Telecommand and Telemetry Formats
Instrument Operation Focus (abridged)

Large Area Telescope (LAT) Flight Software (FSW) Group
Gamma Ray Large Area Space Telescope (GLAST) Project

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0 SCOPE

0.0 Identification

This Interface Control Document (ICD) describes the formats and protocols associated with telecommands and telemetry for the Gamma-ray Large Area Space Telescope's (GLAST) Large Area Telescope (LAT) payload.

0.1 System Overview

GLAST is a high-energy gamma-ray observatory, designed for making observations of celestial sources in the energy band extending from 20 MeV to 300 GeV, with complementary coverage between 10 KeV and 25 MeV for gamma-ray bursts.

The LAT instrument detects both Cosmic Rays (i.e., charged particles) and Gamma Rays (i.e., high-energy photons), capturing the resulting information as "events". The LAT Flight Software (FSW) is tasked with configuring and operating the instrument, as well as deciding which events are Gamma Rays from celestial sources.

The vast majority of communication with the FSW is accomplished by the exchange of telecommand and telemetry packets. Telecommand packets are used to load new software, set configuration values, initiate operations, etc. Telemetry packets are used to report data of various types, including diagnostic, housekeeping, and science.

The FSW receives telecommand packets from the spacecraft (SC) and telemetry packets from the Gamma-ray Burst Monitor (GBM). It sends telemetry packets to the spacecraft, for retransmission to Earth-based installations. On rare occasions, the FSW sends telecommand packets (e.g., repoint requests) to the spacecraft.

0.2 Document Overview

This document details the telecommand and telemetry interfaces between the LAT payload and the GLAST spacecraft bus. It is organized as follows:

0 Scope

Discussion of the general nature of the document.

1 References

Documents, acronyms, and glossary terms referenced in or required for use with this document.

2 Interface Overview

A summary of the telecommand and telemetry interfaces between the LAT payload and the GLAST spacecraft bus and between the LAT payload and the GBM payload.

3 CCSDS Protocol

A summary of the CCSDS protocol.

4 Package Overview

A summary of the packages described in subsequent sections.

5 <package> (e.g., FILE, LCAT, LHK):

Definitions of relevant items (e.g., packets, attributes) for the package in question.

Indexes

Indexes into the package chapters, organized by APID, item name, etc.

0.3 Document Data Sources

The "front matter" for this document was derived, largely, from a set of hand-edited configuration files. Consequently, it may not track all changes in the software, etc.

The telecommand and telemetry descriptions in this document were autogenerated from the following packages/versions in the LAT flight software code management system:

0.4 Document Output Variants

The "Telecommand and Telemetry Formats" document is available in four variant formats, differing in focus ("Software Maintenance", "Instrument Operation") and level of detail ("abridged", detailed").

The Software Maintenance variants are aimed at the needs of software maintainers. Consequently, they discuss data structures (e.g., Bitfields), use LCAT (i.e., C) nomenclature, etc.

The Instrument Operation variants are aimed at the needs of instrument operators. Consequently, they ignore data structures, use ITOS nomenclature, etc.

None of these variants is as complete and navigable, however, as the online (web-based) variants. If online access is available, this should be your first choice.

1 REFERENCES

This section lists documents, acronyms, and glossary terms that either are referenced in this Interface Control Document or provide additional information applicable to the understanding of this document.

1.0 Applicable Documents

LAT Project Documents

LAT Project Documents	
Document Number	**Document Title**

GLAST Project Documents

GLAST Project Documents	
Document Number	**Document Title**

NASA Standards and Guidelines

NASA Standards and Guidelines	
Document Number	**Document Title**
CCSDS 101.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Telemetry Channel Coding, May 1999
CCSDS 102.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Packet Telemetry, November 1995
CCSDS 200.0-G-6	Consultative Committee for Space Data Systems (CCSDS) Report for Telecommand: Summary of Concept and Rationale, January 1987
CCSDS 201.0-B-3	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Telecommand: Part 1, Channel Service, June 2000
CCSDS 202.0-B-2	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Telecommand: Part 2.1, Command Operation Procedures, October 1991
CCSDS 203.0-B-1	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Telecommand: Part 3, Data Management Service Architectural Specification, January 1987
CCSDS 102.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Packet Telemetry, November 1995
CCSDS 102.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Packet Telemetry, November 1995
CCSDS 102.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Packet Telemetry, November 1995
CCSDS 102.0-B-4	Consultative Committee for Space Data Systems (CCSDS) Recommendation for Packet Telemetry, November 1995

Military Standards and Guidelines

Military Standards and Guidelines	
Document Number	**Document Title**

Commercial Standards

Commercial Standards	
Document Number	**Document Title**
RFC-1590	Media Type Registration Procedure
RFC-1591	Domain Name System Structure and Delegation

1.1 Acronyms

Acronyms	
Acronym	**Definition**

1.2 Glossary

Glossary	
Term	**Definition**

2 INTERFACE OVERVIEW

This section provides a summary description of the telecommand and telemetry interfaces between the LAT payload and the GLAST spacecraft bus and between the LAT payload and the GBM payload.

2.0 Data Representation Conventions

Unless otherwise specified, the following data representation conventions are applicable for the entire document:

- Bits are numbered from 0 to N, where 0 represents the least significant bit of the field and N represents the most significant bit in a field. TBR - is this appropriate for the RAD750 and spacecraft bus? (BD)
- The data representations in this document treat bytes as the smallest addressable unit size.
- When multiple bytes are combined to form larger data units, the most significant byte of the field is the byte with the lowest address.
- When data are transferred across a serial interface, the bits flow from the most significant bit to the least significant bit.
- Floating-point values are represented in either a 32-bit IEEE-754 format or a 64-bit IEEE-754 format.

Refer to Figure 1-1 and Figure 1-2 for graphical depictions of the data representation conventions.

TBR - depending on the answer above, these pictures may need to change to reflect the convention for bit number assignments.

>>> fig_01.gif

>>> fig_02.gif

Time is represented as a 64-bit value from a time epoch. The time epoch for LAT and the spacecraft bus is 00:00:00.0 hours of January 1st, 2001. That is, the midnight between December 31st, 2000 and January 1st, 2001. The 64-bit value is represented in Figure 3. The 32-bit Timestamp Seconds represents the number of elapsed seconds since the epoch. The Timestamp Sub-Seconds represents the number of micro-seconds elapsed since the last second.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Timestamp Seconds MSW															
Timestamp Seconds LSW															
Timestamp Sub-Seconds MSW															
Timestamp Sub-Seconds LSW															

2.1 Interface Identification

The LAT interfaces are depicted below.

>>> fig_04.gif

Telecommands to LAT

Interface:	1553
Type:	BC to RT
Source:	Bus Controller - Spacecraft Bus Processor
Destination:	Remote Terminal 3 - LAT SIU
Data Transfer:	Subaddress 27 - 62 Bytes
Transfer Rate:	20 Hz maximum
Transfer Gap:	20 milliseconds minimum

Protocol:	BC to RT data transfer will only take place when a LAT telecommand is ready for transfer.
Message Type:	CCSDS Version 1 Telecommand Packet
Message Size:	62 bytes maximum, even number of bytes, zero filled to 62 bytes
APID Range:	0x640 - 0x69F, directed to LAT 0x701, broadcast from spacecraft bus processor 0x703, broadcast from GBM
Notes:	None

Telecommands from LAT

Interface:	1553
Type:	RT to BC
Source:	Remote Terminal 3 - LAT SIU
Destination:	Bus Controller - Spacecraft Bus Processor
Data Transfer:	Subaddress 29 - 64 Bytes
Transfer Rate:	5 Hz
Transfer Gap:	150 milliseconds minimum to 250 milliseconds maximum
Protocol:	First word of the transfer is a Transfer Request Counter. If the counter has changed since last read by the BC and is non-zero, then the transfer contains a new telecommand from the LAT.
Message Type:	CCSDS Version 1 Telecommand Packet
Message Size:	62 bytes maximum, even number of bytes, zero filled to 62 bytes
APID Range:	0x600 - 0x63F, directed to spacecraft bus processor 0x6A0 - 0x6FF, directed to GBM 0x702, broadcast from LAT
Notes:	The GBM telecommands and LAT broadcast telecommands are routed to the GBM by the spacecraft bus processor.

Housekeeping Telemetry from LAT

Interface:	1553
Type:	RT to BC
Source:	Remote Terminal 3 - LAT SIU
Destination:	Bus Controller - Spacecraft Bus Processor
Data Transfer:	Subaddress 11 through Subaddress 25 - 960 Bytes
Transfer Rate:	4 Hz
Transfer Gap:	500 milliseconds maximum (question - what is the minimum?)
Protocol:	First word of the transfer is a Transfer Request Counter. If the counter has changed since last read by the BC and is non-zero, then the transfer contains new telemetry from the LAT. If the BC successfully reads the 15 subaddresses, then a BC to RT transaction is performed to write one data word to RT-3 subaddress 26. The fifteen BC to RT transactions and the sole RT to BC transactions are all scheduled to occur consecutively. By LAT convention, the housekeeping telemetry will occupy the first 116 bytes available for telemetry transfer (last 62 bytes of SA 11, first 54 bytes of SA 12). Multiple telemetry packets can be transferred during one transaction. The packets must be contiguous. Packets cannot span transactions. If the packet data for a transaction uses 958 or less bytes, then the last packet must be followed by at least two bytes containing zeroes.
Message Type:	CCSDS Advanced Orbital Systems Telemetry Packets
Message Size:	116 bytes
APID Range:	0x200 - 0x25F from LAT

Notes:	LAT Housekeeping telemetry is transmitted when a TDRSS or GN RF link is active. The spacecraft bus processor stores the housekeeping telemetry.

Diagnostic Telemetry from LAT

Interface:	1553
Type:	RT to BC
Source:	Remote Terminal 3 - LAT SIU
Destination:	Bus Controller - Spacecraft Bus Processor
Data Transfer:	Subaddress 11 through Subaddress 25 - 960 Bytes
Transfer Rate:	4 Hz
Transfer Gap:	500 milliseconds maximum
Protocol:	Reference protocol for Housekeeping Telemetry from LAT.
Message Type:	CCSDS Advanced Orbital Systems Telemetry Packets
Message Size:	942 bytes maximum, even number of bytes
APID Range:	0x260 - 0x33F from LAT
Notes:	LAT Diagnostic telemetry is transmitted when a TDRSS or GN RF link is active. The spacecraft bus processor stores the diagnostic telemetry. (question - how does the spacecraft processor rate-control the diagnostic telemetry?)

Alert Telemetry from LAT

Interface:	1553
Type:	RT to BC
Source:	Remote Terminal 3 - LAT SIU
Destination:	Bus Controller - Spacecraft Bus Processor
Data Transfer:	Subaddress 11 through Subaddress 25 - 960 Bytes
Transfer Rate:	4 Hz
Transfer Gap:	500 milliseconds maximum
Protocol:	Reference protocol for Housekeeping Telemetry from LAT.
Message Type:	CCSDS Advanced Orbital Systems Telemetry Packets
Message Size:	942 bytes maximum, even number of bytes
APID Range:	0x340 - 0x39F from LAT
Notes:	LAT Alert telemetry is transmitted when a TDRSS or GN RF link is active. If no RF link is active, then the spacecraft bus will activate the TDRSS link to transmit an alert telemetry packet. The spacecraft bus processor stores the alert telemetry.

Science Telemetry from LAT

Interface:	LVDS
Type:	LAT Protocol (LATp)
Source:	LAT - GASU
Destination:	Spacecraft Bus - Solid State Recorder
Data Transfer:	Contiguous and Encapsulated 128-bit LATp cells. Encapsulation uses a cell announce, cell truncate, and cell parity for each cell. The first cell in contiguous sequence has a cell header.
Transfer Rate:	TBD bits/second
Transfer Gap:	TBD time between LATp transfers
Protocol:	TBD protocol Packets must be a multiple of bytes in length.
Message Type:	CCSDS Advanced Orbital Systems Telemetry Packets
Message Size:	65540 bytes maximum (TBR), must be a multiple of 4 bytes in length
APID Range:	0x3A0 - 0x3FF from LAT

Notes: None

2.2 Unit Identification

The LAT will use the following unit identification codes for external communications (via the 1553 bus) and internal communications (via the LATp bus):

LAT Unit Identification Codes		
LAT Unit	**Description**	**LATp ID**
Not Applicable	SIU(ext): SIU test port.	0x11 (TBR)
0x0	SIU(0): The SIU designated as unit 0. The LAT unit identifier of 0x0 will be used to address the active SIU on the 1553 bus. SIU 0 is active if it is the SIU that is responsive on the 1553 bus. The LATp address for SIU(0) is unique from SIU(1) and is designated as ID 18.	0x12
	SIU(1): The SIU designated as unit 1. The LAT unit identifier of 0x0 will be used to address the active SIU on the 1553 bus. SIU 1 is active if it is the SIU that is responsive on the 1553 bus. The LATp address for SIU(1) is unique from SIU(0) and is designated as ID 19.	0x13
0x1	EPU(0): EPU designated as unit 0.	0x14
0x2	EPU(1): EPU designated as unit 1.	0x15
0x3	EPU(2): EPU designated as unit 2.	0x16
0x6-0xF	Not Assigned	Not Applicable

3 CCSDS PROTOCOL

3.0 Telecommand Packet

The LAT receives CCSDS telecommand packets as input from the SC, across the 1553 bus. The LAT can also send a limited set of telecommands to the SC, across the 1553 bus.

Packet Format

Each Telecommand packet contains three items:

- GLAST CCSDS Telecommand Packet Header
- Packet Command Data
- Packet Checksum (required by Spectrum Astro)

Header Format

The GLAST CCSDS telecommand packets have the standard 6-byte primary header, followed by a 2-byte secondary header. The GLAST CCSDS telecommand header layout is shown below.

Layout:

offset	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0x00	Version = 0			T=1	SH=1	APID										
0x02	3		Sequence Count													
0x04	Packet Length															
0x06	0	Function Code														

Fields:

APID - The CCSDS-packet application identifier.

Function Code - An indicator of the specific command action to perform.

Packet Length - The CCSDS-packet length. Indicates the length of application data, plus the two bytes of secondary header, minus 1.

Sequence Count - The CCSDS-packet sequence count. This running counter increments for each packet generated for a given application type (indicated by the "APID" member).

SF - The CCSDS-packet sequence flags ('00' = continuation packet in the middle of a sequence; '01' = first packet in a sequence; '10' = standalone packet that is not part of a sequence).

SH - The CCSDS-packet secondary-header flag. Always 1, indicating that all GLAST telemetry packets have secondary headers.

T - The CCSDS packet-type identifier ('0' indicates a telemetry packet; '1' indicates a telecommand packet).

Version - The CCSDS-packet version identifier. Always '0', indicating a Version 1 packet.

Telecommand Application Identifier (APID) Summary

Telecommand Receive Application ID's

Telecommand packets with telecommand receive application ID values designate commands or other input for which the LAT is the destination. LAT telecommand receive APID's are in the range 0x640-0x69F. In addition, the LAT also receives broadcast telecommands as input from the SC.

The LAT utilizes the APID range from 0x710-0x76F for internal LAT FSW master-task to slave-task communications. This APID range is used to address message queues associated with slave tasks. The LAT utilizes the APID range from 0x780-0x7DF for internal LAT FSW slave-task to master-task communications. This APID range is used to address message queues associated with master tasks. These APIDs are for internal communication use only and are not recognized by any LAT external system. Telecommands from the ground (across the 1553 bus) cannot utilize these APID ranges.

Telecommand Receive APIDs			
APID	**Description**	**M -> S**	**S -> M**
0x640	Boot operational telecommands	N/A	N/A
0x641	File Load telecommands	0x711	0x781
0x642	Memory Load telecommands	0x712	0x782
0x643	File Dump telecommands	0x713	0x783
0x644	Memory Dump telecommands	0x714	0x784
0x645	Task Management telecommands	0x715	0x785
0x646	Diagnostic telecommands	0x716	0x786
0x647	Not Assigned	N/A	N/A
0x648	Front end primitive telecommands	N/A	N/A
0x649	Not Assigned	N/A	N/A
0x650	Science operations telecommands	N/A	N/A
0x650-0x65F	Not Assigned	N/A	N/A
0x660	GBM alert telecommands	N/A	N/A
0x661	SC repoint request reply	N/A	N/A
0x663-0x69F	Not Assigned	N/A	N/A
0x662	SC load shed notification	N/A	N/A
0x701	SC broadcast telecommands	N/A	N/A

Telecommand Transmit Application ID’s

Telecommand packets with telecommand transmit application ID values designate commands or other input for which the LAT is the source. The APID assignments for such telecommands depend on the destination. The SC destination is designated by APID’s in the range 0x600-0x63F.

Telecommand Transmit APIDs	
APID	**Description**
0x600-0x63F	SC repoint request telecommands

3.1 Telemetry Packet Summary

The LAT outputs CCSDS telemetry packets to the SC on both the 1553 bus and the high-speed science data interface.

Packet Format

Each Telemetry packet contains two items:

- GLAST CCSDS Telecommand Packet Header
- Packet Command Data

Header Format

The LAT CCSDS telemetry packets have the standard 6-byte primary header, followed by an 8-byte secondary header specific to the LAT. The LAT CCSDS telemetry header layout is shown below.

Layout:

offset	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0x00	Version = 0			T=0	SH=1	APID										
0x02	SF		Sequence Count													
0x04	Packet Length: TBD															
0x06	Timestamp Seconds MSW															
0x08	Timestamp Seconds LSW															
0x0A	Timestamp Sub-Seconds MSW															
0x0C	Timestamp Sub-Seconds LSW															

APID - The CCSDS-packet application identifier.

Packet Length - The CCSDS-packet length. Indicates the length of application data, plus the two bytes of secondary header, minus 1.

Sequence Count - The CCSDS-packet sequence count. This running counter increments for each packet generated for a given application type (indicated by the "APID" member).

SF - The CCSDS-packet sequence flags ('00' = continuation packet in the middle of a sequence; '01' = first packet in a sequence; '10' = standalone packet that is not part of a sequence).

SH - The CCSDS-packet secondary-header flag. Always 1, indicating that all GLAST telemetry packets have secondary headers.

T - The CCSDS packet-type identifier ('0' indicates a telemetry packet; '1' indicates a telecommand packet).

Timestamp - Time is represented as a 64-bit offset from a time epoch. The time epoch for LAT and the spacecraft bus is 00:00:00.0 hours of January 1st, 2001. That is the midnight between December 31st, 2000 and January 1st, 2001. Timestamp Seconds represents the number of elapsed seconds since the epoch. Timestamp Sub-Seconds represents the number of microseconds elapsed since the last second.

Version - The CCSDS-packet version identifier. Always '0', indicating a Version 1 packet.

Telemetry Application Identifier (APID) Summary

Housekeeping Telemetry Application ID's

The housekeeping telemetry packets provide critical status information about the current state of the LAT. The SC treats housekeeping telemetry packets specially, so that the packets are downlinked on the real-time channel.

Housekeeping Telemetry APIDs	
APID	**Description**
0x200	Boot housekeeping telemetry
0x20F	Communication test housekeeping telemetry

Diagnostic Telemetry Appication ID's

Diagnostic telemetry packets provide status responses to particular commands or internal states of the LAT. The diagnostic telemetry may report general success or error reports, in response to telecommands. The diagnostic telemetry may also report data back in response to a telecommand that requests a dump or explicit status of some kind. Internal errors encountered during normal processing will also generate diagnostic telemetry error packets.

Diagnostic Telemetry APIDs	
APID	**Description**
0x260	File data dump telemetry
0x261	File directory dump telemetry
0x262	File system dump telemetry
0x263	Memory data dump telemetry
0x264	Memory symbol lookup telemetry
0x265	Memory pool status dump telemetry
0x266	Task status dump telemetry
0x26F	Communication test diagnostic telemetry
0x270	TEM register read telemetry
0x271	GTIC register read telemetry
0x272	GCCC register read telemetry
0x273	GCRC register read telemetry
0x274	GCFE register read telemetry
0x275	GTCC register read telemetry
0x276	GTRC register read telemetry
0x277	GTFE register read telemetry
0x278	AEM register read telemetry
0x279	GARC register read telemetry
0x27A	GAFE register read telemetry

Alert Telemetry Appication ID's

Alert Telemetry APIDs	
APID	**Description**
0x34F	Communication test alert telemetry

Science Telemetry Appication ID's

Science Telemetry APIDs	
APID	**Description**
0x3AF	Communication test science telemetry

4 PACKAGES

5 CTDB Package

5.0 Overview

The CTDB package contains routines that are specific to the Command and Telemetry Data Bus.

The package supports the following functions:

- 1553 bus communications
- Configure ACD front-end electronics
- Configure by compressed file
- Configure GASU (i.e., CRU, GEM, EBM, AEM)
- Configure PDU
- Configure TKR and CAL front-end electronics
- Emulated event delivery (to science data interface)
- Housekeeping data stream
- RAD750 boot and crate initialization
- Software watchdog
- Telecommand/telemetry database and services
- Wall clock time services (GPS)

5.1 Telemetry Packets

5.1.0 `LCTDBRTDIAG` (526/0x20E)

Description:

"CTDB 1553 RT Driver Diagnostics" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCTDBPAD16 16 bit spare padding word
0x010	0	32	U1234	LCTDBERRCNT RT driver total error count
0x014	0	32	U1234	LCTDBINTCNT RT driver total interrupt count
0x018	0	32	U1234	LCTDBCRXPKTCNT RT driver telecommand receive count
0x01C	0	32	U1234	LCTDBCRXBYTCNT RT driver telecommand receive total bytes
0x020	0	32	U1234	LCTDBCTXPKTCNT RT driver telecommand send count
0x024	0	32	U1234	LCTDBCTXBYTCNT RT driver telecommand send total bytes
0x028	0	32	U1234	LCTDBHKPPKTCNT RT driver HKP send count
0x02C	0	32	U1234	LCTDBHKPBYTCNT RT driver HKP send total bytes
0x030	0	32	U1234	LCTDBTLMPKTCNT

Offset	S	L	Type	ITOS name, attribute(s), and description
				RT driver telemetry send count
0x034	0	32	U1234	LCTDBTLMBYTCNT RT driver telemetry send total bytes

6 DDT Package

6.0 Overview

The DDT package contains routines that are specific to SUROM write.

6.1 Command Packets

6.1.0 `LDDTWRITEFILE` (1602/0x642:0)

Description:

"Write a file to SUROM" Telecommand Packet

Starts the process of writing data from a file into SUROM.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LDDTLATUNIT` Target LAT Unit
`0x00C`	0	32	`U1234`	`LDDTFILEID` File ID

7 EMP Package

7.0 Overview

The EMP package contains routines that are specific to the Event Monitoring Package.

7.1 Telemetry Packets

7.1.0 `ASCSIU` (985/0x3D9)

Description:

"ASC stats from ACD/GEM processed on SIU" Telemetry Packet

ASC Counters includes CNO statistics (from GEM) and discriminator histogram block from ACD

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

7.1.1 `ASCEPU0` (986/0x3DA)

Description:

"ASC stats from ACD/GEM processed on EPU0" Telemetry Packet

ASC Counters includes CNO statistics (from GEM) and discriminator histogram block from ACD

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

7.1.2 `ASCEPU1` (987/0x3DB)

Description:

"ASC stats from ACD/GEM processed on EPU1" Telemetry Packet

ASC Counters includes CNO statistics (from GEM) and discriminator histogram block from ACD

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

7.1.3 **`ASCEPU2`** (988/0x3DC)

Description:

"ASC stats from ACD/GEM processed on EPU2" Telemetry Packet

ASC Counters includes CNO statistics (from GEM) and discriminator histogram block from ACD

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

7.1.4 **`ASCEPU3`** (989/0x3DD)

Description:

"ASC stats from ACD/GEM processed on EPU3" Telemetry Packet

ASC Counters includes CNO statistics (from GEM) and discriminator histogram block from ACD

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

8 FILE Package

8.0 Overview

The FILE package contains routines that are specific to the file system.

The package supports the following functions:

- RAD750 boot and crate initialization

8.1 Command Packets

8.1.0 `LFILUPLSTART` (1601/0x641:0)

Description:

"File Upload Start" Telecommand Packet

Announces the start of a new file upload. The FILESIZE parameter sets the maximum offset for incomming LFILUPLDATA packets. Upon completion, the file upload state machine is in the LOAD state.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LFILESIZE` File Size

8.1.1 `LFILUPLCANCEL` (1601/0x641:1)

Description:

"File Upload Cancel" Telecommand Packet

This command cancels a file upload and resets the file upload state machine to the START state, regardless of the state when the command is received. A new LFILUPLSTART command is needed to begin a new file upload.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFILENODE` Computer to send the command to
	4	12	`U12`	`LFILEPAD12` A twelve-bit padding field

8.1.2 `LFILUPLCOMMIT` (1601/0x641:2)

Description:

"File Upload Commit" Telecommand Packet

This command indicates that the loaded LFILUPLDATA file data contents should be written to storage. The FILEID paramter indicates the storage location. The complete file data set is first validated before successfully entering the COMMIT state. The validate only flag in the FILEFLAGS parameter indicates that validations errors shoud be reported, but that the file upload state machine will remain in the LOAD state regardless of the validation outcome.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFILENODE Computer to send the command to
	4	12	U12	LFILEPAD12 A twelve-bit padding field
0x00A	0	16	U12	LFILEFLAGS File Commit Flags
0x00C	0	32	U1234	LFILEID File Storage ID

8.1.3 **LFILUPLDATA** (1601/0x641:3)

Description:

"File Upload Data" Telecommand Packet

Each LFILUPLDATA packet contains a portion of the file data being loaded. The FILEOFFSET parameter is the offset in bytes from the beginning of the file which the first FILEDATA byte in this packet represents. The LFILEUPLDATA packets may be loaded in any order with respect to the offset and may be re-loaded ad many times as wished .

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	OFFSET File Data Offset
0x00C	0	8	U1	DATA File Data
0x00D	0	8	U1	LFILEDATA1 File Data
0x00E	0	8	U1	LFILEDATA2 File Data
0x00F	0	8	U1	LFILEDATA3 File Data
0x010	0	8	U1	LFILEDATA4 File Data
0x011	0	8	U1	LFILEDATA5 File Data
0x012	0	8	U1	LFILEDATA6 File Data
0x013	0	8	U1	LFILEDATA7 File Data
0x014	0	8	U1	LFILEDATA8 File Data
0x015	0	8	U1	LFILEDATA9 File Data
0x016	0	8	U1	LFILEDATA10 File Data
0x017	0	8	U1	LFILEDATA11 File Data
0x018	0	8	U1	LFILEDATA12 File Data

Offset	S	L	Type	ITOS name, attribute(s), and description
0x019	0	8	U1	LFILEDATA13 File Data
0x01A	0	8	U1	LFILEDATA14 File Data
0x01B	0	8	U1	LFILEDATA15 File Data
0x01C	0	8	U1	LFILEDATA16 File Data
0x01D	0	8	U1	LFILEDATA17 File Data
0x01E	0	8	U1	LFILEDATA18 File Data
0x01F	0	8	U1	LFILEDATA19 File Data
0x020	0	8	U1	LFILEDATA20 File Data
0x021	0	8	U1	LFILEDATA21 File Data
0x022	0	8	U1	LFILEDATA22 File Data
0x023	0	8	U1	LFILEDATA23 File Data
0x024	0	8	U1	LFILEDATA24 File Data
0x025	0	8	U1	LFILEDATA25 File Data
0x026	0	8	U1	LFILEDATA26 File Data
0x027	0	8	U1	LFILEDATA27 File Data
0x028	0	8	U1	LFILEDATA28 File Data
0x029	0	8	U1	LFILEDATA29 File Data
0x02A	0	8	U1	LFILEDATA30 File Data
0x02B	0	8	U1	LFILEDATA31 File Data
0x02C	0	8	U1	LFILEDATA32 File Data
0x02D	0	8	U1	LFILEDATA33 File Data
0x02E	0	8	U1	LFILEDATA34 File Data
0x02F	0	8	U1	LFILEDATA35 File Data
0x030	0	8	U1	LFILEDATA36 File Data
0x031	0	8	U1	LFILEDATA37 File Data
0x032	0	8	U1	LFILEDATA38 File Data

Offset	S	L	Type	ITOS name, attribute(s), and description
0x033	0	8	U1	LFILEDATA39 File Data
0x034	0	8	U1	LFILEDATA40 File Data
0x035	0	8	U1	LFILEDATA41 File Data
0x036	0	8	U1	LFILEDATA42 File Data
0x037	0	8	U1	LFILEDATA43 File Data
0x038	0	8	U1	LFILEDATA44 File Data
0x039	0	8	U1	LFILEDATA45 File Data
0x03A	0	8	U1	LFILEDATA46 File Data
0x03B	0	8	U1	LFILEDATA47 File Data

8.1.4 LFILUPLEPU (1601/0x641:4)

Description:

"File Upload to EPU" Telecommand Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFILENODE Computer to send the command to
	4	12	U12	LFILEPAD12 A twelve-bit padding field
0x00A	0	16	U12	LFILEPAD16 16-bit padding
0x00C	0	32	U1234	LFILEID File Storage ID

8.2 Enumerations

8.2.0 `LFILENODEID` (List of CPU nodes addressable with FILE commands) Enumeration

Description:

List of CPU nodes addressable with FILE commands

Definition:

0 The SIU computer (`SIU`)
The SIU computer

1 The EPU0 computer (`EPU0`)
The EPU0 computer

2 The EPU1 computer (`EPU1`)
The EPU1 computer

3 The EPU2 computer (`EPU2`)
The EPU2 computer

4 The EPU3 computer (external crate) (`EPU3`)
The EPU3 computer (external crate)

Used by:

???

8.3 Ranges

8.3.0 `LFILEMBZ` (A must-be-zero field) Range

Description:

Used to ensure that padding fields are set to zero.

Definition:

Limits 0 - 0

Used by:

???

9 ITC Package

9.0 Overview

The ITC package defines a common communications standard to unify communications between tasks on either the same or different CPUs. It also provides the services to build up tasks that are capable of communicating according to the standard.

The package supports the following functions:

- CPU internal communications/task frameworks

9.1 Telemetry Packets

9.1.0 `CmdConfirm` (720/0x2D0)

Description:

"Response to command from spacecraft" Telemetry Packet

Command confirmation telemetry packet. When executing spacecraft commands, ITC will autogenerate a diagnostic packet, detailing where and when a command is executed as well as the return code for the execution. To identify the command, ITC reflects the command in toto.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	I1	LITCNODE; LITCNODEID ITC node ID
0x00F	0	8	I1	LITCTASK ITC task ID
0x010	0	32	U1234	LITCDEQTIMHI Time (most significant 32 bits)
0x014	0	32	U1234	LITCDEQTIMLO Time (least significant 32 bits)
0x018	0	32	U1234	LITCEXETIMHI Time (most significant 32 bits)
0x01C	0	32	U1234	LITCEXETIMLO Time (least significant 32 bits)
0x020	0	32	U1234	LITCEXESTATUS MSG status code
0x024	0	16	U12	LITCDROPCNFRM Number of dropped confirmations
0x026	0	15	U12	LITCPAD15 Padding field (15 bits)
	15	1	U12	LITCISTIME44 Flag to indicate the format of the time fields
0x028	0	3	I1	LITCCMDHDRVER CCSDS version
	3	1	I1	LITCCMDHDRCMD CCSDS command bit
	4	1	I1	LITCCMDHDRSEC CCSDS secondary header flag
	5	11	U12	LITCCMDHDRAPID CCSDS application ID
0x02A	0	2	I1	LITCCMDHDRSEQ

Offset	S	L	Type	ITOS name, attribute(s), and description
				CCSDS sequencing bits
	2	14	U12	LITCCMDHDRCNT CCSDS sequencing count
0x02C	0	16	U12	LITCCMDHDRLEN CCSDS telecommand packet length
0x02E	0	1	I1	LITCCMDHDRPAD Padding
	1	15	U12	LITCCMDHDRFNC CCSDS telecommand function code

9.2 Discretes

9.2.0 `LITCNODEID` (Discrete list of ITC nodes) Discrete

Description:

Discrete list of ITC nodes

Definition:

-1 Unknown node (guard value) (`ITC_NID_UNKNOWN`)

0 SIU (`ITC_NID_SIU`)

1 EPU 0 (`ITC_NID_EPU0`)

2 EPU 1 (`ITC_NID_EPU1`)

3 EPU 2 (`ITC_NID_EPU2`)

4 EPU 3 (external crate) (`ITC_NID_EPU3`)

5 Science Data Interface (to Solid State Recorder) (`ITC_NID_SDI`)

6 Spacecraft (`ITC_NID_SC`)

7 CPU broadcast class (`ITC_NID_BCST`)

Used by:

???

9.2.1 `LITCTASKID` (Discrete list of ITC task IDs) Discrete

Description:

Discrete list of ITC task IDs

Definition:

-1 Unknown task (guard value) (`ITC_TID_UNKNOWN`)

0 The anonymous task (`ITC_TID_ANON`)

1 LAT computer manager task (`ITC_TID_LCM`)

2 LAT file system master task (`ITC_TID_LFS_M`)

3 LAT file system slave task (`LAT_TID_LFS_S`)

4 LAT housekeeping master task (`LAT_TID_LHK_M`)

5 LAT housekeeping slave task (`ITC_TID_LHK_S`)

6 LAT instrument manager master task (`LAT_TID_LIM_M`)

7 LAT instrument manager slave task (`LAT_TID_LIM_S`)

8 LAT spacecraft messages master task (`LAT_TID_LSM_M`)

9 LAT spacecraft messages slave task (`ITC_TID_LSM_S`)

10 LAT software watchdog master task (`ITC_TID_LSW_M`)

11 LAT software watchdog slave task (`ITC_TID_LSW_S`)

12 LAT charge injection calibration master task (`ITC_TID_LCI_M`)

13 LAT charge injection calibration slave task (`ITC_TID_LCI_S`)

14 LAT multiplexed rate counters (`ITC_TID_LMC`)

15 LAT physics aquisision (`ITC_TID_LPA`)

17 LAT register access (`ITC_TID_LRA`)

18 LAT thermal control (`ITC_TID_LTC`)

19 LAT gamma ray burst analysis (`ITC_TID_GRB`)

20 ISIS command task (`ITC_TID_ICT`)

30 LCB Tx service task (`ITS_SID_LCS`)

31 CTDB Tx service task (`ITC_SID_CTS`)

32 LCB Rx driver callback (`ITC_LID_LCX`)

33 CTDB Rx driver callback (`ITC_LID_CTX`)

34 ITC hook into message task (`ITC_LID_MSG`)

Used by:

???

10 LATC Package

10.0 Overview

The LATC package contains routines that are specific to LAT Configuration.

The package supports the following functions:

- Configure by compressed file

10.1 Telemetry Packets

10.1.0 `LATCDATA` (1021/0x3FD)

Description:

"Returned LATC data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LTHDR` Tertiary header

11 LCI Package

11.0 Overview

The LCI package provides facilities for subsystems (TKR, CAL, ACD) to perform charge injection calibration of their electronics. LCI runs within the Instrument Physics task.

11.1 Command Packets

11.1.0 `LCICALIBRATE` (1660/0x67C:1)

Description:

"Initiate the calibration" Telecommand Packet

Starts the calibration process and provides the three file IDs required by LCI.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LCILATCCFG File ID
0x00C	0	32	U1234	LCICFG File ID
0x010	0	32	U1234	LCILATCIGN File ID
0x014	0	32	U1234	LCIRUNID Identifier for this calibration

11.1.1 `LCIABORT` (1660/0x67C:2)

Description:

"Abort a running calibration" Telecommand Packet

Stops the calibration at the end of the current cycle.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

11.1.2 `LCINOOP` (1661/0x67D:0)

Description:

"No operation" Telecommand Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

11.2 Telemetry Packets

11.2.0 TERMINATE (728/0x2D8)

Description:

"Packet containing status of calibration" Telemetry Packet

Packet containing the MSG code generated by LCI at the end of the calibration.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	32	U1234	LCISTATUS Termination status code

11.2.1 LCISIUEVTDAT (965/0x3C5)

Description:

"LCI SIU event data" Telemetry Packet

Charge injection events collected by the SIU

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCITHDR Tertiary Header

11.2.2 LCIEPU0EVTDAT (966/0x3C6)

Description:

"LCI EPU0 event data." Telemetry Packet

Charge injection events collected by EPU0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCITHDR Tertiary Header

11.2.3 LCIEPU1EVTDAT (967/0x3C7)

Description:

"LCI EPU1 event data" Telemetry Packet

Charge injection events collected by EPU1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCITHDR

Offset	S	L	Type	ITOS name, attribute(s), and description
				Tertiary Header

11.2.4 LCIEPU2EVTDAT (968/0x3C8)

Description:

"LCI EPU2 event data" Telemetry Packet

Charge injection events collected by EPU2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCITHDR Tertiary Header

12 LCM Package

12.0 Overview

The LCM package handles the management of a single LAT computer.

12.1 Command Packets

12.1.0 `LCMSCRUBRUN` (1684/0x694:0)

Description:

"Run memory scrubber" Telecommand Packet

Runs the RAD750 memory scrubber once through the SDRAM memory bank.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMPAD12 A twelve-bit padding field

12.1.1 `LCMSCRUBCFG` (1684/0x694:1)

Description:

"Configure the memory scrubber" Telecommand Packet

Configures the period between runs of the RAD750 memory scrubber. If the LCMSCRUBPER parameter is set to '0', then the periodic scrubber is disabled.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMPAD12 A twelve-bit padding field
0x00A	0	16	U12	LCMSCRUBPER Memory Scrubber Period

12.1.2 `LCMERRORCFG` (1684/0x694:2)

Description:

"Configure CPU error handling" Telecommand Packet

This telecommand configures the error handlers attached to the RAD750 bridge chip interrupts. For each error class (LCMECLPCI, LCMECLMEC, LCMECLMEU), the error reponse level may be set to LCMLEVCNT, LCMLEVDIA, or LCMLEVCRI.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LFLAGPAD12 A twelve-bit padding field
0x00A	0	16	U12	LCMERRCLASS Error Reporting Class
0x00C	0	16	U12	LCMERRLEVEL Error Reporting Level

12.1.3 LCMMSGRESPONSE (1685/0x695:0)

Description:

"Change task messaging level" Telecommand Packet

Change the severity level at which a task will emit MSG messages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LCMNODEID ITC node ID
0x009	0	8	U1	LCMTASKID ITC task ID
0x00A	0	8	U1	LCMMSGLEVEL Messaging level
0x00B	0	8	U1	LPAD One byte of padding

12.1.4 LCMCMDRESPONSE (1685/0x695:1)

Description:

"Change task command confirmation level" Telecommand Packet

Change the spacecraft command confirmation level of a task

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LCMNODEID ITC node ID
0x009	0	8	U1	LCMTASKID ITC task ID
0x00A	0	8	U1	LCMCMDCLASS Spacecraft command class (normal or broadcast)
0x00B	0	8	U1	LCMCMDACTION Actions task can take (forward or execute)
0x00C	0	8	U1	LCMCMDLEVEL Response level
0x00D	0	8	U1	LPAD

Offset	S	L	Type	ITOS name, attribute(s), and description
				One byte of padding

12.1.5 LCMMODDUMP (1685/0x695:2)

Description:

"Generate CPU code module listing" Telecommand Packet

When this command is received, a series of LLCMMODLIST telemetry packets is sent to the CTDB interface, one for each loaded module on the target CPU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMTRANID Transaction ID to associate with command

12.1.6 LCMTASKDUMP (1685/0x695:3)

Description:

"Generate CPU task listing" Telecommand Packet

When this command is received, a series of LLCMTASKLIST telemetry packets is sent to the CTDB interface, one for each spawned task on the target CPU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMTRANID Transaction ID to associate with command

12.1.7 LCMCPURESET (1685/0x695:4)

Description:

"Reset a CPU" Telecommand Packet

Reset a CPU

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMTRANID Transaction ID to associate with command
0x00A	0	16	U12	LCMSPARE0 16-bit Padding Word
0x00C	0	20	U1234	LCMSPARE0

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 3 bit pad in unsigned int
	20	4	`U1234`	`LCMPBFCOLUMN` Memory column number to swap in
	24	3	`U1234`	`LCMSPARE1` Explicit 16 bit pad in unsigned int
	27	1	`U1234`	`LCMPBFSWAP` Enable/disable the DIAGS_PBF_MEM_SPARE_ENABLE flag
	28	1	`U1234`	`LCMPBFDIAG` Enable/disable the DIAGS_PBF_DIAG_MEM_TEST flag
	29	1	`U1234`	`LCMPBFBOOT` Enable/disable the DIAGS_PBF_BOOT_MEM_TEST flag
	30	1	`U1234`	`LCMPBFRTOS` Enable/disable the DIAGS_PBF_RTOS_MEM_TEST flag
	31	1	`U1234`	`LCMPBFUSER` Enable/disable the DIAGS_PBF_RES_MEM_TEST flag
`0x010`	0	2	`U1234`	`LCMSBFVXW` Select source of vxw image (/mem, /mm0, /mm1)
	2	2	`U1234`	`LCMSBFSBM` Select source of secondary boot module (/mem, /mm0, /mm1)
	4	2	`U1234`	`LCMSBFSBS` Select source of secondary boot script (/mem, /mm0, /mm1)
	6	10	`U1234`	`LCMSPARE0` Explicit 10 bit pad in unsigned int
	16	1	`U1234`	`LCMSBFEE0` Enable/disable the mounting of device /ee0
	17	1	`U1234`	`LCMSBFEE1` Enable/disable the mounting of device /ee1
	18	1	`U1234`	`LCMSBFMEM` Enable/disable the mounting of /mem (code smuggling only)
	19	1	`U1234`	`LCMSBFNOCACHE` Enable to force processor into non-caching mode (note: negative logic)
	20	8	`U1234`	`LCMSPARE1` Explicit 8 bit pad in unsigned int
	28	1	`U1234`	`LCMSBFFORCE` Force a reset even if the SUROM does not validate
	29	2	`U1234`	`LCMSBFTRD` Select device on which to save the turbo reset database (/mm0, /mm1)
	31	1	`U1234`	`LCMSBFTURBO` Perform a turbo reset

12.1.8 `LCMSTATS` (1685/0x695:5)

Description:

"Set up the SMON statistics monitor" Telecommand Packet

This command sets up a timer to collect statistics data from various hardware at the requested sampling interval, compresses the data, then sends them to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LCMPAD16`

Offset	S	L	Type	ITOS name, attribute(s), and description
				16-bit Padding Word
0x00A	0	8	U1	LCMNODEID ITC node ID
0x00B	0	8	U1	LCMTIMERID Stat Monitor Timer ID
0x00C	0	32	U1234	LCMSTATMASK Specify HW to monitor for stats
0x010	0	32	U1234	LCMOPTIONMASK Specify options in Stat Monitor
0x014	0	32	I1234	LCMTIMELEN Stat Monitor Time Len (sec)
0x018	0	32	U1234	LCMTIMESAMPLE Monitor time sample (milliSec)

12.1.9 LCMNOOP (1685/0x695:6)

Description:

"LCM no-op" Telecommand Packet

This telecommand does nothing except generate a command confirmation response from the LCM task.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LCMNODE Computer to send the command to
	4	12	U12	LCMPAD12 A twelve-bit padding field

12.1.10 LCMMSGOUT (1685/0x695:7)

Description:

"Configure MSG output interface" Telecommand Packet

Controls the MSG severity level of output to an interface (1553 or SDI). The interface will output MSG's with a severity level greater than or equal to the LCMMSGLEVEL parameter. Setting it to LCMMSGLVLDISB prevents all MSG's from being sent.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LCMNODEID ITC node ID
0x009	0	8	U1	LCMMSGINTER MSG Output Interface
0x00A	0	8	U1	LCMMSGLEVEL Messaging level
0x00B	0	8	U1	LPAD One byte of padding

12.1.11 `LCMIMAGEDUMP` (1685/0x695:8)

Description:

"Dump complete module/task information (to SDI)" Telecommand Packet

Dump complete module/task information (to SDI)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LCMNODE Computer to send the command to
0x00C	0	32	U1234	LCMDMPREASON User provided reason code (arbitrary)
0x010	0	32	U1234	LCMDMPIDENT User provided dump identity (to distinguish dumps)

12.1.12 `LCMTURBORESET` (1686/0x696:0)

Description:

"Turbo reset command" Telecommand Packet

Turbo reset command

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	2	U1234	LCMSIUVXW SIU: Source of VxWorks operating system (device)
	2	2	U1234	LCMSIUSBM SIU: Source of secondary boot module (device)
	4	2	U1234	LCMSIUSBS SIU: Source of secondary boot script (device)
	6	10	U1234	LCMSPARE0 Explicit 10 bit pad in unsigned int
	16	1	U1234	LCMSIUEE0 SIU: Mount /ee0
	17	1	U1234	LCMSIUEE1 SIU: Mount /ee1
	18	1	U1234	LCMSIUMEM SIU: Mount code smuggling area (obscure and rarely used)
	19	1	U1234	LCMSIUNOCACHE SIU: Disable CPU caches
	20	8	U1234	LCMSPARE1 Explicit 8 bit pad in unsigned int
	28	1	U1234	LCMSIUFORCE SIU: Force a reset even if the SUROM does not validate
	29	2	U1234	LCMSIUTRD SIU: Destination of turbo reset database (device)
	31	1	U1234	LCMSIUTURBO SIU: Perform turbo reset
0x00C	0	2	U1234	LCMEPU0VXW EPU0: Source of VxWorks operating system (device)

Offset	S	L	Type	ITOS name, attribute(s), and description
	2	2	`U1234`	`LCMEPU0SBM` EPU0: Source of secondary boot module (device)
	4	2	`U1234`	`LCMEPU0SBS` EPU0: Source of secondary boot script (device)
	6	10	`U1234`	`LCMSPARE0` Explicit 10 bit pad in unsigned int
	16	1	`U1234`	`LCMEPU0EE0` EPU0: Mount /ee0
	17	1	`U1234`	`LCMEPU0EE1` EPU0: Mount /ee1
	18	1	`U1234`	`LCMEPU0MEM` EPU0: Mount code smuggling area (obscure and rarely used)
	19	1	`U1234`	`LCMEPU0NOCACHE` EPU0: Disable CPU caches
	20	8	`U1234`	`LCMSPARE1` Explicit 8 bit pad in unsigned int
	28	1	`U1234`	`LCMEPU0FORCE` EPU0: Force a reset even if the SUROM does not validate
	29	2	`U1234`	`LCMEPU0TRD` EPU0: Destination of turbo reset database (device)
	31	1	`U1234`	`LCMEPU0TURBO` EPU0: Perform turbo reset
`0x010`	0	2	`U1234`	`LCMEPU1VXW` EPU1: Source of VxWorks operating system (device)
	2	2	`U1234`	`LCMEPU1SBM` EPU1: Source of secondary boot module (device)
	4	2	`U1234`	`LCMEPU1SBS` EPU1: Source of secondary boot script (device)
	6	10	`U1234`	`LCMSPARE0` Explicit 10 bit pad in unsigned int
	16	1	`U1234`	`LCMEPU1EE0` EPU1: Mount /ee0
	17	1	`U1234`	`LCMEPU1EE1` EPU1: Mount /ee1
	18	1	`U1234`	`LCMEPU1MEM` EPU1: Mount code smuggling area (obscure and rarely used)
	19	1	`U1234`	`LCMEPU1NOCACHE` EPU1: Disable CPU caches
	20	8	`U1234`	`LCMSPARE1` Explicit 8 bit pad in unsigned int
	28	1	`U1234`	`LCMEPU1FORCE` EPU1: Force a reset even if the SUROM does not validate
	29	2	`U1234`	`LCMEPU1TRD` EPU1: Destination of turbo reset database (device)
	31	1	`U1234`	`LCMEPU1TURBO` EPU1: Perform turbo reset
`0x014`	0	2	`U1234`	`LCMEPU2VXW` EPU2: Source of VxWorks operating system (device)
	2	2	`U1234`	`LCMEPU2SBM` EPU2: Source of secondary boot module (device)
	4	2	`U1234`	`LCMEPU2SBS` EPU2: Source of secondary boot script (device)

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	10	`U1234`	`LCMSPARE0` Explicit 10 bit pad in unsigned int
	16	1	`U1234`	`LCMEPU2EE0` EPU2: Mount /ee0
	17	1	`U1234`	`LCMEPU2EE1` EPU2: Mount /ee1
	18	1	`U1234`	`LCMEPU2MEM` EPU2: Mount code smuggling area (obscure and rarely used)
	19	1	`U1234`	`LCMEPU2NOCACHE` EPU2: Disable CPU caches
	20	8	`U1234`	`LCMSPARE1` Explicit 8 bit pad in unsigned int
	28	1	`U1234`	`LCMEPU2FORCE` EPU2: Force a reset even if the SUROM does not validate
	29	2	`U1234`	`LCMEPU2TRD` EPU2: Destination of turbo reset database (device)
	31	1	`U1234`	`LCMEPU2TURBO` EPU2: Perform turbo reset
`0x018`	0	2	`U1234`	`LCMEPU3VXW` EPU3: Source of VxWorks operating system (device)
	2	2	`U1234`	`LCMEPU3SBM` EPU3: Source of secondary boot module (device)
	4	2	`U1234`	`LCMEPU3SBS` EPU3: Source of secondary boot script (device)
	6	10	`U1234`	`LCMSPARE0` Explicit 10 bit pad in unsigned int
	16	1	`U1234`	`LCMEPU3EE0` EPU3: Mount /ee0
	17	1	`U1234`	`LCMEPU3EE1` EPU3: Mount /ee1
	18	1	`U1234`	`LCMEPU3MEM` EPU3: Mount code smuggling area (obscure and rarely used)
	19	1	`U1234`	`LCMEPU3NOCACHE` EPU3: Disable CPU caches
	20	8	`U1234`	`LCMSPARE1` Explicit 8 bit pad in unsigned int
	28	1	`U1234`	`LCMEPU3FORCE` EPU3: Force a reset even if the SUROM does not validate
	29	2	`U1234`	`LCMEPU3TRD` EPU3: Destination of turbo reset database (device)
	31	1	`U1234`	`LCMEPU3TURBO` EPU3: Perform turbo reset

12.2 Enumerations

12.2.0 `LCMCMDACTION` (ITC Command Actions) Enumeration

Description:

A selector to to distiguish the command confirmation response based on whether the target task executest the command itself, or simply forwards it to another task.

Definition:

0 For execute commands (`EXECUTE`)
Select the command response level for commands that are executed by the target task.

1 For forward commands (`FORWARD`)
Select the command response level for commands that are forwarded by the target task.

Used by:

???

12.2.1 `LCMCMDCLASS` (ITC Command Classes) Enumeration

Description:

A selector to to distiguish the command confirmation response based on whether the command is a normal command or one of the SC braodcast messages.

Definition:

0 Normal command (`NORMAL`)
Select the command response level for normal commands.

1 Broadcast command (`BROADCAST`)
Select the command response level for broadcast commands.

Used by:

???

12.2.2 `LCMCMDLEVEL` (ITC Command Response Level) Enumeration

Description:

Selector for the command response level of a task based on the action being taken by the task (forward or execute) and the type of command (normal or broadcast).

Definition:

0 Respond to all commands (success or failure) (`ALL`)

1 Respond to errored commands (`ERROR`)

2 Never respond to commands (`NONE`)

Used by:

???

12.2.3 **LCMDEVICES** (Enumeration of available devices) Enumeration

Description:

Enumeration of available devices

Definition:

0 The /mem device (LCMMEM)
The /mem device

1 The /mm1 device (LCMMM1)
The /mm1 device

2 The /mm0 device (LCMMM0)
The /mm0 device

Used by:

???

12.2.4 **LCMENABLES** (A disabled/enabled enumeration) Enumeration

Description:

A disabled/enabled enumeration

Definition:

0 Disable (LCMDISABLE)
Disable

1 Enable (LCMENABLE)
Enable

Used by:

???

12.2.5 **LCMERRCLASS** (LCM Error Configuration Classes) Enumeration

Description:

Definition:

1 PCI Bus Error Class (LCMECLPCI)

2 Correctable Memory Error Class (LCMECLMEC)

3 Uncorretable Memory Error Class (LCMECLMEU)

Used by:

???

12.2.6 **LCMERRLEVEL** (LCM Error Handling Level) Enumeration

Description:

Definition:

1 Counted Error Level (`LCMLEVCNT`)

2 Diagnostic Error Level (`LCMLEVDIA`)

3 Crititcal Error Level (`LCMLEVCRI`)

Used by:

???

12.2.7 `LCMMSGINTER` (MSG output interfaces) Enumeration

Description:

Definition:

1 CTDB MSG output interface (`LCMMINCTDB`)

2 SSR MSG Output interface (`LCMMINSSR`)

Used by:

???

12.2.8 `LCMMSGLEVEL` (MSG output level) Enumeration

Description:

Describes the severity level for MSG records being delivered to an ouput interface.

Definition:

1 INFORMATION MSG Level (`MSGLVLINFO`)

2 MSG WARNING Level (`MSGLVLWARNING`)

3 MSG ERROR Level (`MSGLVLERROR`)

4 Disable MSG Output (`MSGLVLDISABLE`)

Used by:

???

12.2.9 `LCMNODEID` (List of CPU nodes addressable with LCM commands) Enumeration

Description:

List of CPU nodes addressable with LCM commands

Definition:

0 The SIU computer (`SIU`)
The SIU computer

1 The EPU0 computer (`EPU0`)
The EPU0 computer

2 The EPU1 computer (`EPU1`)
The EPU1 computer

3 The EPU2 computer (`EPU2`)
The EPU2 computer

4 The EPU3 computer (external crate) (`EPU3`)
The EPU3 computer (external crate)

Used by:

???

12.2.10 `LCMTASKID` (Discrete list of task IDs) Enumeration

Description:

Discrete list of task IDs

Definition:

1 LAT computer manager, master task (`LCM_M`)
A task that runs on both SIU and EPU. There is no master/slave relationship between copies of LCM_M. They run as peers.

2 LAT file system, master task (`LFS_M`)
A task that runs on both SIU and EPU. It manages the file system (add new files, delete old files, dump directories, ...). There is no

4 LAT housekeeping system, master task (`LHK_M`)
A task that runs only on the SIU. It manages the collection and delivery of housekeeping data.

5 LAT housekeeping, slave task (`LHK_S`)
A task that runs on EPU only. It gathers CPU based housekeeping information and sends it to the SIU for further processing by the

6 LAT instrument manager, master task (`LIM_M`)
A task run only on the SIU. It manages the mode of the instrument (physics mode, calibration mode, quiescent, ...).

8 LAT spacecraft messages, master task (`LSM_M`)
A task that runs only on the SIU. It receives and redistibutes the spacecraft broadcast messages (attitude, ancillary and timetone).

9 LAT spacecraft messages, slave task (`LSM_S`)
A task that only runs on EPU. It receives and processes spacecraft broadcast messages that have been forwarded by the LSM_M (

10 LAT software watchdog, master task (`LSW_M`)
A task that runs on both SIU and EPU. This is a very high priority task that tracks CPU activity (using a trace buffer) and manage

12 LAT charge injection calibration, master task (`LCI_M`)
A task that runs only on the SIU. It processes requests for charge injection calibration runs (ACD, CAL, or TKR subsystems).

14 LAT multiplexed rate counters, master task (`LMC_M`)

A task that runs on the SIU only. It is responsible for cycling through the multiplex counters (a set of counters in the instrument h

15 LAT physics aquisition, master task (`LPA_M`)
A task that runs on the SIU only. It is responsible for coordinating the activities of the LPA_S (LPA slave) tasks running on the E

16 LAT physics acquisition, slave task (`LPA_S`)
A task that (currently) only runs on EPU. This task is slaved to the LPA_M task which has overall responsibility for coordinating

17 LAT register access, master task (`LRA_M`)
A task that runs only on the SIU. This task can directly access (read/write) hardware registers, and should be used with extreme c

18 LAT thermal control, master task (`LTC_M`)
A task that runs only on the SIU. This task provides the feedback mechanism for turning the radiators on and off.

19 LAT gamma ray burst analysis, slave task (`GRB_S`)
A task that runs only on the SIU. It is slaved to the LPA task. During physics acquisition, GRB attempts to identify gamma ray bu

20 LAT instrument housekeeping, master task (`LIH_M`)
A task that only runs on the SIU. Responsible for acquiring data for most housekeeping packets. In particaulr, LIH acquires instru

22 CTDB command receive, utility task (`CRXC_U`)
A task that only runs on the SIU. It is responsible for receiving commands from the CTDB bus and distributing them to the corre

25 LCB transmit, utility task (`LTX0_U`)
A task that runs on both SIU and EPU. Basically a message postman. Allows CPUs to send messages to each other across the LC

26 LCB receive result, utility task (`LRXR_U`)
A task that runs on both SIU and EPU. Basically a postman for messages received back from an LCB command list.

27 LCB receive event, utility task (`LRXE_U`)
A task that runs on both SIU and EPU. Basically a postman for unsolicited traffic arriving at a CPUs LCB. Unsolicited traffic is e

29 CTDB transmit, utility task (`CTX_U`)
A task that only runs on the SIU. Basically a postman that delivers telemetry from applications tasks (both SIU and EPU) to the C

30 SDI (transmit), utility task (`STX_U`)
A task run on both SIU and EPU to send data to the science data interface (and thence to the solid state recorder).

Used by:

???

12.3 Ranges

12.3.0 `LCMMBZ` (A must-be-zero field) Range

Description:

Used to ensure that padding fields are set to zero.

Definition:

Limits 0 - 0

Used by:

???

12.3.1 `STATSTIMELENLIM` (Limits on the Statistics Timer) Range

Description:

Limit on how long the statistics timer should run. The special value -1 means run forever. The special value 0 means stop the timer.

Definition:

Limits -1 - 2000000

Used by:

???

12.4 Telemetry Packets

12.4.0 `MemoryError` (718/0x2CE)

Description:

"A memory error report" Telemetry Packet

A memory error report

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCMSPARE16 Unsigned short
0x010	0	8	U1234	LCMMEMCPUINST Memory error instrument number
	8	8	U1234	LCMMEMCPUEBM Memory error CPU address on EBM
	16	8	U1234	LCMMEMCPUNODE Memory error CPU logical node
	24	8	U1234	LCMMEMCPUSN Memory error CPU simple serial number
0x014	0	32	U1234	LCMMEMSTATUS Memory error status register
0x018	0	32	U1234	LCMMEMCOUNT Memory error count register
0x01C	0	32	U1234	LCMMEMLOG0TYP Memory error log entry 0 (type of error)
0x020	0	32	U1234	LCMMEMLOG0ADD Memory error log entry 0 (address of error)
0x024	0	32	U1234	LCMMEMLOG1TYP Memory error log entry 1 (type of error)
0x028	0	32	U1234	LCMMEMLOG1ADD Memory error log entry 1 (address of error)
0x02C	0	32	U1234	LCMMEMLOG2TYP Memory error log entry 2 (type of error)
0x030	0	32	U1234	LCMMEMLOG2ADD Memory error log entry 2 (address of error)
0x034	0	32	U1234	LCMMEMLOG3TYP Memory error log entry 3 (type of error)
0x038	0	32	U1234	LCMMEMLOG3ADD Memory error log entry 3 (address of error)

12.4.1 `PciError` (719/0x2CF)

Description:

"A PCI error report" Telemetry Packet

A PCI error report

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCMSPARE16 Unsigned short
0x010	0	8	U1234	LCMPCICPUINST PCI error instrument number
	8	8	U1234	LCMPCICPUEBM PCI error CPU address on EBM
	16	8	U1234	LCMPCICPUNODE PCI error CPU logical node
	24	8	U1234	LCMPCICPUSN PCI error CPU simple serial number
0x014	0	32	U1234	LCMPCISTATUS PCI error status 2 register
0x018	0	32	U1234	LCMPCIBUS PCI error bus error status register
0x01C	0	32	U1234	LCMPCIADDRESS PCI error address register

12.4.2 LLCMMODLIST (721/0x2D1)

Description:

"Module Status Dump" Telemetry Packet

One LLCMMODLIST telemetry packet is sent in reponse to the LCMMODDUMP telecommand for each software module loaded on the target CPU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LCMMDMPUNIT LAT Unit
	4	12	U12	LCMMDMPXACT Transaction ID
0x010	0	32	U1234	LCMMDMPMID Module VxWorks ID
0x014	0	32	U1234	LCMMDMPTEXTADDR Module Text Segment Address
0x018	0	32	U1234	LCMMDMPTEXTSIZE Module Text Segment Size
0x01C	0	32	U1234	LCMMDMPDATAADDR Module Data Segment Address
0x020	0	32	U1234	LCMMDMPDATASIZE Module Data Segment Address
0x024	0	32	U1234	LCMMDMPBSSADDR Module BSS Segment Address
0x028	0	32	U1234	LCMMDMPBSSSIZE Module BSS Segment Size
0x02C	0	32	U1234	LCMMDMPFILEID Module File ID
0x030	0	16	I12	LCMMDMPMAJVER Module CMX Major Version
0x032	0	16	I12	LCMMDMPMINVER Module CMX Minor Version

Offset	S	L	Type	ITOS name, attribute(s), and description
0x034	0	16	I12	LCMMDMPPATVER Module CMX Patch Version
0x036	0	8	I1	LCMMDMPPACKAGE0 Module CMX Package
0x037	0	8	I1	LCMMDMPPACKAGE1 Module CMX Package
0x038	0	8	I1	LCMMDMPPACKAGE2 Module CMX Package
0x039	0	8	I1	LCMMDMPPACKAGE3 Module CMX Package
0x03A	0	8	I1	LCMMDMPPACKAGE4 Module CMX Package
0x03B	0	8	I1	LCMMDMPPACKAGE5 Module CMX Package
0x03C	0	8	I1	LCMMDMPPACKAGE6 Module CMX Package
0x03D	0	8	I1	LCMMDMPPACKAGE7 Module CMX Package
0x03E	0	8	I1	LCMMDMPCONSTIT0 Module CMX Constituent
0x03F	0	8	I1	LCMMDMPCONSTIT1 Module CMX Constituent
0x040	0	8	I1	LCMMDMPCONSTIT2 Module CMX Constituent
0x041	0	8	I1	LCMMDMPCONSTIT3 Module CMX Constituent
0x042	0	8	I1	LCMMDMPCONSTIT4 Module CMX Constituent
0x043	0	8	I1	LCMMDMPCONSTIT5 Module CMX Constituent
0x044	0	8	I1	LCMMDMPCONSTIT6 Module CMX Constituent
0x045	0	8	I1	LCMMDMPCONSTIT7 Module CMX Constituent
0x046	0	8	I1	LCMMDMPCONSTIT8 Module CMX Constituent
0x047	0	8	I1	LCMMDMPCONSTIT9 Module CMX Constituent
0x048	0	8	I1	LCMMDMPCONSTIT10 Module CMX Constituent
0x049	0	8	I1	LCMMDMPCONSTIT11 Module CMX Constituent
0x04A	0	8	I1	LCMMDMPCONSTIT12 Module CMX Constituent
0x04B	0	8	I1	LCMMDMPCONSTIT13 Module CMX Constituent
0x04C	0	8	I1	LCMMDMPCONSTIT14 Module CMX Constituent
0x04D	0	8	I1	LCMMDMPCONSTIT15 Module CMX Constituent

12.4.3 **LLCMTASKLIST** (722/0x2D2)

Description:

"Task Status Dump" Telemetry Packet

One LLCMTASKLIST telemetry packet is sent in reponse to the LCMTASKDUMP telecommand for each active task on the target CPU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LCMTDMPUNIT LAT Unit
	4	12	U12	LCMTDMPXACT Transaction ID
0x010	0	32	U1234	LCMTDMPTID VxWorks Task ID
0x014	0	32	U1234	LCMTDMPPRIORITY Task Priority
0x018	0	32	U1234	LCMTDMPSTATUS Task Status
0x01C	0	32	U1234	LCMTDMPENTRY Task Entry Address
0x020	0	32	U1234	LCMTDMPERROR Task Most Recent Error
0x024	0	32	U1234	LCMTDMPOPTIONS Task Options
0x028	0	32	U1234	LCMTDMPDELAY Task Delay Timeout
0x02C	0	32	U1234	LCMTDMPSTSP Task Saved SP Value
0x030	0	32	U1234	LCMTDMPSTBASE Task Stack Base Address
0x034	0	32	U1234	LCMTDMPSTEND Task Stack End Address
0x038	0	32	U1234	LCMTDMPSTLIMIT Task Stack Limit
0x03C	0	32	U1234	LCMTDMPSTSIZE Task Stack Size
0x040	0	32	U1234	LCMTDMPSTCUR Task Stack Current Usage
0x044	0	32	U1234	LCMTDMPSTMAR Task Stack Current Margin
0x048	0	32	U1234	LCMTDMPSTHIGH Task Stack Maximum Usage
0x04C	0	8	I1	LCMTDMPNAME0 Task Name
0x04D	0	8	I1	LCMTDMPNAME1 Task Name
0x04E	0	8	I1	LCMTDMPNAME2 Task Name
0x04F	0	8	I1	LCMTDMPNAME3 Task Name

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	8	I1	LCMTDMPNAME4 Task Name
0x051	0	8	I1	LCMTDMPNAME5 Task Name
0x052	0	8	I1	LCMTDMPNAME6 Task Name
0x053	0	8	I1	LCMTDMPNAME7 Task Name
0x054	0	8	I1	LCMTDMPNAME8 Task Name
0x055	0	8	I1	LCMTDMPNAME9 Task Name
0x056	0	8	I1	LCMTDMPNAME10 Task Name
0x057	0	8	I1	LCMTDMPNAME11 Task Name
0x058	0	8	I1	LCMTDMPNAME12 Task Name
0x059	0	8	I1	LCMTDMPNAME13 Task Name
0x05A	0	8	I1	LCMTDMPNAME14 Task Name
0x05B	0	8	I1	LCMTDMPNAME15 Task Name

12.4.4 LLCMPCIERR (723/0x2D3)

Description:

"RAD750 PCI Error Report" Telemetry Packet

One LLCMMEMERR telemetry packet is generated for each RAD750 memory error reported by hardware if the LCMECLPCI error class is set to the LCMLEVDIA error level.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LCMPERRUNIT LAT Unit
	4	12	U12	LCMPERRXACT Transaction ID
0x010	0	32	U1234	LCMPERRSTATUS RAD750 PCI Error Status Register
0x014	0	32	U1234	LCMPERRBUS RAD750 PCI Bus Status Register
0x018	0	32	U1234	LCMPERRADDR RAD750 PCI Error Address Register

12.4.5 `LLCMMEMERR` (724/0x2D4)

Description:

"RAD750 MEM Error Report" Telemetry Packet

One LLCMMEMERR telemetry packet is generated for each RAD750 memory error reported by hardware if the LCMECLMEC or LCMECLMEU error classes are set to the LCMLEVDIA error level.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LCMMERRUNIT LAT Unit
	4	12	U12	LCMMERRXACT Transaction ID
0x010	0	32	U1234	LCMMERRSTATUS RAD750 MEM Error Status Register
0x014	0	32	U1234	LCMMERRCOUNT RAD750 MEM Error Count Register
0x018	0	32	U1234	LCMMERRLOG0 RAD750 MEM Error Log Register 0
0x01C	0	32	U1234	LCMMERRLOG1 RAD750 MEM Error Log Register 1

12.4.6 `LCMMSGOUTC` (725/0x2D5)

Description:

"CTDB MSG Output" Telemetry Packet

One LCMMSGOUT telemetry packet is optionally generated for each MSG output record.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LCMMSGPAD16 Padding
0x010	0	32	U1234	LCMMSGTIMESEC MSG Generation Time
0x014	0	32	U1234	LCMMSGTIMEUSEC MSG Generation Time
0x018	0	32	U1234	LCMMSGCODE MSG ID Code
0x01C	0	8	U1234	LCMMSGINST Instrument number
	8	8	U1234	LCMMSGEBM CPU address on the EBM
	16	8	U1234	LCMMSGNODE MSG ITC Source Node
	24	8	U1234	LCMMSGSN Simple CPU serial number
0x020	0	8	I1	LCMMSGTASK0 MSG Source Task
0x021	0	8	I1	LCMMSGTASK1

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Source Task
0x022	0	8	I1	LCMMSGTASK2
				MSG Source Task
0x023	0	8	I1	LCMMSGTASK3
				MSG Source Task
0x024	0	8	I1	LCMMSGTASK4
				MSG Source Task
0x025	0	8	I1	LCMMSGTASK5
				MSG Source Task
0x026	0	8	I1	LCMMSGTASK6
				MSG Source Task
0x027	0	8	I1	LCMMSGTASK7
				MSG Source Task
0x028	0	8	I1	LCMMSGFUNC0
				MSG Source Function
0x029	0	8	I1	LCMMSGFUNC1
				MSG Source Function
0x02A	0	8	I1	LCMMSGFUNC2
				MSG Source Function
0x02B	0	8	I1	LCMMSGFUNC3
				MSG Source Function
0x02C	0	8	I1	LCMMSGFUNC4
				MSG Source Function
0x02D	0	8	I1	LCMMSGFUNC5
				MSG Source Function
0x02E	0	8	I1	LCMMSGFUNC6
				MSG Source Function
0x02F	0	8	I1	LCMMSGFUNC7
				MSG Source Function
0x030	0	8	I1	LCMMSGFUNC8
				MSG Source Function
0x031	0	8	I1	LCMMSGFUNC9
				MSG Source Function
0x032	0	8	I1	LCMMSGFUNC10
				MSG Source Function
0x033	0	8	I1	LCMMSGFUNC11
				MSG Source Function
0x034	0	8	I1	LCMMSGFUNC12
				MSG Source Function
0x035	0	8	I1	LCMMSGFUNC13
				MSG Source Function
0x036	0	8	I1	LCMMSGFUNC14
				MSG Source Function
0x037	0	8	I1	LCMMSGFUNC15
				MSG Source Function
0x038	0	8	I1	LCMMSGFUNC16
				MSG Source Function
0x039	0	8	I1	LCMMSGFUNC17
				MSG Source Function
0x03A	0	8	I1	LCMMSGFUNC18
				MSG Source Function
0x03B	0	8	I1	LCMMSGFUNC19

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Source Function
0x03C	0	8	I1	LCMMSGFUNC20
				MSG Source Function
0x03D	0	8	I1	LCMMSGFUNC21
				MSG Source Function
0x03E	0	8	I1	LCMMSGFUNC22
				MSG Source Function
0x03F	0	8	I1	LCMMSGFUNC23
				MSG Source Function
0x040	0	8	I1	LCMMSGFUNC24
				MSG Source Function
0x041	0	8	I1	LCMMSGFUNC25
				MSG Source Function
0x042	0	8	I1	LCMMSGFUNC26
				MSG Source Function
0x043	0	8	I1	LCMMSGFUNC27
				MSG Source Function
0x044	0	8	I1	LCMMSGFUNC28
				MSG Source Function
0x045	0	8	I1	LCMMSGFUNC29
				MSG Source Function
0x046	0	8	I1	LCMMSGFUNC30
				MSG Source Function
0x047	0	8	I1	LCMMSGFUNC31
				MSG Source Function
0x048	0	8	I1	LCMMSGFACIL0
				MSG Facility Name
0x049	0	8	I1	LCMMSGFACIL1
				MSG Facility Name
0x04A	0	8	I1	LCMMSGFACIL2
				MSG Facility Name
0x04B	0	8	I1	LCMMSGFACIL3
				MSG Facility Name
0x04C	0	8	I1	LCMMSGNAME0
				MSG Mnemonic
0x04D	0	8	I1	LCMMSGNAME1
				MSG Mnemonic
0x04E	0	8	I1	LCMMSGNAME2
				MSG Mnemonic
0x04F	0	8	I1	LCMMSGNAME3
				MSG Mnemonic
0x050	0	8	I1	LCMMSGNAME4
				MSG Mnemonic
0x051	0	8	I1	LCMMSGNAME5
				MSG Mnemonic
0x052	0	8	I1	LCMMSGNAME6
				MSG Mnemonic
0x053	0	8	I1	LCMMSGNAME7
				MSG Mnemonic
0x054	0	8	I1	LCMMSGTEXT0
				MSG Text String
0x055	0	8	I1	LCMMSGTEXT1

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Text String
0x056	0	8	I1	LCMMSGTEXT2
				MSG Text String
0x057	0	8	I1	LCMMSGTEXT3
				MSG Text String
0x058	0	8	I1	LCMMSGTEXT4
				MSG Text String
0x059	0	8	I1	LCMMSGTEXT5
				MSG Text String
0x05A	0	8	I1	LCMMSGTEXT6
				MSG Text String
0x05B	0	8	I1	LCMMSGTEXT7
				MSG Text String
0x05C	0	8	I1	LCMMSGTEXT8
				MSG Text String
0x05D	0	8	I1	LCMMSGTEXT9
				MSG Text String
0x05E	0	8	I1	LCMMSGTEXT10
				MSG Text String
0x05F	0	8	I1	LCMMSGTEXT11
				MSG Text String
0x060	0	8	I1	LCMMSGTEXT12
				MSG Text String
0x061	0	8	I1	LCMMSGTEXT13
				MSG Text String
0x062	0	8	I1	LCMMSGTEXT14
				MSG Text String
0x063	0	8	I1	LCMMSGTEXT15
				MSG Text String
0x064	0	8	I1	LCMMSGTEXT16
				MSG Text String
0x065	0	8	I1	LCMMSGTEXT17
				MSG Text String
0x066	0	8	I1	LCMMSGTEXT18
				MSG Text String
0x067	0	8	I1	LCMMSGTEXT19
				MSG Text String
0x068	0	8	I1	LCMMSGTEXT20
				MSG Text String
0x069	0	8	I1	LCMMSGTEXT21
				MSG Text String
0x06A	0	8	I1	LCMMSGTEXT22
				MSG Text String
0x06B	0	8	I1	LCMMSGTEXT23
				MSG Text String
0x06C	0	8	I1	LCMMSGTEXT24
				MSG Text String
0x06D	0	8	I1	LCMMSGTEXT25
				MSG Text String
0x06E	0	8	I1	LCMMSGTEXT26
				MSG Text String
0x06F	0	8	I1	LCMMSGTEXT27

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Text String
`0x070`	0	8	`I1`	`LCMMSGTEXT28` MSG Text String
`0x071`	0	8	`I1`	`LCMMSGTEXT29` MSG Text String
`0x072`	0	8	`I1`	`LCMMSGTEXT30` MSG Text String
`0x073`	0	8	`I1`	`LCMMSGTEXT31` MSG Text String
`0x074`	0	8	`I1`	`LCMMSGTEXT32` MSG Text String
`0x075`	0	8	`I1`	`LCMMSGTEXT33` MSG Text String
`0x076`	0	8	`I1`	`LCMMSGTEXT34` MSG Text String
`0x077`	0	8	`I1`	`LCMMSGTEXT35` MSG Text String
`0x078`	0	8	`I1`	`LCMMSGTEXT36` MSG Text String
`0x079`	0	8	`I1`	`LCMMSGTEXT37` MSG Text String
`0x07A`	0	8	`I1`	`LCMMSGTEXT38` MSG Text String
`0x07B`	0	8	`I1`	`LCMMSGTEXT39` MSG Text String
`0x07C`	0	8	`I1`	`LCMMSGTEXT40` MSG Text String
`0x07D`	0	8	`I1`	`LCMMSGTEXT41` MSG Text String
`0x07E`	0	8	`I1`	`LCMMSGTEXT42` MSG Text String
`0x07F`	0	8	`I1`	`LCMMSGTEXT43` MSG Text String
`0x080`	0	8	`I1`	`LCMMSGTEXT44` MSG Text String
`0x081`	0	8	`I1`	`LCMMSGTEXT45` MSG Text String
`0x082`	0	8	`I1`	`LCMMSGTEXT46` MSG Text String
`0x083`	0	8	`I1`	`LCMMSGTEXT47` MSG Text String
`0x084`	0	8	`I1`	`LCMMSGTEXT48` MSG Text String
`0x085`	0	8	`I1`	`LCMMSGTEXT49` MSG Text String
`0x086`	0	8	`I1`	`LCMMSGTEXT50` MSG Text String
`0x087`	0	8	`I1`	`LCMMSGTEXT51` MSG Text String
`0x088`	0	8	`I1`	`LCMMSGTEXT52` MSG Text String
`0x089`	0	8	`I1`	`LCMMSGTEXT53`

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Text String
0x08A	0	8	I1	LCMMSGTEXT54 MSG Text String
0x08B	0	8	I1	LCMMSGTEXT55 MSG Text String
0x08C	0	8	I1	LCMMSGTEXT56 MSG Text String
0x08D	0	8	I1	LCMMSGTEXT57 MSG Text String
0x08E	0	8	I1	LCMMSGTEXT58 MSG Text String
0x08F	0	8	I1	LCMMSGTEXT59 MSG Text String
0x090	0	8	I1	LCMMSGTEXT60 MSG Text String
0x091	0	8	I1	LCMMSGTEXT61 MSG Text String
0x092	0	8	I1	LCMMSGTEXT62 MSG Text String
0x093	0	8	I1	LCMMSGTEXT63 MSG Text String
0x094	0	8	I1	LCMMSGTEXT64 MSG Text String
0x095	0	8	I1	LCMMSGTEXT65 MSG Text String
0x096	0	8	I1	LCMMSGTEXT66 MSG Text String
0x097	0	8	I1	LCMMSGTEXT67 MSG Text String
0x098	0	8	I1	LCMMSGTEXT68 MSG Text String
0x099	0	8	I1	LCMMSGTEXT69 MSG Text String
0x09A	0	8	I1	LCMMSGTEXT70 MSG Text String
0x09B	0	8	I1	LCMMSGTEXT71 MSG Text String
0x09C	0	8	I1	LCMMSGTEXT72 MSG Text String
0x09D	0	8	I1	LCMMSGTEXT73 MSG Text String
0x09E	0	8	I1	LCMMSGTEXT74 MSG Text String
0x09F	0	8	I1	LCMMSGTEXT75 MSG Text String
0x0A0	0	8	I1	LCMMSGTEXT76 MSG Text String
0x0A1	0	8	I1	LCMMSGTEXT77 MSG Text String
0x0A2	0	8	I1	LCMMSGTEXT78 MSG Text String
0x0A3	0	8	I1	LCMMSGTEXT79

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Text String
0x0A4	0	8	I1	LCMMSGTEXT80 MSG Text String
0x0A5	0	8	I1	LCMMSGTEXT81 MSG Text String
0x0A6	0	8	I1	LCMMSGTEXT82 MSG Text String
0x0A7	0	8	I1	LCMMSGTEXT83 MSG Text String
0x0A8	0	8	I1	LCMMSGTEXT84 MSG Text String
0x0A9	0	8	I1	LCMMSGTEXT85 MSG Text String
0x0AA	0	8	I1	LCMMSGTEXT86 MSG Text String
0x0AB	0	8	I1	LCMMSGTEXT87 MSG Text String
0x0AC	0	8	I1	LCMMSGTEXT88 MSG Text String
0x0AD	0	8	I1	LCMMSGTEXT89 MSG Text String
0x0AE	0	8	I1	LCMMSGTEXT90 MSG Text String
0x0AF	0	8	I1	LCMMSGTEXT91 MSG Text String
0x0B0	0	8	I1	LCMMSGTEXT92 MSG Text String
0x0B1	0	8	I1	LCMMSGTEXT93 MSG Text String
0x0B2	0	8	I1	LCMMSGTEXT94 MSG Text String
0x0B3	0	8	I1	LCMMSGTEXT95 MSG Text String
0x0B4	0	8	I1	LCMMSGTEXT96 MSG Text String
0x0B5	0	8	I1	LCMMSGTEXT97 MSG Text String
0x0B6	0	8	I1	LCMMSGTEXT98 MSG Text String
0x0B7	0	8	I1	LCMMSGTEXT99 MSG Text String
0x0B8	0	8	I1	LCMMSGTEXT100 MSG Text String
0x0B9	0	8	I1	LCMMSGTEXT101 MSG Text String
0x0BA	0	8	I1	LCMMSGTEXT102 MSG Text String
0x0BB	0	8	I1	LCMMSGTEXT103 MSG Text String
0x0BC	0	8	I1	LCMMSGTEXT104 MSG Text String
0x0BD	0	8	I1	LCMMSGTEXT105

Offset	S	L	Type	ITOS name, attribute(s), and description
				MSG Text String
0x0BE	0	8	I1	LCMMSGTEXT106 MSG Text String
0x0BF	0	8	I1	LCMMSGTEXT107 MSG Text String
0x0C0	0	8	I1	LCMMSGTEXT108 MSG Text String
0x0C1	0	8	I1	LCMMSGTEXT109 MSG Text String
0x0C2	0	8	I1	LCMMSGTEXT110 MSG Text String
0x0C3	0	8	I1	LCMMSGTEXT111 MSG Text String
0x0C4	0	8	I1	LCMMSGTEXT112 MSG Text String
0x0C5	0	8	I1	LCMMSGTEXT113 MSG Text String
0x0C6	0	8	I1	LCMMSGTEXT114 MSG Text String
0x0C7	0	8	I1	LCMMSGTEXT115 MSG Text String
0x0C8	0	8	I1	LCMMSGTEXT116 MSG Text String
0x0C9	0	8	I1	LCMMSGTEXT117 MSG Text String
0x0CA	0	8	I1	LCMMSGTEXT118 MSG Text String
0x0CB	0	8	I1	LCMMSGTEXT119 MSG Text String
0x0CC	0	8	I1	LCMMSGTEXT120 MSG Text String
0x0CD	0	8	I1	LCMMSGTEXT121 MSG Text String
0x0CE	0	8	I1	LCMMSGTEXT122 MSG Text String
0x0CF	0	8	I1	LCMMSGTEXT123 MSG Text String
0x0D0	0	8	I1	LCMMSGTEXT124 MSG Text String
0x0D1	0	8	I1	LCMMSGTEXT125 MSG Text String
0x0D2	0	8	I1	LCMMSGTEXT126 MSG Text String
0x0D3	0	8	I1	LCMMSGTEXT127 MSG Text String

12.4.7 `LCMMSGSSRSI` (960/0x3C0)

Description:

"SSR MSG Output SIU" Telemetry Packet

One LCMMSGSSRSI telemetry packet is optionally generated for each MSG output record from the SIU. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLCM package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LCMPAD16SI` 16-bit alignment padding

12.4.8 `LCMMSGSSRE0` (961/0x3C1)

Description:

"SSR MSG Output EPU0" Telemetry Packet

One LCMMSGSSRE0 telemetry packet is optionally generated for each MSG output record from EPU0. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLCM package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LCMPAD16E0` 16-bit alignment padding

12.4.9 `LCMMSGSSRE1` (962/0x3C2)

Description:

"SSR MSG Output EPU1" Telemetry Packet

One LCMMSGSSRE1 telemetry packet is optionally generated for each MSG output record from EPU1 This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLCM package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LCMPAD16E1` 16-bit alignment padding

12.4.10 `LCMMSGSSRE2` (963/0x3C3)

Description:

"SSR MSG Output EPU2" Telemetry Packet

One LCMMSGSSRE2 telemetry packet is optionally generated for each MSG output record from EPU2. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLCM package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LCMPAD16E2` 16-bit alignment padding

12.4.11 `LCMMSGSSRE3` (964/0x3C4)

Description:

"SSR MSG Output EPU3" Telemetry Packet

One LCMMSGSSRE3 telemetry packet is optionally generated for each MSG output record from EPU3. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLCM package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LCMPAD16E3` 16-bit alignment padding

12.4.12 `STATSSIU` (990/0x3DE)

Description:

"LCB and other stats processed on SIU" Telemetry Packet

Statictics and other stats collected on SIU and sent over the science interface.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after packet

12.4.13 `STATSEPU0` (991/0x3DF)

Description:

"LCB and other stats processed on EPU0" Telemetry Packet

Statictics and other stats collected on EPU0 and sent over the science interface.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after packet

12.4.14 `STATSEPU1` (992/0x3E0)

Description:

"LCB and other stats processed on EPU1" Telemetry Packet

Statictics and other stats collected on EPU1 and sent over the science interface.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after packet

12.4.15 `STATSEPU2` (993/0x3E1)

Description:

"LCB and other stats processed on EPU2" Telemetry Packet

Statictics and other stats collected on EPU2 and sent over the science interface.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after packet

12.4.16 `STATSEPU3` (994/0x3E2)

Description:

"LCB and other stats processed on EPU3" Telemetry Packet

Statictics and other stats collected on EPU3 and sent over the science interface.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after packet

12.4.17 `LCMIMAGESIU` (1000/0x3E8)

Description:

"Dump of SIU image information" Telemetry Packet

Dump of SIU image information. These are the traditional module and task tables.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

12.4.18 LCMIMAGEEPU0 (1001/0x3E9)

Description:

"Dump of EPU0 image information" Telemetry Packet

Dump of EPU0 image information. These are the traditional module and task tables.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

12.4.19 LCMIMAGEEPU1 (1002/0x3EA)

Description:

"Dump of EPU1 image information" Telemetry Packet

Dump of EPU1 image information. These are the traditional module and task tables.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

12.4.20 LCMIMAGEEPU2 (1003/0x3EB)

Description:

"Dump of EPU2 image information" Telemetry Packet

Dump of EPU2 image information. These are the traditional module and task tables.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

12.4.21 LCMIMAGEEPU3 (1004/0x3EC)

Description:

"Dump of EPU3 image information" Telemetry Packet

Dump of EPU3 image information. These are the traditional module and task tables.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

13 LFS Package

13.0 Overview

The LFS package provides the "standard" file operations (copy, delete, move, list directory, ...), plus a few "unusual" operations (file upload and file dump via spacecraft).

13.1 Command Packets

13.1.0 `LFSFILEDELETE` (1608/0x648:0)

Description:

"File Delete" Telecommand Packet

Deletes the file specified by LFSFILEID. Valid devices for this telecommand are '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSTRANID` Transaction ID to associate with command
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSFILEID` File Storage ID

13.1.1 `LFSFILECOPY` (1608/0x648:1)

Description:

"File Copy Local" Telecommand Packet

Copies a file locally on the same CPU. The LFSSRCFILEID and LFSDESTFILEID values specify the source and destination file locations. Valid devices for this telecommand are '/ram' (1), '/ee0' (2), and '/ee1' (3). This command may be used to copy from one device to another and from one directory to another, as long as the devices are on the same CPU. Copying a file from SIU to and EPU requires using the LFILUPLEPU telecommand.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSTRANID` Transaction ID to associate with command
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSSRCFILEID` File Storage ID
`0x010`	0	32	`U1234`	`LFSDESTFILEID`

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Storage ID

13.1.2 `LFSDIRCREATE` (1608/0x648:2)

Description:

"Directory Create" Telecommand Packet

Creates a directory specified by the LFSFILEID path. Only the device and directory number portions of the file ID are used. Valid devices for this telecommand are '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSTRANID` Transaction ID to associate with command
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSFILEID` File Storage ID

13.1.3 `LFSDIRDELETE` (1608/0x648:3)

Description:

"Directory Delete" Telecommand Packet

Deletes a directory specified by the LFSFILEID path. Only the device and directory number portions of the file ID are used. Valid devices for this telecommand are '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSTRANID` Transaction ID to associate with command
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSFILEID` File Storage ID

13.1.4 `LFSFILEDUMPC` (1608/0x648:4)

Description:

"File Dump CTDB" Telecommand Packet

Dumps the contents of a file indicated by LFSFILEID to the CTDB interface. The file data is sent as a series of LFSDUMPCTBD telemetery packets. Valid devices for this telecommand are '/boot' (0), '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE Computer to send the command to
	4	12	U12	LFSTRANID Transaction ID to associate with command
0x00A	0	16	U12	LFSPAD16 16-bit padding
0x00C	0	32	U1234	LFSFILEID File Storage ID

13.1.5 `LFSDIRDUMP` (1608/0x648:5)

Description:

"Directory Dump" Telecommand Packet

Dumps the contents of a directory specified by the LFSFILEID path. Only the device and directory number portions of the file ID are used. If the directory value is '127', a series of LFS-ROOTLIST telemetry packets are sent, one for each directory in the root directory of the device. Otherwise, a series of LFSDIRLIST telemetry packets are sent, one for each file in the directory. Valid devices for this telecommand are '/boot (0), '/ram' (1), '/ee0' (2), and '/ee1' (3). When the telecommand is directed at the boot partitions (device 0), up to 6 file listings may be produced. The lower and upper EEPROM banks each contain 3 boot file slots, which are reported if the file header contained at the beginning of the slot is valid.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE Computer to send the command to
	4	12	U12	LFSTRANID Transaction ID to associate with command
0x00A	0	16	U12	LFSPAD16 16-bit padding
0x00C	0	32	U1234	LFSFILEID File Storage ID

13.1.6 `LFSSYSSTATUS` (1608/0x648:6)

Description:

"File System Status" Telecommand Packet

Report the current status of a file system partition indicated by LFSFILEID. Only the device number portion of the file storage ID is used. The status is returned as a single LFSSYSLIST telemetry packet. Valid devices for this telecommand are '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSTRANID` Transaction ID to associate with command
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSFILEID` File Storage ID

13.1.7 `LFSSYSCHECK` (1608/0x648:7)

Description:

"File System Check" Telecommand Packet

This telecommand runs the chkdsk utility on the target on-board file system. Valid devices for this telecommand are '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LFSNODE` Computer to send the command to
	4	12	`U12`	`LFSPAD12` A twelve-bit padding field
`0x00A`	0	16	`U12`	`LFSPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LFSFILEID` File Storage ID

13.1.8 `LFSFILEDUMPS` (1608/0x648:8)

Description:

"File Dump SSR" Telecommand Packet

Dumps the contents of a file indicated by LFSFILEID to the SSR science interface. The file data is sent as a series of QLFS datagrams embedded in telemetery packets. Valid devices for this telecommand are '/boot' (0), '/ram' (1), '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE
				Computer to send the command to
	4	12	U12	LFSTRANID
				Transaction ID to associate with command
0x00A	0	16	U12	LFSPAD16
				16-bit padding
0x00C	0	32	U1234	LFSFILEID
				File Storage ID

13.1.9 **LFSNOOP** (1608/0x648:9)

Description:

"LFS No-Op" Telecommand Packet

A no-op telecommand for the LFS/FILE task. Does nothing but generate a command confirm reply.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE
				Computer to send the command to
	4	12	U12	LFSPAD12
				A twelve-bit padding field

13.1.10 **LFSSYSFORMAT** (1609/0x649:0)

Description:

"File System Format" Telecommand Packet

This telecommand will reformat one of the TFFS file system partitions contained in the SIB board EEPROM banks. The partition will start at the offset into the bank as indicated by the telecommand parameters. The file system partition should not overlap the boot partition contained in the EEPROM bank. Use this command with care, since it will destroy any previous file system partition stored in that bank. Valid devices for this telecommand are '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE
				Computer to send the command to
	4	12	U12	LFSPAD12
				A twelve-bit padding field
0x00A	0	16	U12	LFSPAD16
				16-bit padding
0x00C	0	32	U1234	LFSFILEID
				File Storage ID
0x010	0	32	U1234	LFSOFFSET
				Offset in bytes

13.1.11 `LFSSYSMOUNT` (1609/0x649:1)

Description:

"File System Mount" Telecommand Packet

This telecommand performs a manual mount of one of the on-board file systems. Valid devices for this telecommand are '/ee0' (2), and '/ee1' (3).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE
				Computer to send the command to
	4	12	U12	LFSPAD12
				A twelve-bit padding field
0x00A	0	16	U12	LFSPAD16
				16-bit padding
0x00C	0	32	U1234	LFSFILEID
				File Storage ID

13.1.12 `LFSSYSREPAIR` (1609/0x649:2)

Description:

"File System Repair" Telecommand Packet

Run the VxWorks chkdsk utility on the target device with the repair flag set to true. WARNING: This telecommand may result in the deletion of corrupted files for the sake of returning the partition to a consistent state.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LFSNODE
				Computer to send the command to
	4	12	U12	LFSPAD12
				A twelve-bit padding field
0x00A	0	16	U12	LFSPAD16
				16-bit padding
0x00C	0	32	U1234	LFSFILEID
				File Storage ID

13.2 Enumerations

13.2.0 `LFSNODEID` (List of CPU nodes addressable with LFS commands) Enumeration

Description:

List of CPU nodes addressable with LCM commands

Definition:

0 The SIU computer (`SIU`)
The SIU computer

1 The EPU0 computer (`EPU0`)
The EPU0 computer

2 The EPU1 computer (`EPU1`)
The EPU1 computer

3 The EPU2 computer (`EPU2`)
The EPU2 computer

4 The EPU3 computer (external crate) (`EPU3`)
The EPU3 computer (external crate)

Used by:

???

13.3 Ranges

13.3.0 `LFSMBZ` (A must-be-zero field) Range

Description:

Used to ensure that padding fields are set to zero.

Definition:

Limits 0 - 0

Used by:

???

13.4 Telemetry Packets

13.4.0 LLFSDIRLIST (792/0x318)

Description:

"Directory Listing Report" Telemetry Packet

Lists one file entry in a LAT file system sub-directory. One of these packets is sent in response to a LFSDIRDUMP telecommand for each file in the target directory.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LFSDDMPUNIT LAT Storage Unit
	4	12	U12	LFSDDMPXACT Transaction ID
0x010	0	1	I1	LFSDDMPARCFLG File Storage Archive Flag
	1	1	U12	LFSDDMPDIRFLG File Storage Directory Flag
	2	1	U12	LFSDDMPROFLG File Storage Read-Only Flag
	3	13	U12	LFSDDMPPAD13 13-bit Padding Word
0x012	0	16	U12	LFSDDMPPAD16 16-bit Padding Word
0x014	0	3	U1234	LFSDDMPDEV File ID Device Number
	3	7	U1234	LFSDDMPDIR File ID Directory Number
	10	22	U1234	LFSDDMPFILE File ID File Number
0x018	0	32	U1234	LFSDDMPTIME File Storage Update Time
0x01C	0	32	U1234	LFSDDMPSIZE File Storage Size
0x020	0	32	U1234	LFSDDMPBLKS File Storage Blocks
0x024	0	8	U1	LFSDDMPFHDR0 File Header Data
0x025	0	8	U1	LFSDDMPFHDR1 File Header Data
0x026	0	8	U1	LFSDDMPFHDR2 File Header Data
0x027	0	8	U1	LFSDDMPFHDR3 File Header Data
0x028	0	8	U1	LFSDDMPFHDR4 File Header Data
0x029	0	8	U1	LFSDDMPFHDR5 File Header Data
0x02A	0	8	U1	LFSDDMPFHDR6 File Header Data

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02B	0	8	U1	LFSDDMPFHDR7 File Header Data
0x02C	0	8	U1	LFSDDMPFHDR8 File Header Data
0x02D	0	8	U1	LFSDDMPFHDR9 File Header Data
0x02E	0	8	U1	LFSDDMPFHDR10 File Header Data
0x02F	0	8	U1	LFSDDMPFHDR11 File Header Data
0x030	0	8	U1	LFSDDMPFHDR12 File Header Data
0x031	0	8	U1	LFSDDMPFHDR13 File Header Data
0x032	0	8	U1	LFSDDMPFHDR14 File Header Data
0x033	0	8	U1	LFSDDMPFHDR15 File Header Data
0x034	0	8	U1	LFSDDMPFHDR16 File Header Data
0x035	0	8	U1	LFSDDMPFHDR17 File Header Data
0x036	0	8	U1	LFSDDMPFHDR18 File Header Data
0x037	0	8	U1	LFSDDMPFHDR19 File Header Data
0x038	0	8	U1	LFSDDMPFHDR20 File Header Data
0x039	0	8	U1	LFSDDMPFHDR21 File Header Data
0x03A	0	8	U1	LFSDDMPFHDR22 File Header Data
0x03B	0	8	U1	LFSDDMPFHDR23 File Header Data
0x03C	0	8	U1	LFSDDMPFHDR24 File Header Data
0x03D	0	8	U1	LFSDDMPFHDR25 File Header Data
0x03E	0	8	U1	LFSDDMPFHDR26 File Header Data
0x03F	0	8	U1	LFSDDMPFHDR27 File Header Data
0x040	0	8	U1	LFSDDMPFHDR28 File Header Data
0x041	0	8	U1	LFSDDMPFHDR29 File Header Data
0x042	0	8	U1	LFSDDMPFHDR30 File Header Data
0x043	0	8	U1	LFSDDMPFHDR31 File Header Data

13.4.1 LLFSROOTLIST (793/0x319)

Description:

"Root Listing Report" Telemetry Packet

Lists one file entry in a LAT file system root directory. One of these packets is sent in response to a LFSDIRDUMP (directory = '127') telecommand for each sub-directory in the target device.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LFSRDMPUNIT LAT Storage Unit
	4	12	U12	LFSRDMPXACT Transaction ID
0x010	0	1	I1	LFSRDMPARCFLG File Storage Archive Flag
	1	1	U12	LFSRDMPDIRFLG File Storage Directory Flag
	2	1	U12	LFSRDMPROFLG File Storage Read-Only Flag
	3	13	U12	LFSRDMPPAD13 13-bit Padding Word
0x012	0	16	U12	LFSRDMPPAD16 16-bit Padding Word
0x014	0	3	U1234	LFSRDMPFDEV File ID Device Number
	3	7	U1234	LFSRDMPFDIR File ID Directory Number
	10	22	U1234	LFSRDMPFFILE File ID File Number
0x018	0	32	U1234	LFSRDMPTIME File Storage Update Time
0x01C	0	32	U1234	LFSRDMPSIZE File Storage Size
0x020	0	32	U1234	LFSRDMPBLKS File Storage Blocks

13.4.2 LLFSSYSLIST (794/0x31A)

Description:

"File System Status Report" Telemetry Packet

Provides the status of a LAT file system partition. One of these packets is sent in response to the LFSSYSSTATUS telecommand.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LFSSYSSUNIT LAT Storage Unit
	4	12	U12	LFSSYSSXACT

Offset	S	L	Type	ITOS name, attribute(s), and description
				Transaction ID
0x010	0	3	U1234	LFSSYSSDEV File ID Device Number
	3	7	U1234	LFSSYSSDIR File ID Directory Number
	10	22	U1234	LFSSYSSFILE File ID File Number
0x014	0	32	U1234	LFSSYSSBLKSIZE File System Block Size
0x018	0	32	U1234	LFSSYSSBLKFREE File System Free Blocks
0x01C	0	32	U1234	LFSSYSSBLKTOT File System Total Blocks

13.4.3 LLFSDUMPCTDB (795/0x31B)

Description:

"File Dump Data CTDB" Telemetry Packet

Contains a portion of a file data dump to the CTDB interface. The LFSFDMPOFFSET and LFSFDMP-SIZE members provide the offset into the file and size of the current packet's data contents (LFSFDMPDATAxxx). The LFSFDMPDEV, LFSFDMPDIR, and LFSFDMPFILE members give the storage location of the file.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LFSFDMPUNIT LAT Storage Unit
	4	12	U12	LFSFDMPXACT Transaction ID
0x010	0	3	U1234	LFSFDMPDEV File ID Device Number
	3	7	U1234	LFSFDMPDIR File ID Directory Number
	10	22	U1234	LFSFDMPFILE File ID File Number
0x014	0	32	U1234	LFSFDMPOFFSET File Data Offset
0x018	0	32	U1234	LFSFDMPSIZE File Dump Current Size
0x01C	0	8	U1	LFSFDMPDATA0 File Data Contents
0x01D	0	8	U1	LFSFDMPDATA1 File Data Contents
0x01E	0	8	U1	LFSFDMPDATA2 File Data Contents
0x01F	0	8	U1	LFSFDMPDATA3 File Data Contents
0x020	0	8	U1	LFSFDMPDATA4 File Data Contents
0x021	0	8	U1	LFSFDMPDATA5

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x022	0	8	U1	LFSFDMPDATA6
				File Data Contents
0x023	0	8	U1	LFSFDMPDATA7
				File Data Contents
0x024	0	8	U1	LFSFDMPDATA8
				File Data Contents
0x025	0	8	U1	LFSFDMPDATA9
				File Data Contents
0x026	0	8	U1	LFSFDMPDATA10
				File Data Contents
0x027	0	8	U1	LFSFDMPDATA11
				File Data Contents
0x028	0	8	U1	LFSFDMPDATA12
				File Data Contents
0x029	0	8	U1	LFSFDMPDATA13
				File Data Contents
0x02A	0	8	U1	LFSFDMPDATA14
				File Data Contents
0x02B	0	8	U1	LFSFDMPDATA15
				File Data Contents
0x02C	0	8	U1	LFSFDMPDATA16
				File Data Contents
0x02D	0	8	U1	LFSFDMPDATA17
				File Data Contents
0x02E	0	8	U1	LFSFDMPDATA18
				File Data Contents
0x02F	0	8	U1	LFSFDMPDATA19
				File Data Contents
0x030	0	8	U1	LFSFDMPDATA20
				File Data Contents
0x031	0	8	U1	LFSFDMPDATA21
				File Data Contents
0x032	0	8	U1	LFSFDMPDATA22
				File Data Contents
0x033	0	8	U1	LFSFDMPDATA23
				File Data Contents
0x034	0	8	U1	LFSFDMPDATA24
				File Data Contents
0x035	0	8	U1	LFSFDMPDATA25
				File Data Contents
0x036	0	8	U1	LFSFDMPDATA26
				File Data Contents
0x037	0	8	U1	LFSFDMPDATA27
				File Data Contents
0x038	0	8	U1	LFSFDMPDATA28
				File Data Contents
0x039	0	8	U1	LFSFDMPDATA29
				File Data Contents
0x03A	0	8	U1	LFSFDMPDATA30
				File Data Contents
0x03B	0	8	U1	LFSFDMPDATA31

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x03C	0	8	U1	LFSFDMPDATA32
				File Data Contents
0x03D	0	8	U1	LFSFDMPDATA33
				File Data Contents
0x03E	0	8	U1	LFSFDMPDATA34
				File Data Contents
0x03F	0	8	U1	LFSFDMPDATA35
				File Data Contents
0x040	0	8	U1	LFSFDMPDATA36
				File Data Contents
0x041	0	8	U1	LFSFDMPDATA37
				File Data Contents
0x042	0	8	U1	LFSFDMPDATA38
				File Data Contents
0x043	0	8	U1	LFSFDMPDATA39
				File Data Contents
0x044	0	8	U1	LFSFDMPDATA40
				File Data Contents
0x045	0	8	U1	LFSFDMPDATA41
				File Data Contents
0x046	0	8	U1	LFSFDMPDATA42
				File Data Contents
0x047	0	8	U1	LFSFDMPDATA43
				File Data Contents
0x048	0	8	U1	LFSFDMPDATA44
				File Data Contents
0x049	0	8	U1	LFSFDMPDATA45
				File Data Contents
0x04A	0	8	U1	LFSFDMPDATA46
				File Data Contents
0x04B	0	8	U1	LFSFDMPDATA47
				File Data Contents
0x04C	0	8	U1	LFSFDMPDATA48
				File Data Contents
0x04D	0	8	U1	LFSFDMPDATA49
				File Data Contents
0x04E	0	8	U1	LFSFDMPDATA50
				File Data Contents
0x04F	0	8	U1	LFSFDMPDATA51
				File Data Contents
0x050	0	8	U1	LFSFDMPDATA52
				File Data Contents
0x051	0	8	U1	LFSFDMPDATA53
				File Data Contents
0x052	0	8	U1	LFSFDMPDATA54
				File Data Contents
0x053	0	8	U1	LFSFDMPDATA55
				File Data Contents
0x054	0	8	U1	LFSFDMPDATA56
				File Data Contents
0x055	0	8	U1	LFSFDMPDATA57

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x056	0	8	U1	LFSFDMPDATA58 File Data Contents
0x057	0	8	U1	LFSFDMPDATA59 File Data Contents
0x058	0	8	U1	LFSFDMPDATA60 File Data Contents
0x059	0	8	U1	LFSFDMPDATA61 File Data Contents
0x05A	0	8	U1	LFSFDMPDATA62 File Data Contents
0x05B	0	8	U1	LFSFDMPDATA63 File Data Contents
0x05C	0	8	U1	LFSFDMPDATA64 File Data Contents
0x05D	0	8	U1	LFSFDMPDATA65 File Data Contents
0x05E	0	8	U1	LFSFDMPDATA66 File Data Contents
0x05F	0	8	U1	LFSFDMPDATA67 File Data Contents
0x060	0	8	U1	LFSFDMPDATA68 File Data Contents
0x061	0	8	U1	LFSFDMPDATA69 File Data Contents
0x062	0	8	U1	LFSFDMPDATA70 File Data Contents
0x063	0	8	U1	LFSFDMPDATA71 File Data Contents
0x064	0	8	U1	LFSFDMPDATA72 File Data Contents
0x065	0	8	U1	LFSFDMPDATA73 File Data Contents
0x066	0	8	U1	LFSFDMPDATA74 File Data Contents
0x067	0	8	U1	LFSFDMPDATA75 File Data Contents
0x068	0	8	U1	LFSFDMPDATA76 File Data Contents
0x069	0	8	U1	LFSFDMPDATA77 File Data Contents
0x06A	0	8	U1	LFSFDMPDATA78 File Data Contents
0x06B	0	8	U1	LFSFDMPDATA79 File Data Contents
0x06C	0	8	U1	LFSFDMPDATA80 File Data Contents
0x06D	0	8	U1	LFSFDMPDATA81 File Data Contents
0x06E	0	8	U1	LFSFDMPDATA82 File Data Contents
0x06F	0	8	U1	LFSFDMPDATA83

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x070	0	8	U1	LFSFDMPDATA84
				File Data Contents
0x071	0	8	U1	LFSFDMPDATA85
				File Data Contents
0x072	0	8	U1	LFSFDMPDATA86
				File Data Contents
0x073	0	8	U1	LFSFDMPDATA87
				File Data Contents
0x074	0	8	U1	LFSFDMPDATA88
				File Data Contents
0x075	0	8	U1	LFSFDMPDATA89
				File Data Contents
0x076	0	8	U1	LFSFDMPDATA90
				File Data Contents
0x077	0	8	U1	LFSFDMPDATA91
				File Data Contents
0x078	0	8	U1	LFSFDMPDATA92
				File Data Contents
0x079	0	8	U1	LFSFDMPDATA93
				File Data Contents
0x07A	0	8	U1	LFSFDMPDATA94
				File Data Contents
0x07B	0	8	U1	LFSFDMPDATA95
				File Data Contents
0x07C	0	8	U1	LFSFDMPDATA96
				File Data Contents
0x07D	0	8	U1	LFSFDMPDATA97
				File Data Contents
0x07E	0	8	U1	LFSFDMPDATA98
				File Data Contents
0x07F	0	8	U1	LFSFDMPDATA99
				File Data Contents
0x080	0	8	U1	LFSFDMPDATA100
				File Data Contents
0x081	0	8	U1	LFSFDMPDATA101
				File Data Contents
0x082	0	8	U1	LFSFDMPDATA102
				File Data Contents
0x083	0	8	U1	LFSFDMPDATA103
				File Data Contents
0x084	0	8	U1	LFSFDMPDATA104
				File Data Contents
0x085	0	8	U1	LFSFDMPDATA105
				File Data Contents
0x086	0	8	U1	LFSFDMPDATA106
				File Data Contents
0x087	0	8	U1	LFSFDMPDATA107
				File Data Contents
0x088	0	8	U1	LFSFDMPDATA108
				File Data Contents
0x089	0	8	U1	LFSFDMPDATA109

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x08A	0	8	U1	LFSFDMPDATA110 File Data Contents
0x08B	0	8	U1	LFSFDMPDATA111 File Data Contents
0x08C	0	8	U1	LFSFDMPDATA112 File Data Contents
0x08D	0	8	U1	LFSFDMPDATA113 File Data Contents
0x08E	0	8	U1	LFSFDMPDATA114 File Data Contents
0x08F	0	8	U1	LFSFDMPDATA115 File Data Contents
0x090	0	8	U1	LFSFDMPDATA116 File Data Contents
0x091	0	8	U1	LFSFDMPDATA117 File Data Contents
0x092	0	8	U1	LFSFDMPDATA118 File Data Contents
0x093	0	8	U1	LFSFDMPDATA119 File Data Contents
0x094	0	8	U1	LFSFDMPDATA120 File Data Contents
0x095	0	8	U1	LFSFDMPDATA121 File Data Contents
0x096	0	8	U1	LFSFDMPDATA122 File Data Contents
0x097	0	8	U1	LFSFDMPDATA123 File Data Contents
0x098	0	8	U1	LFSFDMPDATA124 File Data Contents
0x099	0	8	U1	LFSFDMPDATA125 File Data Contents
0x09A	0	8	U1	LFSFDMPDATA126 File Data Contents
0x09B	0	8	U1	LFSFDMPDATA127 File Data Contents
0x09C	0	8	U1	LFSFDMPDATA128 File Data Contents
0x09D	0	8	U1	LFSFDMPDATA129 File Data Contents
0x09E	0	8	U1	LFSFDMPDATA130 File Data Contents
0x09F	0	8	U1	LFSFDMPDATA131 File Data Contents
0x0A0	0	8	U1	LFSFDMPDATA132 File Data Contents
0x0A1	0	8	U1	LFSFDMPDATA133 File Data Contents
0x0A2	0	8	U1	LFSFDMPDATA134 File Data Contents
0x0A3	0	8	U1	LFSFDMPDATA135

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x0A4	0	8	U1	LFSFDMPDATA136
				File Data Contents
0x0A5	0	8	U1	LFSFDMPDATA137
				File Data Contents
0x0A6	0	8	U1	LFSFDMPDATA138
				File Data Contents
0x0A7	0	8	U1	LFSFDMPDATA139
				File Data Contents
0x0A8	0	8	U1	LFSFDMPDATA140
				File Data Contents
0x0A9	0	8	U1	LFSFDMPDATA141
				File Data Contents
0x0AA	0	8	U1	LFSFDMPDATA142
				File Data Contents
0x0AB	0	8	U1	LFSFDMPDATA143
				File Data Contents
0x0AC	0	8	U1	LFSFDMPDATA144
				File Data Contents
0x0AD	0	8	U1	LFSFDMPDATA145
				File Data Contents
0x0AE	0	8	U1	LFSFDMPDATA146
				File Data Contents
0x0AF	0	8	U1	LFSFDMPDATA147
				File Data Contents
0x0B0	0	8	U1	LFSFDMPDATA148
				File Data Contents
0x0B1	0	8	U1	LFSFDMPDATA149
				File Data Contents
0x0B2	0	8	U1	LFSFDMPDATA150
				File Data Contents
0x0B3	0	8	U1	LFSFDMPDATA151
				File Data Contents
0x0B4	0	8	U1	LFSFDMPDATA152
				File Data Contents
0x0B5	0	8	U1	LFSFDMPDATA153
				File Data Contents
0x0B6	0	8	U1	LFSFDMPDATA154
				File Data Contents
0x0B7	0	8	U1	LFSFDMPDATA155
				File Data Contents
0x0B8	0	8	U1	LFSFDMPDATA156
				File Data Contents
0x0B9	0	8	U1	LFSFDMPDATA157
				File Data Contents
0x0BA	0	8	U1	LFSFDMPDATA158
				File Data Contents
0x0BB	0	8	U1	LFSFDMPDATA159
				File Data Contents
0x0BC	0	8	U1	LFSFDMPDATA160
				File Data Contents
0x0BD	0	8	U1	LFSFDMPDATA161

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x0BE	0	8	U1	LFSFDMPDATA162
				File Data Contents
0x0BF	0	8	U1	LFSFDMPDATA163
				File Data Contents
0x0C0	0	8	U1	LFSFDMPDATA164
				File Data Contents
0x0C1	0	8	U1	LFSFDMPDATA165
				File Data Contents
0x0C2	0	8	U1	LFSFDMPDATA166
				File Data Contents
0x0C3	0	8	U1	LFSFDMPDATA167
				File Data Contents
0x0C4	0	8	U1	LFSFDMPDATA168
				File Data Contents
0x0C5	0	8	U1	LFSFDMPDATA169
				File Data Contents
0x0C6	0	8	U1	LFSFDMPDATA170
				File Data Contents
0x0C7	0	8	U1	LFSFDMPDATA171
				File Data Contents
0x0C8	0	8	U1	LFSFDMPDATA172
				File Data Contents
0x0C9	0	8	U1	LFSFDMPDATA173
				File Data Contents
0x0CA	0	8	U1	LFSFDMPDATA174
				File Data Contents
0x0CB	0	8	U1	LFSFDMPDATA175
				File Data Contents
0x0CC	0	8	U1	LFSFDMPDATA176
				File Data Contents
0x0CD	0	8	U1	LFSFDMPDATA177
				File Data Contents
0x0CE	0	8	U1	LFSFDMPDATA178
				File Data Contents
0x0CF	0	8	U1	LFSFDMPDATA179
				File Data Contents
0x0D0	0	8	U1	LFSFDMPDATA180
				File Data Contents
0x0D1	0	8	U1	LFSFDMPDATA181
				File Data Contents
0x0D2	0	8	U1	LFSFDMPDATA182
				File Data Contents
0x0D3	0	8	U1	LFSFDMPDATA183
				File Data Contents
0x0D4	0	8	U1	LFSFDMPDATA184
				File Data Contents
0x0D5	0	8	U1	LFSFDMPDATA185
				File Data Contents
0x0D6	0	8	U1	LFSFDMPDATA186
				File Data Contents
0x0D7	0	8	U1	LFSFDMPDATA187

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x0D8	0	8	U1	LFSFDMPDATA188 File Data Contents
0x0D9	0	8	U1	LFSFDMPDATA189 File Data Contents
0x0DA	0	8	U1	LFSFDMPDATA190 File Data Contents
0x0DB	0	8	U1	LFSFDMPDATA191 File Data Contents
0x0DC	0	8	U1	LFSFDMPDATA192 File Data Contents
0x0DD	0	8	U1	LFSFDMPDATA193 File Data Contents
0x0DE	0	8	U1	LFSFDMPDATA194 File Data Contents
0x0DF	0	8	U1	LFSFDMPDATA195 File Data Contents
0x0E0	0	8	U1	LFSFDMPDATA196 File Data Contents
0x0E1	0	8	U1	LFSFDMPDATA197 File Data Contents
0x0E2	0	8	U1	LFSFDMPDATA198 File Data Contents
0x0E3	0	8	U1	LFSFDMPDATA199 File Data Contents
0x0E4	0	8	U1	LFSFDMPDATA200 File Data Contents
0x0E5	0	8	U1	LFSFDMPDATA201 File Data Contents
0x0E6	0	8	U1	LFSFDMPDATA202 File Data Contents
0x0E7	0	8	U1	LFSFDMPDATA203 File Data Contents
0x0E8	0	8	U1	LFSFDMPDATA204 File Data Contents
0x0E9	0	8	U1	LFSFDMPDATA205 File Data Contents
0x0EA	0	8	U1	LFSFDMPDATA206 File Data Contents
0x0EB	0	8	U1	LFSFDMPDATA207 File Data Contents
0x0EC	0	8	U1	LFSFDMPDATA208 File Data Contents
0x0ED	0	8	U1	LFSFDMPDATA209 File Data Contents
0x0EE	0	8	U1	LFSFDMPDATA210 File Data Contents
0x0EF	0	8	U1	LFSFDMPDATA211 File Data Contents
0x0F0	0	8	U1	LFSFDMPDATA212 File Data Contents
0x0F1	0	8	U1	LFSFDMPDATA213

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x0F2	0	8	U1	LFSFDMPDATA214 File Data Contents
0x0F3	0	8	U1	LFSFDMPDATA215 File Data Contents
0x0F4	0	8	U1	LFSFDMPDATA216 File Data Contents
0x0F5	0	8	U1	LFSFDMPDATA217 File Data Contents
0x0F6	0	8	U1	LFSFDMPDATA218 File Data Contents
0x0F7	0	8	U1	LFSFDMPDATA219 File Data Contents
0x0F8	0	8	U1	LFSFDMPDATA220 File Data Contents
0x0F9	0	8	U1	LFSFDMPDATA221 File Data Contents
0x0FA	0	8	U1	LFSFDMPDATA222 File Data Contents
0x0FB	0	8	U1	LFSFDMPDATA223 File Data Contents
0x0FC	0	8	U1	LFSFDMPDATA224 File Data Contents
0x0FD	0	8	U1	LFSFDMPDATA225 File Data Contents
0x0FE	0	8	U1	LFSFDMPDATA226 File Data Contents
0x0FF	0	8	U1	LFSFDMPDATA227 File Data Contents
0x100	0	8	U1	LFSFDMPDATA228 File Data Contents
0x101	0	8	U1	LFSFDMPDATA229 File Data Contents
0x102	0	8	U1	LFSFDMPDATA230 File Data Contents
0x103	0	8	U1	LFSFDMPDATA231 File Data Contents
0x104	0	8	U1	LFSFDMPDATA232 File Data Contents
0x105	0	8	U1	LFSFDMPDATA233 File Data Contents
0x106	0	8	U1	LFSFDMPDATA234 File Data Contents
0x107	0	8	U1	LFSFDMPDATA235 File Data Contents
0x108	0	8	U1	LFSFDMPDATA236 File Data Contents
0x109	0	8	U1	LFSFDMPDATA237 File Data Contents
0x10A	0	8	U1	LFSFDMPDATA238 File Data Contents
0x10B	0	8	U1	LFSFDMPDATA239

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x10C	0	8	U1	LFSFDMPDATA240 File Data Contents
0x10D	0	8	U1	LFSFDMPDATA241 File Data Contents
0x10E	0	8	U1	LFSFDMPDATA242 File Data Contents
0x10F	0	8	U1	LFSFDMPDATA243 File Data Contents
0x110	0	8	U1	LFSFDMPDATA244 File Data Contents
0x111	0	8	U1	LFSFDMPDATA245 File Data Contents
0x112	0	8	U1	LFSFDMPDATA246 File Data Contents
0x113	0	8	U1	LFSFDMPDATA247 File Data Contents
0x114	0	8	U1	LFSFDMPDATA248 File Data Contents
0x115	0	8	U1	LFSFDMPDATA249 File Data Contents
0x116	0	8	U1	LFSFDMPDATA250 File Data Contents
0x117	0	8	U1	LFSFDMPDATA251 File Data Contents
0x118	0	8	U1	LFSFDMPDATA252 File Data Contents
0x119	0	8	U1	LFSFDMPDATA253 File Data Contents
0x11A	0	8	U1	LFSFDMPDATA254 File Data Contents
0x11B	0	8	U1	LFSFDMPDATA255 File Data Contents
0x11C	0	8	U1	LFSFDMPDATA256 File Data Contents
0x11D	0	8	U1	LFSFDMPDATA257 File Data Contents
0x11E	0	8	U1	LFSFDMPDATA258 File Data Contents
0x11F	0	8	U1	LFSFDMPDATA259 File Data Contents
0x120	0	8	U1	LFSFDMPDATA260 File Data Contents
0x121	0	8	U1	LFSFDMPDATA261 File Data Contents
0x122	0	8	U1	LFSFDMPDATA262 File Data Contents
0x123	0	8	U1	LFSFDMPDATA263 File Data Contents
0x124	0	8	U1	LFSFDMPDATA264 File Data Contents
0x125	0	8	U1	LFSFDMPDATA265

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x126	0	8	U1	LFSFDMPDATA266
				File Data Contents
0x127	0	8	U1	LFSFDMPDATA267
				File Data Contents
0x128	0	8	U1	LFSFDMPDATA268
				File Data Contents
0x129	0	8	U1	LFSFDMPDATA269
				File Data Contents
0x12A	0	8	U1	LFSFDMPDATA270
				File Data Contents
0x12B	0	8	U1	LFSFDMPDATA271
				File Data Contents
0x12C	0	8	U1	LFSFDMPDATA272
				File Data Contents
0x12D	0	8	U1	LFSFDMPDATA273
				File Data Contents
0x12E	0	8	U1	LFSFDMPDATA274
				File Data Contents
0x12F	0	8	U1	LFSFDMPDATA275
				File Data Contents
0x130	0	8	U1	LFSFDMPDATA276
				File Data Contents
0x131	0	8	U1	LFSFDMPDATA277
				File Data Contents
0x132	0	8	U1	LFSFDMPDATA278
				File Data Contents
0x133	0	8	U1	LFSFDMPDATA279
				File Data Contents
0x134	0	8	U1	LFSFDMPDATA280
				File Data Contents
0x135	0	8	U1	LFSFDMPDATA281
				File Data Contents
0x136	0	8	U1	LFSFDMPDATA282
				File Data Contents
0x137	0	8	U1	LFSFDMPDATA283
				File Data Contents
0x138	0	8	U1	LFSFDMPDATA284
				File Data Contents
0x139	0	8	U1	LFSFDMPDATA285
				File Data Contents
0x13A	0	8	U1	LFSFDMPDATA286
				File Data Contents
0x13B	0	8	U1	LFSFDMPDATA287
				File Data Contents
0x13C	0	8	U1	LFSFDMPDATA288
				File Data Contents
0x13D	0	8	U1	LFSFDMPDATA289
				File Data Contents
0x13E	0	8	U1	LFSFDMPDATA290
				File Data Contents
0x13F	0	8	U1	LFSFDMPDATA291

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x140	0	8	U1	LFSFDMPDATA292
				File Data Contents
0x141	0	8	U1	LFSFDMPDATA293
				File Data Contents
0x142	0	8	U1	LFSFDMPDATA294
				File Data Contents
0x143	0	8	U1	LFSFDMPDATA295
				File Data Contents
0x144	0	8	U1	LFSFDMPDATA296
				File Data Contents
0x145	0	8	U1	LFSFDMPDATA297
				File Data Contents
0x146	0	8	U1	LFSFDMPDATA298
				File Data Contents
0x147	0	8	U1	LFSFDMPDATA299
				File Data Contents
0x148	0	8	U1	LFSFDMPDATA300
				File Data Contents
0x149	0	8	U1	LFSFDMPDATA301
				File Data Contents
0x14A	0	8	U1	LFSFDMPDATA302
				File Data Contents
0x14B	0	8	U1	LFSFDMPDATA303
				File Data Contents
0x14C	0	8	U1	LFSFDMPDATA304
				File Data Contents
0x14D	0	8	U1	LFSFDMPDATA305
				File Data Contents
0x14E	0	8	U1	LFSFDMPDATA306
				File Data Contents
0x14F	0	8	U1	LFSFDMPDATA307
				File Data Contents
0x150	0	8	U1	LFSFDMPDATA308
				File Data Contents
0x151	0	8	U1	LFSFDMPDATA309
				File Data Contents
0x152	0	8	U1	LFSFDMPDATA310
				File Data Contents
0x153	0	8	U1	LFSFDMPDATA311
				File Data Contents
0x154	0	8	U1	LFSFDMPDATA312
				File Data Contents
0x155	0	8	U1	LFSFDMPDATA313
				File Data Contents
0x156	0	8	U1	LFSFDMPDATA314
				File Data Contents
0x157	0	8	U1	LFSFDMPDATA315
				File Data Contents
0x158	0	8	U1	LFSFDMPDATA316
				File Data Contents
0x159	0	8	U1	LFSFDMPDATA317

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x15A	0	8	U1	LFSFDMPDATA318
				File Data Contents
0x15B	0	8	U1	LFSFDMPDATA319
				File Data Contents
0x15C	0	8	U1	LFSFDMPDATA320
				File Data Contents
0x15D	0	8	U1	LFSFDMPDATA321
				File Data Contents
0x15E	0	8	U1	LFSFDMPDATA322
				File Data Contents
0x15F	0	8	U1	LFSFDMPDATA323
				File Data Contents
0x160	0	8	U1	LFSFDMPDATA324
				File Data Contents
0x161	0	8	U1	LFSFDMPDATA325
				File Data Contents
0x162	0	8	U1	LFSFDMPDATA326
				File Data Contents
0x163	0	8	U1	LFSFDMPDATA327
				File Data Contents
0x164	0	8	U1	LFSFDMPDATA328
				File Data Contents
0x165	0	8	U1	LFSFDMPDATA329
				File Data Contents
0x166	0	8	U1	LFSFDMPDATA330
				File Data Contents
0x167	0	8	U1	LFSFDMPDATA331
				File Data Contents
0x168	0	8	U1	LFSFDMPDATA332
				File Data Contents
0x169	0	8	U1	LFSFDMPDATA333
				File Data Contents
0x16A	0	8	U1	LFSFDMPDATA334
				File Data Contents
0x16B	0	8	U1	LFSFDMPDATA335
				File Data Contents
0x16C	0	8	U1	LFSFDMPDATA336
				File Data Contents
0x16D	0	8	U1	LFSFDMPDATA337
				File Data Contents
0x16E	0	8	U1	LFSFDMPDATA338
				File Data Contents
0x16F	0	8	U1	LFSFDMPDATA339
				File Data Contents
0x170	0	8	U1	LFSFDMPDATA340
				File Data Contents
0x171	0	8	U1	LFSFDMPDATA341
				File Data Contents
0x172	0	8	U1	LFSFDMPDATA342
				File Data Contents
0x173	0	8	U1	LFSFDMPDATA343

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x174	0	8	U1	LFSFDMPDATA344
				File Data Contents
0x175	0	8	U1	LFSFDMPDATA345
				File Data Contents
0x176	0	8	U1	LFSFDMPDATA346
				File Data Contents
0x177	0	8	U1	LFSFDMPDATA347
				File Data Contents
0x178	0	8	U1	LFSFDMPDATA348
				File Data Contents
0x179	0	8	U1	LFSFDMPDATA349
				File Data Contents
0x17A	0	8	U1	LFSFDMPDATA350
				File Data Contents
0x17B	0	8	U1	LFSFDMPDATA351
				File Data Contents
0x17C	0	8	U1	LFSFDMPDATA352
				File Data Contents
0x17D	0	8	U1	LFSFDMPDATA353
				File Data Contents
0x17E	0	8	U1	LFSFDMPDATA354
				File Data Contents
0x17F	0	8	U1	LFSFDMPDATA355
				File Data Contents
0x180	0	8	U1	LFSFDMPDATA356
				File Data Contents
0x181	0	8	U1	LFSFDMPDATA357
				File Data Contents
0x182	0	8	U1	LFSFDMPDATA358
				File Data Contents
0x183	0	8	U1	LFSFDMPDATA359
				File Data Contents
0x184	0	8	U1	LFSFDMPDATA360
				File Data Contents
0x185	0	8	U1	LFSFDMPDATA361
				File Data Contents
0x186	0	8	U1	LFSFDMPDATA362
				File Data Contents
0x187	0	8	U1	LFSFDMPDATA363
				File Data Contents
0x188	0	8	U1	LFSFDMPDATA364
				File Data Contents
0x189	0	8	U1	LFSFDMPDATA365
				File Data Contents
0x18A	0	8	U1	LFSFDMPDATA366
				File Data Contents
0x18B	0	8	U1	LFSFDMPDATA367
				File Data Contents
0x18C	0	8	U1	LFSFDMPDATA368
				File Data Contents
0x18D	0	8	U1	LFSFDMPDATA369

Offset	S	L	Type	ITOS name, attribute(s), and description
				File Data Contents
0x18E	0	8	U1	LFSFDMPDATA370 File Data Contents
0x18F	0	8	U1	LFSFDMPDATA371 File Data Contents
0x190	0	8	U1	LFSFDMPDATA372 File Data Contents
0x191	0	8	U1	LFSFDMPDATA373 File Data Contents
0x192	0	8	U1	LFSFDMPDATA374 File Data Contents
0x193	0	8	U1	LFSFDMPDATA375 File Data Contents
0x194	0	8	U1	LFSFDMPDATA376 File Data Contents
0x195	0	8	U1	LFSFDMPDATA377 File Data Contents
0x196	0	8	U1	LFSFDMPDATA378 File Data Contents
0x197	0	8	U1	LFSFDMPDATA379 File Data Contents
0x198	0	8	U1	LFSFDMPDATA380 File Data Contents
0x199	0	8	U1	LFSFDMPDATA381 File Data Contents
0x19A	0	8	U1	LFSFDMPDATA382 File Data Contents
0x19B	0	8	U1	LFSFDMPDATA383 File Data Contents
0x19C	0	8	U1	LFSFDMPDATA384 File Data Contents
0x19D	0	8	U1	LFSFDMPDATA385 File Data Contents
0x19E	0	8	U1	LFSFDMPDATA386 File Data Contents
0x19F	0	8	U1	LFSFDMPDATA387 File Data Contents
0x1A0	0	8	U1	LFSFDMPDATA388 File Data Contents
0x1A1	0	8	U1	LFSFDMPDATA389 File Data Contents

13.4.4 `LLFSDIREMPTY` (796/0x31C)

Description:

"Directory Empty Report" Telemetry Packet

This telemetry packet is sent in response to the LFSDIRDUMP telecommand when the target directory is empty (no files or subdirectories).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LFSDEMPTUNIT LAT Storage Unit
	4	12	U12	LFSDEMPTXACT Transaction ID
0x010	0	3	U1234	LFSDEMPTDEV File ID Device Number
	3	7	U1234	LFSDEMPTDIR File ID Directory Number
	10	22	U1234	LFSDEMPTFILE File ID File Number

13.4.5 `LFSDUMPSSRSI` (975/0x3CF)

Description:

"File Dump Data SSR SIU" Telemetry Packet

A series of LFSDUMPSSRSI telemetry packets is enerated for each LFSFILEDUMPS telecommand sent to the SIU. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLFS package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LFSPAD16 16-bit Padding Word

13.4.6 `LFSDUMPSSRE0` (976/0x3D0)

Description:

"File Dump Data SSR EPU0" Telemetry Packet

A series of LFSDUMPSSRE0 telemetry packets is enerated for each LFSFILEDUMPS telecommand sent to EPU0. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLFS package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LFSPAD16 16-bit Padding Word

13.4.7 `LFSDUMPSSRE1` (977/0x3D1)

Description:

"File Dump Data SSR EPU1" Telemetry Packet

A series of LFSDUMPSSRE1 telemetry packets is enerated for each LFSFILEDUMPS telecommand sent to EPU1. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLFS package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LFSPAD16` 16-bit Padding Word

13.4.8 `LFSDUMPSSRE2` (978/0x3D2)

Description:

"File Dump Data SSR EPU2" Telemetry Packet

A series of LFSDUMPSSRE2 telemetry packets is enerated for each LFSFILEDUMPS telecommand sent to EPU2. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLFS package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LFSPAD16` 16-bit Padding Word

13.4.9 `LFSDUMPSSRE3` (979/0x3D3)

Description:

"File Dump Data SSR EPU3" Telemetry Packet

A series of LFSDUMPSSRE3 telemetry packets is enerated for each LFSFILEDUMPS telecommand sent to EPU3. This LCAT definition is minimal; the complete definition of the contained datagram can be found in the QLFS package.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LFSPAD16` 16-bit Padding Word

14 LHK Package

14.0 Overview

The LHK package provides monitoring facilities that are orthogonal and asynchronous to the monitoring that is based on the contents of physics events being read from the instrument. This is much more fundamental monitoring (e.g., temperatures, voltages, currents). LHK runs its own task.

The package supports the following functions:

- Housekeeping data stream

14.1 Command Packets

14.1.0 `LHKREQDIAGPKT` (1616/0x650:0)

Description:

"Request a Housekeeping Diagnostic Packet" Telecommand Packet

Sends a request to the housekeeping system to send a packets using the diagnostic channel.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LHKDIAGAPID` ?
`0x00C`	0	32	`U1234`	`LHKDIAGCOUNT` ?
`0x010`	0	32	`U1234`	`LHKDIAGINTERVAL` ?

14.1.1 `LHKSYSRESET` (1616/0x650:1)

Description:

"System Reset" Telecommand Packet

Resets the housekeeping system using configuration file parameters. File IDs can be null, which specifies loading of default configuration.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LHKCFGFILE0` ?
`0x00C`	0	32	`U1234`	`LHKCFGFILE1` ?

14.1.2 `LHKSTOPDIAG` (1616/0x650:2)

Description:

"Stop Diagnostic Sample" Telecommand Packet

Terminates the current diagnostic sample run.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

14.1.3 `LHKNOOP` (1616/0x650:3)

Description:

"LHK No-Op Command" Telecommand Packet

No-op command.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

14.1.4 `LHKCANCELDIAG` (1616/0x650:4)

Description:

"Cancel a request for diagnostic packets" Telecommand Packet

Cancel a request for diagnostic packets

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LHKCANCELAPID` APID of diagnsotic to cancel

14.1.5 `LHKNEWSCHEDFILE` (1616/0x650:5)

Description:

"Request a new housekeeping schedule by file ID" Telecommand Packet

Request a new housekeeping schedule by file ID

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LHKSCHEDFILE` File ID of new housekeeping scheduling file

14.1.6 `LHKNEWSCHEDINST` (1616/0x650:6)

Description:

"Request a new housekeeping schedule by CDM instance number" Telecommand Packet

Request a new housekeeping schedule by CDM instance number

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LHKSCHEDINST CDM instance number of new scheduling file

14.2 Ranges

14.2.0 `LHKAPDRNGDIA` (Valid range for mirror diagnostic APIDs) Range

Description:

A subset of the full diagnostic APID range. APIDs in this subset are used to mirror APIDs in the housekeeping range one-to-one. APIDs in this subset can then be used to schedule a packet on a different cadence.

Definition:

Limits 609 - 703

Used by:

???

14.2.1 `LHKAPIDRNGCMB` (LHK APID Range (combined housekeeping and diagnostic)) Range

Description:

Valid range of APIDs for LHK (cobined housekeeping and diagnostic). This is a deprecated range limit. It combines both the housekeeping range proper, and the part of the diagnostic range that mirrors the housekeeping range for purposes of scheduling a packet on a different cadence.

Definition:

Limits 503 - 607

Used by:

???

14.3 Telemetry Packets

14.3.0 `TemEnvPwr0` (528/0x210)

Description:

"TEM Power Packet 0" Telemetry Packet

Contains power specific ADC values for TEMs 0, 1, and 2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR0 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT0TKR25VDLM; LHKADCLMTSTATES TEM 0 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VDST TEM 0 TKR digital 2.5 V - read out status
	4	12	U12	LHKT0TKR25VD TEM 0 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT0TKR15VAALM; LHKADCLMTSTATES TEM 0 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT0TKR15VAAST TEM 0 TKR analog 1.5 V - read out status
	4	12	U12	LHKT0TKR15VAA TEM 0 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT0TKR25VABLM; LHKADCLMTSTATES TEM 0 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VABST TEM 0 TKR analog 2.5 V - read out status
	4	12	U12	LHKT0TKR25VAB TEM 0 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT0TKRBV0LM; LHKADCLMTSTATES TEM 0 TKR bias V0 - limit evaluation
	3	1	U12	LHKT0TKRBV0ST TEM 0 TKR bias V0 - read out status
	4	12	U12	LHKT0TKRBV0 TEM 0 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT0CAL33VDLM; LHKADCLMTSTATES TEM 0 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VDST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 CAL digital 3.3 V - read out status
	4	12	U12	LHKT0CAL33VD TEM 0 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT0TKRBV1LM; LHKADCLMTSTATES TEM 0 TKR bias V1 - limit evaluation
	3	1	U12	LHKT0TKRBV1ST TEM 0 TKR bias V1 - read out status
	4	12	U12	LHKT0TKRBV1 TEM 0 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT0CAL33VALM; LHKADCLMTSTATES TEM 0 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VAST TEM 0 CAL analog 3.3 V - read out status
	4	12	U12	LHKT0CAL33VA TEM 0 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT0CALBSV1LM; LHKADCLMTSTATES TEM 0 CAL bias V1 - limit evaluation
	3	1	U12	LHKT0CALBSV1ST TEM 0 CAL bias V1 - read out status
	4	12	U12	LHKT0CALBSV1 TEM 0 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT0CALBSV0LM; LHKADCLMTSTATES TEM 0 CAL bias V0 - limit evaluation
	3	1	U12	LHKT0CALBSV0ST TEM 0 CAL bias V0 - read out status
	4	12	U12	LHKT0CALBSV0 TEM 0 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT0TEM28V0LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT0TEM28V0ST TEM 0 TEM 28 V (V0) - read out status
	4	12	U12	LHKT0TEM28V0 TEM 0 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT0TEM33VLM; LHKADCLMTSTATES TEM 0 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT0TEM33VST TEM 0 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT0TEM33V TEM 0 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT0TEM28V1LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT0TEM28V1ST TEM 0 TEM 28 V (V1) - read out status
	4	12	U12	LHKT0TEM28V1 TEM 0 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT1TKR25VDLM; LHKADCLMTSTATES TEM 1 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VDST TEM 1 TKR digital 2.5 V - read out status
	4	12	U12	LHKT1TKR25VD TEM 1 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT1TKR15VAALM; LHKADCLMTSTATES TEM 1 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT1TKR15VAAST TEM 1 TKR analog 1.5 V - read out status
	4	12	U12	LHKT1TKR15VAA TEM 1 TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKT1TKR25VABLM; LHKADCLMTSTATES TEM 1 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VABST TEM 1 TKR analog 2.5 V - read out status
	4	12	U12	LHKT1TKR25VAB TEM 1 TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKT1TKRBV0LM; LHKADCLMTSTATES TEM 1 TKR bias V0 - limit evaluation
	3	1	U12	LHKT1TKRBV0ST TEM 1 TKR bias V0 - read out status
	4	12	U12	LHKT1TKRBV0 TEM 1 TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKT1CAL33VDLM; LHKADCLMTSTATES TEM 1 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VDST TEM 1 CAL digital 3.3 V - read out status
	4	12	U12	LHKT1CAL33VD TEM 1 CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKT1TKRBV1LM; LHKADCLMTSTATES TEM 1 TKR bias V1 - limit evaluation
	3	1	U12	LHKT1TKRBV1ST TEM 1 TKR bias V1 - read out status
	4	12	U12	LHKT1TKRBV1 TEM 1 TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKT1CAL33VALM; LHKADCLMTSTATES TEM 1 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VAST TEM 1 CAL analog 3.3 V - read out status
	4	12	U12	LHKT1CAL33VA TEM 1 CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKT1CALBSV1LM TEM 1 CAL bias V1 - limit evaluation
	3	1	U12	LHKT1CALBSV1ST TEM 1 CAL bias V1 - read out status
	4	12	U12	LHKT1CALBSV1 TEM 1 CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKT1CALBSV0LM TEM 1 CAL bias V0 - limit evaluation
	3	1	U12	LHKT1CALBSV0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 1 CAL bias V0 - read out status
	4	12	U12	LHKT1CALBSV0 TEM 1 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT1TEM28V0LM TEM 1 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT1TEM28V0ST TEM 1 TEM 28 V (V0) - read out status
	4	12	U12	LHKT1TEM28V0 TEM 1 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT1TEM33VLM; LHKADCLMTSTATES TEM 1 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT1TEM33VST TEM 1 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT1TEM33V TEM 1 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT1TEM28V1LM; LHKADCLMTSTATES TEM 1 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT1TEM28V1ST TEM 1 TEM 28 V (V1) - read out status
	4	12	U12	LHKT1TEM28V1 TEM 1 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT2TKR25VDLM; LHKADCLMTSTATES TEM 2 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VDST TEM 2 TKR digital 2.5 V - read out status
	4	12	U12	LHKT2TKR25VD TEM 2 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT2TKR15VAALM; LHKADCLMTSTATES TEM 2 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT2TKR15VAAST TEM 2 TKR analog 1.5 V - read out status
	4	12	U12	LHKT2TKR15VAA TEM 2 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT2TKR25VABLM; LHKADCLMTSTATES TEM 2 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VABST TEM 2 TKR analog 2.5 V - read out status
	4	12	U12	LHKT2TKR25VAB TEM 2 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT2TKRBV0LM; LHKADCLMTSTATES TEM 2 TKR bias V0 - limit evaluation
	3	1	U12	LHKT2TKRBV0ST TEM 2 TKR bias V0 - read out status
	4	12	U12	LHKT2TKRBV0 TEM 2 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT2CAL33VDLM; LHKADCLMTSTATES TEM 2 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VDST TEM 2 CAL digital 3.3 V - read out status
	4	12	U12	LHKT2CAL33VD TEM 2 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT2TKRBV1LM; LHKADCLMTSTATES TEM 2 TKR bias V1 - limit evaluation
	3	1	U12	LHKT2TKRBV1ST TEM 2 TKR bias V1 - read out status
	4	12	U12	LHKT2TKRBV1 TEM 2 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT2CAL33VALM; LHKADCLMTSTATES TEM 2 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VAST TEM 2 CAL analog 3.3 V - read out status
	4	12	U12	LHKT2CAL33VA TEM 2 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT2CALBSV1LM; LHKADCLMTSTATES TEM 2 CAL bias V1 - limit evaluation
	3	1	U12	LHKT2CALBSV1ST TEM 2 CAL bias V1 - read out status
	4	12	U12	LHKT2CALBSV1 TEM 2 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT2CALBSV0LM; LHKADCLMTSTATES TEM 2 CAL bias V0 - limit evaluation
	3	1	U12	LHKT2CALBSV0ST TEM 2 CAL bias V0 - read out status
	4	12	U12	LHKT2CALBSV0 TEM 2 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT2TEM28V0LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT2TEM28V0ST TEM 2 TEM 28 V (V0) - read out status
	4	12	U12	LHKT2TEM28V0 TEM 2 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT2TEM33VLM; LHKADCLMTSTATES TEM 2 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT2TEM33VST TEM 2 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT2TEM33V TEM 2 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT2TEM28V1LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT2TEM28V1ST TEM 2 TEM 28 V (V1) - read out status
	4	12	U12	LHKT2TEM28V1 TEM 2 TEM 28 V (V1) - raw ADC value

14.3.1 `TemEnvPwr1` (529/0x211)

Description:

"TEM Power Packet 1" Telemetry Packet

Contains power specific ADC values for TEMs 3, 4, and 5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR1 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT3TKR25VDLM; LHKADCLMTSTATES TEM 3 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VDST TEM 3 TKR digital 2.5 V - read out status
	4	12	U12	LHKT3TKR25VD TEM 3 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT3TKR15VAALM; LHKADCLMTSTATES TEM 3 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT3TKR15VAAST TEM 3 TKR analog 1.5 V - read out status
	4	12	U12	LHKT3TKR15VAA TEM 3 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT3TKR25VABLM; LHKADCLMTSTATES TEM 3 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VABST TEM 3 TKR analog 2.5 V - read out status
	4	12	U12	LHKT3TKR25VAB TEM 3 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT3TKRBV0LM; LHKADCLMTSTATES TEM 3 TKR bias V0 - limit evaluation
	3	1	U12	LHKT3TKRBV0ST TEM 3 TKR bias V0 - read out status
	4	12	U12	LHKT3TKRBV0 TEM 3 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT3CAL33VDLM; LHKADCLMTSTATES TEM 3 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VDST TEM 3 CAL digital 3.3 V - read out status
	4	12	U12	LHKT3CAL33VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT3TKRBV1LM; LHKADCLMTSTATES TEM 3 TKR bias V1 - limit evaluation
	3	1	U12	LHKT3TKRBV1ST TEM 3 TKR bias V1 - read out status
	4	12	U12	LHKT3TKRBV1 TEM 3 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT3CAL33VALM; LHKADCLMTSTATES TEM 3 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VAST TEM 3 CAL analog 3.3 V - read out status
	4	12	U12	LHKT3CAL33VA TEM 3 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT3CALBSV1LM TEM 3 CAL bias V1 - limit evaluation
	3	1	U12	LHKT3CALBSV1ST TEM 3 CAL bias V1 - read out status
	4	12	U12	LHKT3CALBSV1 TEM 3 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT3CALBSV0LM TEM 3 CAL bias V0 - limit evaluation
	3	1	U12	LHKT3CALBSV0ST TEM 3 CAL bias V0 - read out status
	4	12	U12	LHKT3CALBSV0 TEM 3 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT3TEM28V0LM TEM 3 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT3TEM28V0ST TEM 3 TEM 28 V (V0) - read out status
	4	12	U12	LHKT3TEM28V0 TEM 3 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT3TEM33VLM; LHKADCLMTSTATES TEM 3 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT3TEM33VST TEM 3 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT3TEM33V TEM 3 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT3TEM28V1LM; LHKADCLMTSTATES TEM 3 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT3TEM28V1ST TEM 3 TEM 28 V (V1) - read out status
	4	12	U12	LHKT3TEM28V1 TEM 3 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT4TKR25VDLM; LHKADCLMTSTATES TEM 4 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VDST TEM 4 TKR digital 2.5 V - read out status
	4	12	U12	LHKT4TKR25VD TEM 4 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT4TKR15VAALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 4 TKR analog 1.5 V - limit evaluation
	3	1	`U12`	`LHKT4TKR15VAAST`
				TEM 4 TKR analog 1.5 V - read out status
	4	12	`U12`	`LHKT4TKR15VAA`
				TEM 4 TKR analog 1.5 V - raw ADC value
`0x03A`	0	16	`U12`	`LHKSPARE16U12`
				Explicit 16 bit pad in unsigned short
`0x03C`	0	3	`U12`	`LHKT4TKR25VABLM; LHKADCLMTSTATES`
				TEM 4 TKR analog 2.5 V - limit evaluation
	3	1	`U12`	`LHKT4TKR25VABST`
				TEM 4 TKR analog 2.5 V - read out status
	4	12	`U12`	`LHKT4TKR25VAB`
				TEM 4 TKR analog 2.5 V - raw ADC value
`0x03E`	0	16	`U12`	`LHKSPARE16U12`
				Explicit 16 bit pad in unsigned short
`0x040`	0	3	`U12`	`LHKT4TKRBV0LM; LHKADCLMTSTATES`
				TEM 4 TKR bias V0 - limit evaluation
	3	1	`U12`	`LHKT4TKRBV0ST`
				TEM 4 TKR bias V0 - read out status
	4	12	`U12`	`LHKT4TKRBV0`
				TEM 4 TKR bias V0 - raw ADC value
`0x042`	0	16	`U12`	`LHKSPARE16U12`
				Explicit 16 bit pad in unsigned short
`0x044`	0	3	`U12`	`LHKT4CAL33VDLM; LHKADCLMTSTATES`
				TEM 4 CAL digital 3.3 V - limit evaluation
	3	1	`U12`	`LHKT4CAL33VDST`
				TEM 4 CAL digital 3.3 V - read out status
	4	12	`U12`	`LHKT4CAL33VD`
				TEM 4 CAL digital 3.3 V - raw ADC value
`0x046`	0	3	`U12`	`LHKT4TKRBV1LM; LHKADCLMTSTATES`
				TEM 4 TKR bias V1 - limit evaluation
	3	1	`U12`	`LHKT4TKRBV1ST`
				TEM 4 TKR bias V1 - read out status
	4	12	`U12`	`LHKT4TKRBV1`
				TEM 4 TKR bias V1 - raw ADC value
`0x048`	0	3	`U12`	`LHKT4CAL33VALM; LHKADCLMTSTATES`
				TEM 4 CAL analog 3.3 V - limit evaluation
	3	1	`U12`	`LHKT4CAL33VAST`
				TEM 4 CAL analog 3.3 V - read out status
	4	12	`U12`	`LHKT4CAL33VA`
				TEM 4 CAL analog 3.3 - raw ADC value
`0x04A`	0	3	`U12`	`LHKT4CALBSV1LM; LHKADCLMTSTATES`
				TEM 4 CAL bias V1 - limit evaluation
	3	1	`U12`	`LHKT4CALBSV1ST`
				TEM 4 CAL bias V1 - read out status
	4	12	`U12`	`LHKT4CALBSV1`
				TEM 4 CAL bias V1 - raw ADC value
`0x04C`	0	3	`U12`	`LHKT4CALBSV0LM; LHKADCLMTSTATES`
				TEM 4 CAL bias V0 - limit evaluation
	3	1	`U12`	`LHKT4CALBSV0ST`
				TEM 4 CAL bias V0 - read out status
	4	12	`U12`	`LHKT4CALBSV0`

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 4 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT4TEM28V0LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT4TEM28V0ST TEM 4 TEM 28 V (V0) - read out status
	4	12	U12	LHKT4TEM28V0 TEM 4 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT4TEM33VLM; LHKADCLMTSTATES TEM 4 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT4TEM33VST TEM 4 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT4TEM33V TEM 4 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT4TEM28V1LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT4TEM28V1ST TEM 4 TEM 28 V (V1) - read out status
	4	12	U12	LHKT4TEM28V1 TEM 4 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT5TKR25VDLM; LHKADCLMTSTATES TEM 5 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VDST TEM 5 TKR digital 2.5 V - read out status
	4	12	U12	LHKT5TKR25VD TEM 5 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT5TKR15VAALM; LHKADCLMTSTATES TEM 5 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT5TKR15VAAST TEM 5 TKR analog 1.5 V - read out status
	4	12	U12	LHKT5TKR15VAA TEM 5 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT5TKR25VABLM; LHKADCLMTSTATES TEM 5 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VABST TEM 5 TKR analog 2.5 V - read out status
	4	12	U12	LHKT5TKR25VAB TEM 5 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT5TKRBV0LM; LHKADCLMTSTATES TEM 5 TKR bias V0 - limit evaluation
	3	1	U12	LHKT5TKRBV0ST TEM 5 TKR bias V0 - read out status
	4	12	U12	LHKT5TKRBV0 TEM 5 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT5CAL33VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 5 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VDST TEM 5 CAL digital 3.3 V - read out status
	4	12	U12	LHKT5CAL33VD TEM 5 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT5TKRBV1LM; LHKADCLMTSTATES TEM 5 TKR bias V1 - limit evaluation
	3	1	U12	LHKT5TKRBV1ST TEM 5 TKR bias V1 - read out status
	4	12	U12	LHKT5TKRBV1 TEM 5 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT5CAL33VALM; LHKADCLMTSTATES TEM 5 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VAST TEM 5 CAL analog 3.3 V - read out status
	4	12	U12	LHKT5CAL33VA TEM 5 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT5CALBSV1LM TEM 5 CAL bias V1 - limit evaluation
	3	1	U12	LHKT5CALBSV1ST TEM 5 CAL bias V1 - read out status
	4	12	U12	LHKT5CALBSV1 TEM 5 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT5CALBSV0LM TEM 5 CAL bias V0 - limit evaluation
	3	1	U12	LHKT5CALBSV0ST TEM 5 CAL bias V0 - read out status
	4	12	U12	LHKT5CALBSV0 TEM 5 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT5TEM28V0LM TEM 5 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT5TEM28V0ST TEM 5 TEM 28 V (V0) - read out status
	4	12	U12	LHKT5TEM28V0 TEM 5 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT5TEM33VLM; LHKADCLMTSTATES TEM 5 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT5TEM33VST TEM 5 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT5TEM33V TEM 5 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT5TEM28V1LM; LHKADCLMTSTATES TEM 5 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT5TEM28V1ST TEM 5 TEM 28 V (V1) - read out status
	4	12	U12	LHKT5TEM28V1 TEM 5 TEM 28 V (V1) - raw ADC value

14.3.2 `TemEnvPwr2` (530/0x212)

Description:

"TEM Power Packet 2" Telemetry Packet

Contains power specific ADC values for TEMs 6, 7, and 8

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR2 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT6TKR25VDLM; LHKADCLMTSTATES TEM 6 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VDST TEM 6 TKR digital 2.5 V - read out status
	4	12	U12	LHKT6TKR25VD TEM 6 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT6TKR15VAALM; LHKADCLMTSTATES TEM 6 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT6TKR15VAAST TEM 6 TKR analog 1.5 V - read out status
	4	12	U12	LHKT6TKR15VAA TEM 6 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT6TKR25VABLM; LHKADCLMTSTATES TEM 6 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VABST TEM 6 TKR analog 2.5 V - read out status
	4	12	U12	LHKT6TKR25VAB TEM 6 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT6TKRBV0LM; LHKADCLMTSTATES TEM 6 TKR bias V0 - limit evaluation
	3	1	U12	LHKT6TKRBV0ST TEM 6 TKR bias V0 - read out status
	4	12	U12	LHKT6TKRBV0 TEM 6 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT6CAL33VDLM; LHKADCLMTSTATES TEM 6 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VDST TEM 6 CAL digital 3.3 V - read out status
	4	12	U12	LHKT6CAL33VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT6TKRBV1LM; LHKADCLMTSTATES TEM 6 TKR bias V1 - limit evaluation
	3	1	U12	LHKT6TKRBV1ST TEM 6 TKR bias V1 - read out status
	4	12	U12	LHKT6TKRBV1 TEM 6 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT6CAL33VALM; LHKADCLMTSTATES TEM 6 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VAST TEM 6 CAL analog 3.3 V - read out status
	4	12	U12	LHKT6CAL33VA TEM 6 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT6CALBSV1LM; LHKADCLMTSTATES TEM 6 CAL bias V1 - limit evaluation
	3	1	U12	LHKT6CALBSV1ST TEM 6 CAL bias V1 - read out status
	4	12	U12	LHKT6CALBSV1 TEM 6 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT6CALBSV0LM; LHKADCLMTSTATES TEM 6 CAL bias V0 - limit evaluation
	3	1	U12	LHKT6CALBSV0ST TEM 6 CAL bias V0 - read out status
	4	12	U12	LHKT6CALBSV0 TEM 6 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT6TEM28V0LM; LHKADCLMTSTATES TEM 6 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT6TEM28V0ST TEM 6 TEM 28 V (V0) - read out status
	4	12	U12	LHKT6TEM28V0 TEM 6 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT6TEM33VLM; LHKADCLMTSTATES TEM 6 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT6TEM33VST TEM 6 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT6TEM33V TEM 6 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT6TEM28V1LM; LHKADCLMTSTATES TEM 6 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT6TEM28V1ST TEM 6 TEM 28 V (V1) - read out status
	4	12	U12	LHKT6TEM28V1 TEM 6 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT7TKR25VDLM; LHKADCLMTSTATES TEM 7 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VDST TEM 7 TKR digital 2.5 V - read out status
	4	12	U12	LHKT7TKR25VD TEM 7 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT7TKR15VAALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT7TKR15VAAST TEM 7 TKR analog 1.5 V - read out status
	4	12	U12	LHKT7TKR15VAA TEM 7 TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKT7TKR25VABLM; LHKADCLMTSTATES TEM 7 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VABST TEM 7 TKR analog 2.5 V - read out status
	4	12	U12	LHKT7TKR25VAB TEM 7 TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKT7TKRBV0LM; LHKADCLMTSTATES TEM 7 TKR bias V0 - limit evaluation
	3	1	U12	LHKT7TKRBV0ST TEM 7 TKR bias V0 - read out status
	4	12	U12	LHKT7TKRBV0 TEM 7 TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKT7CAL33VDLM; LHKADCLMTSTATES TEM 7 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VDST TEM 7 CAL digital 3.3 V - read out status
	4	12	U12	LHKT7CAL33VD TEM 7 CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKT7TKRBV1LM; LHKADCLMTSTATES TEM 7 TKR bias V1 - limit evaluation
	3	1	U12	LHKT7TKRBV1ST TEM 7 TKR bias V1 - read out status
	4	12	U12	LHKT7TKRBV1 TEM 7 TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKT7CAL33VALM; LHKADCLMTSTATES TEM 7 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VAST TEM 7 CAL analog 3.3 V - read out status
	4	12	U12	LHKT7CAL33VA TEM 7 CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKT7CALBSV1LM TEM 7 CAL bias V1 - limit evaluation
	3	1	U12	LHKT7CALBSV1ST TEM 7 CAL bias V1 - read out status
	4	12	U12	LHKT7CALBSV1 TEM 7 CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKT7CALBSV0LM TEM 7 CAL bias V0 - limit evaluation
	3	1	U12	LHKT7CALBSV0ST TEM 7 CAL bias V0 - read out status
	4	12	U12	LHKT7CALBSV0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT7TEM28V0LM
				TEM 7 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT7TEM28V0ST
				TEM 7 TEM 28 V (V0) - read out status
	4	12	U12	LHKT7TEM28V0
				TEM 7 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT7TEM33VLM; LHKADCLMTSTATES
				TEM 7 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT7TEM33VST
				TEM 7 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT7TEM33V
				TEM 7 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT7TEM28V1LM; LHKADCLMTSTATES
				TEM 7 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT7TEM28V1ST
				TEM 7 TEM 28 V (V1) - read out status
	4	12	U12	LHKT7TEM28V1
				TEM 7 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT8TKR25VDLM; LHKADCLMTSTATES
				TEM 8 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VDST
				TEM 8 TKR digital 2.5 V - read out status
	4	12	U12	LHKT8TKR25VD
				TEM 8 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT8TKR15VAALM; LHKADCLMTSTATES
				TEM 8 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT8TKR15VAAST
				TEM 8 TKR analog 1.5 V - read out status
	4	12	U12	LHKT8TKR15VAA
				TEM 8 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT8TKR25VABLM; LHKADCLMTSTATES
				TEM 8 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VABST
				TEM 8 TKR analog 2.5 V - read out status
	4	12	U12	LHKT8TKR25VAB
				TEM 8 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT8TKRBV0LM; LHKADCLMTSTATES
				TEM 8 TKR bias V0 - limit evaluation
	3	1	U12	LHKT8TKRBV0ST
				TEM 8 TKR bias V0 - read out status
	4	12	U12	LHKT8TKRBV0
				TEM 8 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT8CAL33VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 8 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VDST TEM 8 CAL digital 3.3 V - read out status
	4	12	U12	LHKT8CAL33VD TEM 8 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT8TKRBV1LM; LHKADCLMTSTATES TEM 8 TKR bias V1 - limit evaluation
	3	1	U12	LHKT8TKRBV1ST TEM 8 TKR bias V1 - read out status
	4	12	U12	LHKT8TKRBV1 TEM 8 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT8CAL33VALM; LHKADCLMTSTATES TEM 8 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VAST TEM 8 CAL analog 3.3 V - read out status
	4	12	U12	LHKT8CAL33VA TEM 8 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT8CALBSV1LM; LHKADCLMTSTATES TEM 8 CAL bias V1 - limit evaluation
	3	1	U12	LHKT8CALBSV1ST TEM 8 CAL bias V1 - read out status
	4	12	U12	LHKT8CALBSV1 TEM 8 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT8CALBSV0LM; LHKADCLMTSTATES TEM 8 CAL bias V0 - limit evaluation
	3	1	U12	LHKT8CALBSV0ST TEM 8 CAL bias V0 - read out status
	4	12	U12	LHKT8CALBSV0 TEM 8 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT8TEM28V0LM; LHKADCLMTSTATES TEM 8 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT8TEM28V0ST TEM 8 TEM 28 V (V0) - read out status
	4	12	U12	LHKT8TEM28V0 TEM 8 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT8TEM33VLM; LHKADCLMTSTATES TEM 8 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT8TEM33VST TEM 8 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT8TEM33V TEM 8 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT8TEM28V1LM; LHKADCLMTSTATES TEM 8 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT8TEM28V1ST TEM 8 TEM 28 V (V1) - read out status
	4	12	U12	LHKT8TEM28V1 TEM 8 TEM 28 V (V1) - raw ADC value

14.3.3 `TemEnvPwr3` (531/0x213)

Description:

"TEM Power Packet 3" Telemetry Packet

Contains power specific ADC values for TEMs 9, A, and B

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR3 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT9TKR25VDLM; LHKADCLMTSTATES TEM 9 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VDST TEM 9 TKR digital 2.5 V - read out status
	4	12	U12	LHKT9TKR25VD TEM 9 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT9TKR15VAALM; LHKADCLMTSTATES TEM 9 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT9TKR15VAAST TEM 9 TKR analog 1.5 V - read out status
	4	12	U12	LHKT9TKR15VAA TEM 9 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT9TKR25VABLM; LHKADCLMTSTATES TEM 9 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VABST TEM 9 TKR analog 2.5 V - read out status
	4	12	U12	LHKT9TKR25VAB TEM 9 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT9TKRBV0LM; LHKADCLMTSTATES TEM 9 TKR bias V0 - limit evaluation
	3	1	U12	LHKT9TKRBV0ST TEM 9 TKR bias V0 - read out status
	4	12	U12	LHKT9TKRBV0 TEM 9 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT9CAL33VDLM; LHKADCLMTSTATES TEM 9 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VDST TEM 9 CAL digital 3.3 V - read out status
	4	12	U12	LHKT9CAL33VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 9 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT9TKRBV1LM; LHKADCLMTSTATES TEM 9 TKR bias V1 - limit evaluation
	3	1	U12	LHKT9TKRBV1ST TEM 9 TKR bias V1 - read out status
	4	12	U12	LHKT9TKRBV1 TEM 9 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT9CAL33VALM; LHKADCLMTSTATES TEM 9 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VAST TEM 9 CAL analog 3.3 V - read out status
	4	12	U12	LHKT9CAL33VA TEM 9 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT9CALBSV1LM TEM 9 CAL bias V1 - limit evaluation
	3	1	U12	LHKT9CALBSV1ST TEM 9 CAL bias V1 - read out status
	4	12	U12	LHKT9CALBSV1 TEM 9 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT9CALBSV0LM TEM 9 CAL bias V0 - limit evaluation
	3	1	U12	LHKT9CALBSV0ST TEM 9 CAL bias V0 - read out status
	4	12	U12	LHKT9CALBSV0 TEM 9 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT9TEM28V0LM TEM 9 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT9TEM28V0ST TEM 9 TEM 28 V (V0) - read out status
	4	12	U12	LHKT9TEM28V0 TEM 9 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT9TEM33VLM; LHKADCLMTSTATES TEM 9 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT9TEM33VST TEM 9 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT9TEM33V TEM 9 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT9TEM28V1LM; LHKADCLMTSTATES TEM 9 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT9TEM28V1ST TEM 9 TEM 28 V (V1) - read out status
	4	12	U12	LHKT9TEM28V1 TEM 9 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKTATKR25VDLM; LHKADCLMTSTATES TEM A TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VDST TEM A TKR digital 2.5 V - read out status
	4	12	U12	LHKTATKR25VD TEM A TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKTATKR15VAALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTATKR15VAAST TEM A TKR analog 1.5 V - read out status
	4	12	U12	LHKTATKR15VAA TEM A TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKTATKR25VABLM; LHKADCLMTSTATES TEM A TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VABST TEM A TKR analog 2.5 V - read out status
	4	12	U12	LHKTATKR25VAB TEM A TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKTATKRBV0LM; LHKADCLMTSTATES TEM A TKR bias V0 - limit evaluation
	3	1	U12	LHKTATKRBV0ST TEM A TKR bias V0 - read out status
	4	12	U12	LHKTATKRBV0 TEM A TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKTACAL33VDLM; LHKADCLMTSTATES TEM A CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VDST TEM A CAL digital 3.3 V - read out status
	4	12	U12	LHKTACAL33VD TEM A CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKTATKRBV1LM; LHKADCLMTSTATES TEM A TKR bias V1 - limit evaluation
	3	1	U12	LHKTATKRBV1ST TEM A TKR bias V1 - read out status
	4	12	U12	LHKTATKRBV1 TEM A TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKTACAL33VALM; LHKADCLMTSTATES TEM A CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VAST TEM A CAL analog 3.3 V - read out status
	4	12	U12	LHKTACAL33VA TEM A CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKTACALBSV1LM; LHKADCLMTSTATES TEM A CAL bias V1 - limit evaluation
	3	1	U12	LHKTACALBSV1ST TEM A CAL bias V1 - read out status
	4	12	U12	LHKTACALBSV1 TEM A CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKTACALBSV0LM; LHKADCLMTSTATES TEM A CAL bias V0 - limit evaluation
	3	1	U12	LHKTACALBSV0ST TEM A CAL bias V0 - read out status
	4	12	U12	LHKTACALBSV0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKTATEM28V0LM; LHKADCLMTSTATES TEM A TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTATEM28V0ST TEM A TEM 28 V (V0) - read out status
	4	12	U12	LHKTATEM28V0 TEM A TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKTATEM33VLM; LHKADCLMTSTATES TEM A TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTATEM33VST TEM A TEM digitial 3.3 V - read out status
	4	12	U12	LHKTATEM33V TEM A TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKTATEM28V1LM; LHKADCLMTSTATES TEM A TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTATEM28V1ST TEM A TEM 28 V (V1) - read out status
	4	12	U12	LHKTATEM28V1 TEM A TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKTBTKR25VDLM; LHKADCLMTSTATES TEM B TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VDST TEM B TKR digital 2.5 V - read out status
	4	12	U12	LHKTBTKR25VD TEM B TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKTBTKR15VAALM; LHKADCLMTSTATES TEM B TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTBTKR15VAAST TEM B TKR analog 1.5 V - read out status
	4	12	U12	LHKTBTKR15VAA TEM B TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKTBTKR25VABLM; LHKADCLMTSTATES TEM B TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VABST TEM B TKR analog 2.5 V - read out status
	4	12	U12	LHKTBTKR25VAB TEM B TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKTBTKRBV0LM; LHKADCLMTSTATES TEM B TKR bias V0 - limit evaluation
	3	1	U12	LHKTBTKRBV0ST TEM B TKR bias V0 - read out status
	4	12	U12	LHKTBTKRBV0 TEM B TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKTBCAL33VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VDST TEM B CAL digital 3.3 V - read out status
	4	12	U12	LHKTBCAL33VD TEM B CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTBTKRBV1LM; LHKADCLMTSTATES TEM B TKR bias V1 - limit evaluation
	3	1	U12	LHKTBTKRBV1ST TEM B TKR bias V1 - read out status
	4	12	U12	LHKTBTKRBV1 TEM B TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTBCAL33VALM; LHKADCLMTSTATES TEM B CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VAST TEM B CAL analog 3.3 V - read out status
	4	12	U12	LHKTBCAL33VA TEM B CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTBCALBSV1LM TEM B CAL bias V1 - limit evaluation
	3	1	U12	LHKTBCALBSV1ST TEM B CAL bias V1 - read out status
	4	12	U12	LHKTBCALBSV1 TEM B CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTBCALBSV0LM TEM B CAL bias V0 - limit evaluation
	3	1	U12	LHKTBCALBSV0ST TEM B CAL bias V0 - read out status
	4	12	U12	LHKTBCALBSV0 TEM B CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTBTEM28V0LM TEM B TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTBTEM28V0ST TEM B TEM 28 V (V0) - read out status
	4	12	U12	LHKTBTEM28V0 TEM B TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTBTEM33VLM; LHKADCLMTSTATES TEM B TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTBTEM33VST TEM B TEM digitial 3.3 V - read out status
	4	12	U12	LHKTBTEM33V TEM B TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTBTEM28V1LM; LHKADCLMTSTATES TEM B TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTBTEM28V1ST TEM B TEM 28 V (V1) - read out status
	4	12	U12	LHKTBTEM28V1 TEM B TEM 28 V (V1) - raw ADC value

14.3.4 `TemEnvPwr4` (532/0x214)

Description:

"TEM Power Packet 4" Telemetry Packet

Contains power specific ADC values for TEMs C, D, and E

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR4 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTCTKR25VDLM; LHKADCLMTSTATES TEM C TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VDST TEM C TKR digital 2.5 V - read out status
	4	12	U12	LHKTCTKR25VD TEM C TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKTCTKR15VAALM; LHKADCLMTSTATES TEM C TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTCTKR15VAAST TEM C TKR analog 1.5 V - read out status
	4	12	U12	LHKTCTKR15VAA TEM C TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKTCTKR25VABLM; LHKADCLMTSTATES TEM C TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VABST TEM C TKR analog 2.5 V - read out status
	4	12	U12	LHKTCTKR25VAB TEM C TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKTCTKRBV0LM; LHKADCLMTSTATES TEM C TKR bias V0 - limit evaluation
	3	1	U12	LHKTCTKRBV0ST TEM C TKR bias V0 - read out status
	4	12	U12	LHKTCTKRBV0 TEM C TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKTCCAL33VDLM; LHKADCLMTSTATES TEM C CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VDST TEM C CAL digital 3.3 V - read out status
	4	12	U12	LHKTCCAL33VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM C CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKTCTKRBV1LM; LHKADCLMTSTATES TEM C TKR bias V1 - limit evaluation
	3	1	U12	LHKTCTKRBV1ST TEM C TKR bias V1 - read out status
	4	12	U12	LHKTCTKRBV1 TEM C TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKTCCAL33VALM; LHKADCLMTSTATES TEM C CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VAST TEM C CAL analog 3.3 V - read out status
	4	12	U12	LHKTCCAL33VA TEM C CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKTCCALBSV1LM; LHKADCLMTSTATES TEM C CAL bias V1 - limit evaluation
	3	1	U12	LHKTCCALBSV1ST TEM C CAL bias V1 - read out status
	4	12	U12	LHKTCCALBSV1 TEM C CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKTCCALBSV0LM; LHKADCLMTSTATES TEM C CAL bias V0 - limit evaluation
	3	1	U12	LHKTCCALBSV0ST TEM C CAL bias V0 - read out status
	4	12	U12	LHKTCCALBSV0 TEM C CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKTCTEM28V0LM; LHKADCLMTSTATES TEM C TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTCTEM28V0ST TEM C TEM 28 V (V0) - read out status
	4	12	U12	LHKTCTEM28V0 TEM C TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKTCTEM33VLM; LHKADCLMTSTATES TEM C TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTCTEM33VST TEM C TEM digitial 3.3 V - read out status
	4	12	U12	LHKTCTEM33V TEM C TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKTCTEM28V1LM; LHKADCLMTSTATES TEM C TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTCTEM28V1ST TEM C TEM 28 V (V1) - read out status
	4	12	U12	LHKTCTEM28V1 TEM C TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKTDTKR25VDLM; LHKADCLMTSTATES TEM D TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VDST TEM D TKR digital 2.5 V - read out status
	4	12	U12	LHKTDTKR25VD TEM D TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKTDTKR15VAALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTDTKR15VAAST TEM D TKR analog 1.5 V - read out status
	4	12	U12	LHKTDTKR15VAA TEM D TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKTDTKR25VABLM; LHKADCLMTSTATES TEM D TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VABST TEM D TKR analog 2.5 V - read out status
	4	12	U12	LHKTDTKR25VAB TEM D TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKTDTKRBV0LM; LHKADCLMTSTATES TEM D TKR bias V0 - limit evaluation
	3	1	U12	LHKTDTKRBV0ST TEM D TKR bias V0 - read out status
	4	12	U12	LHKTDTKRBV0 TEM D TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKTDCAL33VDLM; LHKADCLMTSTATES TEM D CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VDST TEM D CAL digital 3.3 V - read out status
	4	12	U12	LHKTDCAL33VD TEM D CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKTDTKRBV1LM; LHKADCLMTSTATES TEM D TKR bias V1 - limit evaluation
	3	1	U12	LHKTDTKRBV1ST TEM D TKR bias V1 - read out status
	4	12	U12	LHKTDTKRBV1 TEM D TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKTDCAL33VALM; LHKADCLMTSTATES TEM D CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VAST TEM D CAL analog 3.3 V - read out status
	4	12	U12	LHKTDCAL33VA TEM D CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKTDCALBSV1LM TEM D CAL bias V1 - limit evaluation
	3	1	U12	LHKTDCALBSV1ST TEM D CAL bias V1 - read out status
	4	12	U12	LHKTDCALBSV1 TEM D CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKTDCALBSV0LM TEM D CAL bias V0 - limit evaluation
	3	1	U12	LHKTDCALBSV0ST TEM D CAL bias V0 - read out status
	4	12	U12	LHKTDCALBSV0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKTDTEM28V0LM TEM D TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTDTEM28V0ST TEM D TEM 28 V (V0) - read out status
	4	12	U12	LHKTDTEM28V0 TEM D TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKTDTEM33VLM; LHKADCLMTSTATES TEM D TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTDTEM33VST TEM D TEM digitial 3.3 V - read out status
	4	12	U12	LHKTDTEM33V TEM D TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKTDTEM28V1LM; LHKADCLMTSTATES TEM D TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTDTEM28V1ST TEM D TEM 28 V (V1) - read out status
	4	12	U12	LHKTDTEM28V1 TEM D TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKTETKR25VDLM; LHKADCLMTSTATES TEM E TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VDST TEM E TKR digital 2.5 V - read out status
	4	12	U12	LHKTETKR25VD TEM E TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKTETKR15VAALM; LHKADCLMTSTATES TEM E TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTETKR15VAAST TEM E TKR analog 1.5 V - read out status
	4	12	U12	LHKTETKR15VAA TEM E TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKTETKR25VABLM; LHKADCLMTSTATES TEM E TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VABST TEM E TKR analog 2.5 V - read out status
	4	12	U12	LHKTETKR25VAB TEM E TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKTETKRBV0LM; LHKADCLMTSTATES TEM E TKR bias V0 - limit evaluation
	3	1	U12	LHKTETKRBV0ST TEM E TKR bias V0 - read out status
	4	12	U12	LHKTETKRBV0 TEM E TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKTECAL33VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VDST TEM E CAL digital 3.3 V - read out status
	4	12	U12	LHKTECAL33VD TEM E CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTETKRBV1LM; LHKADCLMTSTATES TEM E TKR bias V1 - limit evaluation
	3	1	U12	LHKTETKRBV1ST TEM E TKR bias V1 - read out status
	4	12	U12	LHKTETKRBV1 TEM E TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTECAL33VALM; LHKADCLMTSTATES TEM E CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VAST TEM E CAL analog 3.3 V - read out status
	4	12	U12	LHKTECAL33VA TEM E CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTECALBSV1LM; LHKADCLMTSTATES TEM E CAL bias V1 - limit evaluation
	3	1	U12	LHKTECALBSV1ST TEM E CAL bias V1 - read out status
	4	12	U12	LHKTECALBSV1 TEM E CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTECALBSV0LM; LHKADCLMTSTATES TEM E CAL bias V0 - limit evaluation
	3	1	U12	LHKTECALBSV0ST TEM E CAL bias V0 - read out status
	4	12	U12	LHKTECALBSV0 TEM E CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTETEM28V0LM; LHKADCLMTSTATES TEM E TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTETEM28V0ST TEM E TEM 28 V (V0) - read out status
	4	12	U12	LHKTETEM28V0 TEM E TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTETEM33VLM; LHKADCLMTSTATES TEM E TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTETEM33VST TEM E TEM digitial 3.3 V - read out status
	4	12	U12	LHKTETEM33V TEM E TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTETEM28V1LM; LHKADCLMTSTATES TEM E TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTETEM28V1ST TEM E TEM 28 V (V1) - read out status
	4	12	U12	LHKTETEM28V1 TEM E TEM 28 V (V1) - raw ADC value

14.3.5 `TemEnvPwr5` (533/0x215)

Description:

"TEM Power Packet 5" Telemetry Packet

Contains power specific ADC values for TEM F

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKRSVTEMPWR5` LHK reserved field
`0x010`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x012`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x014`	0	3	`U12`	`LHKTFTKR25VDLM; LHKADCLMTSTATES` TEM F TKR digital 2.5 V - limit evaluation
	3	1	`U12`	`LHKTFTKR25VDST` TEM F TKR digital 2.5 V - read out status
	4	12	`U12`	`LHKTFTKR25VD` TEM F TKR digital 2.5 V - raw ADC value
`0x016`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x018`	0	3	`U12`	`LHKTFTKR15VAALM; LHKADCLMTSTATES` TEM F TKR analog 1.5 V - limit evaluation
	3	1	`U12`	`LHKTFTKR15VAAST` TEM F TKR analog 1.5 V - read out status
	4	12	`U12`	`LHKTFTKR15VAA` TEM F TKR analog 1.5 V - raw ADC value
`0x01A`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x01C`	0	3	`U12`	`LHKTFTKR25VABLM; LHKADCLMTSTATES` TEM F TKR analog 2.5 V - limit evaluation
	3	1	`U12`	`LHKTFTKR25VABST` TEM F TKR analog 2.5 V - read out status
	4	12	`U12`	`LHKTFTKR25VAB` TEM F TKR analog 2.5 V - raw ADC value
`0x01E`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x020`	0	3	`U12`	`LHKTFTKRBV0LM; LHKADCLMTSTATES` TEM F TKR bias V0 - limit evaluation
	3	1	`U12`	`LHKTFTKRBV0ST` TEM F TKR bias V0 - read out status
	4	12	`U12`	`LHKTFTKRBV0` TEM F TKR bias V0 - raw ADC value
`0x022`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x024`	0	3	`U12`	`LHKTFCAL33VDLM; LHKADCLMTSTATES` TEM F CAL digital 3.3 V - limit evaluation
	3	1	`U12`	`LHKTFCAL33VDST` TEM F CAL digital 3.3 V - read out status
	4	12	`U12`	`LHKTFCAL33VD`

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM F CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKTFTKRBV1LM; LHKADCLMTSTATES TEM F TKR bias V1 - limit evaluation
	3	1	U12	LHKTFTKRBV1ST TEM F TKR bias V1 - read out status
	4	12	U12	LHKTFTKRBV1 TEM F TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKTFCAL33VALM; LHKADCLMTSTATES TEM F CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VAST TEM F CAL analog 3.3 V - read out status
	4	12	U12	LHKTFCAL33VA TEM F CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKTFCALBSV1LM TEM F CAL bias V1 - limit evaluation
	3	1	U12	LHKTFCALBSV1ST TEM F CAL bias V1 - read out status
	4	12	U12	LHKTFCALBSV1 TEM F CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKTFCALBSV0LM TEM F CAL bias V0 - limit evaluation
	3	1	U12	LHKTFCALBSV0ST TEM F CAL bias V0 - read out status
	4	12	U12	LHKTFCALBSV0 TEM F CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKTFTEM28V0LM TEM F TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTFTEM28V0ST TEM F TEM 28 V (V0) - read out status
	4	12	U12	LHKTFTEM28V0 TEM F TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKTFTEM33VLM; LHKADCLMTSTATES TEM F TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTFTEM33VST TEM F TEM digitial 3.3 V - read out status
	4	12	U12	LHKTFTEM33V TEM F TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKTFTEM28V1LM; LHKADCLMTSTATES TEM F TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTFTEM28V1ST TEM F TEM 28 V (V1) - read out status
	4	12	U12	LHKTFTEM28V1 TEM F TEM 28 V (V1) - raw ADC value
0x034	0	32	U1234	LHKRTERRCNT 1553 Error Count
0x038	0	32	U1234	LHKRTINTRCNT 1553 Interrupts
0x03C	0	32	U1234	LHKRTCXPCNT 1553 Cmd Rx Packet Count
0x040	0	32	U1234	LHKRTCXBCNT 1553 Cmd Rx Byte Count
0x044	0	32	U1234	LHKRTTXPCNT

Offset	S	L	Type	ITOS name, attribute(s), and description
				1553 Cmd Tx Packet Count
0x048	0	32	U1234	LHKRTTXBCNT 1553 Cmd Tx Byte Count
0x04C	0	32	U1234	LHKRTHKPCNT 1553 Housekeeping Packet Count
0x050	0	32	U1234	LHKRTHKBCNT 1553 Housekeeping Byte Count
0x054	0	32	U1234	LHKRTTLMPCNT 1553 Telemetry Packet Count
0x058	0	32	U1234	LHKRTTLMBCNT 1553 Telemertry Byte Count
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.6 `TemEnvTemp0` (534/0x216)

Description:

"TEM temperature ADCs for TEMs 0-1" Telemetry Packet

TEM temperature ADCs for TEMs 0-1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP0 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	3	U12	LHKT0CALAF0T0LM; LHKADCLMTSTATES TEM 0 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF0T0ST TEM 0 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT0CALAF0T0 TEM 0 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT0CALAF0T1LM; LHKADCLMTSTATES TEM 0 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF0T1ST TEM 0 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT0CALAF0T1 TEM 0 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT0CALAF1T0LM; LHKADCLMTSTATES TEM 0 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF1T0ST TEM 0 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT0CALAF1T0 TEM 0 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT0CALAF1T1LM TEM 0 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF1T1ST TEM 0 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT0CALAF1T1 TEM 0 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT0CALAF2T0LM TEM 0 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF2T0ST TEM 0 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT0CALAF2T0 TEM 0 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT0CALAF2T1LM TEM 0 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF2T1ST TEM 0 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT0CALAF2T1 TEM 0 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT0CALAF3T0LM; LHKADCLMTSTATES TEM 0 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF3T0ST TEM 0 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT0CALAF3T0 TEM 0 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT0CALAF3T1LM; LHKADCLMTSTATES TEM 0 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF3T1ST TEM 0 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT0CALAF3T1 TEM 0 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT0TKRC0T0LM; LHKADCLMTSTATES TEM 0 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC0T0ST TEM 0 TKR cable 0 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT0TKRC0T0 TEM 0 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT0TKRC0T1LM; LHKADCLMTSTATES TEM 0 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC0T1ST TEM 0 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT0TKRC0T1 TEM 0 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT0TKRC1T0LM; LHKADCLMTSTATES TEM 0 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC1T0ST TEM 0 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT0TKRC1T0 TEM 0 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT0TKRC1T1LM TEM 0 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC1T1ST TEM 0 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT0TKRC1T1 TEM 0 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT0TKRC2T0LM TEM 0 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC2T0ST TEM 0 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT0TKRC2T0 TEM 0 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT0TKRC2T1LM TEM 0 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC2T1ST TEM 0 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT0TKRC2T1 TEM 0 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT0TKRC3T0LM; LHKADCLMTSTATES TEM 0 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC3T0ST TEM 0 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT0TKRC3T0 TEM 0 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT0TKRC3T1LM; LHKADCLMTSTATES TEM 0 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC3T1ST TEM 0 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT0TKRC3T1 TEM 0 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT0TKRC4T0LM; LHKADCLMTSTATES TEM 0 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC4T0ST TEM 0 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT0TKRC4T0 TEM 0 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT0TKRC4T1LM; LHKADCLMTSTATES TEM 0 TKR cable 4 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT0TKRC4T1ST TEM 0 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT0TKRC4T1 TEM 0 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT0TKRC5T0LM; LHKADCLMTSTATES TEM 0 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC5T0ST TEM 0 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT0TKRC5T0 TEM 0 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT0TKRC5T1LM TEM 0 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC5T1ST TEM 0 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT0TKRC5T1 TEM 0 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT0TKRC6T0LM TEM 0 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC6T0ST TEM 0 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT0TKRC6T0 TEM 0 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT0TKRC6T1LM TEM 0 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC6T1ST TEM 0 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT0TKRC6T1 TEM 0 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT0TKRC7T0LM; LHKADCLMTSTATES TEM 0 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC7T0ST TEM 0 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT0TKRC7T0 TEM 0 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT0TKRC7T1LM; LHKADCLMTSTATES TEM 0 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC7T1ST TEM 0 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT0TKRC7T1 TEM 0 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT1CALAF2T0LM; LHKADCLMTSTATES TEM 1 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF2T0ST TEM 1 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT1CALAF2T0 TEM 1 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT1CALAF2T1LM; LHKADCLMTSTATES TEM 1 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF2T1ST TEM 1 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT1CALAF2T1 TEM 1 CAL AFEE 2 temperature 1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	3	U12	LHKT1CALAF3T0LM; LHKADCLMTSTATES TEM 1 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF3T0ST TEM 1 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT1CALAF3T0 TEM 1 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT1CALAF3T1LM TEM 1 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF3T1ST TEM 1 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT1CALAF3T1 TEM 1 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT1CALAF0T0LM TEM 1 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF0T0ST TEM 1 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT1CALAF0T0 TEM 1 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT1CALAF0T1LM TEM 1 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF0T1ST TEM 1 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT1CALAF0T1 TEM 1 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT1CALAF1T0LM; LHKADCLMTSTATES TEM 1 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF1T0ST TEM 1 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT1CALAF1T0 TEM 1 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT1CALAF1T1LM; LHKADCLMTSTATES TEM 1 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF1T1ST TEM 1 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT1CALAF1T1 TEM 1 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT1TKRC4T0LM; LHKADCLMTSTATES TEM 1 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC4T0ST TEM 1 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT1TKRC4T0 TEM 1 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT1TKRC4T1LM; LHKADCLMTSTATES TEM 1 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC4T1ST TEM 1 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT1TKRC4T1 TEM 1 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT1TKRC5T0LM; LHKADCLMTSTATES TEM 1 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC5T0ST TEM 1 TKR cable 5 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT1TKRC5T0 TEM 1 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT1TKRC5T1LM TEM 1 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC5T1ST TEM 1 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT1TKRC5T1 TEM 1 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT1TKRC6T0LM TEM 1 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC6T0ST TEM 1 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT1TKRC6T0 TEM 1 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT1TKRC6T1LM TEM 1 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC6T1ST TEM 1 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT1TKRC6T1 TEM 1 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT1TKRC7T0LM; LHKADCLMTSTATES TEM 1 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC7T0ST TEM 1 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT1TKRC7T0 TEM 1 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT1TKRC7T1LM; LHKADCLMTSTATES TEM 1 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC7T1ST TEM 1 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT1TKRC7T1 TEM 1 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT1TKRC0T0LM; LHKADCLMTSTATES TEM 1 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC0T0ST TEM 1 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT1TKRC0T0 TEM 1 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT1TKRC0T1LM; LHKADCLMTSTATES TEM 1 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC0T1ST TEM 1 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT1TKRC0T1 TEM 1 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT1TKRC1T0LM; LHKADCLMTSTATES TEM 1 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC1T0ST TEM 1 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT1TKRC1T0 TEM 1 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT1TKRC1T1LM TEM 1 TKR cable 1 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT1TKRC1T1ST TEM 1 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT1TKRC1T1 TEM 1 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT1TKRC2T0LM TEM 1 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC2T0ST TEM 1 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT1TKRC2T0 TEM 1 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT1TKRC2T1LM TEM 1 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC2T1ST TEM 1 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT1TKRC2T1 TEM 1 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT1TKRC3T0LM; LHKADCLMTSTATES TEM 1 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC3T0ST TEM 1 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT1TKRC3T0 TEM 1 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT1TKRC3T1LM; LHKADCLMTSTATES TEM 1 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC3T1ST TEM 1 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT1TKRC3T1 TEM 1 TKR cable 3 temperature 1 - raw ADC value

14.3.7 `TemEnvTemp1` (535/0x217)

Description:

"TEM temperature ADCs for TEMs 2-3" Telemetry Packet

TEM temperature ADCs for TEMs 2-3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP1 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT2CALAF0T0LM; LHKADCLMTSTATES TEM 2 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF0T0ST TEM 2 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT2CALAF0T0 TEM 2 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT2CALAF0T1LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF0T1ST
				TEM 2 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT2CALAF0T1
				TEM 2 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT2CALAF1T0LM; LHKADCLMTSTATES
				TEM 2 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF1T0ST
				TEM 2 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT2CALAF1T0
				TEM 2 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT2CALAF1T1LM
				TEM 2 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF1T1ST
				TEM 2 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT2CALAF1T1
				TEM 2 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT2CALAF2T0LM
				TEM 2 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF2T0ST
				TEM 2 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT2CALAF2T0
				TEM 2 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT2CALAF2T1LM
				TEM 2 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF2T1ST
				TEM 2 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT2CALAF2T1
				TEM 2 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT2CALAF3T0LM; LHKADCLMTSTATES
				TEM 2 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF3T0ST
				TEM 2 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT2CALAF3T0
				TEM 2 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT2CALAF3T1LM; LHKADCLMTSTATES
				TEM 2 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF3T1ST
				TEM 2 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT2CALAF3T1
				TEM 2 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT2TKRC0T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC0T0ST
				TEM 2 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT2TKRC0T0
				TEM 2 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT2TKRC0T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC0T1ST
				TEM 2 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT2TKRC0T1

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT2TKRC1T0LM; LHKADCLMTSTATES TEM 2 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC1T0ST TEM 2 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT2TKRC1T0 TEM 2 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT2TKRC1T1LM TEM 2 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC1T1ST TEM 2 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT2TKRC1T1 TEM 2 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT2TKRC2T0LM TEM 2 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC2T0ST TEM 2 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT2TKRC2T0 TEM 2 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT2TKRC2T1LM TEM 2 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC2T1ST TEM 2 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT2TKRC2T1 TEM 2 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT2TKRC3T0LM; LHKADCLMTSTATES TEM 2 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC3T0ST TEM 2 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT2TKRC3T0 TEM 2 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT2TKRC3T1LM; LHKADCLMTSTATES TEM 2 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC3T1ST TEM 2 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT2TKRC3T1 TEM 2 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT2TKRC4T0LM; LHKADCLMTSTATES TEM 2 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC4T0ST TEM 2 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT2TKRC4T0 TEM 2 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT2TKRC4T1LM; LHKADCLMTSTATES TEM 2 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC4T1ST TEM 2 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT2TKRC4T1 TEM 2 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT2TKRC5T0LM; LHKADCLMTSTATES TEM 2 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC5T0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT2TKRC5T0
				TEM 2 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT2TKRC5T1LM
				TEM 2 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC5T1ST
				TEM 2 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT2TKRC5T1
				TEM 2 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT2TKRC6T0LM
				TEM 2 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC6T0ST
				TEM 2 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT2TKRC6T0
				TEM 2 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT2TKRC6T1LM
				TEM 2 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC6T1ST
				TEM 2 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT2TKRC6T1
				TEM 2 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT2TKRC7T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC7T0ST
				TEM 2 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT2TKRC7T0
				TEM 2 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT2TKRC7T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC7T1ST
				TEM 2 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT2TKRC7T1
				TEM 2 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT3CALAF2T0LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF2T0ST
				TEM 3 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT3CALAF2T0
				TEM 3 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT3CALAF2T1LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF2T1ST
				TEM 3 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT3CALAF2T1
				TEM 3 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT3CALAF3T0LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF3T0ST
				TEM 3 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT3CALAF3T0
				TEM 3 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT3CALAF3T1LM

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF3T1ST
				TEM 3 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT3CALAF3T1
				TEM 3 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT3CALAF0T0LM
				TEM 3 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF0T0ST
				TEM 3 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT3CALAF0T0
				TEM 3 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT3CALAF0T1LM
				TEM 3 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF0T1ST
				TEM 3 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT3CALAF0T1
				TEM 3 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT3CALAF1T0LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF1T0ST
				TEM 3 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT3CALAF1T0
				TEM 3 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT3CALAF1T1LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF1T1ST
				TEM 3 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT3CALAF1T1
				TEM 3 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT3TKRC4T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC4T0ST
				TEM 3 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT3TKRC4T0
				TEM 3 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT3TKRC4T1LM; LHKADCLMTSTATES
				TEM 3 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC4T1ST
				TEM 3 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT3TKRC4T1
				TEM 3 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT3TKRC5T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC5T0ST
				TEM 3 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT3TKRC5T0
				TEM 3 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT3TKRC5T1LM
				TEM 3 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC5T1ST
				TEM 3 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT3TKRC5T1

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT3TKRC6T0LM
				TEM 3 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC6T0ST
				TEM 3 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT3TKRC6T0
				TEM 3 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT3TKRC6T1LM
				TEM 3 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC6T1ST
				TEM 3 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT3TKRC6T1
				TEM 3 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT3TKRC7T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC7T0ST
				TEM 3 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT3TKRC7T0
				TEM 3 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT3TKRC7T1LM; LHKADCLMTSTATES
				TEM 3 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC7T1ST
				TEM 3 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT3TKRC7T1
				TEM 3 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT3TKRC0T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC0T0ST
				TEM 3 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT3TKRC0T0
				TEM 3 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT3TKRC0T1LM; LHKADCLMTSTATES
				TEM 3 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC0T1ST
				TEM 3 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT3TKRC0T1
				TEM 3 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT3TKRC1T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC1T0ST
				TEM 3 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT3TKRC1T0
				TEM 3 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT3TKRC1T1LM
				TEM 3 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC1T1ST
				TEM 3 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT3TKRC1T1
				TEM 3 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT3TKRC2T0LM
				TEM 3 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC2T0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT3TKRC2T0 TEM 3 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT3TKRC2T1LM TEM 3 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC2T1ST TEM 3 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT3TKRC2T1 TEM 3 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT3TKRC3T0LM; LHKADCLMTSTATES TEM 3 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC3T0ST TEM 3 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT3TKRC3T0 TEM 3 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT3TKRC3T1LM; LHKADCLMTSTATES TEM 3 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC3T1ST TEM 3 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT3TKRC3T1 TEM 3 TKR cable 3 temperature 1 - raw ADC value

14.3.8 `TemEnvTemp2` (536/0x218)

Description:

"TEM temperature ADCs for TEMs 4-5" Telemetry Packet

TEM temperature ADCs for TEMs 4-5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP2 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT4CALAF0T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF0T0ST TEM 4 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT4CALAF0T0 TEM 4 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT4CALAF0T1LM; LHKADCLMTSTATES TEM 4 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF0T1ST TEM 4 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT4CALAF0T1 TEM 4 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT4CALAF1T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 1 temperature 0 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT4CALAF1T0ST TEM 4 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT4CALAF1T0 TEM 4 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT4CALAF1T1LM TEM 4 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF1T1ST TEM 4 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT4CALAF1T1 TEM 4 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT4CALAF2T0LM TEM 4 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF2T0ST TEM 4 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT4CALAF2T0 TEM 4 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT4CALAF2T1LM TEM 4 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF2T1ST TEM 4 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT4CALAF2T1 TEM 4 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT4CALAF3T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF3T0ST TEM 4 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT4CALAF3T0 TEM 4 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT4CALAF3T1LM; LHKADCLMTSTATES TEM 4 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF3T1ST TEM 4 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT4CALAF3T1 TEM 4 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT4TKRC0T0LM; LHKADCLMTSTATES TEM 4 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC0T0ST TEM 4 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT4TKRC0T0 TEM 4 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT4TKRC0T1LM; LHKADCLMTSTATES TEM 4 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC0T1ST TEM 4 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT4TKRC0T1 TEM 4 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT4TKRC1T0LM; LHKADCLMTSTATES TEM 4 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC1T0ST TEM 4 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT4TKRC1T0 TEM 4 TKR cable 1 temperature 0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02A	0	3	U12	LHKT4TKRC1T1LM TEM 4 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC1T1ST TEM 4 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT4TKRC1T1 TEM 4 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT4TKRC2T0LM TEM 4 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC2T0ST TEM 4 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT4TKRC2T0 TEM 4 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT4TKRC2T1LM TEM 4 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC2T1ST TEM 4 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT4TKRC2T1 TEM 4 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT4TKRC3T0LM; LHKADCLMTSTATES TEM 4 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC3T0ST TEM 4 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT4TKRC3T0 TEM 4 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT4TKRC3T1LM; LHKADCLMTSTATES TEM 4 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC3T1ST TEM 4 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT4TKRC3T1 TEM 4 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT4TKRC4T0LM; LHKADCLMTSTATES TEM 4 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC4T0ST TEM 4 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT4TKRC4T0 TEM 4 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT4TKRC4T1LM; LHKADCLMTSTATES TEM 4 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC4T1ST TEM 4 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT4TKRC4T1 TEM 4 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT4TKRC5T0LM; LHKADCLMTSTATES TEM 4 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC5T0ST TEM 4 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT4TKRC5T0 TEM 4 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT4TKRC5T1LM TEM 4 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC5T1ST TEM 4 TKR cable 5 temperature 1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT4TKRC5T1 TEM 4 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT4TKRC6T0LM TEM 4 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC6T0ST TEM 4 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT4TKRC6T0 TEM 4 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT4TKRC6T1LM TEM 4 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC6T1ST TEM 4 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT4TKRC6T1 TEM 4 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT4TKRC7T0LM; LHKADCLMTSTATES TEM 4 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC7T0ST TEM 4 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT4TKRC7T0 TEM 4 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT4TKRC7T1LM; LHKADCLMTSTATES TEM 4 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC7T1ST TEM 4 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT4TKRC7T1 TEM 4 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT5CALAF2T0LM; LHKADCLMTSTATES TEM 5 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF2T0ST TEM 5 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT5CALAF2T0 TEM 5 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT5CALAF2T1LM; LHKADCLMTSTATES TEM 5 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF2T1ST TEM 5 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT5CALAF2T1 TEM 5 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT5CALAF3T0LM; LHKADCLMTSTATES TEM 5 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF3T0ST TEM 5 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT5CALAF3T0 TEM 5 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT5CALAF3T1LM TEM 5 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF3T1ST TEM 5 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT5CALAF3T1 TEM 5 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT5CALAF0T0LM TEM 5 CAL AFEE 0 temperature 0 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	`LHKT5CALAF0T0ST` TEM 5 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	`LHKT5CALAF0T0` TEM 5 CAL AFEE 0 temperature 0 - raw ADC value
`0x04E`	0	3	U12	`LHKT5CALAF0T1LM` TEM 5 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	`LHKT5CALAF0T1ST` TEM 5 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	`LHKT5CALAF0T1` TEM 5 CAL AFEE 0 temperature 1 - raw ADC value
`0x050`	0	3	U12	`LHKT5CALAF1T0LM; LHKADCLMTSTATES` TEM 5 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	`LHKT5CALAF1T0ST` TEM 5 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	`LHKT5CALAF1T0` TEM 5 CAL AFEE 1 temperature 0 - raw ADC value
`0x052`	0	3	U12	`LHKT5CALAF1T1LM; LHKADCLMTSTATES` TEM 5 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	`LHKT5CALAF1T1ST` TEM 5 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	`LHKT5CALAF1T1` TEM 5 CAL AFEE 1 temperature 1 - raw ADC value
`0x054`	0	3	U12	`LHKT5TKRC4T0LM; LHKADCLMTSTATES` TEM 5 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	`LHKT5TKRC4T0ST` TEM 5 TKR cable 4 temperature 0 - read out status
	4	12	U12	`LHKT5TKRC4T0` TEM 5 TKR cable 4 temperature 0 - raw ADC value
`0x056`	0	3	U12	`LHKT5TKRC4T1LM; LHKADCLMTSTATES` TEM 5 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	`LHKT5TKRC4T1ST` TEM 5 TKR cable 4 temperature 1 - read out status
	4	12	U12	`LHKT5TKRC4T1` TEM 5 TKR cable 4 temperature 1 - raw ADC value
`0x058`	0	3	U12	`LHKT5TKRC5T0LM; LHKADCLMTSTATES` TEM 5 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	`LHKT5TKRC5T0ST` TEM 5 TKR cable 5 temperature 0 - read out status
	4	12	U12	`LHKT5TKRC5T0` TEM 5 TKR cable 5 temperature 0 - raw ADC value
`0x05A`	0	3	U12	`LHKT5TKRC5T1LM` TEM 5 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	`LHKT5TKRC5T1ST` TEM 5 TKR cable 5 temperature 1 - read out status
	4	12	U12	`LHKT5TKRC5T1` TEM 5 TKR cable 5 temperature 1 - raw ADC value
`0x05C`	0	3	U12	`LHKT5TKRC6T0LM` TEM 5 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	`LHKT5TKRC6T0ST` TEM 5 TKR cable 6 temperature 0 - read out status
	4	12	U12	`LHKT5TKRC6T0` TEM 5 TKR cable 6 temperature 0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05E	0	3	U12	LHKT5TKRC6T1LM TEM 5 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC6T1ST TEM 5 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT5TKRC6T1 TEM 5 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT5TKRC7T0LM; LHKADCLMTSTATES TEM 5 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC7T0ST TEM 5 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT5TKRC7T0 TEM 5 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT5TKRC7T1LM; LHKADCLMTSTATES TEM 5 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC7T1ST TEM 5 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT5TKRC7T1 TEM 5 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT5TKRC0T0LM; LHKADCLMTSTATES TEM 5 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC0T0ST TEM 5 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT5TKRC0T0 TEM 5 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT5TKRC0T1LM; LHKADCLMTSTATES TEM 5 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC0T1ST TEM 5 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT5TKRC0T1 TEM 5 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT5TKRC1T0LM; LHKADCLMTSTATES TEM 5 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC1T0ST TEM 5 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT5TKRC1T0 TEM 5 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT5TKRC1T1LM TEM 5 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC1T1ST TEM 5 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT5TKRC1T1 TEM 5 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT5TKRC2T0LM TEM 5 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC2T0ST TEM 5 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT5TKRC2T0 TEM 5 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT5TKRC2T1LM TEM 5 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC2T1ST TEM 5 TKR cable 2 temperature 1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT5TKRC2T1 TEM 5 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT5TKRC3T0LM; LHKADCLMTSTATES TEM 5 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC3T0ST TEM 5 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT5TKRC3T0 TEM 5 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT5TKRC3T1LM; LHKADCLMTSTATES TEM 5 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC3T1ST TEM 5 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT5TKRC3T1 TEM 5 TKR cable 3 temperature 1 - raw ADC value

14.3.9 `TemEnvTemp3` (537/0x219)

Description:

"TEM temperature ADCs for TEMs 6-7" Telemetry Packet

TEM temperature ADCs for TEMs 6-7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP3 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT6CALAF0T0LM; LHKADCLMTSTATES TEM 6 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF0T0ST TEM 6 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT6CALAF0T0 TEM 6 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT6CALAF0T1LM; LHKADCLMTSTATES TEM 6 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF0T1ST TEM 6 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT6CALAF0T1 TEM 6 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT6CALAF1T0LM; LHKADCLMTSTATES TEM 6 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF1T0ST TEM 6 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT6CALAF1T0 TEM 6 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT6CALAF1T1LM TEM 6 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF1T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT6CALAF1T1
				TEM 6 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT6CALAF2T0LM
				TEM 6 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF2T0ST
				TEM 6 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT6CALAF2T0
				TEM 6 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT6CALAF2T1LM
				TEM 6 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF2T1ST
				TEM 6 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT6CALAF2T1
				TEM 6 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT6CALAF3T0LM; LHKADCLMTSTATES
				TEM 6 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF3T0ST
				TEM 6 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT6CALAF3T0
				TEM 6 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT6CALAF3T1LM; LHKADCLMTSTATES
				TEM 6 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF3T1ST
				TEM 6 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT6CALAF3T1
				TEM 6 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT6TKRC0T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC0T0ST
				TEM 6 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT6TKRC0T0
				TEM 6 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT6TKRC0T1LM; LHKADCLMTSTATES
				TEM 6 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC0T1ST
				TEM 6 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT6TKRC0T1
				TEM 6 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT6TKRC1T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC1T0ST
				TEM 6 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT6TKRC1T0
				TEM 6 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT6TKRC1T1LM
				TEM 6 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC1T1ST
				TEM 6 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT6TKRC1T1
				TEM 6 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT6TKRC2T0LM

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC2T0ST
				TEM 6 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT6TKRC2T0
				TEM 6 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT6TKRC2T1LM
				TEM 6 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC2T1ST
				TEM 6 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT6TKRC2T1
				TEM 6 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT6TKRC3T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC3T0ST
				TEM 6 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT6TKRC3T0
				TEM 6 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT6TKRC3T1LM; LHKADCLMTSTATES
				TEM 6 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC3T1ST
				TEM 6 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT6TKRC3T1
				TEM 6 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT6TKRC4T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC4T0ST
				TEM 6 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT6TKRC4T0
				TEM 6 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT6TKRC4T1LM; LHKADCLMTSTATES
				TEM 6 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC4T1ST
				TEM 6 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT6TKRC4T1
				TEM 6 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT6TKRC5T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC5T0ST
				TEM 6 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT6TKRC5T0
				TEM 6 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT6TKRC5T1LM
				TEM 6 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC5T1ST
				TEM 6 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT6TKRC5T1
				TEM 6 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT6TKRC6T0LM
				TEM 6 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC6T0ST
				TEM 6 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT6TKRC6T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT6TKRC6T1LM TEM 6 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC6T1ST TEM 6 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT6TKRC6T1 TEM 6 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT6TKRC7T0LM; LHKADCLMTSTATES TEM 6 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC7T0ST TEM 6 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT6TKRC7T0 TEM 6 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT6TKRC7T1LM; LHKADCLMTSTATES TEM 6 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC7T1ST TEM 6 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT6TKRC7T1 TEM 6 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT7CALAF2T0LM; LHKADCLMTSTATES TEM 7 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF2T0ST TEM 7 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT7CALAF2T0 TEM 7 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT7CALAF2T1LM; LHKADCLMTSTATES TEM 7 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF2T1ST TEM 7 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT7CALAF2T1 TEM 7 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT7CALAF3T0LM; LHKADCLMTSTATES TEM 7 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF3T0ST TEM 7 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT7CALAF3T0 TEM 7 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT7CALAF3T1LM TEM 7 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF3T1ST TEM 7 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT7CALAF3T1 TEM 7 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT7CALAF0T0LM TEM 7 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF0T0ST TEM 7 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT7CALAF0T0 TEM 7 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT7CALAF0T1LM TEM 7 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF0T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT7CALAF0T1
				TEM 7 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT7CALAF1T0LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF1T0ST
				TEM 7 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT7CALAF1T0
				TEM 7 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT7CALAF1T1LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF1T1ST
				TEM 7 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT7CALAF1T1
				TEM 7 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT7TKRC4T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC4T0ST
				TEM 7 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT7TKRC4T0
				TEM 7 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT7TKRC4T1LM; LHKADCLMTSTATES
				TEM 7 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC4T1ST
				TEM 7 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT7TKRC4T1
				TEM 7 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT7TKRC5T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC5T0ST
				TEM 7 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT7TKRC5T0
				TEM 7 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT7TKRC5T1LM
				TEM 7 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC5T1ST
				TEM 7 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT7TKRC5T1
				TEM 7 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT7TKRC6T0LM
				TEM 7 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC6T0ST
				TEM 7 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT7TKRC6T0
				TEM 7 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT7TKRC6T1LM
				TEM 7 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC6T1ST
				TEM 7 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT7TKRC6T1
				TEM 7 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT7TKRC7T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC7T0ST
				TEM 7 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT7TKRC7T0
				TEM 7 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT7TKRC7T1LM; LHKADCLMTSTATES
				TEM 7 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC7T1ST
				TEM 7 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT7TKRC7T1
				TEM 7 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT7TKRC0T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC0T0ST
				TEM 7 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT7TKRC0T0
				TEM 7 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT7TKRC0T1LM; LHKADCLMTSTATES
				TEM 7 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC0T1ST
				TEM 7 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT7TKRC0T1
				TEM 7 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT7TKRC1T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC1T0ST
				TEM 7 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT7TKRC1T0
				TEM 7 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT7TKRC1T1LM
				TEM 7 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC1T1ST
				TEM 7 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT7TKRC1T1
				TEM 7 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT7TKRC2T0LM
				TEM 7 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC2T0ST
				TEM 7 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT7TKRC2T0
				TEM 7 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT7TKRC2T1LM
				TEM 7 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC2T1ST
				TEM 7 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT7TKRC2T1
				TEM 7 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT7TKRC3T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC3T0ST
				TEM 7 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT7TKRC3T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT7TKRC3T1LM; LHKADCLMTSTATES TEM 7 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC3T1ST TEM 7 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT7TKRC3T1 TEM 7 TKR cable 3 temperature 1 - raw ADC value

14.3.10 `TemEnvTemp4` (538/0x21A)

Description:

"TEM temperature ADCs for TEMs 8-9" Telemetry Packet

TEM temperature ADCs for TEMs 8-9

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP4 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT8CALAF0T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF0T0ST TEM 8 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT8CALAF0T0 TEM 8 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT8CALAF0T1LM; LHKADCLMTSTATES TEM 8 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF0T1ST TEM 8 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT8CALAF0T1 TEM 8 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT8CALAF1T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF1T0ST TEM 8 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT8CALAF1T0 TEM 8 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT8CALAF1T1LM TEM 8 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF1T1ST TEM 8 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT8CALAF1T1 TEM 8 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT8CALAF2T0LM TEM 8 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF2T0ST TEM 8 CAL AFEE 2 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT8CALAF2T0 TEM 8 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT8CALAF2T1LM TEM 8 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF2T1ST TEM 8 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT8CALAF2T1 TEM 8 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT8CALAF3T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF3T0ST TEM 8 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT8CALAF3T0 TEM 8 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT8CALAF3T1LM; LHKADCLMTSTATES TEM 8 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF3T1ST TEM 8 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT8CALAF3T1 TEM 8 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT8TKRC0T0LM; LHKADCLMTSTATES TEM 8 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC0T0ST TEM 8 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT8TKRC0T0 TEM 8 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT8TKRC0T1LM; LHKADCLMTSTATES TEM 8 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC0T1ST TEM 8 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT8TKRC0T1 TEM 8 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT8TKRC1T0LM; LHKADCLMTSTATES TEM 8 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC1T0ST TEM 8 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT8TKRC1T0 TEM 8 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT8TKRC1T1LM TEM 8 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC1T1ST TEM 8 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT8TKRC1T1 TEM 8 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT8TKRC2T0LM TEM 8 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC2T0ST TEM 8 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT8TKRC2T0 TEM 8 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT8TKRC2T1LM TEM 8 TKR cable 2 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT8TKRC2T1ST TEM 8 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT8TKRC2T1 TEM 8 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT8TKRC3T0LM; LHKADCLMTSTATES TEM 8 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC3T0ST TEM 8 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT8TKRC3T0 TEM 8 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT8TKRC3T1LM; LHKADCLMTSTATES TEM 8 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC3T1ST TEM 8 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT8TKRC3T1 TEM 8 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT8TKRC4T0LM; LHKADCLMTSTATES TEM 8 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC4T0ST TEM 8 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT8TKRC4T0 TEM 8 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT8TKRC4T1LM; LHKADCLMTSTATES TEM 8 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC4T1ST TEM 8 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT8TKRC4T1 TEM 8 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT8TKRC5T0LM; LHKADCLMTSTATES TEM 8 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC5T0ST TEM 8 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT8TKRC5T0 TEM 8 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT8TKRC5T1LM TEM 8 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC5T1ST TEM 8 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT8TKRC5T1 TEM 8 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT8TKRC6T0LM TEM 8 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC6T0ST TEM 8 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT8TKRC6T0 TEM 8 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT8TKRC6T1LM TEM 8 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC6T1ST TEM 8 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT8TKRC6T1 TEM 8 TKR cable 6 temperature 1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x040	0	3	U12	LHKT8TKRC7T0LM; LHKADCLMTSTATES TEM 8 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC7T0ST TEM 8 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT8TKRC7T0 TEM 8 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT8TKRC7T1LM; LHKADCLMTSTATES TEM 8 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC7T1ST TEM 8 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT8TKRC7T1 TEM 8 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT9CALAF2T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF2T0ST TEM 9 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT9CALAF2T0 TEM 9 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT9CALAF2T1LM; LHKADCLMTSTATES TEM 9 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF2T1ST TEM 9 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT9CALAF2T1 TEM 9 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT9CALAF3T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF3T0ST TEM 9 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT9CALAF3T0 TEM 9 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT9CALAF3T1LM TEM 9 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF3T1ST TEM 9 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT9CALAF3T1 TEM 9 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT9CALAF0T0LM TEM 9 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF0T0ST TEM 9 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT9CALAF0T0 TEM 9 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT9CALAF0T1LM TEM 9 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF0T1ST TEM 9 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT9CALAF0T1 TEM 9 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT9CALAF1T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF1T0ST TEM 9 CAL AFEE 1 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT9CALAF1T0 TEM 9 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT9CALAF1T1LM; LHKADCLMTSTATES TEM 9 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF1T1ST TEM 9 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT9CALAF1T1 TEM 9 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT9TKRC4T0LM; LHKADCLMTSTATES TEM 9 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC4T0ST TEM 9 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT9TKRC4T0 TEM 9 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT9TKRC4T1LM; LHKADCLMTSTATES TEM 9 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC4T1ST TEM 9 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT9TKRC4T1 TEM 9 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT9TKRC5T0LM; LHKADCLMTSTATES TEM 9 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC5T0ST TEM 9 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT9TKRC5T0 TEM 9 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT9TKRC5T1LM TEM 9 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC5T1ST TEM 9 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT9TKRC5T1 TEM 9 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT9TKRC6T0LM TEM 9 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC6T0ST TEM 9 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT9TKRC6T0 TEM 9 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT9TKRC6T1LM TEM 9 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC6T1ST TEM 9 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT9TKRC6T1 TEM 9 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT9TKRC7T0LM; LHKADCLMTSTATES TEM 9 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC7T0ST TEM 9 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT9TKRC7T0 TEM 9 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT9TKRC7T1LM; LHKADCLMTSTATES TEM 9 TKR cable 7 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT9TKRC7T1ST TEM 9 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT9TKRC7T1 TEM 9 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT9TKRC0T0LM; LHKADCLMTSTATES TEM 9 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC0T0ST TEM 9 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT9TKRC0T0 TEM 9 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT9TKRC0T1LM; LHKADCLMTSTATES TEM 9 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC0T1ST TEM 9 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT9TKRC0T1 TEM 9 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT9TKRC1T0LM; LHKADCLMTSTATES TEM 9 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC1T0ST TEM 9 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT9TKRC1T0 TEM 9 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT9TKRC1T1LM TEM 9 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC1T1ST TEM 9 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT9TKRC1T1 TEM 9 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT9TKRC2T0LM TEM 9 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC2T0ST TEM 9 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT9TKRC2T0 TEM 9 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT9TKRC2T1LM TEM 9 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC2T1ST TEM 9 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT9TKRC2T1 TEM 9 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT9TKRC3T0LM; LHKADCLMTSTATES TEM 9 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC3T0ST TEM 9 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT9TKRC3T0 TEM 9 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT9TKRC3T1LM; LHKADCLMTSTATES TEM 9 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC3T1ST TEM 9 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT9TKRC3T1 TEM 9 TKR cable 3 temperature 1 - raw ADC value

14.3.11 `TemEnvTemp5` (539/0x21B)

Description:

"TEM temperature ADCs for TEMs A-B" Telemetry Packet

TEM temperature ADCs for TEMs A-B

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP5 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTACALAF0T0LM; LHKADCLMTSTATES TEM A CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF0T0ST TEM A CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTACALAF0T0 TEM A CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTACALAF0T1LM; LHKADCLMTSTATES TEM A CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF0T1ST TEM A CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTACALAF0T1 TEM A CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTACALAF1T0LM; LHKADCLMTSTATES TEM A CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF1T0ST TEM A CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTACALAF1T0 TEM A CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTACALAF1T1LM TEM A CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF1T1ST TEM A CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTACALAF1T1 TEM A CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTACALAF2T0LM TEM A CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF2T0ST TEM A CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTACALAF2T0 TEM A CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTACALAF2T1LM TEM A CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF2T1ST TEM A CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTACALAF2T1 TEM A CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTACALAF3T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF3T0ST TEM A CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTACALAF3T0 TEM A CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTACALAF3T1LM; LHKADCLMTSTATES TEM A CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF3T1ST TEM A CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTACALAF3T1 TEM A CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTATKRC0T0LM; LHKADCLMTSTATES TEM A TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC0T0ST TEM A TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTATKRC0T0 TEM A TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTATKRC0T1LM; LHKADCLMTSTATES TEM A TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC0T1ST TEM A TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTATKRC0T1 TEM A TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTATKRC1T0LM; LHKADCLMTSTATES TEM A TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC1T0ST TEM A TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTATKRC1T0 TEM A TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTATKRC1T1LM TEM A TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC1T1ST TEM A TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTATKRC1T1 TEM A TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTATKRC2T0LM TEM A TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC2T0ST TEM A TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTATKRC2T0 TEM A TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTATKRC2T1LM TEM A TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC2T1ST TEM A TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTATKRC2T1 TEM A TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTATKRC3T0LM; LHKADCLMTSTATES TEM A TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC3T0ST TEM A TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTATKRC3T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTATKRC3T1LM; LHKADCLMTSTATES
				TEM A TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC3T1ST
				TEM A TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTATKRC3T1
				TEM A TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTATKRC4T0LM; LHKADCLMTSTATES
				TEM A TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC4T0ST
				TEM A TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTATKRC4T0
				TEM A TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTATKRC4T1LM; LHKADCLMTSTATES
				TEM A TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC4T1ST
				TEM A TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTATKRC4T1
				TEM A TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTATKRC5T0LM; LHKADCLMTSTATES
				TEM A TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC5T0ST
				TEM A TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTATKRC5T0
				TEM A TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTATKRC5T1LM
				TEM A TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC5T1ST
				TEM A TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTATKRC5T1
				TEM A TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTATKRC6T0LM
				TEM A TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC6T0ST
				TEM A TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTATKRC6T0
				TEM A TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTATKRC6T1LM
				TEM A TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC6T1ST
				TEM A TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTATKRC6T1
				TEM A TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKTATKRC7T0LM; LHKADCLMTSTATES
				TEM A TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC7T0ST
				TEM A TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTATKRC7T0
				TEM A TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTATKRC7T1LM; LHKADCLMTSTATES
				TEM A TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC7T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTATKRC7T1
				TEM A TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTBCALAF2T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF2T0ST
				TEM B CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTBCALAF2T0
				TEM B CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTBCALAF2T1LM; LHKADCLMTSTATES
				TEM B CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF2T1ST
				TEM B CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTBCALAF2T1
				TEM B CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKTBCALAF3T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF3T0ST
				TEM B CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTBCALAF3T0
				TEM B CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTBCALAF3T1LM
				TEM B CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF3T1ST
				TEM B CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTBCALAF3T1
				TEM B CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTBCALAF0T0LM
				TEM B CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF0T0ST
				TEM B CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTBCALAF0T0
				TEM B CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTBCALAF0T1LM
				TEM B CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF0T1ST
				TEM B CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTBCALAF0T1
				TEM B CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTBCALAF1T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF1T0ST
				TEM B CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTBCALAF1T0
				TEM B CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTBCALAF1T1LM; LHKADCLMTSTATES
				TEM B CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF1T1ST
				TEM B CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTBCALAF1T1
				TEM B CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTBTKRC4T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC4T0ST
				TEM B TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTBTKRC4T0
				TEM B TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTBTKRC4T1LM; LHKADCLMTSTATES
				TEM B TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC4T1ST
				TEM B TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTBTKRC4T1
				TEM B TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTBTKRC5T0LM; LHKADCLMTSTATES
				TEM B TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC5T0ST
				TEM B TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTBTKRC5T0
				TEM B TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKTBTKRC5T1LM
				TEM B TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC5T1ST
				TEM B TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTBTKRC5T1
				TEM B TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKTBTKRC6T0LM
				TEM B TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC6T0ST
				TEM B TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTBTKRC6T0
				TEM B TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKTBTKRC6T1LM
				TEM B TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC6T1ST
				TEM B TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTBTKRC6T1
				TEM B TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKTBTKRC7T0LM; LHKADCLMTSTATES
				TEM B TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC7T0ST
				TEM B TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTBTKRC7T0
				TEM B TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKTBTKRC7T1LM; LHKADCLMTSTATES
				TEM B TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC7T1ST
				TEM B TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTBTKRC7T1
				TEM B TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKTBTKRC0T0LM; LHKADCLMTSTATES
				TEM B TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC0T0ST
				TEM B TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTBTKRC0T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKTBTKRC0T1LM; LHKADCLMTSTATES TEM B TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC0T1ST TEM B TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTBTKRC0T1 TEM B TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKTBTKRC1T0LM; LHKADCLMTSTATES TEM B TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC1T0ST TEM B TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTBTKRC1T0 TEM B TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKTBTKRC1T1LM TEM B TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC1T1ST TEM B TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTBTKRC1T1 TEM B TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTBTKRC2T0LM TEM B TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC2T0ST TEM B TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTBTKRC2T0 TEM B TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTBTKRC2T1LM TEM B TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC2T1ST TEM B TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTBTKRC2T1 TEM B TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTBTKRC3T0LM; LHKADCLMTSTATES TEM B TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC3T0ST TEM B TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTBTKRC3T0 TEM B TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTBTKRC3T1LM; LHKADCLMTSTATES TEM B TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC3T1ST TEM B TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTBTKRC3T1 TEM B TKR cable 3 temperature 1 - raw ADC value

14.3.12 `TemEnvTemp6` (540/0x21C)

Description:

"TEM temperature ADCs for TEMs C-D" Telemetry Packet

TEM temperature ADCs for TEMs C-D

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP6 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTCCALAF0T0LM; LHKADCLMTSTATES TEM C CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF0T0ST TEM C CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTCCALAF0T0 TEM C CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTCCALAF0T1LM; LHKADCLMTSTATES TEM C CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF0T1ST TEM C CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTCCALAF0T1 TEM C CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTCCALAF1T0LM; LHKADCLMTSTATES TEM C CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF1T0ST TEM C CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTCCALAF1T0 TEM C CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTCCALAF1T1LM TEM C CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF1T1ST TEM C CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTCCALAF1T1 TEM C CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTCCALAF2T0LM TEM C CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF2T0ST TEM C CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTCCALAF2T0 TEM C CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTCCALAF2T1LM TEM C CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF2T1ST TEM C CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTCCALAF2T1 TEM C CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTCCALAF3T0LM; LHKADCLMTSTATES TEM C CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF3T0ST TEM C CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTCCALAF3T0 TEM C CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTCCALAF3T1LM; LHKADCLMTSTATES TEM C CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF3T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM C CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTCCALAF3T1
				TEM C CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTCTKRC0T0LM; LHKADCLMTSTATES
				TEM C TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC0T0ST
				TEM C TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTCTKRC0T0
				TEM C TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTCTKRC0T1LM; LHKADCLMTSTATES
				TEM C TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC0T1ST
				TEM C TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTCTKRC0T1
				TEM C TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTCTKRC1T0LM; LHKADCLMTSTATES
				TEM C TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC1T0ST
				TEM C TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTCTKRC1T0
				TEM C TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTCTKRC1T1LM
				TEM C TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC1T1ST
				TEM C TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTCTKRC1T1
				TEM C TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTCTKRC2T0LM
				TEM C TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC2T0ST
				TEM C TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTCTKRC2T0
				TEM C TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTCTKRC2T1LM
				TEM C TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC2T1ST
				TEM C TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTCTKRC2T1
				TEM C TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTCTKRC3T0LM; LHKADCLMTSTATES
				TEM C TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC3T0ST
				TEM C TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTCTKRC3T0
				TEM C TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTCTKRC3T1LM; LHKADCLMTSTATES
				TEM C TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC3T1ST
				TEM C TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTCTKRC3T1
				TEM C TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTCTKRC4T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM C TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC4T0ST
				TEM C TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTCTKRC4T0
				TEM C TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTCTKRC4T1LM; LHKADCLMTSTATES
				TEM C TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC4T1ST
				TEM C TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTCTKRC4T1
				TEM C TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTCTKRC5T0LM; LHKADCLMTSTATES
				TEM C TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC5T0ST
				TEM C TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTCTKRC5T0
				TEM C TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTCTKRC5T1LM
				TEM C TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC5T1ST
				TEM C TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTCTKRC5T1
				TEM C TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTCTKRC6T0LM
				TEM C TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC6T0ST
				TEM C TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTCTKRC6T0
				TEM C TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTCTKRC6T1LM
				TEM C TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC6T1ST
				TEM C TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTCTKRC6T1
				TEM C TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKTCTKRC7T0LM; LHKADCLMTSTATES
				TEM C TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC7T0ST
				TEM C TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTCTKRC7T0
				TEM C TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTCTKRC7T1LM; LHKADCLMTSTATES
				TEM C TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC7T1ST
				TEM C TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTCTKRC7T1
				TEM C TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTDCALAF2T0LM; LHKADCLMTSTATES
				TEM D CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF2T0ST
				TEM D CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTDCALAF2T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTDCALAF2T1LM; LHKADCLMTSTATES TEM D CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF2T1ST TEM D CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTDCALAF2T1 TEM D CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKTDCALAF3T0LM; LHKADCLMTSTATES TEM D CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF3T0ST TEM D CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTDCALAF3T0 TEM D CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTDCALAF3T1LM TEM D CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF3T1ST TEM D CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTDCALAF3T1 TEM D CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTDCALAF0T0LM TEM D CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF0T0ST TEM D CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTDCALAF0T0 TEM D CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTDCALAF0T1LM TEM D CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF0T1ST TEM D CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTDCALAF0T1 TEM D CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTDCALAF1T0LM; LHKADCLMTSTATES TEM D CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF1T0ST TEM D CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTDCALAF1T0 TEM D CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTDCALAF1T1LM; LHKADCLMTSTATES TEM D CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF1T1ST TEM D CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTDCALAF1T1 TEM D CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTDTKRC4T0LM; LHKADCLMTSTATES TEM D TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC4T0ST TEM D TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTDTKRC4T0 TEM D TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTDTKRC4T1LM; LHKADCLMTSTATES TEM D TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC4T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTDTKRC4T1
				TEM D TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTDTKRC5T0LM; LHKADCLMTSTATES
				TEM D TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC5T0ST
				TEM D TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTDTKRC5T0
				TEM D TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKTDTKRC5T1LM
				TEM D TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC5T1ST
				TEM D TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTDTKRC5T1
				TEM D TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKTDTKRC6T0LM
				TEM D TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC6T0ST
				TEM D TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTDTKRC6T0
				TEM D TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKTDTKRC6T1LM
				TEM D TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC6T1ST
				TEM D TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTDTKRC6T1
				TEM D TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKTDTKRC7T0LM; LHKADCLMTSTATES
				TEM D TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC7T0ST
				TEM D TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTDTKRC7T0
				TEM D TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKTDTKRC7T1LM; LHKADCLMTSTATES
				TEM D TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC7T1ST
				TEM D TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTDTKRC7T1
				TEM D TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKTDTKRC0T0LM; LHKADCLMTSTATES
				TEM D TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC0T0ST
				TEM D TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTDTKRC0T0
				TEM D TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKTDTKRC0T1LM; LHKADCLMTSTATES
				TEM D TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC0T1ST
				TEM D TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTDTKRC0T1
				TEM D TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKTDTKRC1T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC1T0ST TEM D TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTDTKRC1T0 TEM D TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKTDTKRC1T1LM TEM D TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC1T1ST TEM D TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTDTKRC1T1 TEM D TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTDTKRC2T0LM TEM D TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC2T0ST TEM D TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTDTKRC2T0 TEM D TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTDTKRC2T1LM TEM D TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC2T1ST TEM D TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTDTKRC2T1 TEM D TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTDTKRC3T0LM; LHKADCLMTSTATES TEM D TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC3T0ST TEM D TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTDTKRC3T0 TEM D TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTDTKRC3T1LM; LHKADCLMTSTATES TEM D TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC3T1ST TEM D TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTDTKRC3T1 TEM D TKR cable 3 temperature 1 - raw ADC value

14.3.13 `TemEnvTemp7` (541/0x21D)

Description:

"TEM temperature ADCs for TEMs E-F" Telemetry Packet

TEM temperature ADCs for TEMs E-F

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRTMP7 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	3	U12	LHKTECALAF0T0LM; LHKADCLMTSTATES TEM E CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF0T0ST TEM E CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTECALAF0T0 TEM E CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTECALAF0T1LM; LHKADCLMTSTATES TEM E CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF0T1ST TEM E CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTECALAF0T1 TEM E CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTECALAF1T0LM; LHKADCLMTSTATES TEM E CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF1T0ST TEM E CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTECALAF1T0 TEM E CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTECALAF1T1LM TEM E CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF1T1ST TEM E CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTECALAF1T1 TEM E CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTECALAF2T0LM TEM E CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF2T0ST TEM E CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTECALAF2T0 TEM E CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTECALAF2T1LM TEM E CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF2T1ST TEM E CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTECALAF2T1 TEM E CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTECALAF3T0LM; LHKADCLMTSTATES TEM E CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF3T0ST TEM E CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTECALAF3T0 TEM E CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTECALAF3T1LM; LHKADCLMTSTATES TEM E CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF3T1ST TEM E CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTECALAF3T1 TEM E CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTETKRC0T0LM; LHKADCLMTSTATES TEM E TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC0T0ST TEM E TKR cable 0 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTETKRC0T0 TEM E TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTETKRC0T1LM; LHKADCLMTSTATES TEM E TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC0T1ST TEM E TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTETKRC0T1 TEM E TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTETKRC1T0LM; LHKADCLMTSTATES TEM E TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC1T0ST TEM E TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTETKRC1T0 TEM E TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTETKRC1T1LM TEM E TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC1T1ST TEM E TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTETKRC1T1 TEM E TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTETKRC2T0LM TEM E TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC2T0ST TEM E TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTETKRC2T0 TEM E TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTETKRC2T1LM TEM E TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC2T1ST TEM E TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTETKRC2T1 TEM E TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTETKRC3T0LM; LHKADCLMTSTATES TEM E TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC3T0ST TEM E TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTETKRC3T0 TEM E TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTETKRC3T1LM; LHKADCLMTSTATES TEM E TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC3T1ST TEM E TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTETKRC3T1 TEM E TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTETKRC4T0LM; LHKADCLMTSTATES TEM E TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC4T0ST TEM E TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTETKRC4T0 TEM E TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTETKRC4T1LM; LHKADCLMTSTATES TEM E TKR cable 4 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTETKRC4T1ST TEM E TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTETKRC4T1 TEM E TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTETKRC5T0LM; LHKADCLMTSTATES TEM E TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC5T0ST TEM E TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTETKRC5T0 TEM E TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTETKRC5T1LM TEM E TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC5T1ST TEM E TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTETKRC5T1 TEM E TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTETKRC6T0LM TEM E TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC6T0ST TEM E TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTETKRC6T0 TEM E TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTETKRC6T1LM TEM E TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC6T1ST TEM E TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTETKRC6T1 TEM E TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKTETKRC7T0LM; LHKADCLMTSTATES TEM E TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC7T0ST TEM E TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTETKRC7T0 TEM E TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTETKRC7T1LM; LHKADCLMTSTATES TEM E TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC7T1ST TEM E TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTETKRC7T1 TEM E TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTFCALAF2T0LM; LHKADCLMTSTATES TEM F CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF2T0ST TEM F CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTFCALAF2T0 TEM F CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTFCALAF2T1LM; LHKADCLMTSTATES TEM F CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF2T1ST TEM F CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTFCALAF2T1 TEM F CAL AFEE 2 temperature 1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	3	U12	LHKTFCALAF3T0LM; LHKADCLMTSTATES TEM F CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF3T0ST TEM F CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTFCALAF3T0 TEM F CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTFCALAF3T1LM TEM F CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF3T1ST TEM F CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTFCALAF3T1 TEM F CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTFCALAF0T0LM TEM F CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF0T0ST TEM F CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTFCALAF0T0 TEM F CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTFCALAF0T1LM TEM F CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF0T1ST TEM F CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTFCALAF0T1 TEM F CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTFCALAF1T0LM; LHKADCLMTSTATES TEM F CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF1T0ST TEM F CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTFCALAF1T0 TEM F CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTFCALAF1T1LM; LHKADCLMTSTATES TEM F CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF1T1ST TEM F CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTFCALAF1T1 TEM F CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTFTKRC4T0LM; LHKADCLMTSTATES TEM F TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC4T0ST TEM F TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTFTKRC4T0 TEM F TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTFTKRC4T1LM; LHKADCLMTSTATES TEM F TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC4T1ST TEM F TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTFTKRC4T1 TEM F TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTFTKRC5T0LM; LHKADCLMTSTATES TEM F TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC5T0ST TEM F TKR cable 5 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	`LHKTFTKRC5T0` TEM F TKR cable 5 temperature 0 - raw ADC value
`0x05A`	0	3	U12	`LHKTFTKRC5T1LM` TEM F TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	`LHKTFTKRC5T1ST` TEM F TKR cable 5 temperature 1 - read out status
	4	12	U12	`LHKTFTKRC5T1` TEM F TKR cable 5 temperature 1 - raw ADC value
`0x05C`	0	3	U12	`LHKTFTKRC6T0LM` TEM F TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	`LHKTFTKRC6T0ST` TEM F TKR cable 6 temperature 0 - read out status
	4	12	U12	`LHKTFTKRC6T0` TEM F TKR cable 6 temperature 0 - raw ADC value
`0x05E`	0	3	U12	`LHKTFTKRC6T1LM` TEM F TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	`LHKTFTKRC6T1ST` TEM F TKR cable 6 temperature 1 - read out status
	4	12	U12	`LHKTFTKRC6T1` TEM F TKR cable 6 temperature 1 - raw ADC value
`0x060`	0	3	U12	`LHKTFTKRC7T0LM; LHKADCLMTSTATES` TEM F TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	`LHKTFTKRC7T0ST` TEM F TKR cable 7 temperature 0 - read out status
	4	12	U12	`LHKTFTKRC7T0` TEM F TKR cable 7 temperature 0 - raw ADC value
`0x062`	0	3	U12	`LHKTFTKRC7T1LM; LHKADCLMTSTATES` TEM F TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	`LHKTFTKRC7T1ST` TEM F TKR cable 7 temperature 1 - read out status
	4	12	U12	`LHKTFTKRC7T1` TEM F TKR cable 7 temperature 1 - raw ADC value
`0x064`	0	3	U12	`LHKTFTKRC0T0LM; LHKADCLMTSTATES` TEM F TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	`LHKTFTKRC0T0ST` TEM F TKR cable 0 temperature 0 - read out status
	4	12	U12	`LHKTFTKRC0T0` TEM F TKR cable 0 temperature 0 - raw ADC value
`0x066`	0	3	U12	`LHKTFTKRC0T1LM; LHKADCLMTSTATES` TEM F TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	`LHKTFTKRC0T1ST` TEM F TKR cable 0 temperature 1 - read out status
	4	12	U12	`LHKTFTKRC0T1` TEM F TKR cable 0 temperature 1 - raw ADC value
`0x068`	0	3	U12	`LHKTFTKRC1T0LM; LHKADCLMTSTATES` TEM F TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	`LHKTFTKRC1T0ST` TEM F TKR cable 1 temperature 0 - read out status
	4	12	U12	`LHKTFTKRC1T0` TEM F TKR cable 1 temperature 0 - raw ADC value
`0x06A`	0	3	U12	`LHKTFTKRC1T1LM` TEM F TKR cable 1 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTFTKRC1T1ST TEM F TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTFTKRC1T1 TEM F TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTFTKRC2T0LM TEM F TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC2T0ST TEM F TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTFTKRC2T0 TEM F TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTFTKRC2T1LM TEM F TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC2T1ST TEM F TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTFTKRC2T1 TEM F TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTFTKRC3T0LM; LHKADCLMTSTATES TEM F TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC3T0ST TEM F TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTFTKRC3T0 TEM F TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTFTKRC3T1LM; LHKADCLMTSTATES TEM F TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC3T1ST TEM F TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTFTKRC3T1 TEM F TKR cable 3 temperature 1 - raw ADC value

14.3.14 `PduEnv0` (542/0x21E)

Description:

"PDU Environmental Packet 0" Telemetry Packet

PDU Environmental Packet 0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	1	U12	LHKP0TEMFPM; LHKSWITCHSTATES PDU0 TEM F power management switch
	1	1	U12	LHKP0TEMEPM PDU0 TEM E power management switch
	2	1	U12	LHKP0TEMDPM PDU0 TEM D power management switch
	3	1	U12	LHKP0TEMCPM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM C power management switch
	4	1	U12	LHKP0TEMBPM PDU0 TEM B power management switch
	5	1	U12	LHKP0TEMAPM PDU0 TEM A power management switch
	6	1	U12	LHKP0TEM9PM PDU0 TEM 9 power management switch
	7	1	U12	LHKP0TEM8PM PDU0 TEM 8 power management switch
	8	1	U12	LHKP0TEM7PM PDU0 TEM 7 power management switch
	9	1	U12	LHKP0TEM6PM PDU0 TEM 6 power management switch
	10	1	U12	LHKP0TEM5PM PDU0 TEM 5 power management switch
	11	1	U12	LHKP0TEM4PM PDU0 TEM 4 power management switch
	12	1	U12	LHKP0TEM3PM PDU0 TEM 3 power management switch
	13	1	U12	LHKP0TEM2PM PDU0 TEM 2 power management switch
	14	1	U12	LHKP0TEM1PM PDU0 TEM 1 power management switch
	15	1	U12	LHKP0TEM0PM PDU0 TEM 0 power management switch
0x016	0	13	U12	LHKSPARE13U12 Explicit 13 bit pad in unsigned short
	13	1	U12	LHKP0EPU2PM PDU0 EPU 2 power management switch
	14	1	U12	LHKP0EPU1PM PDU0 EPU 1 power management switch
	15	1	U12	LHKP0EPU0PM PDU0 EPU 0 power management switch
0x018	0	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	3	1	U12	LHKP0TEMPWREGST PDU0 TEM power switches - read out status
	4	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	7	1	U12	LHKP0EPUPWREGST PDU0 EPU power switches - read out status
	8	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	11	1	U12	LHKP0ACDPWREGST PDU0 ACD power switches - read out status
	12	2	U12	LHKSPARE2U12 Explicit 2 bit pad in unsigned short
	14	1	U12	LHKP0ACDPSP PDU0 ACD power supply selector (primary/redundant)
	15	1	U12	LHKP0ACDPM PDU0 ACD power management switch
0x01A	0	3	U12	LHKP0TEM033VLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM033VST
				PDU0 TEM 0 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM033V
				PDU0 TEM 0 digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKP0TEM133VLM
				PDU0 TEM 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM133VST
				PDU0 TEM 1 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM133V
				PDU0 TEM 1 digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKP0TEM233VLM
				PDU0 TEM 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM233VST
				PDU0 TEM 2 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM233V
				PDU0 TEM 2 digital 3.3 V - raw ADC value
0x020	0	3	U12	LHKP0TEM333VLM; LHKADCLMTSTATES
				PDU0 TEM 3 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM333VST
				PDU0 TEM 3 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM333V
				PDU0 TEM 3 digital 3.3 V - raw ADC value
0x022	0	3	U12	LHKP0TEM433VLM; LHKADCLMTSTATES
				PDU0 TEM 4 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM433VST
				PDU0 TEM 4 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM433V
				PDU0 TEM 4 digital 3.3 V - raw ADC value
0x024	0	3	U12	LHKP0TEM533VLM; LHKADCLMTSTATES
				PDU0 TEM 5 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM533VST
				PDU0 TEM 5 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM533V
				PDU0 TEM 5 digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKP0TEM633VLM; LHKADCLMTSTATES
				PDU0 TEM 6 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM633VST
				PDU0 TEM 6 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM633V
				PDU0 TEM 6 digital 3.3 V - raw ADC value
0x028	0	3	U12	LHKP0TEM733VLM; LHKADCLMTSTATES
				PDU0 TEM 7 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM733VST
				PDU0 TEM 7 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM733V
				PDU0 TEM 7 digital 3.3 V - raw ADC value
0x02A	0	3	U12	LHKP0TEM833VLM
				PDU0 TEM 8 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM833VST
				PDU0 TEM 8 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM833V

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 8 digital 3.3 V - raw ADC value
0x02C	0	3	U12	LHKP0TEM933VLM PDU0 TEM 9 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM933VST PDU0 TEM 9 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM933V PDU0 TEM 9 digital 3.3 V - raw ADC value
0x02E	0	3	U12	LHKP0TEMA33VLM PDU0 TEM A digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMA33VST PDU0 TEM A digital 3.3 V - read out status
	4	12	U12	LHKP0TEMA33V PDU0 TEM A digital 3.3 V - raw ADC value
0x030	0	3	U12	LHKP0TEMB33VLM; LHKADCLMTSTATES PDU0 TEM B digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMB33VST PDU0 TEM B digital 3.3 V - read out status
	4	12	U12	LHKP0TEMB33V PDU0 TEM B digital 3.3 V - raw ADC value
0x032	0	3	U12	LHKP0TEMC33VLM; LHKADCLMTSTATES PDU0 TEM C digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMC33VST PDU0 TEM C digital 3.3 V - read out status
	4	12	U12	LHKP0TEMC33V PDU0 TEM C digital 3.3 V - raw ADC value
0x034	0	3	U12	LHKP0TEMD33VLM; LHKADCLMTSTATES PDU0 TEM D digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMD33VST PDU0 TEM D digital 3.3 V - read out status
	4	12	U12	LHKP0TEMD33V PDU0 TEM D digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKP0TEME33VLM; LHKADCLMTSTATES PDU0 TEM E digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEME33VST PDU0 TEM E digital 3.3 V - read out status
	4	12	U12	LHKP0TEME33V PDU0 TEM E digital 3.3 V - raw ADC value
0x038	0	3	U12	LHKP0TEMF33VLM; LHKADCLMTSTATES PDU0 TEM F digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMF33VST PDU0 TEM F digital 3.3 V - read out status
	4	12	U12	LHKP0TEMF33V PDU0 TEM F digital 3.3 V - raw ADC value
0x03A	0	3	U12	LHKP0TEM0PSTLM PDU0 TEM 0 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM0PSTST PDU0 TEM 0 power supply temperature - read out status
	4	12	U12	LHKP0TEM0PST PDU0 TEM 0 power supply temperature - raw ADC value
0x03C	0	3	U12	LHKP0TEM1PSTLM PDU0 TEM 1 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM1PSTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 1 power supply temperature - read out status
	4	12	U12	LHKP0TEM1PST
				PDU0 TEM 1 power supply temperature - raw ADC value
0x03E	0	3	U12	LHKP0TEM2PSTLM
				PDU0 TEM 2 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM2PSTST
				PDU0 TEM 2 power supply temperature - read out status
	4	12	U12	LHKP0TEM2PST
				PDU0 TEM 2 power supply temperature - raw ADC value
0x040	0	3	U12	LHKP0TEM3PSTLM; LHKADCLMTSTATES
				PDU0 TEM 3 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM3PSTST
				PDU0 TEM 3 power supply temperature - read out status
	4	12	U12	LHKP0TEM3PST
				PDU0 TEM 3 power supply temperature - raw ADC value
0x042	0	3	U12	LHKP0TEM4PSTLM; LHKADCLMTSTATES
				PDU0 TEM 4 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM4PSTST
				PDU0 TEM 4 power supply temperature - read out status
	4	12	U12	LHKP0TEM4PST
				PDU0 TEM 4 power supply temperature - raw ADC value
0x044	0	3	U12	LHKP0TEM5PSTLM; LHKADCLMTSTATES
				PDU0 TEM 5 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM5PSTST
				PDU0 TEM 5 power supply temperature - read out status
	4	12	U12	LHKP0TEM5PST
				PDU0 TEM 5 power supply temperature - raw ADC value
0x046	0	3	U12	LHKP0TEM6PSTLM; LHKADCLMTSTATES
				PDU0 TEM 6 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM6PSTST
				PDU0 TEM 6 power supply temperature - read out status
	4	12	U12	LHKP0TEM6PST
				PDU0 TEM 6 power supply temperature - raw ADC value
0x048	0	3	U12	LHKP0TEM7PSTLM; LHKADCLMTSTATES
				PDU0 TEM 7 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM7PSTST
				PDU0 TEM 7 power supply temperature - read out status
	4	12	U12	LHKP0TEM7PST
				PDU0 TEM 7 power supply temperature - raw ADC value
0x04A	0	3	U12	LHKP0TEM8PSTLM
				PDU0 TEM 8 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM8PSTST
				PDU0 TEM 8 power supply temperature - read out status
	4	12	U12	LHKP0TEM8PST
				PDU0 TEM 8 power supply temperature - raw ADC value
0x04C	0	3	U12	LHKP0TEM9PSTLM
				PDU0 TEM 9 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM9PSTST
				PDU0 TEM 9 power supply temperature - read out status
	4	12	U12	LHKP0TEM9PST
				PDU0 TEM 9 power supply temperature - raw ADC value
0x04E	0	3	U12	LHKP0TEMAPSTLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM A power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMAPSTST
				PDU0 TEM A power supply temperature - read out status
	4	12	U12	LHKP0TEMAPST
				PDU0 TEM A power supply temperature - raw ADC value
0x050	0	3	U12	LHKP0TEMBPSTLM; LHKADCLMTSTATES
				PDU0 TEM B power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMBPSTST
				PDU0 TEM B power supply temperature - read out status
	4	12	U12	LHKP0TEMBPST
				PDU0 TEM B power supply temperature - raw ADC value
0x052	0	3	U12	LHKP0TEMCPSTLM; LHKADCLMTSTATES
				PDU0 TEM C power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMCPSTST
				PDU0 TEM C power supply temperature - read out status
	4	12	U12	LHKP0TEMCPST
				PDU0 TEM C power supply temperature - raw ADC value
0x054	0	3	U12	LHKP0TEMDPSTLM; LHKADCLMTSTATES
				PDU0 TEM D power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMDPSTST
				PDU0 TEM D power supply temperature - read out status
	4	12	U12	LHKP0TEMDPST
				PDU0 TEM D power supply temperature - raw ADC value
0x056	0	3	U12	LHKP0TEMEPSTLM; LHKADCLMTSTATES
				PDU0 TEM E power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMEPSTST
				PDU0 TEM E power supply temperature - read out status
	4	12	U12	LHKP0TEMEPST
				PDU0 TEM E power supply temperature - raw ADC value
0x058	0	3	U12	LHKP0TEMFPSTLM; LHKADCLMTSTATES
				PDU0 TEM F power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMFPSTST
				PDU0 TEM F power supply temperature - read out status
	4	12	U12	LHKP0TEMFPST
				PDU0 TEM F power supply temperature - raw ADC value
0x05A	0	3	U12	LHKP0EPU033VLM
				PDU0 EPU 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU033VST
				PDU0 EPU 0 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU033V
				PDU0 EPU 0 digital 3.3 V - raw ADC value
0x05C	0	3	U12	LHKP0EPU133VLM
				PDU0 EPU 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU133VST
				PDU0 EPU 1 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU133V
				PDU0 EPU 1 digital 3.3 V - raw ADC value
0x05E	0	3	U12	LHKP0EPU233VLM
				PDU0 EPU 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU233VST
				PDU0 EPU 2 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU233V

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 EPU 2 digital 3.3 V - raw ADC value
0x060	0	3	U12	LHKP0EPU0TLM; LHKADCLMTSTATES PDU0 EPU 0 temperature - limit evaluation
	3	1	U12	LHKP0EPU0TST PDU0 EPU 0 temperature - read out status
	4	12	U12	LHKP0EPU0T PDU0 EPU 0 temperature - raw ADC value
0x062	0	3	U12	LHKP0EPU1TLM; LHKADCLMTSTATES PDU0 EPU 1 temperature - limit evaluation
	3	1	U12	LHKP0EPU1TST PDU0 EPU 1 temperature - read out status
	4	12	U12	LHKP0EPU1T PDU0 EPU 1 temperature - raw ADC value
0x064	0	3	U12	LHKP0EPU2TLM; LHKADCLMTSTATES PDU0 EPU 2 temperature - limit evaluation
	3	1	U12	LHKP0EPU2TST PDU0 EPU 2 temperature - read out status
	4	12	U12	LHKP0EPU2T PDU0 EPU 2 temperature - raw ADC value
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.15 `PduEnv1` (543/0x21F)

Description:

"PDU Environmental Packet 1" Telemetry Packet

PDU Environmental Packet 1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV1 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP0TEM0PCTLM; LHKADCLMTSTATES PDU0 TEM 0 PCB temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP0TEM0PCTST PDU0 TEM 0 PCB temperature - read out status
	4	12	U12	LHKP0TEM0PCT PDU0 TEM 0 PCB temperature - raw ADC value
0x016	0	3	U12	LHKP0TEM1PCTLM; LHKADCLMTSTATES PDU0 TEM 1 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM1PCTST PDU0 TEM 1 PCB temperature - read out status
	4	12	U12	LHKP0TEM1PCT PDU0 TEM 1 PCB temperature - raw ADC value
0x018	0	3	U12	LHKP0TEM2PCTLM; LHKADCLMTSTATES PDU0 TEM 2 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM2PCTST PDU0 TEM 2 PCB temperature - read out status
	4	12	U12	LHKP0TEM2PCT PDU0 TEM 2 PCB temperature - raw ADC value
0x01A	0	3	U12	LHKP0TEM3PCTLM PDU0 TEM 3 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM3PCTST PDU0 TEM 3 PCB temperature - read out status
	4	12	U12	LHKP0TEM3PCT PDU0 TEM 3 PCB temperature - raw ADC value
0x01C	0	3	U12	LHKP0TEM4PCTLM PDU0 TEM 4 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM4PCTST PDU0 TEM 4 PCB temperature - read out status
	4	12	U12	LHKP0TEM4PCT PDU0 TEM 4 PCB temperature - raw ADC value
0x01E	0	3	U12	LHKP0TEM5PCTLM PDU0 TEM 5 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM5PCTST PDU0 TEM 5 PCB temperature - read out status
	4	12	U12	LHKP0TEM5PCT PDU0 TEM 5 PCB temperature - raw ADC value
0x020	0	3	U12	LHKP0TEM6PCTLM; LHKADCLMTSTATES PDU0 TEM 6 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM6PCTST PDU0 TEM 6 PCB temperature - read out status
	4	12	U12	LHKP0TEM6PCT PDU0 TEM 6 PCB temperature - raw ADC value
0x022	0	3	U12	LHKP0TEM7PCTLM; LHKADCLMTSTATES PDU0 TEM 7 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM7PCTST PDU0 TEM 7 PCB temperature - read out status
	4	12	U12	LHKP0TEM7PCT PDU0 TEM 7 PCB temperature - raw ADC value
0x024	0	3	U12	LHKP0TEM8PCTLM; LHKADCLMTSTATES PDU0 TEM 8 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM8PCTST PDU0 TEM 8 PCB temperature - read out status
	4	12	U12	LHKP0TEM8PCT PDU0 TEM 8 PCB temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x026	0	3	U12	LHKP0TEM9PCTLM; LHKADCLMTSTATES PDU0 TEM 9 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM9PCTST PDU0 TEM 9 PCB temperature - read out status
	4	12	U12	LHKP0TEM9PCT PDU0 TEM 9 PCB temperature - raw ADC value
0x028	0	3	U12	LHKP0TEMAPCTLM; LHKADCLMTSTATES PDU0 TEM A PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMAPCTST PDU0 TEM A PCB temperature - read out status
	4	12	U12	LHKP0TEMAPCT PDU0 TEM A PCB temperature - raw ADC value
0x02A	0	3	U12	LHKP0TEMBPCTLM PDU0 TEM B PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMBPCTST PDU0 TEM B PCB temperature - read out status
	4	12	U12	LHKP0TEMBPCT PDU0 TEM B PCB temperature - raw ADC value
0x02C	0	3	U12	LHKP0TEMCPCTLM PDU0 TEM C PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMCPCTST PDU0 TEM C PCB temperature - read out status
	4	12	U12	LHKP0TEMCPCT PDU0 TEM C PCB temperature - raw ADC value
0x02E	0	3	U12	LHKP0TEMDPCTLM PDU0 TEM D PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMDPCTST PDU0 TEM D PCB temperature - read out status
	4	12	U12	LHKP0TEMDPCT PDU0 TEM D PCB temperature - raw ADC value
0x030	0	3	U12	LHKP0TEMEPCTLM; LHKADCLMTSTATES PDU0 TEM E PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMEPCTST PDU0 TEM E PCB temperature - read out status
	4	12	U12	LHKP0TEMEPCT PDU0 TEM E PCB temperature - raw ADC value
0x032	0	3	U12	LHKP0TEMFPCTLM; LHKADCLMTSTATES PDU0 TEM F PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMFPCTST PDU0 TEM F PCB temperature - read out status
	4	12	U12	LHKP0TEMFPCT PDU0 TEM F PCB temperature - raw ADC value
0x034	0	3	U12	LHKP0CAL8BPTLM; LHKADCLMTSTATES PDU0 TEM 8 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL8BPTST PDU0 TEM 8 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL8BPT PDU0 TEM 8 CAL baseplate temperature - raw ADC value
0x036	0	3	U12	LHKP0CAL9BPTLM; LHKADCLMTSTATES PDU0 TEM 9 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL9BPTST PDU0 TEM 9 CAL baseplate temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP0CAL9BPT PDU0 TEM 9 CAL baseplate temperature - raw ADC value
0x038	0	3	U12	LHKP0CALFBPTLM; LHKADCLMTSTATES PDU0 TEM F CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALFBPTST PDU0 TEM F CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALFBPT PDU0 TEM F CAL baseplate temperature - raw ADC value
0x03A	0	3	U12	LHKP0CALBBPTLM PDU0 TEM B CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALBBPTST PDU0 TEM B CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALBBPT PDU0 TEM B CAL baseplate temperature - raw ADC value
0x03C	0	3	U12	LHKP0CALCBPTLM PDU0 TEM C CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALCBPTST PDU0 TEM C CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALCBPT PDU0 TEM C CAL baseplate temperature - raw ADC value
0x03E	0	3	U12	LHKP0CALDBPTLM PDU0 TEM D CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALDBPTST PDU0 TEM D CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALDBPT PDU0 TEM D CAL baseplate temperature - raw ADC value
0x040	0	3	U12	LHKP0CALEBPTLM; LHKADCLMTSTATES PDU0 TEM E CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALEBPTST PDU0 TEM E CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALEBPT PDU0 TEM E CAL baseplate temperature - raw ADC value
0x042	0	3	U12	LHKP0CALABPTLM; LHKADCLMTSTATES PDU0 TEM A CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALABPTST PDU0 TEM A CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALABPT PDU0 TEM A CAL baseplate temperature - raw ADC value
0x044	0	3	U12	LHKP0CAL0BPTLM; LHKADCLMTSTATES PDU0 TEM 0 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL0BPTST PDU0 TEM 0 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL0BPT PDU0 TEM 0 CAL baseplate temperature - raw ADC value
0x046	0	3	U12	LHKP0CAL1BPTLM; LHKADCLMTSTATES PDU0 TEM 1 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL1BPTST PDU0 TEM 1 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL1BPT PDU0 TEM 1 CAL baseplate temperature - raw ADC value
0x048	0	3	U12	LHKP0CAL7BPTLM; LHKADCLMTSTATES PDU0 TEM 7 CAL baseplate temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP0CAL7BPTST PDU0 TEM 7 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL7BPT PDU0 TEM 7 CAL baseplate temperature - raw ADC value
0x04A	0	3	U12	LHKP0CAL3BPTLM PDU0 TEM 3 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL3BPTST PDU0 TEM 3 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL3BPT PDU0 TEM 3 CAL baseplate temperature - raw ADC value
0x04C	0	3	U12	LHKP0CAL4BPTLM PDU0 TEM 4 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL4BPTST PDU0 TEM 4 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL4BPT PDU0 TEM 4 CAL baseplate temperature - raw ADC value
0x04E	0	3	U12	LHKP0CAL5BPTLM PDU0 TEM 5 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL5BPTST PDU0 TEM 5 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL5BPT PDU0 TEM 5 CAL baseplate temperature - raw ADC value
0x050	0	3	U12	LHKP0CAL6BPTLM; LHKADCLMTSTATES PDU0 TEM 6 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL6BPTST PDU0 TEM 6 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL6BPT PDU0 TEM 6 CAL baseplate temperature - raw ADC value
0x052	0	3	U12	LHKP0CAL2BPTLM; LHKADCLMTSTATES PDU0 TEM 2 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL2BPTST PDU0 TEM 2 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL2BPT PDU0 TEM 2 CAL baseplate temperature - raw ADC value
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.16 PduEnv2 (544/0x220)

Description:

"PDU Environmental Packet 2" Telemetry Packet

PDU Environmental Packet 2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV2 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	3	U12	LHKP0PHP0XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP0XLITST PDU0 +Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP0XLIT PDU0 +Y VCHP 0 XLHP interface temperature - raw ADC value
0x016	0	3	U12	LHKP0PHP1XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP1XLITST PDU0 +Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP1XLIT PDU0 +Y VCHP 1 XLHP interface temperature - raw ADC value
0x018	0	3	U12	LHKP0PHP2XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP2XLITST PDU0 +Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP2XLIT PDU0 +Y VCHP 2 XLHP interface temperature - raw ADC value
0x01A	0	3	U12	LHKP0PHP3XLITLM PDU0 +Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP3XLITST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 +Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP3XLIT
				PDU0 +Y VCHP 3 XLHP interface temperature - raw ADC value
0x01C	0	3	U12	LHKP0PHP4XLITLM
				PDU0 +Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP4XLITST
				PDU0 +Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP4XLIT
				PDU0 +Y VCHP 4 XLHP interface temperature - raw ADC value
0x01E	0	3	U12	LHKP0PHP5XLITLM
				PDU0 +Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP5XLITST
				PDU0 +Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP5XLIT
				PDU0 +Y VCHP 5 XLHP interface temperature - raw ADC value
0x020	0	3	U12	LHKP0MHP0XLITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP0XLITST
				PDU0 -Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP0XLIT
				PDU0 -Y VCHP 0 XLHP interface temperature - raw ADC value
0x022	0	3	U12	LHKP0MHP1XLITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP1XLITST
				PDU0 -Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP1XLIT
				PDU0 -Y VCHP 1 XLHP interface temperature - raw ADC value
0x024	0	3	U12	LHKP0MHP2XLITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP2XLITST
				PDU0 -Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP2XLIT
				PDU0 -Y VCHP 2 XLHP interface temperature - raw ADC value
0x026	0	3	U12	LHKP0MHP3XLITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP3XLITST
				PDU0 -Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP3XLIT
				PDU0 -Y VCHP 3 XLHP interface temperature - raw ADC value
0x028	0	3	U12	LHKP0MHP4XLITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP4XLITST
				PDU0 -Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP4XLIT
				PDU0 -Y VCHP 4 XLHP interface temperature - raw ADC value
0x02A	0	3	U12	LHKP0MHP5XLITLM
				PDU0 -Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP5XLITST
				PDU0 -Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP5XLIT
				PDU0 -Y VCHP 5 XLHP interface temperature - raw ADC value
0x02C	0	3	U12	LHKP0PHP0DSITLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 +Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP0DSITST
				PDU0 +Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP0DSIT
				PDU0 +Y VCHP 0 DSHP interface temperature - raw ADC value
0x02E	0	3	U12	LHKP0PHP1DSITLM
				PDU0 +Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP1DSITST
				PDU0 +Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP1DSIT
				PDU0 +Y VCHP 1 DSHP interface temperature - raw ADC value
0x030	0	3	U12	LHKP0PHP2DSITLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP2DSITST
				PDU0 +Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP2DSIT
				PDU0 +Y VCHP 2 DSHP interface temperature - raw ADC value
0x032	0	3	U12	LHKP0PHP5DSITLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP5DSITST
				PDU0 +Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP5DSIT
				PDU0 +Y VCHP 5 DSHP interface temperature - raw ADC value
0x034	0	3	U12	LHKP0PHP4DSITLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP4DSITST
				PDU0 +Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP4DSIT
				PDU0 +Y VCHP 4 DSHP interface temperature - raw ADC value
0x036	0	3	U12	LHKP0PHP3DSITLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP3DSITST
				PDU0 +Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP3DSIT
				PDU0 +Y VCHP 3 DSHP interface temperature - raw ADC value
0x038	0	3	U12	LHKP0MHP0DSITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP0DSITST
				PDU0 -Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP0DSIT
				PDU0 -Y VCHP 0 DSHP interface temperature - raw ADC value
0x03A	0	3	U12	LHKP0MHP1DSITLM
				PDU0 -Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP1DSITST
				PDU0 -Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP1DSIT
				PDU0 -Y VCHP 1 DSHP interface temperature - raw ADC value
0x03C	0	3	U12	LHKP0MHP2DSITLM
				PDU0 -Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP2DSITST
				PDU0 -Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP2DSIT

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 -Y VCHP 2 DSHP interface temperature - raw ADC value
0x03E	0	3	U12	LHKP0MHP5DSITLM
				PDU0 -Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP5DSITST
				PDU0 -Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP5DSIT
				PDU0 -Y VCHP 5 DSHP interface temperature - raw ADC value
0x040	0	3	U12	LHKP0MHP4DSITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP4DSITST
				PDU0 -Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP4DSIT
				PDU0 -Y VCHP 4 DSHP interface temperature - raw ADC value
0x042	0	3	U12	LHKP0MHP3DSITLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP3DSITST
				PDU0 -Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP3DSIT
				PDU0 -Y VCHP 3 DSHP interface temperature - raw ADC value
0x044	0	3	U12	LHKP0PHP0RVHTLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP0RVHTST
				PDU0 +Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP0RVHT
				PDU0 +Y VCHP 0 reservoir heater temperature - raw ADC value
0x046	0	3	U12	LHKP0PHP1RVHTLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP1RVHTST
				PDU0 +Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP1RVHT
				PDU0 +Y VCHP 1 reservoir heater temperature - raw ADC value
0x048	0	3	U12	LHKP0PHP2RVHTLM; LHKADCLMTSTATES
				PDU0 +Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP2RVHTST
				PDU0 +Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP2RVHT
				PDU0 +Y VCHP 2 reservoir heater temperature - raw ADC value
0x04A	0	3	U12	LHKP0PHP3RVHTLM
				PDU0 +Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP3RVHTST
				PDU0 +Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP3RVHT
				PDU0 +Y VCHP 3 reservoir heater temperature - raw ADC value
0x04C	0	3	U12	LHKP0PHP4RVHTLM
				PDU0 +Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP4RVHTST
				PDU0 +Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP4RVHT
				PDU0 +Y VCHP 4 reservoir heater temperature - raw ADC value
0x04E	0	3	U12	LHKP0PHP5RVHTLM
				PDU0 +Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP5RVHTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 +Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP5RVHT
				PDU0 +Y VCHP 5 reservoir heater temperature - raw ADC value
0x050	0	3	U12	LHKP0MHP0RVHTLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP0RVHTST
				PDU0 -Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP0RVHT
				PDU0 -Y VCHP 0 reservoir heater temperature - raw ADC value
0x052	0	3	U12	LHKP0MHP1RVHTLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP1RVHTST
				PDU0 -Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP1RVHT
				PDU0 -Y VCHP 1 reservoir heater temperature - raw ADC value
0x054	0	3	U12	LHKP0MHP2RVHTLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP2RVHTST
				PDU0 -Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP2RVHT
				PDU0 -Y VCHP 2 reservoir heater temperature - raw ADC value
0x056	0	3	U12	LHKP0MHP3RVHTLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP3RVHTST
				PDU0 -Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP3RVHT
				PDU0 -Y VCHP 3 reservoir heater temperature - raw ADC value
0x058	0	3	U12	LHKP0MHP4RVHTLM; LHKADCLMTSTATES
				PDU0 -Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP4RVHTST
				PDU0 -Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP4RVHT
				PDU0 -Y VCHP 4 reservoir heater temperature - raw ADC value
0x05A	0	3	U12	LHKP0MHP5RVHTLM
				PDU0 -Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP5RVHTST
				PDU0 -Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP5RVHT
				PDU0 -Y VCHP 5 reservoir heater temperature - raw ADC value
0x05C	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x064	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.17 **PduEnv3** (545/0x221)

Description:

"PDU Environmental Packet 3" Telemetry Packet

PDU Environmental Packet 3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV3 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP0GRID6TLM; LHKADCLMTSTATES PDU0 Grid 6 temperature - limit evaluation
	3	1	U12	LHKP0GRID6TST PDU0 Grid 6 temperature - read out status
	4	12	U12	LHKP0GRID6T PDU0 Grid 6 temperature - raw ADC value
0x016	0	3	U12	LHKP0GRID7TLM; LHKADCLMTSTATES PDU0 Grid 7 temperature - limit evaluation
	3	1	U12	LHKP0GRID7TST PDU0 Grid 7 temperature - read out status
	4	12	U12	LHKP0GRID7T PDU0 Grid 7 temperature - raw ADC value
0x018	0	3	U12	LHKP0GRID8TLM; LHKADCLMTSTATES PDU0 Grid 8 temperature - limit evaluation
	3	1	U12	LHKP0GRID8TST PDU0 Grid 8 temperature - read out status
	4	12	U12	LHKP0GRID8T PDU0 Grid 8 temperature - raw ADC value
0x01A	0	3	U12	LHKP0GRID9TLM PDU0 Grid 9 temperature - limit evaluation
	3	1	U12	LHKP0GRID9TST PDU0 Grid 9 temperature - read out status
	4	12	U12	LHKP0GRID9T PDU0 Grid 9 temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01C	0	3	U12	LHKP0GRID10TLM PDU0 Grid 10 temperature - limit evaluation
	3	1	U12	LHKP0GRID10TST PDU0 Grid 10 temperature - read out status
	4	12	U12	LHKP0GRID10T PDU0 Grid 10 temperature - raw ADC value
0x01E	0	3	U12	LHKP0GRID11TLM PDU0 Grid 11 temperature - limit evaluation
	3	1	U12	LHKP0GRID11TST PDU0 Grid 11 temperature - read out status
	4	12	U12	LHKP0GRID11T PDU0 Grid 11 temperature - raw ADC value
0x020	0	3	U12	LHKP0GRID0TLM; LHKADCLMTSTATES PDU0 Grid 0 temperature - limit evaluation
	3	1	U12	LHKP0GRID0TST PDU0 Grid 0 temperature - read out status
	4	12	U12	LHKP0GRID0T PDU0 Grid 0 temperature - raw ADC value
0x022	0	3	U12	LHKP0GRID1TLM; LHKADCLMTSTATES PDU0 Grid 1 temperature - limit evaluation
	3	1	U12	LHKP0GRID1TST PDU0 Grid 1 temperature - read out status
	4	12	U12	LHKP0GRID1T PDU0 Grid 1 temperature - raw ADC value
0x024	0	3	U12	LHKP0GRID2TLM; LHKADCLMTSTATES PDU0 Grid 2 temperature - limit evaluation
	3	1	U12	LHKP0GRID2TST PDU0 Grid 2 temperature - read out status
	4	12	U12	LHKP0GRID2T PDU0 Grid 2 temperature - raw ADC value
0x026	0	3	U12	LHKP0GRID3TLM; LHKADCLMTSTATES PDU0 Grid 3 temperature - limit evaluation
	3	1	U12	LHKP0GRID3TST PDU0 Grid 3 temperature - read out status
	4	12	U12	LHKP0GRID3T PDU0 Grid 3 temperature - raw ADC value
0x028	0	3	U12	LHKP0GRID4TLM; LHKADCLMTSTATES PDU0 Grid 4 temperature - limit evaluation
	3	1	U12	LHKP0GRID4TST PDU0 Grid 4 temperature - read out status
	4	12	U12	LHKP0GRID4T PDU0 Grid 4 temperature - raw ADC value
0x02A	0	3	U12	LHKP0GRID5TLM PDU0 Grid 5 temperature - limit evaluation
	3	1	U12	LHKP0GRID5TST PDU0 Grid 5 temperature - read out status
	4	12	U12	LHKP0GRID5T PDU0 Grid 5 temperature - raw ADC value
0x02C	0	3	U12	LHKP0ACDSHT0LM PDU0 ACD shell temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDSHT0ST PDU0 ACD shell temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP0ACDSHT0 PDU0 ACD shell temperature 0 - raw ADC value
0x02E	0	3	U12	LHKP0ACDSHT1LM PDU0 ACD shell temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDSHT1ST PDU0 ACD shell temperature 1 - read out status
	4	12	U12	LHKP0ACDSHT1 PDU0 ACD shell temperature 1 - raw ADC value
0x030	0	3	U12	LHKP0ACDPRT0LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDPRT0ST PDU0 ACD PMT rail temperature 0 - read out status
	4	12	U12	LHKP0ACDPRT0 PDU0 ACD PMT rail temperature 0 - raw ADC value
0x032	0	3	U12	LHKP0ACDPRT1LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDPRT1ST PDU0 ACD PMT rail temperature 1 - read out status
	4	12	U12	LHKP0ACDPRT1 PDU0 ACD PMT rail temperature 1 - raw ADC value
0x034	0	3	U12	LHKP0ACDPRT2LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 2 - limit evaluation
	3	1	U12	LHKP0ACDPRT2ST PDU0 ACD PMT rail temperature 2 - read out status
	4	12	U12	LHKP0ACDPRT2 PDU0 ACD PMT rail temperature 2 - raw ADC value
0x036	0	3	U12	LHKP0ACDPRT3LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 3 - limit evaluation
	3	1	U12	LHKP0ACDPRT3ST PDU0 ACD PMT rail temperature 3 - read out status
	4	12	U12	LHKP0ACDPRT3 PDU0 ACD PMT rail temperature 3 - raw ADC value
0x038	0	3	U12	LHKP0ACDBGT0LM; LHKADCLMTSTATES PDU0 ACD BEA grid temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDBGT0ST PDU0 ACD BEA grid temperature 0 - read out status
	4	12	U12	LHKP0ACDBGT0 PDU0 ACD BEA grid temperature 0 - raw ADC value
0x03A	0	3	U12	LHKP0ACDBGT1LM PDU0 ACD BEA grid temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDBGT1ST PDU0 ACD BEA grid temperature 1 - read out status
	4	12	U12	LHKP0ACDBGT1 PDU0 ACD BEA grid temperature 1 - raw ADC value
0x03C	0	3	U12	LHKP0RADAFHT1LM PDU0 +Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP0RADAFHT1ST PDU0 +Y antifreeze heater temperature - read out status
	4	12	U12	LHKP0RADAFHT1 PDU0 +Y antifreeze heater temperature - raw ADC value
0x03E	0	3	U12	LHKP0RADAFHT0LM PDU0 -Y antifreeze heater temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP0RADAFHT0ST PDU0 -Y antifreeze heater temperature - read out status
	4	12	U12	LHKP0RADAFHT0 PDU0 -Y antifreeze heater temperature - raw ADC value
0x040	0	3	U12	LHKP0GRAD2IFTLM; LHKADCLMTSTATES PDU0 Grid radiator 2 +Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD2IFTST PDU0 Grid radiator 2 +Y temperature - read out status
	4	12	U12	LHKP0GRAD2IFT PDU0 Grid radiator 2 +Y temperature - raw ADC value
0x042	0	3	U12	LHKP0GRAD3IFTLM; LHKADCLMTSTATES PDU0 Grid radiator 3 +Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD3IFTST PDU0 Grid radiator 3 +Y temperature - read out status
	4	12	U12	LHKP0GRAD3IFT PDU0 Grid radiator 3 +Y temperature - raw ADC value
0x044	0	3	U12	LHKP0GRAD0IFTLM; LHKADCLMTSTATES PDU0 Grid radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD0IFTST PDU0 Grid radiator 0 -Y temperature - read out status
	4	12	U12	LHKP0GRAD0IFT PDU0 Grid radiator 0 -Y temperature - raw ADC value
0x046	0	3	U12	LHKP0GRAD1IFTLM; LHKADCLMTSTATES PDU0 Grid radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD1IFTST PDU0 Grid radiator 1 -Y temperature - read out status
	4	12	U12	LHKP0GRAD1IFT PDU0 Grid radiator 1 -Y temperature - raw ADC value
0x048	0	3	U12	LHKP0RAD6TLM; LHKADCLMTSTATES PDU0 Radiator 6 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD6TST PDU0 Radiator 6 +Y temperature - read out status
	4	12	U12	LHKP0RAD6T PDU0 Radiator 6 +Y temperature - raw ADC value
0x04A	0	3	U12	LHKP0RAD7TLM PDU0 Radiator 7 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD7TST PDU0 Radiator 7 +Y temperature - read out status
	4	12	U12	LHKP0RAD7T PDU0 Radiator 7 +Y temperature - raw ADC value
0x04C	0	3	U12	LHKP0RAD8TLM PDU0 Radiator 8 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD8TST PDU0 Radiator 8 +Y temperature - read out status
	4	12	U12	LHKP0RAD8T PDU0 Radiator 8 +Y temperature - raw ADC value
0x04E	0	3	U12	LHKP0RAD9TLM PDU0 Radiator 9 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD9TST PDU0 Radiator 9 +Y temperature - read out status
	4	12	U12	LHKP0RAD9T PDU0 Radiator 9 +Y temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	3	U12	LHKP0RAD10TLM; LHKADCLMTSTATES PDU0 Radiator 10 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD10TST PDU0 Radiator 10 +Y temperature - read out status
	4	12	U12	LHKP0RAD10T PDU0 Radiator 10 +Y temperature - raw ADC value
0x052	0	3	U12	LHKP0RAD11TLM; LHKADCLMTSTATES PDU0 Radiator 11 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD11TST PDU0 Radiator 11 +Y temperature - read out status
	4	12	U12	LHKP0RAD11T PDU0 Radiator 11 +Y temperature - raw ADC value
0x054	0	3	U12	LHKP0RAD0TLM; LHKADCLMTSTATES PDU0 Radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD0TST PDU0 Radiator 0 -Y temperature - read out status
	4	12	U12	LHKP0RAD0T PDU0 Radiator 0 -Y temperature - raw ADC value
0x056	0	3	U12	LHKP0RAD1TLM; LHKADCLMTSTATES PDU0 Radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD1TST PDU0 Radiator 1 -Y temperature - read out status
	4	12	U12	LHKP0RAD1T PDU0 Radiator 1 -Y temperature - raw ADC value
0x058	0	3	U12	LHKP0RAD2TLM; LHKADCLMTSTATES PDU0 Radiator 2 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD2TST PDU0 Radiator 2 -Y temperature - read out status
	4	12	U12	LHKP0RAD2T PDU0 Radiator 2 -Y temperature - raw ADC value
0x05A	0	3	U12	LHKP0RAD3TLM PDU0 Radiator 3 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD3TST PDU0 Radiator 3 -Y temperature - read out status
	4	12	U12	LHKP0RAD3T PDU0 Radiator 3 -Y temperature - raw ADC value
0x05C	0	3	U12	LHKP0RAD4TLM PDU0 Radiator 4 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD4TST PDU0 Radiator 4 -Y temperature - read out status
	4	12	U12	LHKP0RAD4T PDU0 Radiator 4 -Y temperature - raw ADC value
0x05E	0	3	U12	LHKP0RAD5TLM PDU0 Radiator 5 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD5TST PDU0 Radiator 5 -Y temperature - read out status
	4	12	U12	LHKP0RAD5T PDU0 Radiator 5 -Y temperature - raw ADC value
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.18 **PduEnv4** (546/0x222)

Description:

"PDU Environmental Packet 4" Telemetry Packet

PDU Environmental Packet 4

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV4 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	1	U12	LHKP1TEMFPM; LHKSWITCHSTATES PDU1 TEM F power management switch
	1	1	U12	LHKP1TEMEPM PDU1 TEM E power management switch
	2	1	U12	LHKP1TEMDPM PDU1 TEM D power management switch
	3	1	U12	LHKP1TEMCPM PDU1 TEM C power management switch
	4	1	U12	LHKP1TEMBPM PDU1 TEM B power management switch
	5	1	U12	LHKP1TEMAPM PDU1 TEM A power management switch
	6	1	U12	LHKP1TEM9PM PDU1 TEM 9 power management switch
	7	1	U12	LHKP1TEM8PM PDU1 TEM 8 power management switch
	8	1	U12	LHKP1TEM7PM PDU1 TEM 7 power management switch
	9	1	U12	LHKP1TEM6PM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 6 power management switch
	10	1	U12	LHKP1TEM5PM PDU1 TEM 5 power management switch
	11	1	U12	LHKP1TEM4PM PDU1 TEM 4 power management switch
	12	1	U12	LHKP1TEM3PM PDU1 TEM 3 power management switch
	13	1	U12	LHKP1TEM2PM PDU1 TEM 2 power management switch
	14	1	U12	LHKP1TEM1PM PDU1 TEM 1 power management switch
	15	1	U12	LHKP1TEM0PM PDU1 TEM 0 power management switch
0x016	0	13	U12	LHKSPARE13U12 Explicit 13 bit pad in unsigned short
	13	1	U12	LHKP1EPU2PM PDU1 EPU 2 power management switch
	14	1	U12	LHKP1EPU1PM PDU1 EPU 1 power management switch
	15	1	U12	LHKP1EPU0PM PDU1 EPU 0 power management switch
0x018	0	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	3	1	U12	LHKP1TEMPWREGST PDU1 TEM power switches - read out status
	4	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	7	1	U12	LHKP1EPUPWREGST PDU1 EPU power switches - read out status
	8	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	11	1	U12	LHKP1ACDPWREGST PDU1 ACD power switches - read out status
	12	2	U12	LHKSPARE2U12 Explicit 2 bit pad in unsigned short
	14	1	U12	LHKP1ACDPSP PDU1 ACD power supply selector (primary/redundant)
	15	1	U12	LHKP1ACDPM PDU1 ACD power management switch
0x01A	0	3	U12	LHKP1TEM033VLM PDU1 TEM 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM033VST PDU1 TEM 0 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM033V PDU1 TEM 0 digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKP1TEM133VLM PDU1 TEM 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM133VST PDU1 TEM 1 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM133V PDU1 TEM 1 digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKP1TEM233VLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM233VST
				PDU1 TEM 2 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM233V
				PDU1 TEM 2 digital 3.3 V - raw ADC value
0x020	0	3	U12	LHKP1TEM333VLM; LHKADCLMTSTATES
				PDU1 TEM 3 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM333VST
				PDU1 TEM 3 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM333V
				PDU1 TEM 3 digital 3.3 V - raw ADC value
0x022	0	3	U12	LHKP1TEM433VLM; LHKADCLMTSTATES
				PDU1 TEM 4 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM433VST
				PDU1 TEM 4 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM433V
				PDU1 TEM 4 digital 3.3 V - raw ADC value
0x024	0	3	U12	LHKP1TEM533VLM; LHKADCLMTSTATES
				PDU1 TEM 5 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM533VST
				PDU1 TEM 5 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM533V
				PDU1 TEM 5 digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKP1TEM633VLM; LHKADCLMTSTATES
				PDU1 TEM 6 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM633VST
				PDU1 TEM 6 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM633V
				PDU1 TEM 6 digital 3.3 V - raw ADC value
0x028	0	3	U12	LHKP1TEM733VLM; LHKADCLMTSTATES
				PDU1 TEM 7 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM733VST
				PDU1 TEM 7 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM733V
				PDU1 TEM 7 digital 3.3 V - raw ADC value
0x02A	0	3	U12	LHKP1TEM833VLM
				PDU1 TEM 8 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM833VST
				PDU1 TEM 8 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM833V
				PDU1 TEM 8 digital 3.3 V - raw ADC value
0x02C	0	3	U12	LHKP1TEM933VLM
				PDU1 TEM 9 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM933VST
				PDU1 TEM 9 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM933V
				PDU1 TEM 9 digital 3.3 V - raw ADC value
0x02E	0	3	U12	LHKP1TEMA33VLM
				PDU1 TEM A digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMA33VST
				PDU1 TEM A digital 3.3 V - read out status
	4	12	U12	LHKP1TEMA33V

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM A digital 3.3 V - raw ADC value
0x030	0	3	U12	LHKP1TEMB33VLM; LHKADCLMTSTATES PDU1 TEM B digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMB33VST PDU1 TEM B digital 3.3 V - read out status
	4	12	U12	LHKP1TEMB33V PDU1 TEM B digital 3.3 V - raw ADC value
0x032	0	3	U12	LHKP1TEMC33VLM; LHKADCLMTSTATES PDU1 TEM C digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMC33VST PDU1 TEM C digital 3.3 V - read out status
	4	12	U12	LHKP1TEMC33V PDU1 TEM C digital 3.3 V - raw ADC value
0x034	0	3	U12	LHKP1TEMD33VLM; LHKADCLMTSTATES PDU1 TEM D digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMD33VST PDU1 TEM D digital 3.3 V - read out status
	4	12	U12	LHKP1TEMD33V PDU1 TEM D digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKP1TEME33VLM; LHKADCLMTSTATES PDU1 TEM E digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEME33VST PDU1 TEM E digital 3.3 V - read out status
	4	12	U12	LHKP1TEME33V PDU1 TEM E digital 3.3 V - raw ADC value
0x038	0	3	U12	LHKP1TEMF33VLM; LHKADCLMTSTATES PDU1 TEM F digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMF33VST PDU1 TEM F digital 3.3 V - read out status
	4	12	U12	LHKP1TEMF33V PDU1 TEM F digital 3.3 V - raw ADC value
0x03A	0	3	U12	LHKP1TEM0PSTLM PDU1 TEM 0 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM0PSTST PDU1 TEM 0 power supply temperature - read out status
	4	12	U12	LHKP1TEM0PST PDU1 TEM 0 power supply temperature - raw ADC value
0x03C	0	3	U12	LHKP1TEM1PSTLM PDU1 TEM 1 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM1PSTST PDU1 TEM 1 power supply temperature - read out status
	4	12	U12	LHKP1TEM1PST PDU1 TEM 1 power supply temperature - raw ADC value
0x03E	0	3	U12	LHKP1TEM2PSTLM PDU1 TEM 2 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM2PSTST PDU1 TEM 2 power supply temperature - read out status
	4	12	U12	LHKP1TEM2PST PDU1 TEM 2 power supply temperature - raw ADC value
0x040	0	3	U12	LHKP1TEM3PSTLM; LHKADCLMTSTATES PDU1 TEM 3 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM3PSTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 3 power supply temperature - read out status
	4	12	U12	LHKP1TEM3PST
				PDU1 TEM 3 power supply temperature - raw ADC value
0x042	0	3	U12	LHKP1TEM4PSTLM; LHKADCLMTSTATES
				PDU1 TEM 4 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM4PSTST
				PDU1 TEM 4 power supply temperature - read out status
	4	12	U12	LHKP1TEM4PST
				PDU1 TEM 4 power supply temperature - raw ADC value
0x044	0	3	U12	LHKP1TEM5PSTLM; LHKADCLMTSTATES
				PDU1 TEM 5 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM5PSTST
				PDU1 TEM 5 power supply temperature - read out status
	4	12	U12	LHKP1TEM5PST
				PDU1 TEM 5 power supply temperature - raw ADC value
0x046	0	3	U12	LHKP1TEM6PSTLM; LHKADCLMTSTATES
				PDU1 TEM 6 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM6PSTST
				PDU1 TEM 6 power supply temperature - read out status
	4	12	U12	LHKP1TEM6PST
				PDU1 TEM 6 power supply temperature - raw ADC value
0x048	0	3	U12	LHKP1TEM7PSTLM; LHKADCLMTSTATES
				PDU1 TEM 7 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM7PSTST
				PDU1 TEM 7 power supply temperature - read out status
	4	12	U12	LHKP1TEM7PST
				PDU1 TEM 7 power supply temperature - raw ADC value
0x04A	0	3	U12	LHKP1TEM8PSTLM
				PDU1 TEM 8 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM8PSTST
				PDU1 TEM 8 power supply temperature - read out status
	4	12	U12	LHKP1TEM8PST
				PDU1 TEM 8 power supply temperature - raw ADC value
0x04C	0	3	U12	LHKP1TEM9PSTLM
				PDU1 TEM 9 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM9PSTST
				PDU1 TEM 9 power supply temperature - read out status
	4	12	U12	LHKP1TEM9PST
				PDU1 TEM 9 power supply temperature - raw ADC value
0x04E	0	3	U12	LHKP1TEMAPSTLM
				PDU1 TEM A power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMAPSTST
				PDU1 TEM A power supply temperature - read out status
	4	12	U12	LHKP1TEMAPST
				PDU1 TEM A power supply temperature - raw ADC value
0x050	0	3	U12	LHKP1TEMBPSTLM; LHKADCLMTSTATES
				PDU1 TEM B power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMBPSTST
				PDU1 TEM B power supply temperature - read out status
	4	12	U12	LHKP1TEMBPST
				PDU1 TEM B power supply temperature - raw ADC value
0x052	0	3	U12	LHKP1TEMCPSTLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM C power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMCPSTST
				PDU1 TEM C power supply temperature - read out status
	4	12	U12	LHKP1TEMCPST
				PDU1 TEM C power supply temperature - raw ADC value
0x054	0	3	U12	LHKP1TEMDPSTLM; LHKADCLMTSTATES
				PDU1 TEM D power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMDPSTST
				PDU1 TEM D power supply temperature - read out status
	4	12	U12	LHKP1TEMDPST
				PDU1 TEM D power supply temperature - raw ADC value
0x056	0	3	U12	LHKP1TEMEPSTLM; LHKADCLMTSTATES
				PDU1 TEM E power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMEPSTST
				PDU1 TEM E power supply temperature - read out status
	4	12	U12	LHKP1TEMEPST
				PDU1 TEM E power supply temperature - raw ADC value
0x058	0	3	U12	LHKP1TEMFPSTLM; LHKADCLMTSTATES
				PDU1 TEM F power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMFPSTST
				PDU1 TEM F power supply temperature - read out status
	4	12	U12	LHKP1TEMFPST
				PDU1 TEM F power supply temperature - raw ADC value
0x05A	0	3	U12	LHKP1EPU033VLM
				PDU1 EPU 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU033VST
				PDU1 EPU 0 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU033V
				PDU1 EPU 0 digital 3.3 V - raw ADC value
0x05C	0	3	U12	LHKP1EPU133VLM
				PDU1 EPU 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU133VST
				PDU1 EPU 1 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU133V
				PDU1 EPU 1 digital 3.3 V - raw ADC value
0x05E	0	3	U12	LHKP1EPU233VLM
				PDU1 EPU 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU233VST
				PDU1 EPU 2 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU233V
				PDU1 EPU 2 digital 3.3 V - raw ADC value
0x060	0	3	U12	LHKP1EPU0TLM; LHKADCLMTSTATES
				PDU1 EPU 0 temperature - limit evaluation
	3	1	U12	LHKP1EPU0TST
				PDU1 EPU 0 temperature - read out status
	4	12	U12	LHKP1EPU0T
				PDU1 EPU 0 temperature - raw ADC value
0x062	0	3	U12	LHKP1EPU1TLM; LHKADCLMTSTATES
				PDU1 EPU 1 temperature - limit evaluation
	3	1	U12	LHKP1EPU1TST
				PDU1 EPU 1 temperature - read out status
	4	12	U12	LHKP1EPU1T

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 EPU 1 temperature - raw ADC value
0x064	0	3	U12	LHKP1EPU2TLM; LHKADCLMTSTATES PDU1 EPU 2 temperature - limit evaluation
	3	1	U12	LHKP1EPU2TST PDU1 EPU 2 temperature - read out status
	4	12	U12	LHKP1EPU2T PDU1 EPU 2 temperature - raw ADC value
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.19 `PduEnv5` (547/0x223)

Description:

"PDU Environmental Packet 5" Telemetry Packet

PDU Environmental Packet 5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV5 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP1TEM0PCTLM; LHKADCLMTSTATES PDU1 TEM 0 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM0PCTST PDU1 TEM 0 PCB temperature - read out status
	4	12	U12	LHKP1TEM0PCT PDU1 TEM 0 PCB temperature - raw ADC value
0x016	0	3	U12	LHKP1TEM1PCTLM; LHKADCLMTSTATES PDU1 TEM 1 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM1PCTST PDU1 TEM 1 PCB temperature - read out status
	4	12	U12	LHKP1TEM1PCT PDU1 TEM 1 PCB temperature - raw ADC value
0x018	0	3	U12	LHKP1TEM2PCTLM; LHKADCLMTSTATES PDU1 TEM 2 PCB temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP1TEM2PCTST PDU1 TEM 2 PCB temperature - read out status
	4	12	U12	LHKP1TEM2PCT PDU1 TEM 2 PCB temperature - raw ADC value
0x01A	0	3	U12	LHKP1TEM3PCTLM PDU1 TEM 3 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM3PCTST PDU1 TEM 3 PCB temperature - read out status
	4	12	U12	LHKP1TEM3PCT PDU1 TEM 3 PCB temperature - raw ADC value
0x01C	0	3	U12	LHKP1TEM4PCTLM PDU1 TEM 4 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM4PCTST PDU1 TEM 4 PCB temperature - read out status
	4	12	U12	LHKP1TEM4PCT PDU1 TEM 4 PCB temperature - raw ADC value
0x01E	0	3	U12	LHKP1TEM5PCTLM PDU1 TEM 5 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM5PCTST PDU1 TEM 5 PCB temperature - read out status
	4	12	U12	LHKP1TEM5PCT PDU1 TEM 5 PCB temperature - raw ADC value
0x020	0	3	U12	LHKP1TEM6PCTLM; LHKADCLMTSTATES PDU1 TEM 6 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM6PCTST PDU1 TEM 6 PCB temperature - read out status
	4	12	U12	LHKP1TEM6PCT PDU1 TEM 6 PCB temperature - raw ADC value
0x022	0	3	U12	LHKP1TEM7PCTLM; LHKADCLMTSTATES PDU1 TEM 7 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM7PCTST PDU1 TEM 7 PCB temperature - read out status
	4	12	U12	LHKP1TEM7PCT PDU1 TEM 7 PCB temperature - raw ADC value
0x024	0	3	U12	LHKP1TEM8PCTLM; LHKADCLMTSTATES PDU1 TEM 8 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM8PCTST PDU1 TEM 8 PCB temperature - read out status
	4	12	U12	LHKP1TEM8PCT PDU1 TEM 8 PCB temperature - raw ADC value
0x026	0	3	U12	LHKP1TEM9PCTLM; LHKADCLMTSTATES PDU1 TEM 9 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM9PCTST PDU1 TEM 9 PCB temperature - read out status
	4	12	U12	LHKP1TEM9PCT PDU1 TEM 9 PCB temperature - raw ADC value
0x028	0	3	U12	LHKP1TEMAPCTLM; LHKADCLMTSTATES PDU1 TEM A PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMAPCTST PDU1 TEM A PCB temperature - read out status
	4	12	U12	LHKP1TEMAPCT PDU1 TEM A PCB temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02A	0	3	U12	LHKP1TEMBPCTLM PDU1 TEM B PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMBPCTST PDU1 TEM B PCB temperature - read out status
	4	12	U12	LHKP1TEMBPCT PDU1 TEM B PCB temperature - raw ADC value
0x02C	0	3	U12	LHKP1TEMCPCTLM PDU1 TEM C PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMCPCTST PDU1 TEM C PCB temperature - read out status
	4	12	U12	LHKP1TEMCPCT PDU1 TEM C PCB temperature - raw ADC value
0x02E	0	3	U12	LHKP1TEMDPCTLM PDU1 TEM D PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMDPCTST PDU1 TEM D PCB temperature - read out status
	4	12	U12	LHKP1TEMDPCT PDU1 TEM D PCB temperature - raw ADC value
0x030	0	3	U12	LHKP1TEMEPCTLM; LHKADCLMTSTATES PDU1 TEM E PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMEPCTST PDU1 TEM E PCB temperature - read out status
	4	12	U12	LHKP1TEMEPCT PDU1 TEM E PCB temperature - raw ADC value
0x032	0	3	U12	LHKP1TEMFPCTLM; LHKADCLMTSTATES PDU1 TEM F PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMFPCTST PDU1 TEM F PCB temperature - read out status
	4	12	U12	LHKP1TEMFPCT PDU1 TEM F PCB temperature - raw ADC value
0x034	0	3	U12	LHKP1CAL8BPTLM; LHKADCLMTSTATES PDU1 TEM 8 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL8BPTST PDU1 TEM 8 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL8BPT PDU1 TEM 8 CAL baseplate temperature - raw ADC value
0x036	0	3	U12	LHKP1CAL9BPTLM; LHKADCLMTSTATES PDU1 TEM 9 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL9BPTST PDU1 TEM 9 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL9BPT PDU1 TEM 9 CAL baseplate temperature - raw ADC value
0x038	0	3	U12	LHKP1CALFBPTLM; LHKADCLMTSTATES PDU1 TEM F CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALFBPTST PDU1 TEM F CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALFBPT PDU1 TEM F CAL baseplate temperature - raw ADC value
0x03A	0	3	U12	LHKP1CALBBPTLM PDU1 TEM B CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALBBPTST PDU1 TEM B CAL baseplate temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP1CALBBPT PDU1 TEM B CAL baseplate temperature - raw ADC value
0x03C	0	3	U12	LHKP1CALCBPTLM PDU1 TEM C CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALCBPTST PDU1 TEM C CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALCBPT PDU1 TEM C CAL baseplate temperature - raw ADC value
0x03E	0	3	U12	LHKP1CALDBPTLM PDU1 TEM D CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALDBPTST PDU1 TEM D CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALDBPT PDU1 TEM D CAL baseplate temperature - raw ADC value
0x040	0	3	U12	LHKP1CALEBPTLM; LHKADCLMTSTATES PDU1 TEM E CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALEBPTST PDU1 TEM E CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALEBPT PDU1 TEM E CAL baseplate temperature - raw ADC value
0x042	0	3	U12	LHKP1CALABPTLM; LHKADCLMTSTATES PDU1 TEM A CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALABPTST PDU1 TEM A CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALABPT PDU1 TEM A CAL baseplate temperature - raw ADC value
0x044	0	3	U12	LHKP1CAL0BPTLM; LHKADCLMTSTATES PDU1 TEM 0 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL0BPTST PDU1 TEM 0 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL0BPT PDU1 TEM 0 CAL baseplate temperature - raw ADC value
0x046	0	3	U12	LHKP1CAL1BPTLM; LHKADCLMTSTATES PDU1 TEM 1 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL1BPTST PDU1 TEM 1 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL1BPT PDU1 TEM 1 CAL baseplate temperature - raw ADC value
0x048	0	3	U12	LHKP1CAL7BPTLM; LHKADCLMTSTATES PDU1 TEM 7 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL7BPTST PDU1 TEM 7 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL7BPT PDU1 TEM 7 CAL baseplate temperature - raw ADC value
0x04A	0	3	U12	LHKP1CAL3BPTLM PDU1 TEM 3 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL3BPTST PDU1 TEM 3 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL3BPT PDU1 TEM 3 CAL baseplate temperature - raw ADC value
0x04C	0	3	U12	LHKP1CAL4BPTLM PDU1 TEM 4 CAL baseplate temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP1CAL4BPTST PDU1 TEM 4 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL4BPT PDU1 TEM 4 CAL baseplate temperature - raw ADC value
0x04E	0	3	U12	LHKP1CAL5BPTLM PDU1 TEM 5 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL5BPTST PDU1 TEM 5 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL5BPT PDU1 TEM 5 CAL baseplate temperature - raw ADC value
0x050	0	3	U12	LHKP1CAL6BPTLM; LHKADCLMTSTATES PDU1 TEM 6 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL6BPTST PDU1 TEM 6 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL6BPT PDU1 TEM 6 CAL baseplate temperature - raw ADC value
0x052	0	3	U12	LHKP1CAL2BPTLM; LHKADCLMTSTATES PDU1 TEM 2 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL2BPTST PDU1 TEM 2 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL2BPT PDU1 TEM 2 CAL baseplate temperature - raw ADC value
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.20 `PduEnv6` (548/0x224)

Description:

"PDU Environmental Packet 6" Telemetry Packet

PDU Environmental Packet 6

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV6 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	3	U12	LHKP1PHP0XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP0XLITST PDU1 +Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP0XLIT PDU1 +Y VCHP 0 XLHP interface temperature - raw ADC value
0x016	0	3	U12	LHKP1PHP1XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP1XLITST PDU1 +Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP1XLIT PDU1 +Y VCHP 1 XLHP interface temperature - raw ADC value
0x018	0	3	U12	LHKP1PHP2XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP2XLITST PDU1 +Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP2XLIT PDU1 +Y VCHP 2 XLHP interface temperature - raw ADC value
0x01A	0	3	U12	LHKP1PHP3XLITLM PDU1 +Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP3XLITST PDU1 +Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP3XLIT PDU1 +Y VCHP 3 XLHP interface temperature - raw ADC value
0x01C	0	3	U12	LHKP1PHP4XLITLM PDU1 +Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP4XLITST PDU1 +Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP4XLIT PDU1 +Y VCHP 4 XLHP interface temperature - raw ADC value
0x01E	0	3	U12	LHKP1PHP5XLITLM PDU1 +Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP5XLITST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 +Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP5XLIT
				PDU1 +Y VCHP 5 XLHP interface temperature - raw ADC value
0x020	0	3	U12	LHKP1MHP0XLITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP0XLITST
				PDU1 -Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP0XLIT
				PDU1 -Y VCHP 0 XLHP interface temperature - raw ADC value
0x022	0	3	U12	LHKP1MHP1XLITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP1XLITST
				PDU1 -Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP1XLIT
				PDU1 -Y VCHP 1 XLHP interface temperature - raw ADC value
0x024	0	3	U12	LHKP1MHP2XLITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP2XLITST
				PDU1 -Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP2XLIT
				PDU1 -Y VCHP 2 XLHP interface temperature - raw ADC value
0x026	0	3	U12	LHKP1MHP3XLITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP3XLITST
				PDU1 -Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP3XLIT
				PDU1 -Y VCHP 3 XLHP interface temperature - raw ADC value
0x028	0	3	U12	LHKP1MHP4XLITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP4XLITST
				PDU1 -Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP4XLIT
				PDU1 -Y VCHP 4 XLHP interface temperature - raw ADC value
0x02A	0	3	U12	LHKP1MHP5XLITLM
				PDU1 -Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP5XLITST
				PDU1 -Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP5XLIT
				PDU1 -Y VCHP 5 XLHP interface temperature - raw ADC value
0x02C	0	3	U12	LHKP1PHP0DSITLM
				PDU1 +Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP0DSITST
				PDU1 +Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP0DSIT
				PDU1 +Y VCHP 0 DSHP interface temperature - raw ADC value
0x02E	0	3	U12	LHKP1PHP1DSITLM
				PDU1 +Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP1DSITST
				PDU1 +Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP1DSIT
				PDU1 +Y VCHP 1 DSHP interface temperature - raw ADC value
0x030	0	3	U12	LHKP1PHP2DSITLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 +Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP2DSITST PDU1 +Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP2DSIT PDU1 +Y VCHP 2 DSHP interface temperature - raw ADC value
0x032	0	3	U12	LHKP1PHP5DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP5DSITST PDU1 +Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP5DSIT PDU1 +Y VCHP 5 DSHP interface temperature - raw ADC value
0x034	0	3	U12	LHKP1PHP4DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP4DSITST PDU1 +Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP4DSIT PDU1 +Y VCHP 4 DSHP interface temperature - raw ADC value
0x036	0	3	U12	LHKP1PHP3DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP3DSITST PDU1 +Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP3DSIT PDU1 +Y VCHP 3 DSHP interface temperature - raw ADC value
0x038	0	3	U12	LHKP1MHP0DSITLM; LHKADCLMTSTATES PDU1 -Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP0DSITST PDU1 -Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP0DSIT PDU1 -Y VCHP 0 DSHP interface temperature - raw ADC value
0x03A	0	3	U12	LHKP1MHP1DSITLM PDU1 -Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP1DSITST PDU1 -Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP1DSIT PDU1 -Y VCHP 1 DSHP interface temperature - raw ADC value
0x03C	0	3	U12	LHKP1MHP2DSITLM PDU1 -Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP2DSITST PDU1 -Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP2DSIT PDU1 -Y VCHP 2 DSHP interface temperature - raw ADC value
0x03E	0	3	U12	LHKP1MHP5DSITLM PDU1 -Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP5DSITST PDU1 -Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP5DSIT PDU1 -Y VCHP 5 DSHP interface temperature - raw ADC value
0x040	0	3	U12	LHKP1MHP4DSITLM; LHKADCLMTSTATES PDU1 -Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP4DSITST PDU1 -Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP4DSIT

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 -Y VCHP 4 DSHP interface temperature - raw ADC value
0x042	0	3	U12	LHKP1MHP3DSITLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP3DSITST
				PDU1 -Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP3DSIT
				PDU1 -Y VCHP 3 DSHP interface temperature - raw ADC value
0x044	0	3	U12	LHKP1PHP0RVHTLM; LHKADCLMTSTATES
				PDU1 +Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP0RVHTST
				PDU1 +Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP0RVHT
				PDU1 +Y VCHP 0 reservoir heater temperature - raw ADC value
0x046	0	3	U12	LHKP1PHP1RVHTLM; LHKADCLMTSTATES
				PDU1 +Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP1RVHTST
				PDU1 +Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP1RVHT
				PDU1 +Y VCHP 1 reservoir heater temperature - raw ADC value
0x048	0	3	U12	LHKP1PHP2RVHTLM; LHKADCLMTSTATES
				PDU1 +Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP2RVHTST
				PDU1 +Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP2RVHT
				PDU1 +Y VCHP 2 reservoir heater temperature - raw ADC value
0x04A	0	3	U12	LHKP1PHP3RVHTLM
				PDU1 +Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP3RVHTST
				PDU1 +Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP3RVHT
				PDU1 +Y VCHP 3 reservoir heater temperature - raw ADC value
0x04C	0	3	U12	LHKP1PHP4RVHTLM
				PDU1 +Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP4RVHTST
				PDU1 +Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP4RVHT
				PDU1 +Y VCHP 4 reservoir heater temperature - raw ADC value
0x04E	0	3	U12	LHKP1PHP5RVHTLM
				PDU1 +Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP5RVHTST
				PDU1 +Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP5RVHT
				PDU1 +Y VCHP 5 reservoir heater temperature - raw ADC value
0x050	0	3	U12	LHKP1MHP0RVHTLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP0RVHTST
				PDU1 -Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP0RVHT
				PDU1 -Y VCHP 0 reservoir heater temperature - raw ADC value
0x052	0	3	U12	LHKP1MHP1RVHTLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP1RVHTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 -Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP1RVHT
				PDU1 -Y VCHP 1 reservoir heater temperature - raw ADC value
0x054	0	3	U12	LHKP1MHP2RVHTLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP2RVHTST
				PDU1 -Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP2RVHT
				PDU1 -Y VCHP 2 reservoir heater temperature - raw ADC value
0x056	0	3	U12	LHKP1MHP3RVHTLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP3RVHTST
				PDU1 -Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP3RVHT
				PDU1 -Y VCHP 3 reservoir heater temperature - raw ADC value
0x058	0	3	U12	LHKP1MHP4RVHTLM; LHKADCLMTSTATES
				PDU1 -Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP4RVHTST
				PDU1 -Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP4RVHT
				PDU1 -Y VCHP 4 reservoir heater temperature - raw ADC value
0x05A	0	3	U12	LHKP1MHP5RVHTLM
				PDU1 -Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP5RVHTST
				PDU1 -Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP5RVHT
				PDU1 -Y VCHP 5 reservoir heater temperature - raw ADC value
0x05C	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x064	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12
				Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12
				Spare 16 bit field

14.3.21 `PduEnv7` (549/0x225)

Description:

"PDU Environmental Packet 7" Telemetry Packet

PDU Environmental Packet 7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPDUENV7 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP1GRID6TLM; LHKADCLMTSTATES PDU1 Grid 6 temperature - limit evaluation
	3	1	U12	LHKP1GRID6TST PDU1 Grid 6 temperature - read out status
	4	12	U12	LHKP1GRID6T PDU1 Grid 6 temperature - raw ADC value
0x016	0	3	U12	LHKP1GRID7TLM; LHKADCLMTSTATES PDU1 Grid 7 temperature - limit evaluation
	3	1	U12	LHKP1GRID7TST PDU1 Grid 7 temperature - read out status
	4	12	U12	LHKP1GRID7T PDU1 Grid 7 temperature - raw ADC value
0x018	0	3	U12	LHKP1GRID8TLM; LHKADCLMTSTATES PDU1 Grid 8 temperature - limit evaluation
	3	1	U12	LHKP1GRID8TST PDU1 Grid 8 temperature - read out status
	4	12	U12	LHKP1GRID8T PDU1 Grid 8 temperature - raw ADC value
0x01A	0	3	U12	LHKP1GRID9TLM PDU1 Grid 9 temperature - limit evaluation
	3	1	U12	LHKP1GRID9TST PDU1 Grid 9 temperature - read out status
	4	12	U12	LHKP1GRID9T PDU1 Grid 9 temperature - raw ADC value
0x01C	0	3	U12	LHKP1GRID10TLM PDU1 Grid 10 temperature - limit evaluation
	3	1	U12	LHKP1GRID10TST PDU1 Grid 10 temperature - read out status
	4	12	U12	LHKP1GRID10T PDU1 Grid 10 temperature - raw ADC value
0x01E	0	3	U12	LHKP1GRID11TLM PDU1 Grid 11 temperature - limit evaluation
	3	1	U12	LHKP1GRID11TST PDU1 Grid 11 temperature - read out status
	4	12	U12	LHKP1GRID11T PDU1 Grid 11 temperature - raw ADC value
0x020	0	3	U12	LHKP1GRID0TLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Grid 0 temperature - limit evaluation
	3	1	U12	LHKP1GRID0TST
				PDU1 Grid 0 temperature - read out status
	4	12	U12	LHKP1GRID0T
				PDU1 Grid 0 temperature - raw ADC value
0x022	0	3	U12	LHKP1GRID1TLM; LHKADCLMTSTATES
				PDU1 Grid 1 temperature - limit evaluation
	3	1	U12	LHKP1GRID1TST
				PDU1 Grid 1 temperature - read out status
	4	12	U12	LHKP1GRID1T
				PDU1 Grid 1 temperature - raw ADC value
0x024	0	3	U12	LHKP1GRID2TLM; LHKADCLMTSTATES
				PDU1 Grid 2 temperature - limit evaluation
	3	1	U12	LHKP1GRID2TST
				PDU1 Grid 2 temperature - read out status
	4	12	U12	LHKP1GRID2T
				PDU1 Grid 2 temperature - raw ADC value
0x026	0	3	U12	LHKP1GRID3TLM; LHKADCLMTSTATES
				PDU1 Grid 3 temperature - limit evaluation
	3	1	U12	LHKP1GRID3TST
				PDU1 Grid 3 temperature - read out status
	4	12	U12	LHKP1GRID3T
				PDU1 Grid 3 temperature - raw ADC value
0x028	0	3	U12	LHKP1GRID4TLM; LHKADCLMTSTATES
				PDU1 Grid 4 temperature - limit evaluation
	3	1	U12	LHKP1GRID4TST
				PDU1 Grid 4 temperature - read out status
	4	12	U12	LHKP1GRID4T
				PDU1 Grid 4 temperature - raw ADC value
0x02A	0	3	U12	LHKP1GRID5TLM
				PDU1 Grid 5 temperature - limit evaluation
	3	1	U12	LHKP1GRID5TST
				PDU1 Grid 5 temperature - read out status
	4	12	U12	LHKP1GRID5T
				PDU1 Grid 5 temperature - raw ADC value
0x02C	0	3	U12	LHKP1ACDSHT0LM
				PDU1 ACD shell temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDSHT0ST
				PDU1 ACD shell temperature 0 - read out status
	4	12	U12	LHKP1ACDSHT0
				PDU1 ACD shell temperature 0 - raw ADC value
0x02E	0	3	U12	LHKP1ACDSHT1LM
				PDU1 ACD shell temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDSHT1ST
				PDU1 ACD shell temperature 1 - read out status
	4	12	U12	LHKP1ACDSHT1
				PDU1 ACD shell temperature 1 - raw ADC value
0x030	0	3	U12	LHKP1ACDPRT0LM; LHKADCLMTSTATES
				PDU1 ACD PMT rail temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDPRT0ST
				PDU1 ACD PMT rail temperature 0 - read out status
	4	12	U12	LHKP1ACDPRT0

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 ACD PMT rail temperature 0 - raw ADC value
0x032	0	3	U12	LHKP1ACDPRT1LM; LHKADCLMTSTATES
				PDU1 ACD PMT rail temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDPRT1ST
				PDU1 ACD PMT rail temperature 1 - read out status
	4	12	U12	LHKP1ACDPRT1
				PDU1 ACD PMT rail temperature 1 - raw ADC value
0x034	0	3	U12	LHKP1ACDPRT2LM; LHKADCLMTSTATES
				PDU1 ACD PMT rail temperature 2 - limit evaluation
	3	1	U12	LHKP1ACDPRT2ST
				PDU1 ACD PMT rail temperature 2 - read out status
	4	12	U12	LHKP1ACDPRT2
				PDU1 ACD PMT rail temperature 2 - raw ADC value
0x036	0	3	U12	LHKP1ACDPRT3LM; LHKADCLMTSTATES
				PDU1 ACD PMT rail temperature 3 - limit evaluation
	3	1	U12	LHKP1ACDPRT3ST
				PDU1 ACD PMT rail temperature 3 - read out status
	4	12	U12	LHKP1ACDPRT3
				PDU1 ACD PMT rail temperature 3 - raw ADC value
0x038	0	3	U12	LHKP1ACDBGT0LM; LHKADCLMTSTATES
				PDU1 ACD BEA grid temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDBGT0ST
				PDU1 ACD BEA grid temperature 0 - read out status
	4	12	U12	LHKP1ACDBGT0
				PDU1 ACD BEA grid temperature 0 - raw ADC value
0x03A	0	3	U12	LHKP1ACDBGT1LM
				PDU1 ACD BEA grid temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDBGT1ST
				PDU1 ACD BEA grid temperature 1 - read out status
	4	12	U12	LHKP1ACDBGT1
				PDU1 ACD BEA grid temperature 1 - raw ADC value
0x03C	0	3	U12	LHKP1RADAFHT1LM
				PDU1 +Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP1RADAFHT1ST
				PDU1 +Y antifreeze heater temperature - read out status
	4	12	U12	LHKP1RADAFHT1
				PDU1 +Y antifreeze heater temperature - raw ADC value
0x03E	0	3	U12	LHKP1RADAFHT0LM
				PDU1 -Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP1RADAFHT0ST
				PDU1 -Y antifreeze heater temperature - read out status
	4	12	U12	LHKP1RADAFHT0
				PDU1 -Y antifreeze heater temperature - raw ADC value
0x040	0	3	U12	LHKP1GRAD2IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 2 +Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD2IFTST
				PDU1 Grid radiator 2 +Y temperature - read out status
	4	12	U12	LHKP1GRAD2IFT
				PDU1 Grid radiator 2 +Y temperature - raw ADC value
0x042	0	3	U12	LHKP1GRAD3IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 3 +Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD3IFTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Grid radiator 3 +Y temperature - read out status
	4	12	U12	LHKP1GRAD3IFT
				PDU1 Grid radiator 3 +Y temperature - raw ADC value
0x044	0	3	U12	LHKP1GRAD0IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD0IFTST
				PDU1 Grid radiator 0 -Y temperature - read out status
	4	12	U12	LHKP1GRAD0IFT
				PDU1 Grid radiator 0 -Y temperature - raw ADC value
0x046	0	3	U12	LHKP1GRAD1IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD1IFTST
				PDU1 Grid radiator 1 -Y temperature - read out status
	4	12	U12	LHKP1GRAD1IFT
				PDU1 Grid radiator 1 -Y temperature - raw ADC value
0x048	0	3	U12	LHKP1RAD6TLM; LHKADCLMTSTATES
				PDU1 Radiator 6 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD6TST
				PDU1 Radiator 6 +Y temperature - read out status
	4	12	U12	LHKP1RAD6T
				PDU1 Radiator 6 +Y temperature - raw ADC value
0x04A	0	3	U12	LHKP1RAD7TLM
				PDU1 Radiator 7 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD7TST
				PDU1 Radiator 7 +Y temperature - read out status
	4	12	U12	LHKP1RAD7T
				PDU1 Radiator 7 +Y temperature - raw ADC value
0x04C	0	3	U12	LHKP1RAD8TLM
				PDU1 Radiator 8 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD8TST
				PDU1 Radiator 8 +Y temperature - read out status
	4	12	U12	LHKP1RAD8T
				PDU1 Radiator 8 +Y temperature - raw ADC value
0x04E	0	3	U12	LHKP1RAD9TLM
				PDU1 Radiator 9 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD9TST
				PDU1 Radiator 9 +Y temperature - read out status
	4	12	U12	LHKP1RAD9T
				PDU1 Radiator 9 +Y temperature - raw ADC value
0x050	0	3	U12	LHKP1RAD10TLM; LHKADCLMTSTATES
				PDU1 Radiator 10 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD10TST
				PDU1 Radiator 10 +Y temperature - read out status
	4	12	U12	LHKP1RAD10T
				PDU1 Radiator 10 +Y temperature - raw ADC value
0x052	0	3	U12	LHKP1RAD11TLM; LHKADCLMTSTATES
				PDU1 Radiator 11 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD11TST
				PDU1 Radiator 11 +Y temperature - read out status
	4	12	U12	LHKP1RAD11T
				PDU1 Radiator 11 +Y temperature - raw ADC value
0x054	0	3	U12	LHKP1RAD0TLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD0TST
				PDU1 Radiator 0 -Y temperature - read out status
	4	12	U12	LHKP1RAD0T
				PDU1 Radiator 0 -Y temperature - raw ADC value
0x056	0	3	U12	LHKP1RAD1TLM; LHKADCLMTSTATES
				PDU1 Radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD1TST
				PDU1 Radiator 1 -Y temperature - read out status
	4	12	U12	LHKP1RAD1T
				PDU1 Radiator 1 -Y temperature - raw ADC value
0x058	0	3	U12	LHKP1RAD2TLM; LHKADCLMTSTATES
				PDU1 Radiator 2 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD2TST
				PDU1 Radiator 2 -Y temperature - read out status
	4	12	U12	LHKP1RAD2T
				PDU1 Radiator 2 -Y temperature - raw ADC value
0x05A	0	3	U12	LHKP1RAD3TLM
				PDU1 Radiator 3 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD3TST
				PDU1 Radiator 3 -Y temperature - read out status
	4	12	U12	LHKP1RAD3T
				PDU1 Radiator 3 -Y temperature - raw ADC value
0x05C	0	3	U12	LHKP1RAD4TLM
				PDU1 Radiator 4 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD4TST
				PDU1 Radiator 4 -Y temperature - read out status
	4	12	U12	LHKP1RAD4T
				PDU1 Radiator 4 -Y temperature - raw ADC value
0x05E	0	3	U12	LHKP1RAD5TLM
				PDU1 Radiator 5 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD5TST
				PDU1 Radiator 5 -Y temperature - read out status
	4	12	U12	LHKP1RAD5T
				PDU1 Radiator 5 -Y temperature - raw ADC value
0x060	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.22 AemEnv0 (550/0x226)

Description:

"AEM Environmental Monitor Packet 0" Telemetry Packet

AEM Environmental Monitor Packet 0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVAEMENV0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	? ?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?
	10	1	U12	? ?
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAEMFR0VDLM; LHKADCLMTSTATES AEM FREE board 0 VDD - limit evaluation
	3	1	U12	LHKAEMFR0VDST AEM FREE board 0 VDD - read out status
	4	12	U12	LHKAEMFR0VD AEM FREE board 0 VDD - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x016	0	3	U12	LHKAEMFR0TLM; LHKADCLMTSTATES AEM FREE board 0 temperature - limit evaluation
	3	1	U12	LHKAEMFR0TST AEM FREE board 0 temperature - read out status
	4	12	U12	LHKAEMFR0T AEM FREE board 0 temperature - raw ADC value
0x018	0	3	U12	LHKAEMFR0V1LM; LHKADCLMTSTATES AEM FREE board 0 HV1 - limit evaluation
	3	1	U12	LHKAEMFR0V1ST AEM FREE board 0 HV1 - read out status
	4	12	U12	LHKAEMFR0V1 AEM FREE board 0 HV1 - raw ADC value
0x01A	0	3	U12	LHKAEMFR0V2LM AEM FREE board 0 HV2 - limit evaluation
	3	1	U12	LHKAEMFR0V2ST AEM FREE board 0 HV2 - read out status
	4	12	U12	LHKAEMFR0V2 AEM FREE board 0 HV2 - raw ADC value
0x01C	0	3	U12	LHKAEMFR1VDLM AEM FREE board 1 VDD - limit evaluation
	3	1	U12	LHKAEMFR1VDST AEM FREE board 1 VDD - read out status
	4	12	U12	LHKAEMFR1VD AEM FREE board 1 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR1TLM AEM FREE board 1 temperature - limit evaluation
	3	1	U12	LHKAEMFR1TST AEM FREE board 1 temperature - read out status
	4	12	U12	LHKAEMFR1T AEM FREE board 1 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR1V1LM; LHKADCLMTSTATES AEM FREE board 1 HV1 - limit evaluation
	3	1	U12	LHKAEMFR1V1ST AEM FREE board 1 HV1 - read out status
	4	12	U12	LHKAEMFR1V1 AEM FREE board 1 HV1 - raw ADC value
0x022	0	3	U12	LHKAEMFR1V2LM; LHKADCLMTSTATES AEM FREE board 1 HV2 - limit evaluation
	3	1	U12	LHKAEMFR1V2ST AEM FREE board 1 HV2 - read out status
	4	12	U12	LHKAEMFR1V2 AEM FREE board 1 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR2VDLM; LHKADCLMTSTATES AEM FREE board 2 VDD - limit evaluation
	3	1	U12	LHKAEMFR2VDST AEM FREE board 2 VDD - read out status
	4	12	U12	LHKAEMFR2VD AEM FREE board 2 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR2TLM; LHKADCLMTSTATES AEM FREE board 2 temperature - limit evaluation
	3	1	U12	LHKAEMFR2TST AEM FREE board 2 temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKAEMFR2T AEM FREE board 2 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR2V1LM; LHKADCLMTSTATES AEM FREE board 2 HV1 - limit evaluation
	3	1	U12	LHKAEMFR2V1ST AEM FREE board 2 HV1 - read out status
	4	12	U12	LHKAEMFR2V1 AEM FREE board 2 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR2V2LM AEM FREE board 2 HV2 - limit evaluation
	3	1	U12	LHKAEMFR2V2ST AEM FREE board 2 HV2 - read out status
	4	12	U12	LHKAEMFR2V2 AEM FREE board 2 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR3VDLM AEM FREE board 3 VDD - limit evaluation
	3	1	U12	LHKAEMFR3VDST AEM FREE board 3 VDD - read out status
	4	12	U12	LHKAEMFR3VD AEM FREE board 3 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR3TLM AEM FREE board 3 temperature - limit evaluation
	3	1	U12	LHKAEMFR3TST AEM FREE board 3 temperature - read out status
	4	12	U12	LHKAEMFR3T AEM FREE board 3 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR3V1LM; LHKADCLMTSTATES AEM FREE board 3 HV1 - limit evaluation
	3	1	U12	LHKAEMFR3V1ST AEM FREE board 3 HV1 - read out status
	4	12	U12	LHKAEMFR3V1 AEM FREE board 3 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR3V2LM; LHKADCLMTSTATES AEM FREE board 3 HV2 - limit evaluation
	3	1	U12	LHKAEMFR3V2ST AEM FREE board 3 HV2 - read out status
	4	12	U12	LHKAEMFR3V2 AEM FREE board 3 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR4VDLM; LHKADCLMTSTATES AEM FREE board 4 VDD - limit evaluation
	3	1	U12	LHKAEMFR4VDST AEM FREE board 4 VDD - read out status
	4	12	U12	LHKAEMFR4VD AEM FREE board 4 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR4TLM; LHKADCLMTSTATES AEM FREE board 4 temperature - limit evaluation
	3	1	U12	LHKAEMFR4TST AEM FREE board 4 temperature - read out status
	4	12	U12	LHKAEMFR4T AEM FREE board 4 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR4V1LM; LHKADCLMTSTATES AEM FREE board 4 HV1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKAEMFR4V1ST AEM FREE board 4 HV1 - read out status
	4	12	U12	LHKAEMFR4V1 AEM FREE board 4 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR4V2LM AEM FREE board 4 HV2 - limit evaluation
	3	1	U12	LHKAEMFR4V2ST AEM FREE board 4 HV2 - read out status
	4	12	U12	LHKAEMFR4V2 AEM FREE board 4 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR5VDLM AEM FREE board 5 VDD - limit evaluation
	3	1	U12	LHKAEMFR5VDST AEM FREE board 5 VDD - read out status
	4	12	U12	LHKAEMFR5VD AEM FREE board 5 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR5TLM AEM FREE board 5 temperature - limit evaluation
	3	1	U12	LHKAEMFR5TST AEM FREE board 5 temperature - read out status
	4	12	U12	LHKAEMFR5T AEM FREE board 5 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR5V1LM; LHKADCLMTSTATES AEM FREE board 5 HV1 - limit evaluation
	3	1	U12	LHKAEMFR5V1ST AEM FREE board 5 HV1 - read out status
	4	12	U12	LHKAEMFR5V1 AEM FREE board 5 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR5V2LM; LHKADCLMTSTATES AEM FREE board 5 HV2 - limit evaluation
	3	1	U12	LHKAEMFR5V2ST AEM FREE board 5 HV2 - read out status
	4	12	U12	LHKAEMFR5V2 AEM FREE board 5 HV2 - raw ADC value
0x044	0	3	U12	LHKAEMFR6VDLM; LHKADCLMTSTATES AEM FREE board 6 VDD - limit evaluation
	3	1	U12	LHKAEMFR6VDST AEM FREE board 6 VDD - read out status
	4	12	U12	LHKAEMFR6VD AEM FREE board 6 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR6TLM; LHKADCLMTSTATES AEM FREE board 6 temperature - limit evaluation
	3	1	U12	LHKAEMFR6TST AEM FREE board 6 temperature - read out status
	4	12	U12	LHKAEMFR6T AEM FREE board 6 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR6V1LM; LHKADCLMTSTATES AEM FREE board 6 HV1 - limit evaluation
	3	1	U12	LHKAEMFR6V1ST AEM FREE board 6 HV1 - read out status
	4	12	U12	LHKAEMFR6V1 AEM FREE board 6 HV1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x04A	0	3	U12	LHKAEMFR6V2LM AEM FREE board 6 HV2 - limit evaluation
	3	1	U12	LHKAEMFR6V2ST AEM FREE board 6 HV2 - read out status
	4	12	U12	LHKAEMFR6V2 AEM FREE board 6 HV2 - raw ADC value
0x04C	0	3	U12	LHKAEMFR7VDLM AEM FREE board 7 VDD - limit evaluation
	3	1	U12	LHKAEMFR7VDST AEM FREE board 7 VDD - read out status
	4	12	U12	LHKAEMFR7VD AEM FREE board 7 VDD - raw ADC value
0x04E	0	3	U12	LHKAEMFR7TLM AEM FREE board 7 temperature - limit evaluation
	3	1	U12	LHKAEMFR7TST AEM FREE board 7 temperature - read out status
	4	12	U12	LHKAEMFR7T AEM FREE board 7 temperature - raw ADC value
0x050	0	3	U12	LHKAEMFR7V1LM; LHKADCLMTSTATES AEM FREE board 7 HV1 - limit evaluation
	3	1	U12	LHKAEMFR7V1ST AEM FREE board 7 HV1 - read out status
	4	12	U12	LHKAEMFR7V1 AEM FREE board 7 HV1 - raw ADC value
0x052	0	3	U12	LHKAEMFR7V2LM; LHKADCLMTSTATES AEM FREE board 7 HV2 - limit evaluation
	3	1	U12	LHKAEMFR7V2ST AEM FREE board 7 HV2 - read out status
	4	12	U12	LHKAEMFR7V2 AEM FREE board 7 HV2 - raw ADC value
0x054	0	3	U12	LHKAEMFR8VDLM; LHKADCLMTSTATES AEM FREE board 8 VDD - limit evaluation
	3	1	U12	LHKAEMFR8VDST AEM FREE board 8 VDD - read out status
	4	12	U12	LHKAEMFR8VD AEM FREE board 8 VDD - raw ADC value
0x056	0	3	U12	LHKAEMFR8TLM; LHKADCLMTSTATES AEM FREE board 8 temperature - limit evaluation
	3	1	U12	LHKAEMFR8TST AEM FREE board 8 temperature - read out status
	4	12	U12	LHKAEMFR8T AEM FREE board 8 temperature - raw ADC value
0x058	0	3	U12	LHKAEMFR8V1LM; LHKADCLMTSTATES AEM FREE board 8 HV1 - limit evaluation
	3	1	U12	LHKAEMFR8V1ST AEM FREE board 8 HV1 - read out status
	4	12	U12	LHKAEMFR8V1 AEM FREE board 8 HV1 - raw ADC value
0x05A	0	3	U12	LHKAEMFR8V2LM AEM FREE board 8 HV2 - limit evaluation
	3	1	U12	LHKAEMFR8V2ST AEM FREE board 8 HV2 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKAEMFR8V2 AEM FREE board 8 HV2 - raw ADC value
0x05C	0	3	U12	LHKAEMFR9VDLM AEM FREE board 9 VDD - limit evaluation
	3	1	U12	LHKAEMFR9VDST AEM FREE board 9 VDD - read out status
	4	12	U12	LHKAEMFR9VD AEM FREE board 9 VDD - raw ADC value
0x05E	0	3	U12	LHKAEMFR9TLM AEM FREE board 9 temperature - limit evaluation
	3	1	U12	LHKAEMFR9TST AEM FREE board 9 temperature - read out status
	4	12	U12	LHKAEMFR9T AEM FREE board 9 temperature - raw ADC value
0x060	0	3	U12	LHKAEMFR9V1LM; LHKADCLMTSTATES AEM FREE board 9 HV1 - limit evaluation
	3	1	U12	LHKAEMFR9V1ST AEM FREE board 9 HV1 - read out status
	4	12	U12	LHKAEMFR9V1 AEM FREE board 9 HV1 - raw ADC value
0x062	0	3	U12	LHKAEMFR9V2LM; LHKADCLMTSTATES AEM FREE board 9 HV2 - limit evaluation
	3	1	U12	LHKAEMFR9V2ST AEM FREE board 9 HV2 - read out status
	4	12	U12	LHKAEMFR9V2 AEM FREE board 9 HV2 - raw ADC value
0x064	0	3	U12	LHKAEMFR10VDLM; LHKADCLMTSTATES AEM FREE board 10 VDD - limit evaluation
	3	1	U12	LHKAEMFR10VDST AEM FREE board 10 VDD - read out status
	4	12	U12	LHKAEMFR10VD AEM FREE board 10 VDD - raw ADC value
0x066	0	3	U12	LHKAEMFR10TLM; LHKADCLMTSTATES AEM FREE board 10 temperature - limit evaluation
	3	1	U12	LHKAEMFR10TST AEM FREE board 10 temperature - read out status
	4	12	U12	LHKAEMFR10T AEM FREE board 10 temperature - raw ADC value
0x068	0	3	U12	LHKAEMFR10V1LM; LHKADCLMTSTATES AEM FREE board 10 HV1 - limit evaluation
	3	1	U12	LHKAEMFR10V1ST AEM FREE board 10 HV1 - read out status
	4	12	U12	LHKAEMFR10V1 AEM FREE board 10 HV1 - raw ADC value
0x06A	0	3	U12	LHKAEMFR10V2LM AEM FREE board 10 HV2 - limit evaluation
	3	1	U12	LHKAEMFR10V2ST AEM FREE board 10 HV2 - read out status
	4	12	U12	LHKAEMFR10V2 AEM FREE board 10 HV2 - raw ADC value
0x06C	0	3	U12	LHKAEMFR11VDLM AEM FREE board 11 VDD - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKAEMFR11VDST AEM FREE board 11 VDD - read out status
	4	12	U12	LHKAEMFR11VD AEM FREE board 11 VDD - raw ADC value
0x06E	0	3	U12	LHKAEMFR11TLM AEM FREE board 11 temperature - limit evaluation
	3	1	U12	LHKAEMFR11TST AEM FREE board 11 temperature - read out status
	4	12	U12	LHKAEMFR11T AEM FREE board 11 temperature - raw ADC value
0x070	0	3	U12	LHKAEMFR11V1LM; LHKADCLMTSTATES AEM FREE board 11 HV1 - limit evaluation
	3	1	U12	LHKAEMFR11V1ST AEM FREE board 11 HV1 - read out status
	4	12	U12	LHKAEMFR11V1 AEM FREE board 11 HV1 - raw ADC value
0x072	0	3	U12	LHKAEMFR11V2LM; LHKADCLMTSTATES AEM FREE board 11 HV2 - limit evaluation
	3	1	U12	LHKAEMFR11V2ST AEM FREE board 11 HV2 - read out status
	4	12	U12	LHKAEMFR11V2 AEM FREE board 11 HV2 - raw ADC value

14.3.23 `Lrs0` (551/0x227)

Description:

"Low-rate Science/LIM State Packet" Telemetry Packet

Contains GEM low-rate science counters and LIM state values.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKGLRSSEC GEM livetime read timestamp seconds
0x018	0	32	U1234	LHKGLRSSUB GEM livetime read timestamp subseconds
0x01C	0	32	U1234	LHKGLRSLIVE GEM Low-rate Science Livetime
0x020	0	32	U1234	LHKGLRSPRESC GEM Low-rate Science Prescaled
0x024	0	32	U1234	LHKGLRSDISC GEM Low-rate Science Discarded
0x028	0	32	U1234	LHKGLRSSENT GEM Low-rate Science Sent
0x02C	0	32	U1234	LHKGLRSDEAD

Offset	S	L	Type	ITOS name, attribute(s), and description
				GEM Low-rate Science Dead Zoned
0x030	0	32	U1234	LHKEBMSEC
				EBM Statistics Delta Timestamp seconds
0x034	0	32	U1234	LHKEBMSUB
				EBM Statistics Delta Timestamp microseconds
0x038	0	16	U12	LHKEBMGEMEVTRX
				Delta LATp event packets received statistics for the GEM
0x03A	0	16	U12	LHKEBMAEMEVTRX
				Delta LATp event packets received statistics for the AEM
0x03C	0	16	U12	LHKEBMSIU0EVTRX
				Delta LATp event packets received statistics for SIU0
0x03E	0	16	U12	LHKEBMSIU1EVTRX
				Delta LATp event packets received statistics for SIU1
0x040	0	16	U12	LHKEBMEPU0EVTRX
				Delta LATp event packets received statistics for EPU0
0x042	0	16	U12	LHKEBMEPU1EVTRX
				Delta LATp event packets received statistics for EPU1
0x044	0	16	U12	LHKEBMEPU2EVTRX
				Delta LATp event packets received statistics for EPU2
0x046	0	16	U12	LHKEBMSIU0EVTTX
				Delta LATp event packets transmitted statistics for SIU0
0x048	0	16	U12	LHKEBMSIU1EVTTX
				Delta LATp event packets transmitted statistics for SIU1
0x04A	0	16	U12	LHKEBMEPU0EVTTX
				Delta LATp event packets transmitted statistics for EPU0
0x04C	0	16	U12	LHKEBMEPU1EVTTX
				Delta LATp event packets transmitted statistics for EPU1
0x04E	0	16	U12	LHKEBMEPU2EVTTX
				Delta LATp event packets transmitted statistics for EPU2
0x050	0	16	U12	LHKEBMSSREVTTX
				Delta LATp event packets transmitted statistics for the SSR
0x052	0	16	U12	LIMTACTION
				Most Recent LIM Action
0x054	0	32	U1234	LIMTSTATUS
				Most Recent Action Status
0x058	0	8	U1	LIMTOPMODE
				Operating Mode
0x059	0	8	U1	LIMTVIRTMODE
				Virtual Mode
0x05A	0	8	U1	LIMTSAATRANSIT
				SAA Transit Status
0x05B	0	8	U1	LIMTLCISTATE
				LCI Task State
0x05C	0	8	U1	LIMTLDFSTATE
				LDF Task State
0x05D	0	8	U1	LIMTLPASTATE
				LPA Task State
0x05E	0	5	U1	LHKSPARE5U12
				Explicit 5 bit pad in unsigned char
	5	1	U1	LIMTTOOSTARTED
				TOO Started Status
	6	1	U1	LIMTTOOACTIVE

Offset	S	L	Type	ITOS name, attribute(s), and description
				TOO Started Status
	7	1	U1	LIMTTOOREADY TOO Ready Status
0x05F	0	2	U1	LHKSPARE2U1 Explicit 2 bit pad in unsigned char
	2	1	U1	LIMTARRREPPEND ARR Repoint Request Pending Status
	3	3	U1	LIMTARRGRBSTATE ARR GRB State
	6	1	U1	LIMTARRACTIVE ARR Started Status
	7	1	U1	LIMTARRREADY ARR Ready Status
0x060	0	32	U1234	LIMTTOOREMAINSEC TOO Seconds Remaining
0x064	0	32	U1234	LIMTARRREMAINSEC ARR Seconds Remaining
0x068	0	5	U1	LHKSPARE7U1 Explicit 7 bit pad in unsigned char
	5	1	U1	LIMTPRIINTALLOW GBM Primary Interrupt Allowed Status
	6	1	U1	LIMTREDINTALLOW GBM Redundant Interrupt Allowed Status
	7	1	U1	LIMTGBMREPALLOW GBM Repoint Request Allowed Status
0x069	0	7	U1	LHKSPARE7U1 Explicit 7 bit pad in unsigned char
	7	1	U1	LIMTHVALLOW ACD High-Voltage Allowed Status
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	32	U1234	LIMTDISREMAINSEC GBM Interrupt Disable Seconds Remaining
0x070	0	32	U1234	LHKLATCFILEKEY LATC File Key

14.3.24 `CmdCnt0` (552/0x228)

Description:

"Command Statistics Packet 0" Telemetry Packet

Contains task level command statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	32	U1234	LHKLCMCMDSEC SIU LCM task command counter seconds
0x018	0	32	U1234	LHKLCMCMDSUB SIU LCM task command counter subseconds
0x01C	0	32	U1234	LHKLCMCMDSENT SIU LCM task commands received counter
0x020	0	32	U1234	LHKLCMCMDEXEF SIU LCM task command execution failed counter
0x024	0	32	U1234	LHKLFSCMDSEC SIU LFS task command counter seconds
0x028	0	32	U1234	LHKLFSCMDSUB SIU LFS task command counter subseconds
0x02C	0	32	U1234	LHKLFSCMDSENT SIU LFS task commands received counter
0x030	0	32	U1234	LHKLFSCMDEXEF SIU LFS task command execution failed counter
0x034	0	32	U1234	LHKLHKCMDSEC SIU LHK task command counter seconds
0x038	0	32	U1234	LHKLHKCMDSUB SIU LHK task command counter subseconds
0x03C	0	32	U1234	LHKLHKCMDSENT SIU LHK task commands received counter
0x040	0	32	U1234	LHKLHKCMDEXEF SIU LHK task command execution failed counter
0x044	0	32	U1234	LHKLIMCMDSEC SIU LIM task command counter seconds
0x048	0	32	U1234	LHKLIMCMDSUB SIU LIM task command counter subseconds
0x04C	0	32	U1234	LHKLIMCMDSENT SIU LIM task commands received counter
0x050	0	32	U1234	LHKLIMCMDEXEF SIU LIM task command execution failed counter
0x054	0	32	U1234	LHKLSMCMDSEC SIU LSM task command counter seconds
0x058	0	32	U1234	LHKLSMCMDSUB SIU LSM task command counter subseconds
0x05C	0	32	U1234	LHKLSMCMDSENT SIU LSM task commands received counter
0x060	0	32	U1234	LHKLSMCMDEXEF SIU LSM task command execution failed counter
0x064	0	32	U1234	LHKLSWCMDSEC SIU LSW task command counter seconds
0x068	0	32	U1234	LHKLSWCMDSUB SIU LSW task command counter subseconds
0x06C	0	32	U1234	LHKLSWCMDSENT SIU LSW task commands received counter
0x070	0	32	U1234	LHKLSWCMDEXEF SIU LSW task command execution failed counter

14.3.25 `CmdCnt1` (553/0x229)

Description:

"Command Statistics Packet 1" Telemetry Packet

Contains task level command statistics

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKLCICMDSEC SIU LCI task command counter seconds
0x018	0	32	U1234	LHKLCICMDSUB SIU LCI task command counter subseconds
0x01C	0	32	U1234	LHKLCICMDSENT SIU LCI task commands received counter
0x020	0	32	U1234	LHKLCICMDEXEF SIU LCI task command execution failed counter
0x024	0	32	U1234	LHKLMCCMDSEC SIU LMC task command counter seconds
0x028	0	32	U1234	LHKLMCCMDSUB SIU LMC task command counter subseconds
0x02C	0	32	U1234	LHKLMCCMDSENT SIU LMC task commands received counter
0x030	0	32	U1234	LHKLMCCMDEXEF SIU LMC task command execution failed counter
0x034	0	32	U1234	LHKLTCCMDSEC SIU LTC task command counter seconds
0x038	0	32	U1234	LHKLTCCMDSUB SIU LTC task command counter subseconds
0x03C	0	32	U1234	LHKLTCCMDSENT SIU LTC task commands received counter
0x040	0	32	U1234	LHKLTCCMDEXEF SIU LTC task command execution failed counter
0x044	0	32	U1234	LHKLPACMDSEC SIU LPA task command counter seconds
0x048	0	32	U1234	LHKLPACMDSUB SIU LPA task command counter subseconds
0x04C	0	32	U1234	LHKLPACMDSENT SIU LPA task commands received counter
0x050	0	32	U1234	LHKLPACMDEXEF SIU LPA task command execution failed counter
0x054	0	32	U1234	LHKLRACMDSEC SIU LRA task command counter seconds
0x058	0	32	U1234	LHKLRACMDSUB SIU LRA task command counter subseconds
0x05C	0	32	U1234	LHKLRACMDSENT

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU LRA task commands received counter
0x060	0	32	U1234	LHKLRACMDEXEF SIU LRA task command execution failed counter
0x064	0	32	U1234	LHKSPARECMDSEC SIU spare task command counter seconds
0x068	0	32	U1234	LHKSPARECMDSUB SIU spare task command counter subseconds
0x06C	0	32	U1234	LHKSPARECMDSENT SIU spare task commands received counter
0x070	0	32	U1234	LHKSPARECMDEXEF SIU spare task command execution failed counter

14.3.26 `SiuStats` (554/0x22A)

Description:

"SIU Statistics" Telemetry Packet

Contains SIU CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x013	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKSIUPIDSCIN2 SIU PID input 2
	6	1	U1	LHKSIUPIDSCIN1 SIU PID input 2
	7	1	U1	LHKSIUPIDSCIN0 SIU PID input 2
0x014	0	16	U12	LHKSIUPCIERR SIU LCM RAD750 Counter
0x016	0	16	U12	LHKSIUCMERR SIU LCM RAD750 Counter
0x018	0	16	U12	LHKSIUUMERR SIU LCM RAD750 Counter
0x01A	0	16	U12	LHKSIUCPUJTEMP SIU CPU Junction Temperature
0x01C	0	32	U1234	LHKSIUCPUAVLDS SIU Average CPU Load/Sec
0x020	0	32	U1234	LHKSIUCPUAVLDM SIU Average CPU Load/Min
0x024	0	32	U1234	LHKSIUCPULDMIN SIU Min CPU Load/Min
0x028	0	32	U1234	LHKSIUCPULDMAX SIU Max CPU Load/Min

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02C	0	32	U1234	LHKSFILSTATE; LHKFILESTATES SIU FILE Upload State
0x030	0	32	U1234	LHKSFILCURSIZE SIU FILE Size Current
0x034	0	32	U1234	LHKSFILPKTCNT SIU FILE Packet Count
0x038	0	32	U1234	LHKSFILERRCODE SIU FILE Error Code
0x03C	0	32	U1234	LHKSFILERRCNT SIU FILE Error Count
0x040	0	32	U1234	LHKSFILCOMID SIU FILE ID Commit
0x044	0	32	U1234	LHKSMEMLDSTAT SIU Status of most recent load action
0x048	0	32	U1234	LHKSMEMLDACT SIU Memory load active flag
0x04C	0	32	U1234	LHKSMEMLDSTART SIU Starting memory load address
0x050	0	32	U1234	LHKSMEMLDBYTES SIU Memory load total bytes
0x054	0	32	U1234	LHKSMEMLDOFST SIU Memory load offset
0x058	0	32	U1234	LHKSMEMDMPSTAT SIU Memory dump status
0x05C	0	32	U1234	LHKSMEMDMPACT SIU Memory dump active
0x060	0	32	U1234	LHKSMEMDMPSTRT SIU Memory dump start address
0x064	0	32	U1234	LHKSMEMDMPBYTES SIU Memory dump bytes
0x068	0	32	U1234	LHKSMEMDMPADDR SIU Memory dump address
0x06C	0	32	U1234	LHKSMEMDMPFCDE SIU Memory dump function code
0x070	0	32	U1234	LHKSMEMDMPTID SIU Memory dump transaction ID

14.3.27 `Epu0Stats` (555/0x22B)

Description:

"EPU 0 Statistics" Telemetry Packet

Contains EPU 0 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 16 bit field
0x014	0	16	U12	LHKEPU0PCIERR
				EPU0 LCM RAD750 Counter
0x016	0	16	U12	LHKEPU0CMERR
				EPU0 LCM RAD750 Counter
0x018	0	16	U12	LHKEPU0UMERR
				EPU0 LCM RAD750 Counter
0x01A	0	16	U12	LHKEPU0CPUJTEMP
				EPU0 CPU Junction Temperature
0x01C	0	32	U1234	LHKEPU0CPUAVLDS
				EPU0 Average CPU Load/Sec
0x020	0	32	U1234	LHKEPU0CPUAVLDM
				EPU0 Average CPU Load/Min
0x024	0	32	U1234	LHKEPU0CPULDMIN
				EPU0 Min CPU Load/Min
0x028	0	32	U1234	LHKEPU0CPULDMAX
				EPU0 Max CPU Load/Min
0x02C	0	32	U1234	LHKE0FILSTATE; LHKFILESTATES
				EPU0 FILE Upload State
0x030	0	32	U1234	LHKE0FILCURSIZE
				EPU0 File Size Current
0x034	0	32	U1234	LHKE0FILPKTCNT
				EPU0 FILE Packet Count
0x038	0	32	U1234	LHKE0FILERRCODE
				EPU0 FILE Error Code
0x03C	0	32	U1234	LHKE0FILERRCNT
				EPU0 FILE Error Count
0x040	0	32	U1234	LHKE0FILCOMID
				EPU0 FILE ID Commit
0x044	0	32	U1234	LHKE0MEMLDSTAT
				EPU0 Status of most recent load action
0x048	0	32	U1234	LHKE0MEMLDACT
				EPU0 Memory load active flag
0x04C	0	32	U1234	LHKE0MEMLDSTART
				EPU0 Starting memory load address
0x050	0	32	U1234	LHKE0MEMLDBYTES
				EPU0 Memory load total bytes
0x054	0	32	U1234	LHKE0MEMLDOFST
				EPU0 Memory load offset
0x058	0	32	U1234	LHKE0MEMDMPSTAT
				EPU0 Memory dump status
0x05C	0	32	U1234	LHKE0MEMDMPACT
				EPU0 Memory dump active
0x060	0	32	U1234	LHKE0MEMDMPSTRT
				EPU0 Memory dump start address
0x064	0	32	U1234	LHKE0MEMDMPBYT
				EPU0 Memory dump bytes
0x068	0	32	U1234	LHKE0MEMDMPADDR
				EPU0 Memory dump address
0x06C	0	32	U1234	LHKE0MEMDMPFCDE
				EPU0 Memory dump function code
0x070	0	32	U1234	LHKE0MEMDMPTID

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU0 Memory dump transaction ID

14.3.28 `Epu1Stats` (556/0x22C)

Description:

"EPU 1 Statistics" Telemetry Packet

Contains EPU 1 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x010`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x012`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x014`	0	16	`U12`	`LHKEPU1PCIERR` EPU1 LCM RAD750 Counter
`0x016`	0	16	`U12`	`LHKEPU1CMERR` EPU1 LCM RAD750 Counter
`0x018`	0	16	`U12`	`LHKEPU1UMERR` EPU1 LCM RAD750 Counter
`0x01A`	0	16	`U12`	`LHKEPU1CPUJTEMP` EPU1 CPU Junction Temperature
`0x01C`	0	32	`U1234`	`LHKEPU1CPUAVLDS` EPU1 Average CPU Load/Sec
`0x020`	0	32	`U1234`	`LHKEPU1CPUAVLDM` EPU1 Average CPU Load/Min
`0x024`	0	32	`U1234`	`LHKEPU1CPULDMIN` EPU1 Min CPU Load/Min
`0x028`	0	32	`U1234`	`LHKEPU1CPULDMAX` EPU1 Max CPU Load/Min
`0x02C`	0	32	`U1234`	`LHKE1FILSTATE; LHKFILESTATES` EPU1 FILE Upload State
`0x030`	0	32	`U1234`	`LHKE1FILCURSIZE` EPU1 File Size Current
`0x034`	0	32	`U1234`	`LHKE1FILPKTCNT` EPU1 FILE Packet Count
`0x038`	0	32	`U1234`	`LHKE1FILERRCODE` EPU1 FILE Error Code
`0x03C`	0	32	`U1234`	`LHKE1FILERRCNT` EPU1 FILE Error Count
`0x040`	0	32	`U1234`	`LHKE1FILCOMID` EPU1 FILE ID Commit
`0x044`	0	32	`U1234`	`LHKE1MEMLDSTAT` EPU1 Status of most recent load action
`0x048`	0	32	`U1234`	`LHKE1MEMLDACT` EPU1 Memory load active flag
`0x04C`	0	32	`U1234`	`LHKE1MEMLDSTART` EPU1 Starting memory load address

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	32	U1234	LHKE1MEMLDBYTES EPU1 Memory load total bytes
0x054	0	32	U1234	LHKE1MEMLDOFST EPU1 Memory load offset
0x058	0	32	U1234	LHKE1MEMDMPSTAT EPU1 Memory dump status
0x05C	0	32	U1234	LHKE1MEMDMPACT EPU1 Memory dump active
0x060	0	32	U1234	LHKE1MEMDMPSTRT EPU1 Memory dump start address
0x064	0	32	U1234	LHKE1MEMDMPBYT EPU1 Memory dump bytes
0x068	0	32	U1234	LHKE1MEMDMPADDR EPU1 Memory dump address
0x06C	0	32	U1234	LHKE1MEMDMPFCDE EPU1 Memory dump function code
0x070	0	32	U1234	LHKE1MEMDMPTID EPU1 Memory dump transaction ID

14.3.29 `Epu2Stats` (557/0x22D)

Description:

"EPU 2 Statistics" Telemetry Packet

Contains EPU 2 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	U12	LHKEPU2PCIERR EPU2 LCM RAD750 Counter
0x016	0	16	U12	LHKEPU2CMERR EPU2 LCM RAD750 Counter
0x018	0	16	U12	LHKEPU2UMERR EPU2 LCM RAD750 Counter
0x01A	0	16	U12	LHKEPU2CPUJTEMP EPU2 CPU Junction Temperature
0x01C	0	32	U1234	LHKEPU2CPUAVLDS EPU2 Average CPU Load/Sec
0x020	0	32	U1234	LHKEPU2CPUAVLDM EPU2 Average CPU Load/Min
0x024	0	32	U1234	LHKEPU2CPULDMIN EPU2 Min CPU Load/Min
0x028	0	32	U1234	LHKEPU2CPULDMAX EPU2 Max CPU Load/Min
0x02C	0	32	U1234	LHKE2FILSTATE; LHKFILESTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 FILE Upload State
0x030	0	32	U1234	LHKE2FILCURSIZE EPU2 File Size Current
0x034	0	32	U1234	LHKE2FILPKTCNT EPU2 FILE Packet Count
0x038	0	32	U1234	LHKE2FILERRCODE EPU2 FILE Error Code
0x03C	0	32	U1234	LHKE2FILERRCNT EPU2 FILE Error Count
0x040	0	32	U1234	LHKE2FILCOMID EPU2 FILE ID Commit
0x044	0	32	U1234	LHKE2MEMLDSTAT EPU2 Status of most recent load action
0x048	0	32	U1234	LHKE2MEMLDACT EPU2 Memory load active flag
0x04C	0	32	U1234	LHKE2MEMLDSTART EPU2 Starting memory load address
0x050	0	32	U1234	LHKE2MEMLDBYTES EPU2 Memory load total bytes
0x054	0	32	U1234	LHKE2MEMLDOFST EPU2 Memory load offset
0x058	0	32	U1234	LHKE2MEMDMPSTAT EPU2 Memory dump status
0x05C	0	32	U1234	LHKE2MEMDMPACT EPU2 Memory dump active
0x060	0	32	U1234	LHKE2MEMDMPSTRT EPU2 Memory dump start address
0x064	0	32	U1234	LHKE2MEMDMPBYT EPU2 Memory dump bytes
0x068	0	32	U1234	LHKE2MEMDMPADDR EPU2 Memory dump address
0x06C	0	32	U1234	LHKE2MEMDMPFCDE EPU2 Memory dump function code
0x070	0	32	U1234	LHKE2MEMDMPTID EPU2 Memory dump transaction ID

14.3.30 `LtcData0` (558/0x22E)

Description:

"Thermal Control Data Packet 0" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	4	U1	LTC00SELRESHPN

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP00 selected RES input HP#
	4	4	U1	LTC00SELRESTYP
				LTC HP00 selected RES input sensor type
	8	4	U1	LTC00SELRITHPN
				LTC HP00 selected RIT input HP#
	12	4	U1	LTC00SELRITTYP
				LTC HP00 selected RIT input sensor type
0x016	0	4	U1	LTC01SELRESHPN
				LTC HP01 selected RES input HP#
	4	4	U1	LTC01SELRESTYP
				LTC HP01 selected RES input sensor type
	8	4	U1	LTC01SELRITHPN
				LTC HP01 selected RIT input HP#
	12	4	U1	LTC01SELRITTYP
				LTC HP01 selected RIT input sensor type
0x018	0	4	U1	LTC02SELRESHPN
				LTC HP02 selected RES input HP#
	4	4	U1	LTC02SELRESTYP
				LTC HP02 selected RES input sensor type
	8	4	U1	LTC02SELRITHPN
				LTC HP02 selected RIT input HP#
	12	4	U1	LTC02SELRITTYP
				LTC HP02 selected RIT input sensor type
0x01A	0	4	U1	LTC03SELRESHPN
				LTC HP03 selected RES input HP#
	4	4	U1	LTC03SELRESTYP
				LTC HP03 selected RES input sensor type
	8	4	U1	LTC03SELRITHPN
				LTC HP03 selected RIT input HP#
	12	4	U1	LTC03SELRITTYP
				LTC HP03 selected RIT input sensor type
0x01C	0	4	U1	LTC04SELRESHPN
				LTC HP04 selected RES input HP#
	4	4	U1	LTC04SELRESTYP
				LTC HP04 selected RES input sensor type
	8	4	U1	LTC04SELRITHPN
				LTC HP04 selected RIT input HP#
	12	4	U1	LTC04SELRITTYP
				LTC HP04 selected RIT input sensor type
0x01E	0	4	U1	LTC05SELRESHPN
				LTC HP05 selected RES input HP#
	4	4	U1	LTC05SELRESTYP
				LTC HP05 selected RES input sensor type
	8	4	U1	LTC05SELRITHPN
				LTC HP05 selected RIT input HP#
	12	4	U1	LTC05SELRITTYP
				LTC HP05 selected RIT input sensor type
0x020	0	4	U1	LTC06SELRESHPN
				LTC HP06 selected RES input HP#
	4	4	U1	LTC06SELRESTYP
				LTC HP06 selected RES input sensor type
	8	4	U1	LTC06SELRITHPN

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP06 selected RIT input HP#
	12	4	U1	LTC06SELRITTYP LTC HP06 selected RIT input sensor type
0x022	0	4	U1	LTC07SELRESHPN LTC HP07 selected RES input HP#
	4	4	U1	LTC07SELRESTYP LTC HP07 selected RES input sensor type
	8	4	U1	LTC07SELRITHPN LTC HP07 selected RIT input HP#
	12	4	U1	LTC07SELRITTYP LTC HP07 selected RIT input sensor type
0x024	0	4	U1	LTC08SELRESHPN LTC HP08 selected RES input HP#
	4	4	U1	LTC08SELRESTYP LTC HP08 selected RES input sensor type
	8	4	U1	LTC08SELRITHPN LTC HP08 selected RIT input HP#
	12	4	U1	LTC08SELRITTYP LTC HP08 selected RIT input sensor type
0x026	0	4	U1	LTC09SELRESHPN LTC HP09 selected RES input HP#
	4	4	U1	LTC09SELRESTYP LTC HP09 selected RES input sensor type
	8	4	U1	LTC09SELRITHPN LTC HP09 selected RIT input HP#
	12	4	U1	LTC09SELRITTYP LTC HP09 selected RIT input sensor type
0x028	0	4	U1	LTC10SELRESHPN LTC HP10 selected RES input HP#
	4	4	U1	LTC10SELRESTYP LTC HP10 selected RES input sensor type
	8	4	U1	LTC10SELRITHPN LTC HP10 selected RIT input HP#
	12	4	U1	LTC10SELRITTYP LTC HP10 selected RIT input sensor type
0x02A	0	4	U1	LTC11SELRESHPN LTC HP11 selected RES input HP#
	4	4	U1	LTC11SELRESTYP LTC HP11 selected RES input sensor type
	8	4	U1	LTC11SELRITHPN LTC HP11 selected RIT input HP#
	12	4	U1	LTC11SELRITTYP LTC HP11 selected RIT input sensor type
0x02C	0	4	U1	LTC00RITSTAT LTC HP00 RIT Sensor Status
	4	4	U1	LTC00RESSTAT LTC HP00 Reservoir Sensor Status
0x02D	0	4	U1	LTC01RITSTAT LTC HP01 RIT Sensor Status
	4	4	U1	LTC01RESSTAT LTC HP01 Reservoir Sensor Status
0x02E	0	4	U1	LTC02RITSTAT

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP02 RIT Sensor Status
	4	4	U1	LTC02RESSTAT LTC HP02 Reservoir Sensor Status
0x02F	0	4	U1	LTC03RITSTAT LTC HP03 RIT Sensor Status
	4	4	U1	LTC03RESSTAT LTC HP03 Reservoir Sensor Status
0x030	0	4	U1	LTC04RITSTAT LTC HP04 RIT Sensor Status
	4	4	U1	LTC04RESSTAT LTC HP04 Reservoir Sensor Status
0x031	0	4	U1	LTC05RITSTAT LTC HP05 RIT Sensor Status
	4	4	U1	LTC05RESSTAT LTC HP05 Reservoir Sensor Status
0x032	0	4	U1	LTC06RITSTAT LTC HP06 RIT Sensor Status
	4	4	U1	LTC06RESSTAT LTC HP06 Reservoir Sensor Status
0x033	0	4	U1	LTC07RITSTAT LTC HP07 RIT Sensor Status
	4	4	U1	LTC07RESSTAT LTC HP07 Reservoir Sensor Status
0x034	0	4	U1	LTC08RITSTAT LTC HP08 RIT Sensor Status
	4	4	U1	LTC08RESSTAT LTC HP08 Reservoir Sensor Status
0x035	0	4	U1	LTC09RITSTAT LTC HP09 RIT Sensor Status
	4	4	U1	LTC09RESSTAT LTC HP09 Reservoir Sensor Status
0x036	0	4	U1	LTC10RITSTAT LTC HP10 RIT Sensor Status
	4	4	U1	LTC10RESSTAT LTC HP10 Reservoir Sensor Status
0x037	0	4	U1	LTC11RITSTAT LTC HP11 RIT Sensor Status
	4	4	U1	LTC11RESSTAT LTC HP11 Reservoir Sensor Status
0x038	0	4	U12	LHKSPARE4U12 Explicit 4 bit pad in unsigned short
	4	1	U12	LTC11HTRMODE Control mode for VCHP heater 11 (0=manual,1=auto)
	5	1	U12	LTC10HTRMODE Control mode for VCHP heater 10 (0=manual,1=auto)
	6	1	U12	LTC09HTRMODE Control mode for VCHP heater 9 (0=manual,1=auto)
	7	1	U12	LTC08HTRMODE Control mode for VCHP heater 8 (0=manual,1=auto)
	8	1	U12	LTC07HTRMODE Control mode for VCHP heater 7 (0=manual,1=auto)
	9	1	U12	LTC06HTRMODE

Offset	S	L	Type	ITOS name, attribute(s), and description
				Control mode for VCHP heater 6 (0=manual,1=auto)
	10	1	U12	LTC05HTRMODE Control mode for VCHP heater 5 (0=manual,1=auto)
	11	1	U12	LTC04HTRMODE Control mode for VCHP heater 4 (0=manual,1=auto)
	12	1	U12	LTC03HTRMODE Control mode for VCHP heater 3 (0=manual,1=auto)
	13	1	U12	LTC02HTRMODE Control mode for VCHP heater 2 (0=manual,1=auto)
	14	1	U12	LTC01HTRMODE Control mode for VCHP heater 1 (0=manual,1=auto)
	15	1	U12	LTC00HTRMODE Control mode for VCHP heater 0 (0=manual,1=auto)
0x03A	0	1	U12	LTCCNTLMODE LTC control mode
	1	3	U12	LHKSPARE3U12 Padding bits
	4	1	U12	LTC11HTRCMD Current command for VCHP heater 11 (0=off,1=on)
	5	1	U12	LTC10HTRCMD Current command for VCHP heater 10 (0=off,1=on)
	6	1	U12	LTC09HTRCMD Current command for VCHP heater 9 (0=off,1=on)
	7	1	U12	LTC08HTRCMD Current command for VCHP heater 8 (0=off,1=on)
	8	1	U12	LTC07HTRCMD Current command for VCHP heater 7 (0=off,1=on)
	9	1	U12	LTC06HTRCMD Current command for VCHP heater 6 (0=off,1=on)
	10	1	U12	LTC05HTRCMD Current command for VCHP heater 5 (0=off,1=on)
	11	1	U12	LTC04HTRCMD Current command for VCHP heater 4 (0=off,1=on)
	12	1	U12	LTC03HTRCMD Current command for VCHP heater 3 (0=off,1=on)
	13	1	U12	LTC02HTRCMD Current command for VCHP heater 2 (0=off,1=on)
	14	1	U12	LTC01HTRCMD Current command for VCHP heater 1 (0=off,1=on)
	15	1	U12	LTC00HTRCMD Current command for VCHP heater 0 (0=off,1=on)
0x03C	0	1	U12	LTCRUNMODE LTC run mode
	1	3	U12	LHKSPARE3U12 Padding bits
	4	1	U12	LTC11HTRSTATE VCHP heater state 11 (0=off,1=on)
	5	1	U12	LTC10HTRSTATE VCHP heater state 10 (0=off,1=on)
	6	1	U12	LTC09HTRSTATE VCHP heater state 9 (0=off,1=on)
	7	1	U12	LTC08HTRSTATE

Offset	S	L	Type	ITOS name, attribute(s), and description
				VCHP heater state 8 (0=off,1=on)
	8	1	U12	LTC07HTRSTATE VCHP heater state 7 (0=off,1=on)
	9	1	U12	LTC06HTRSTATE VCHP heater state 6 (0=off,1=on)
	10	1	U12	LTC05HTRSTATE VCHP heater state 5 (0=off,1=on)
	11	1	U12	LTC04HTRSTATE VCHP heater state 4 (0=off,1=on)
	12	1	U12	LTC03HTRSTATE VCHP heater state 3 (0=off,1=on)
	13	1	U12	LTC02HTRSTATE VCHP heater state 2 (0=off,1=on)
	14	1	U12	LTC01HTRSTATE VCHP heater state 1 (0=off,1=on)
	15	1	U12	LTC00HTRSTATE VCHP heater state 0 (0=off,1=on)
0x03E	0	16	I12	LTC00RITTEMP LTC HP00 RIT temperature in degress celsius
0x040	0	16	I12	LTC01RITTEMP LTC HP01 RIT temperature in degress celsius
0x042	0	16	I12	LTC02RITTEMP LTC HP02 RIT temperature in degress celsius
0x044	0	16	I12	LTC03RITTEMP LTC HP03 RIT temperature in degress celsius
0x046	0	16	I12	LTC04RITTEMP LTC HP04 RIT temperature in degress celsius
0x048	0	16	I12	LTC05RITTEMP LTC HP05 RIT temperature in degress celsius
0x04A	0	16	I12	LTC06RITTEMP LTC HP06 RIT temperature in degress celsius
0x04C	0	16	I12	LTC07RITTEMP LTC HP07 RIT temperature in degress celsius
0x04E	0	16	I12	LTC08RITTEMP LTC HP08 RIT temperature in degress celsius
0x050	0	16	I12	LTC09RITTEMP LTC HP09 RIT temperature in degress celsius
0x052	0	16	I12	LTC10RITTEMP LTC HP10 RIT temperature in degress celsius
0x054	0	16	I12	LTC11RITTEMP LTC HP11 RIT temperature in degress celsius
0x056	0	16	I12	LTC00RESTEMP LTC HP00 reservoir temperature in degress celsius
0x058	0	16	I12	LTC01RESTEMP LTC HP01 reservoir temperature in degress celsius
0x05A	0	16	I12	LTC02RESTEMP LTC HP02 reservoir temperature in degress celsius
0x05C	0	16	I12	LTC03RESTEMP LTC HP03 reservoir temperature in degress celsius
0x05E	0	16	I12	LTC04RESTEMP LTC HP04 reservoir temperature in degress celsius
0x060	0	16	I12	LTC05RESTEMP

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP05 reservoir temperature in degress celsius
0x062	0	16	I12	LTC06RESTEMP LTC HP06 reservoir temperature in degress celsius
0x064	0	16	I12	LTC07RESTEMP LTC HP07 reservoir temperature in degress celsius
0x066	0	16	I12	LTC08RESTEMP LTC HP08 reservoir temperature in degress celsius
0x068	0	16	I12	LTC09RESTEMP LTC HP09 reservoir temperature in degress celsius
0x06A	0	16	I12	LTC10RESTEMP LTC HP10 reservoir temperature in degress celsius
0x06C	0	16	I12	LTC11RESTEMP LTC HP11 reservoir temperature in degress celsius
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.31 `LtcData1` (559/0x22F)

Description:

"Thermal Control Data Packet 1" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	I12	LTCRITLO0 LTC HP 00 Low limit for RIT sensor in degress celsius
0x016	0	16	I12	LTCRITLO1 LTC HP 01 Low limit for RIT sensor in degress celsius
0x018	0	16	I12	LTCRITLO2 LTC HP 02 Low limit for RIT sensor in degress celsius
0x01A	0	16	I12	LTCRITLO3 LTC HP 03 Low limit for RIT sensor in degress celsius
0x01C	0	16	I12	LTCRITLO4 LTC HP 04 Low limit for RIT sensor in degress celsius
0x01E	0	16	I12	LTCRITLO5 LTC HP 05 Low limit for RIT sensor in degress celsius
0x020	0	16	I12	LTCRITLO6 LTC HP 06 Low limit for RIT sensor in degress celsius
0x022	0	16	I12	LTCRITLO7 LTC HP 07 Low limit for RIT sensor in degress celsius
0x024	0	16	I12	LTCRITLO8

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP 08 Low limit for RIT sensor in degress celsius
0x026	0	16	I12	LTCRITLO9 LTC HP 09 Low limit for RIT sensor in degress celsius
0x028	0	16	I12	LTCRITLO10 LTC HP 10 Low limit for RIT sensor in degress celsius
0x02A	0	16	I12	LTCRITLO11 LTC HP 11 Low limit for RIT sensor in degress celsius
0x02C	0	16	I12	LTCRITHI0 LTC HP 00 High limit for RIT sensor in degress celsius
0x02E	0	16	I12	LTCRITHI1 LTC HP 01 High limit for RIT sensor in degress celsius
0x030	0	16	I12	LTCRITHI2 LTC HP 02 High limit for RIT sensor in degress celsius
0x032	0	16	I12	LTCRITHI3 LTC HP 03 High limit for RIT sensor in degress celsius
0x034	0	16	I12	LTCRITHI4 LTC HP 04 High limit for RIT sensor in degress celsius
0x036	0	16	I12	LTCRITHI5 LTC HP 05 High limit for RIT sensor in degress celsius
0x038	0	16	I12	LTCRITHI6 LTC HP 06 High limit for RIT sensor in degress celsius
0x03A	0	16	I12	LTCRITHI7 LTC HP 07 High limit for RIT sensor in degress celsius
0x03C	0	16	I12	LTCRITHI8 LTC HP 08 High limit for RIT sensor in degress celsius
0x03E	0	16	I12	LTCRITHI9 LTC HP 09 High limit for RIT sensor in degress celsius
0x040	0	16	I12	LTCRITHI10 LTC HP 10 High limit for RIT sensor in degress celsius
0x042	0	16	I12	LTCRITHI11 LTC HP 11 High limit for RIT sensor in degress celsius
0x044	0	16	I12	LTCRESLO0 LTC HP 00 Low limit for reservoir sensor in degress celsius
0x046	0	16	I12	LTCRESLO1 LTC HP 01 Low limit for reservoir sensor in degress celsius
0x048	0	16	I12	LTCRESLO2 LTC HP 02 Low limit for reservoir sensor in degress celsius
0x04A	0	16	I12	LTCRESLO3 LTC HP 03 Low limit for reservoir sensor in degress celsius
0x04C	0	16	I12	LTCRESLO4 LTC HP 04 Low limit for reservoir sensor in degress celsius
0x04E	0	16	I12	LTCRESLO5 LTC HP 05 Low limit for reservoir sensor in degress celsius
0x050	0	16	I12	LTCRESLO6 LTC HP 06 Low limit for reservoir sensor in degress celsius
0x052	0	16	I12	LTCRESLO7 LTC HP 07 Low limit for reservoir sensor in degress celsius
0x054	0	16	I12	LTCRESLO8 LTC HP 08 Low limit for reservoir sensor in degress celsius
0x056	0	16	I12	LTCRESLO9 LTC HP 09 Low limit for reservoir sensor in degress celsius
0x058	0	16	I12	LTCRESLO10

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP 10 Low limit for reservoir sensor in degress celsius
0x05A	0	16	I12	LTCRESLO11 LTC HP 11 Low limit for reservoir sensor in degress celsius
0x05C	0	16	I12	LTCRESHI0 LTC HP 00 High limit for reservoir sensor in degress celsius
0x05E	0	16	I12	LTCRESHI1 LTC HP 01 High limit for reservoir sensor in degress celsius
0x060	0	16	I12	LTCRESHI2 LTC HP 02 High limit for reservoir sensor in degress celsius
0x062	0	16	I12	LTCRESHI3 LTC HP 03 High limit for reservoir sensor in degress celsius
0x064	0	16	I12	LTCRESHI4 LTC HP 04 High limit for reservoir sensor in degress celsius
0x066	0	16	I12	LTCRESHI5 LTC HP 05 High limit for reservoir sensor in degress celsius
0x068	0	16	I12	LTCRESHI6 LTC HP 06 High limit for reservoir sensor in degress celsius
0x06A	0	16	I12	LTCRESHI7 LTC HP 07 High limit for reservoir sensor in degress celsius
0x06C	0	16	I12	LTCRESHI8 LTC HP 08 High limit for reservoir sensor in degress celsius
0x06E	0	16	I12	LTCRESHI9 LTC HP 09 High limit for reservoir sensor in degress celsius
0x070	0	16	I12	LTCRESHI10 LTC HP 10 High limit for reservoir sensor in degress celsius
0x072	0	16	I12	LTCRESHI11 LTC HP 11 High limit for reservoir sensor in degress celsius

14.3.32 `LtcData2` (560/0x230)

Description:

"Thermal Control Data Packet 2" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	I12	LTCDBDELTA0 LTC HP 00 deadband delta limit in degress celsius
0x016	0	16	I12	LTCDBDELTA1 LTC HP 01 deadband delta limit in degress celsius
0x018	0	16	I12	LTCDBDELTA2 LTC HP 02 deadband delta limit in degress celsius
0x01A	0	16	I12	LTCDBDELTA3 LTC HP 03 deadband delta limit in degress celsius
0x01C	0	16	I12	LTCDBDELTA4

Offset	S	L	Type	ITOS name, attribute(s), and description
				LTC HP 04 deadband delta limit in degress celsius
0x01E	0	16	I12	LTCDBDELTA5 LTC HP 05 deadband delta limit in degress celsius
0x020	0	16	I12	LTCDBDELTA6 LTC HP 06 deadband delta limit in degress celsius
0x022	0	16	I12	LTCDBDELTA7 LTC HP 07 deadband delta limit in degress celsius
0x024	0	16	I12	LTCDBDELTA8 LTC HP 08 deadband delta limit in degress celsius
0x026	0	16	I12	LTCDBDELTA9 LTC HP 09 deadband delta limit in degress celsius
0x028	0	16	I12	LTCDBDELTA10 LTC HP 10 deadband delta limit in degress celsius
0x02A	0	16	I12	LTCDBDELTA11 LTC HP 11 deadband delta limit in degress celsius
0x02C	0	4	U12	LTC00STATDSHPPRI Raw Sensor Status DSHP Pri 0
	4	12	U12	LTC00ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 0
0x02E	0	4	U12	LTC00STATDSHPRED Raw Sensor Status DSHP Red 0
	4	12	U12	LTC00ADCDSHPRED Raw Sensor ADC Counts DSHP Red 0
0x030	0	4	U12	LTC00STATXLHPPRI Raw Sensor Status XLHP Pri 0
	4	12	U12	LTC00ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 0
0x032	0	4	U12	LTC00STATXLHPRED Raw Sensor Status XLHP Red 0
	4	12	U12	LTC00ADCXLHPRED Raw Sensor ADC Counts XLHP Red 0
0x034	0	4	U12	LTC00STATRSVRPRI Raw Sensor Status RES Pri 0
	4	12	U12	LTC00ADCRSVRPRI Raw Sensor ADC Counts RES Pri 0
0x036	0	4	U12	LTC00STATRSVRRED Raw Sensor Status RES Red 0
	4	12	U12	LTC00ADCRSVRRED Raw Sensor ADC Counts RES Red 0
0x038	0	4	U12	LTC01STATDSHPPRI Raw Sensor Status DSHP Pri 1
	4	12	U12	LTC01ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 1
0x03A	0	4	U12	LTC01STATDSHPRED Raw Sensor Status DSHP Red 1
	4	12	U12	LTC01ADCDSHPRED Raw Sensor ADC Counts DSHP Red 1
0x03C	0	4	U12	LTC01STATXLHPPRI Raw Sensor Status XLHP Pri 1
	4	12	U12	LTC01ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 1
0x03E	0	4	U12	LTC01STATXLHPRED

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status XLHP Red 1
	4	12	`U12`	`LTC01ADCXLHPRED` Raw Sensor ADC Counts XLHP Red 1
`0x040`	0	4	`U12`	`LTC01STATRSVRPRI` Raw Sensor Status RES Pri 1
	4	12	`U12`	`LTC01ADCRSVRPRI` Raw Sensor ADC Counts RES Pri 1
`0x042`	0	4	`U12`	`LTC01STATRSVRRED` Raw Sensor Status RES Red 1
	4	12	`U12`	`LTC01ADCRSVRRED` Raw Sensor ADC Counts RES Red 1
`0x044`	0	4	`U12`	`LTC02STATDSHPPRI` Raw Sensor Status DSHP Pri 2
	4	12	`U12`	`LTC02ADCDSHPPRI` Raw Sensor ADC Counts DSHP Pri 2
`0x046`	0	4	`U12`	`LTC02STATDSHPRED` Raw Sensor Status DSHP Red 2
	4	12	`U12`	`LTC02ADCDSHPRED` Raw Sensor ADC Counts DSHP Red 2
`0x048`	0	4	`U12`	`LTC02STATXLHPPRI` Raw Sensor Status XLHP Pri 2
	4	12	`U12`	`LTC02ADCXLHPPRI` Raw Sensor ADC Counts XLHP Pri 2
`0x04A`	0	4	`U12`	`LTC02STATXLHPRED` Raw Sensor Status XLHP Red 2
	4	12	`U12`	`LTC02ADCXLHPRED` Raw Sensor ADC Counts XLHP Red 2
`0x04C`	0	4	`U12`	`LTC02STATRSVRPRI` Raw Sensor Status RES Pri 2
	4	12	`U12`	`LTC02ADCRSVRPRI` Raw Sensor ADC Counts RES Pri 2
`0x04E`	0	4	`U12`	`LTC02STATRSVRRED` Raw Sensor Status RES Red 2
	4	12	`U12`	`LTC02ADCRSVRRED` Raw Sensor ADC Counts RES Red 2
`0x050`	0	4	`U12`	`LTC03STATDSHPPRI` Raw Sensor Status DSHP Pri 3
	4	12	`U12`	`LTC03ADCDSHPPRI` Raw Sensor ADC Counts DSHP Pri 3
`0x052`	0	4	`U12`	`LTC03STATDSHPRED` Raw Sensor Status DSHP Red 3
	4	12	`U12`	`LTC03ADCDSHPRED` Raw Sensor ADC Counts DSHP Red 3
`0x054`	0	4	`U12`	`LTC03STATXLHPPRI` Raw Sensor Status XLHP Pri 3
	4	12	`U12`	`LTC03ADCXLHPPRI` Raw Sensor ADC Counts XLHP Pri 3
`0x056`	0	4	`U12`	`LTC03STATXLHPRED` Raw Sensor Status XLHP Red 3
	4	12	`U12`	`LTC03ADCXLHPRED` Raw Sensor ADC Counts XLHP Red 3
`0x058`	0	4	`U12`	`LTC03STATRSVRPRI`

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status RES Pri 3
	4	12	U12	LTC03ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 3
0x05A	0	4	U12	LTC03STATRSVRRED
				Raw Sensor Status RES Red 3
	4	12	U12	LTC03ADCRSVRRED
				Raw Sensor ADC Counts RES Red 3
0x05C	0	4	U12	LTC04STATDSHPPRI
				Raw Sensor Status DSHP Pri 4
	4	12	U12	LTC04ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 4
0x05E	0	4	U12	LTC04STATDSHPRED
				Raw Sensor Status DSHP Red 4
	4	12	U12	LTC04ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 4
0x060	0	4	U12	LTC04STATXLHPPRI
				Raw Sensor Status XLHP Pri 4
	4	12	U12	LTC04ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 4
0x062	0	4	U12	LTC04STATXLHPRED
				Raw Sensor Status XLHP Red 4
	4	12	U12	LTC04ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 4
0x064	0	4	U12	LTC04STATRSVRPRI
				Raw Sensor Status RES Pri 4
	4	12	U12	LTC04ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 4
0x066	0	4	U12	LTC04STATRSVRRED
				Raw Sensor Status RES Red 4
	4	12	U12	LTC04ADCRSVRRED
				Raw Sensor ADC Counts RES Red 4
0x068	0	4	U12	LTC05STATDSHPPRI
				Raw Sensor Status DSHP Pri 5
	4	12	U12	LTC05ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 5
0x06A	0	4	U12	LTC05STATDSHPRED
				Raw Sensor Status DSHP Red 5
	4	12	U12	LTC05ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 5
0x06C	0	4	U12	LTC05STATXLHPPRI
				Raw Sensor Status XLHP Pri 5
	4	12	U12	LTC05ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 5
0x06E	0	4	U12	LTC05STATXLHPRED
				Raw Sensor Status XLHP Red 5
	4	12	U12	LTC05ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 5
0x070	0	4	U12	LTC05STATRSVRPRI
				Raw Sensor Status RES Pri 5
	4	12	U12	LTC05ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 5
0x072	0	4	U12	LTC05STATRSVRRED

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status RES Red 5
	4	12	U12	LTC05ADCRSVRRED Raw Sensor ADC Counts RES Red 5

14.3.33 `LtcData3` (561/0x231)

Description:

"Thermal Control Data Packet 3" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	4	U12	LTC06STATDSHPPRI Raw Sensor Status DSHP Pri 6
	4	12	U12	LTC06ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 6
0x016	0	4	U12	LTC06STATDSHPRED Raw Sensor Status DSHP Red 6
	4	12	U12	LTC06ADCDSHPRED Raw Sensor ADC Counts DSHP Red 6
0x018	0	4	U12	LTC06STATXLHPPRI Raw Sensor Status XLHP Pri 6
	4	12	U12	LTC06ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 6
0x01A	0	4	U12	LTC06STATXLHPRED Raw Sensor Status XLHP Red 6
	4	12	U12	LTC06ADCXLHPRED Raw Sensor ADC Counts XLHP Red 6
0x01C	0	4	U12	LTC06STATRSVRPRI Raw Sensor Status RES Pri 6
	4	12	U12	LTC06ADCRSVRPRI Raw Sensor ADC Counts RES Pri 6
0x01E	0	4	U12	LTC06STATRSVRRED Raw Sensor Status RES Red 6
	4	12	U12	LTC06ADCRSVRRED Raw Sensor ADC Counts RES Red 6
0x020	0	4	U12	LTC07STATDSHPPRI Raw Sensor Status DSHP Pri 7
	4	12	U12	LTC07ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 7
0x022	0	4	U12	LTC07STATDSHPRED Raw Sensor Status DSHP Red 7
	4	12	U12	LTC07ADCDSHPRED Raw Sensor ADC Counts DSHP Red 7
0x024	0	4	U12	LTC07STATXLHPPRI

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status XLHP Pri 7
	4	12	U12	LTC07ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 7
0x026	0	4	U12	LTC07STATXLHPRED
				Raw Sensor Status XLHP Red 7
	4	12	U12	LTC07ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 7
0x028	0	4	U12	LTC07STATRSVRPRI
				Raw Sensor Status RES Pri 7
	4	12	U12	LTC07ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 7
0x02A	0	4	U12	LTC07STATRSVRRED
				Raw Sensor Status RES Red 7
	4	12	U12	LTC07ADCRSVRRED
				Raw Sensor ADC Counts RES Red 7
0x02C	0	4	U12	LTC08STATDSHPPRI
				Raw Sensor Status DSHP Pri 8
	4	12	U12	LTC08ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 8
0x02E	0	4	U12	LTC08STATDSHPRED
				Raw Sensor Status DSHP Red 8
	4	12	U12	LTC08ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 8
0x030	0	4	U12	LTC08STATXLHPPRI
				Raw Sensor Status XLHP Pri 8
	4	12	U12	LTC08ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 8
0x032	0	4	U12	LTC08STATXLHPRED
				Raw Sensor Status XLHP Red 8
	4	12	U12	LTC08ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 8
0x034	0	4	U12	LTC08STATRSVRPRI
				Raw Sensor Status RES Pri 8
	4	12	U12	LTC08ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 8
0x036	0	4	U12	LTC08STATRSVRRED
				Raw Sensor Status RES Red 8
	4	12	U12	LTC08ADCRSVRRED
				Raw Sensor ADC Counts RES Red 8
0x038	0	4	U12	LTC09STATDSHPPRI
				Raw Sensor Status DSHP Pri 9
	4	12	U12	LTC09ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 9
0x03A	0	4	U12	LTC09STATDSHPRED
				Raw Sensor Status DSHP Red 9
	4	12	U12	LTC09ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 9
0x03C	0	4	U12	LTC09STATXLHPPRI
				Raw Sensor Status XLHP Pri 9
	4	12	U12	LTC09ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 9
0x03E	0	4	U12	LTC09STATXLHPRED

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status XLHP Red 9
	4	12	U12	LTC09ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 9
0x040	0	4	U12	LTC09STATRSVRPRI
				Raw Sensor Status RES Pri 9
	4	12	U12	LTC09ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 9
0x042	0	4	U12	LTC09STATRSVRRED
				Raw Sensor Status RES Red 9
	4	12	U12	LTC09ADCRSVRRED
				Raw Sensor ADC Counts RES Red 9
0x044	0	4	U12	LTC10STATDSHPPRI
				Raw Sensor Status DSHP Pri 10
	4	12	U12	LTC10ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 10
0x046	0	4	U12	LTC10STATDSHPRED
				Raw Sensor Status DSHP Red 10
	4	12	U12	LTC10ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 10
0x048	0	4	U12	LTC10STATXLHPPRI
				Raw Sensor Status XLHP Pri 10
	4	12	U12	LTC10ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 10
0x04A	0	4	U12	LTC10STATXLHPRED
				Raw Sensor Status XLHP Red 10
	4	12	U12	LTC10ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 10
0x04C	0	4	U12	LTC10STATRSVRPRI
				Raw Sensor Status RES Pri 10
	4	12	U12	LTC10ADCRSVRPRI
				Raw Sensor ADC Counts RES Pri 10
0x04E	0	4	U12	LTC10STATRSVRRED
				Raw Sensor Status RES Red 10
	4	12	U12	LTC10ADCRSVRRED
				Raw Sensor ADC Counts RES Red 10
0x050	0	4	U12	LTC11STATDSHPPRI
				Raw Sensor Status DSHP Pri 11
	4	12	U12	LTC11ADCDSHPPRI
				Raw Sensor ADC Counts DSHP Pri 11
0x052	0	4	U12	LTC11STATDSHPRED
				Raw Sensor Status DSHP Red 11
	4	12	U12	LTC11ADCDSHPRED
				Raw Sensor ADC Counts DSHP Red 11
0x054	0	4	U12	LTC11STATXLHPPRI
				Raw Sensor Status XLHP Pri 11
	4	12	U12	LTC11ADCXLHPPRI
				Raw Sensor ADC Counts XLHP Pri 11
0x056	0	4	U12	LTC11STATXLHPRED
				Raw Sensor Status XLHP Red 11
	4	12	U12	LTC11ADCXLHPRED
				Raw Sensor ADC Counts XLHP Red 11
0x058	0	4	U12	LTC11STATRSVRPRI

Offset	S	L	Type	ITOS name, attribute(s), and description
				Raw Sensor Status RES Pri 11
	4	12	U12	LTC11ADCRSVRPRI Raw Sensor ADC Counts RES Pri 11
0x05A	0	4	U12	LTC11STATRSVRRED Raw Sensor Status RES Red 11
	4	12	U12	LTC11ADCRSVRRED Raw Sensor ADC Counts RES Red 11
0x05C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x064	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.34 `ItcCfg` (562/0x232)

Description:

"ITC Configuration" Telemetry Packet

Contains the configuration for ITC task message and command confirmation levels.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	1	U1	LHKSIULCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	2	U1	LHKSIULCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKSIULCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKSIULCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKSIULCMCBE Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKSIULCMCBF Computer manager Command Confirm Broadcast Forward
0x016	0	1	U1	LHKSIULFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULFSMLV File system ITC Task Message Level
	8	2	U1	LHKSIULFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKSIULFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKSIULFSCBE File system Command Confirm Broadcast Execute
	14	2	U1	LHKSIULFSCBF File system Command Confirm Broadcast Forward
0x018	0	1	U1	LHKSIULHKMDEF Housekeeping master ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULHKMMLV Housekeeping master ITC Task Message Level
	8	2	U1	LHKSIULHKMCNE Housekeeping master Command Confirm Normal Execute
	10	2	U1	LHKSIULHKMCNF Housekeeping master Command Confirm Normal Forward
	12	2	U1	LHKSIULHKMCBE Housekeeping master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULHKMCBF Housekeeping master Command Confirm Broadcast Forward
0x01A	0	1	U1	LHKSIULIMDEF Instrument manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULIMMLV Instrument manager ITC Task Message Level
	8	2	U1	LHKSIULIMCNE Instrument manager Command Confirm Normal Execute
	10	2	U1	LHKSIULIMCNF Instrument manager Command Confirm Normal Forward
	12	2	U1	LHKSIULIMCBE Instrument manager Command Confirm Broadcast Execute
	14	2	U1	LHKSIULIMCBF Instrument manager Command Confirm Broadcast Forward

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01C	0	1	U1	LHKSIULSMMDEF Spacecraft messages master ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULSMMMLV Spacecraft messages master ITC Task Message Level
	8	2	U1	LHKSIULSMMCNE Spacecraft messages master Command Confirm Normal Execute
	10	2	U1	LHKSIULSMMCNF Spacecraft messages master Command Confirm Normal Forward
	12	2	U1	LHKSIULSMMCBE Spacecraft messages master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULSMMCBF Spacecraft messages master Command Confirm Broadcast Forward
0x01E	0	1	U1	LHKSIULSWDEF Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULSWMLV Software watchdog ITC Task Message Level
	8	2	U1	LHKSIULSWCNE Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKSIULSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKSIULSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKSIULSWCBF Software watchdog Command Confirm Broadcast Forward
0x020	0	1	U1	LHKSIULCIDEF Charge injection ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULCIMLV Charge injection ITC Task Message Level
	8	2	U1	LHKSIULCICNE Charge injection Command Confirm Normal Execute
	10	2	U1	LHKSIULCICNF Charge injection Command Confirm Normal Forward
	12	2	U1	LHKSIULCICBE Charge injection Command Confirm Broadcast Execute
	14	2	U1	LHKSIULCICBF Charge injection Command Confirm Broadcast Forward
0x022	0	1	U1	LHKSIULMCDEF Multiplex counters ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULMCMLV Multiplex counters ITC Task Message Level
	8	2	U1	LHKSIULMCCNE Multiplex counters Command Confirm Normal Execute
	10	2	U1	LHKSIULMCCNF Multiplex counters Command Confirm Normal Forward

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	2	U1	LHKSIULMCCBE Multiplex counters Command Confirm Broadcast Execute
	14	2	U1	LHKSIULMCCBF Multiplex counters Command Confirm Broadcast Forward
0x024	0	1	U1	LHKSIULPAMDEF Physics analysis master ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULPAMMLV Physics analysis master ITC Task Message Level
	8	2	U1	LHKSIULPAMCNE Physics analysis master Command Confirm Normal Execute
	10	2	U1	LHKSIULPAMCNF Physics analysis master Command Confirm Normal Forward
	12	2	U1	LHKSIULPAMCBE Physics analysis master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULPAMCBF Physics analysis master Command Confirm Broadcast Forward
0x026	0	1	U1	LHKSIULRADEF Register access ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRAMLV Register access ITC Task Message Level
	8	2	U1	LHKSIULRACNE Register access Command Confirm Normal Execute
	10	2	U1	LHKSIULRACNF Register access Command Confirm Normal Forward
	12	2	U1	LHKSIULRACBE Register access Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRACBF Register access Command Confirm Broadcast Forward
0x028	0	1	U1	LHKSIULTCDEF Thermal control ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULTCMLV Thermal control ITC Task Message Level
	8	2	U1	LHKSIULTCCNE Thermal control Command Confirm Normal Execute
	10	2	U1	LHKSIULTCCNF Thermal control Command Confirm Normal Forward
	12	2	U1	LHKSIULTCCBE Thermal control Command Confirm Broadcast Execute
	14	2	U1	LHKSIULTCCBF Thermal control Command Confirm Broadcast Forward
0x02A	0	1	U1	LHKSIUGRBDEF GRB analaysis ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUGRBMLV GRB analaysis ITC Task Message Level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKSIUGRBCNE GRB analaysis Command Confirm Normal Execute
	10	2	U1	LHKSIUGRBCNF GRB analaysis Command Confirm Normal Forward
	12	2	U1	LHKSIUGRBCBE GRB analaysis Command Confirm Broadcast Execute
	14	2	U1	LHKSIUGRBCBF GRB analaysis Command Confirm Broadcast Forward
0x02C	0	1	U1	LHKSIUCRXCDEF CTDB Rx task (telecommand ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUCRXCMLV CTDB Rx task (telecommand ITC Task Message Level
	8	2	U1	LHKSIUCRXCCNE CTDB Rx task (telecommand Command Confirm Normal Execute
	10	2	U1	LHKSIUCRXCCNF CTDB Rx task (telecommand Command Confirm Normal Forward
	12	2	U1	LHKSIUCRXCCBE CTDB Rx task (telecommand Command Confirm Broadcast Execute
	14	2	U1	LHKSIUCRXCCBF CTDB Rx task (telecommand Command Confirm Broadcast Forward
0x02E	0	1	U1	LHKSIULTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKSIULTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKSIULTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKSIULTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x030	0	1	U1	LHKSIULRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKSIULRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKSIULRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKSIULRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x032	0	1	U1	LHKSIULRXEDEF LCB Tx task (event) ITC Task Defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKSIULRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKSIULRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKSIULRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x034	0	1	U1	LHKSIUCTXDEF CTDB Tx task ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUCTXMLV CTDB Tx task ITC Task Message Level
	8	2	U1	LHKSIUCTXCNE CTDB Tx task Command Confirm Normal Execute
	10	2	U1	LHKSIUCTXCNF CTDB Tx task Command Confirm Normal Forward
	12	2	U1	LHKSIUCTXCBE CTDB Tx task Command Confirm Broadcast Execute
	14	2	U1	LHKSIUCTXCBF CTDB Tx task Command Confirm Broadcast Forward
0x036	0	1	U1	LHKSIUSTXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUSTXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKSIUSTXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKSIUSTXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKSIUSTXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKSIUSTXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x038	0	1	U1	LHKEPU0LCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKEPU0LCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU0LCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU0LCMCBE Computer manager Command Confirm Broadcast Execute

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKEPU0LCMCBF Computer manager Command Confirm Broadcast Forward
0x03A	0	1	U1	LHKEPU0LFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LFSMLV File system ITC Task Message Level
	8	2	U1	LHKEPU0LFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKEPU0LFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKEPU0LFSCBE File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LFSCBF File system Command Confirm Broadcast Forward
0x03C	0	1	U1	LHKEPU0LHKSDEF Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LHKSMLV Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU0LHKSCNE Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LHKSCNF Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LHKSCBE Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LHKSCBF Housekeeping slave Command Confirm Broadcast Forward
0x03E	0	1	U1	LHKEPU0LSMSDEF Spacecraft messages slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LSMSMLV Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU0LSMSCNE Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LSMSCNF Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LSMSCBE Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LSMSCBF Spacecraft messages slave Command Confirm Broadcast Forward
0x040	0	1	U1	LHKEPU0LSWDEF Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LSWMLV Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU0LSWCNE Software watchdog Command Confirm Normal Execute

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	2	U1	LHKEPU0LSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU0LSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LSWCBF Software watchdog Command Confirm Broadcast Forward
0x042	0	1	U1	LHKEPU0LPASDEF Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LPASMLV Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU0LPASCNE Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LPASCNF Physics analysis slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x044	0	1	U1	LHKEPU0LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU0LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x046	0	1	U1	LHKEPU0LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU0LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x048	0	1	U1	LHKEPU0LRXEDEF LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	2	U1	LHKEPU0LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU0LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x04A	0	1	U1	LHKEPU0STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKEPU0STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU0STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU0STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x04C	0	1	U1	LHKEPU1LCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKEPU1LCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU1LCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU1LCMCBE Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LCMCBF Computer manager Command Confirm Broadcast Forward
0x04E	0	1	U1	LHKEPU1LFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LFSMLV File system ITC Task Message Level
	8	2	U1	LHKEPU1LFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKEPU1LFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKEPU1LFSCBE File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LFSCBF File system Command Confirm Broadcast Forward

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	1	U1	LHKEPU1LHKSDEF Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LHKSMLV Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU1LHKSCNE Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LHKSCNF Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU1LHKSCBE Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LHKSCBF Housekeeping slave Command Confirm Broadcast Forward
0x052	0	1	U1	LHKEPU1LSMSDEF Spacecraft messages slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LSMSMLV Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU1LSMSCNE Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LSMSCNF Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU1LSMSCBE Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LSMSCBF Spacecraft messages slave Command Confirm Broadcast Forward
0x054	0	1	U1	LHKEPU1LSWDEF Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LSWMLV Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU1LSWCNE Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKEPU1LSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU1LSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LSWCBF Software watchdog Command Confirm Broadcast Forward
0x056	0	1	U1	LHKEPU1LPASDEF Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LPASMLV Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU1LPASCNE Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LPASCNF Physics analysis slave Command Confirm Normal Forward

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	2	U1	LHKEPU1LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x058	0	1	U1	LHKEPU1LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU1LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x05A	0	1	U1	LHKEPU1LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU1LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x05C	0	1	U1	LHKEPU1LRXEDEF LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU1LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x05E	0	1	U1	LHKEPU1STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKEPU1STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU1STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU1STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x060	0	1	U1	LHKEPU2LCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKEPU2LCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU2LCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU2LCMCBE Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LCMCBF Computer manager Command Confirm Broadcast Forward
0x062	0	1	U1	LHKEPU2LFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LFSMLV File system ITC Task Message Level
	8	2	U1	LHKEPU2LFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKEPU2LFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKEPU2LFSCBE File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LFSCBF File system Command Confirm Broadcast Forward
0x064	0	1	U1	LHKEPU2LHKSDEF Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LHKSMLV Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU2LHKSCNE Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LHKSCNF Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LHKSCBE Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LHKSCBF Housekeeping slave Command Confirm Broadcast Forward
0x066	0	1	U1	LHKEPU2LSMSDEF Spacecraft messages slave ITC Task Defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LSMSMLV Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU2LSMSCNE Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LSMSCNF Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LSMSCBE Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LSMSCBF Spacecraft messages slave Command Confirm Broadcast Forward
0x068	0	1	U1	LHKEPU2LSWDEF Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LSWMLV Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU2LSWCNE Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKEPU2LSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU2LSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LSWCBF Software watchdog Command Confirm Broadcast Forward
0x06A	0	1	U1	LHKEPU2LPASDEF Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LPASMLV Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU2LPASCNE Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LPASCNF Physics analysis slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x06C	0	1	U1	LHKEPU2LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU2LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKEPU2LTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x06E	0	1	U1	LHKEPU2LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU2LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x070	0	1	U1	LHKEPU2LRXEDEF LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU2LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x072	0	1	U1	LHKEPU2STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKEPU2STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU2STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU2STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward

14.3.35 `TopSiu` (563/0x233)

Description:

"TRC Top SIU Monitor Packet" Telemetry Packet

Contains TRC/LSW SIU cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKSIUCPUFREQ Processor Frequency
0x018	0	32	U1234	LHKSIUCPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKSIUTOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKSIUTOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKSIUTOPDUR TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKSIUTOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKSIUTOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKSIUANONTOP TRC Top SIU ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKSIULCMTOP TRC Top SIU LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKSIULFSTOP TRC Top SIU LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKSIULFSSTOP TRC Top SIU LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKSIULHKMTOP TRC Top SIU LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKSIULHKSTOP TRC Top SIU LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKSIULIMTOP TRC Top SIU LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKSIUTID7TOP TRC Top SIU TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKSIULSMMTOP TRC Top SIU LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKSIULSMSTOP TRC Top SIU LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKSIULSWTOP TRC Top SIU LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKSIUTID11TOP TRC Top SIU TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKSIULCITOP TRC Top SIU LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKSIUTID13TOP TRC Top SIU TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKSIULMCTOP TRC Top SIU LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKSIULPAMTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top SIU LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKSIULPASTOP
				TRC Top SIU LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKSIULRATOP
				TRC Top SIU LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKSIULTCTOP
				TRC Top SIU LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKSIUGRBTOP
				TRC Top SIU GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKSIULIHTOP
				TRC Top SIU LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKSIUTID21TOP
				TRC Top SIU TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKSIUCRXCTOP
				TRC Top SIU CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKSIUTID23TOP
				TRC Top SIU TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKSIULTX1TOP
				TRC Top SIU LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKSIULTX0TOP
				TRC Top SIU LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKSIULRXRTOP
				TRC Top SIU LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKSIULRXETOP
				TRC Top SIU LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKSIULRXNTOP
				TRC Top SIU LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKSIUCTXTOP
				TRC Top SIU CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKSIUSTXTOP
				TRC Top SIU STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKSIUTID31TOP
				TRC Top SIU TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKSIUTID32TOP
				TRC Top SIU TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKSIUMSGTOP
				TRC Top SIU MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKSIUPOLLTOP
				TRC Top SIU POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKSIUIDLETOP
				TRC Top SIU IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKSIULHKCTOP
				TRC Top SIU LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKSIUEFCTOP
				TRC Top SIU EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKSIUEMPTOP
				TRC Top SIU EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKSIULCMSTOP
				TRC Top SIU LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKSIUCTDBTOP
				TRC Top SIU CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKSIULCBTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top SIU LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKSIUTID42TOP TRC Top SIU TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKSIUTID43TOP TRC Top SIU TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKSIUTID44TOP TRC Top SIU TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKSIUROOTTTOP TRC Top SIU ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKSIULOGTTOP TRC Top SIU LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKSIUEXCTTOP TRC Top SIU EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKSIUUNDFTOP TRC Top SIU UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKSIUEXC5TOP TRC Top SIU EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKSIUEXC9TOP TRC Top SIU EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKSIUTID51TOP TRC Top SIU TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKSIUTID52TOP TRC Top SIU TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKSIUTID53TOP TRC Top SIU TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKSIUTID54TOP TRC Top SIU TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKSIUTID55TOP TRC Top SIU TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKSIUTID56TOP TRC Top SIU TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKSIUTID57TOP TRC Top SIU TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKSIUTID58TOP TRC Top SIU TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKSIUTID59TOP TRC Top SIU TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKSIUTID60TOP TRC Top SIU TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKSIUTID61TOP TRC Top SIU TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKSIUTID62TOP TRC Top SIU TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKSIUTID63TOP TRC Top SIU TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 16 bit field

14.3.36 `TopEpu0` (564/0x234)

Description:

"TRC Top EPU 0 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU0 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU0CPUFREQ Processor Frequency
0x018	0	32	U1234	LHKEPU0CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU0TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU0TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU0TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU0TOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKEPU0TOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU0ANONTOP TRC Top EPU0 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU0LCMTOP TRC Top EPU0 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU0LFSTOP TRC Top EPU0 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU0LFSSTOP TRC Top EPU0 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU0LHKMTOP TRC Top EPU0 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU0LHKSTOP TRC Top EPU0 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU0LIMTOP TRC Top EPU0 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU0TID7TOP TRC Top EPU0 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU0LSMMTOP TRC Top EPU0 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU0LSMSTOP TRC Top EPU0 LSM_S Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x036	0	8	U1	LHKEPU0LSWTOP TRC Top EPU0 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU0TID11TOP TRC Top EPU0 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU0LCITOP TRC Top EPU0 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU0TID13TOP TRC Top EPU0 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU0LMCTOP TRC Top EPU0 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU0LPAMTOP TRC Top EPU0 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU0LPASTOP TRC Top EPU0 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU0LRATOP TRC Top EPU0 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU0LTCTOP TRC Top EPU0 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU0GRBTOP TRC Top EPU0 GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKEPU0LIHTOP TRC Top EPU0 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU0TID21TOP TRC Top EPU0 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU0CRXCTOP TRC Top EPU0 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU0TID23TOP TRC Top EPU0 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU0LTX1TOP TRC Top EPU0 LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKEPU0LTX0TOP TRC Top EPU0 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU0LRXRTOP TRC Top EPU0 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU0LRXETOP TRC Top EPU0 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU0LRXNTOP TRC Top EPU0 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU0CTXTOP TRC Top EPU0 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU0STXTOP TRC Top EPU0 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU0TID31TOP TRC Top EPU0 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU0TID32TOP TRC Top EPU0 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU0MSGTOP TRC Top EPU0 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU0POLLTOP TRC Top EPU0 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU0IDLETOP TRC Top EPU0 IDLE Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	8	U1	LHKEPU0LHKCTOP TRC Top EPU0 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU0EFCTOP TRC Top EPU0 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU0EMPTOP TRC Top EPU0 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU0LCMSTOP TRC Top EPU0 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU0CTDBTOP TRC Top EPU0 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU0LCBTOP TRC Top EPU0 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU0TID42TOP TRC Top EPU0 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU0TID43TOP TRC Top EPU0 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU0TID44TOP TRC Top EPU0 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU0ROOTTTOP TRC Top EPU0 ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKEPU0LOGTTOP TRC Top EPU0 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU0EXCTTOP TRC Top EPU0 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU0UNDFTOP TRC Top EPU0 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU0EXC5TOP TRC Top EPU0 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU0EXC9TOP TRC Top EPU0 EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKEPU0TID51TOP TRC Top EPU0 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU0TID52TOP TRC Top EPU0 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU0TID53TOP TRC Top EPU0 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU0TID54TOP TRC Top EPU0 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU0TID55TOP TRC Top EPU0 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU0TID56TOP TRC Top EPU0 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU0TID57TOP TRC Top EPU0 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU0TID58TOP TRC Top EPU0 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU0TID59TOP TRC Top EPU0 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU0TID60TOP TRC Top EPU0 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU0TID61TOP TRC Top EPU0 TID61 Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06A	0	8	U1	LHKEPU0TID62TOP TRC Top EPU0 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU0TID63TOP TRC Top EPU0 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.37 `TopEpu1` (565/0x235)

Description:

"TRC Top EPU 1 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU 1 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU1CPUFREQ Processor Frequency
0x018	0	32	U1234	LHKEPU1CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU1TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU1TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU1TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU1TOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKEPU1TOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU1ANONTOP TRC Top EPU1 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU1LCMTOP TRC Top EPU1 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU1LFSTOP TRC Top EPU1 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU1LFSSTOP TRC Top EPU1 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU1LHKMTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU1 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU1LHKSTOP
				TRC Top EPU1 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU1LIMTOP
				TRC Top EPU1 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU1TID7TOP
				TRC Top EPU1 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU1LSMMTOP
				TRC Top EPU1 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU1LSMSTOP
				TRC Top EPU1 LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKEPU1LSWTOP
				TRC Top EPU1 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU1TID11TOP
				TRC Top EPU1 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU1LCITOP
				TRC Top EPU1 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU1TID13TOP
				TRC Top EPU1 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU1LMCTOP
				TRC Top EPU1 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU1LPAMTOP
				TRC Top EPU1 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU1LPASTOP
				TRC Top EPU1 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU1LRATOP
				TRC Top EPU1 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU1LTCTOP
				TRC Top EPU1 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU1GRBTOP
				TRC Top EPU1 GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKEPU1LIHTOP
				TRC Top EPU1 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU1TID21TOP
				TRC Top EPU1 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU1CRXCTOP
				TRC Top EPU1 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU1TID23TOP
				TRC Top EPU1 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU1LTX1TOP
				TRC Top EPU1 LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKEPU1LTX0TOP
				TRC Top EPU1 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU1LRXRTOP
				TRC Top EPU1 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU1LRXETOP
				TRC Top EPU1 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU1LRXNTOP
				TRC Top EPU1 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU1CTXTOP
				TRC Top EPU1 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU1STXTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU1 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU1TID31TOP
				TRC Top EPU1 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU1TID32TOP
				TRC Top EPU1 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU1MSGTOP
				TRC Top EPU1 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU1POLLTOP
				TRC Top EPU1 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU1IDLETOP
				TRC Top EPU1 IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKEPU1LHKCTOP
				TRC Top EPU1 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU1EFCTOP
				TRC Top EPU1 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU1EMPTOP
				TRC Top EPU1 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU1LCMSTOP
				TRC Top EPU1 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU1CTDBTOP
				TRC Top EPU1 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU1LCBTOP
				TRC Top EPU1 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU1TID42TOP
				TRC Top EPU1 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU1TID43TOP
				TRC Top EPU1 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU1TID44TOP
				TRC Top EPU1 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU1ROOTTTOP
				TRC Top EPU1 ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKEPU1LOGTTOP
				TRC Top EPU1 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU1EXCTTOP
				TRC Top EPU1 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU1UNDFTOP
				TRC Top EPU1 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU1EXC5TOP
				TRC Top EPU1 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU1EXC9TOP
				TRC Top EPU1 EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKEPU1TID51TOP
				TRC Top EPU1 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU1TID52TOP
				TRC Top EPU1 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU1TID53TOP
				TRC Top EPU1 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU1TID54TOP
				TRC Top EPU1 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU1TID55TOP
				TRC Top EPU1 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU1TID56TOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU1 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU1TID57TOP TRC Top EPU1 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU1TID58TOP TRC Top EPU1 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU1TID59TOP TRC Top EPU1 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU1TID60TOP TRC Top EPU1 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU1TID61TOP TRC Top EPU1 TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKEPU1TID62TOP TRC Top EPU1 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU1TID63TOP TRC Top EPU1 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.38 `TopEpu2` (566/0x236)

Description:

"TRC Top EPU 2 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU2 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU2CPUFREQ Processor Frequency
0x018	0	32	U1234	LHKEPU2CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU2TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU2TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU2TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU2TOPEX5IR TRC Top Exception 5 Interrupt Rate

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02A	0	16	U12	LHKEPU2TOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU2ANONTOP TRC Top EPU2 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU2LCMTOP TRC Top EPU2 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU2LFSTOP TRC Top EPU2 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU2LFSSTOP TRC Top EPU2 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU2LHKMTOP TRC Top EPU2 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU2LHKSTOP TRC Top EPU2 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU2LIMTOP TRC Top EPU2 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU2TID7TOP TRC Top EPU2 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU2LSMMTOP TRC Top EPU2 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU2LSMSTOP TRC Top EPU2 LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKEPU2LSWTOP TRC Top EPU2 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU2TID11TOP TRC Top EPU2 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU2LCITOP TRC Top EPU2 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU2TID13TOP TRC Top EPU2 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU2LMCTOP TRC Top EPU2 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU2LPAMTOP TRC Top EPU2 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU2LPASTOP TRC Top EPU2 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU2LRATOP TRC Top EPU2 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU2LTCTOP TRC Top EPU2 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU2GRBTOP TRC Top EPU2 GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKEPU2LIHTOP TRC Top EPU2 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU2TID21TOP TRC Top EPU2 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU2CRXCTOP TRC Top EPU2 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU2TID23TOP TRC Top EPU2 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU2LTX1TOP TRC Top EPU2 LTX1 Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x045	0	8	U1	LHKEPU2LTX0TOP TRC Top EPU2 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU2LRXRTOP TRC Top EPU2 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU2LRXETOP TRC Top EPU2 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU2LRXNTOP TRC Top EPU2 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU2CTXTOP TRC Top EPU2 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU2STXTOP TRC Top EPU2 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU2TID31TOP TRC Top EPU2 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU2TID32TOP TRC Top EPU2 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU2MSGTOP TRC Top EPU2 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU2POLLTOP TRC Top EPU2 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU2IDLETOP TRC Top EPU2 IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKEPU2LHKCTOP TRC Top EPU2 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU2EFCTOP TRC Top EPU2 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU2EMPTOP TRC Top EPU2 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU2LCMSTOP TRC Top EPU2 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU2CTDBTOP TRC Top EPU2 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU2LCBTOP TRC Top EPU2 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU2TID42TOP TRC Top EPU2 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU2TID43TOP TRC Top EPU2 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU2TID44TOP TRC Top EPU2 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU2ROOTTTOP TRC Top EPU2 ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKEPU2LOGTTOP TRC Top EPU2 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU2EXCTTOP TRC Top EPU2 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU2UNDFTOP TRC Top EPU2 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU2EXC5TOP TRC Top EPU2 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU2EXC9TOP TRC Top EPU2 EXC9 Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05F	0	8	U1	LHKEPU2TID51TOP TRC Top EPU2 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU2TID52TOP TRC Top EPU2 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU2TID53TOP TRC Top EPU2 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU2TID54TOP TRC Top EPU2 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU2TID55TOP TRC Top EPU2 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU2TID56TOP TRC Top EPU2 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU2TID57TOP TRC Top EPU2 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU2TID58TOP TRC Top EPU2 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU2TID59TOP TRC Top EPU2 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU2TID60TOP TRC Top EPU2 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU2TID61TOP TRC Top EPU2 TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKEPU2TID62TOP TRC Top EPU2 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU2TID63TOP TRC Top EPU2 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.39 `TemEnvPwr00` (568/0x238)

Description:

"TEM power ADCs for TEMs 0-3" Telemetry Packet

TEM power ADCs for TEMs 0-3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR00 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT0TKR25VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VDST
				TEM 0 TKR digital 2.5 V - read out status
	4	12	U12	LHKT0TKR25VD
				TEM 0 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT0TKR15VAALM; LHKADCLMTSTATES
				TEM 0 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT0TKR15VAAST
				TEM 0 TKR analog 1.5 V - read out status
	4	12	U12	LHKT0TKR15VAA
				TEM 0 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT0TKR25VABLM; LHKADCLMTSTATES
				TEM 0 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VABST
				TEM 0 TKR analog 2.5 V - read out status
	4	12	U12	LHKT0TKR25VAB
				TEM 0 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT0TKRBV0LM; LHKADCLMTSTATES
				TEM 0 TKR bias V0 - limit evaluation
	3	1	U12	LHKT0TKRBV0ST
				TEM 0 TKR bias V0 - read out status
	4	12	U12	LHKT0TKRBV0
				TEM 0 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT0CAL33VDLM; LHKADCLMTSTATES
				TEM 0 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VDST
				TEM 0 CAL digital 3.3 V - read out status
	4	12	U12	LHKT0CAL33VD
				TEM 0 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT0TKRBV1LM; LHKADCLMTSTATES
				TEM 0 TKR bias V1 - limit evaluation
	3	1	U12	LHKT0TKRBV1ST
				TEM 0 TKR bias V1 - read out status
	4	12	U12	LHKT0TKRBV1
				TEM 0 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT0CAL33VALM; LHKADCLMTSTATES
				TEM 0 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VAST
				TEM 0 CAL analog 3.3 V - read out status
	4	12	U12	LHKT0CAL33VA
				TEM 0 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT0CALBSV1LM; LHKADCLMTSTATES
				TEM 0 CAL bias V1 - limit evaluation
	3	1	U12	LHKT0CALBSV1ST
				TEM 0 CAL bias V1 - read out status
	4	12	U12	LHKT0CALBSV1
				TEM 0 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT0CALBSV0LM; LHKADCLMTSTATES
				TEM 0 CAL bias V0 - limit evaluation
	3	1	U12	LHKT0CALBSV0ST
				TEM 0 CAL bias V0 - read out status
	4	12	U12	LHKT0CALBSV0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT0TEM28V0LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT0TEM28V0ST TEM 0 TEM 28 V (V0) - read out status
	4	12	U12	LHKT0TEM28V0 TEM 0 TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKT0TEM33VLM; LHKADCLMTSTATES TEM 0 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT0TEM33VST TEM 0 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT0TEM33V TEM 0 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT0TEM28V1LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT0TEM28V1ST TEM 0 TEM 28 V (V1) - read out status
	4	12	U12	LHKT0TEM28V1 TEM 0 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT1TKR25VDLM; LHKADCLMTSTATES TEM 1 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VDST TEM 1 TKR digital 2.5 V - read out status
	4	12	U12	LHKT1TKR25VD TEM 1 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT1TKR15VAALM; LHKADCLMTSTATES TEM 1 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT1TKR15VAAST TEM 1 TKR analog 1.5 V - read out status
	4	12	U12	LHKT1TKR15VAA TEM 1 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT1TKR25VABLM; LHKADCLMTSTATES TEM 1 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VABST TEM 1 TKR analog 2.5 V - read out status
	4	12	U12	LHKT1TKR25VAB TEM 1 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT1TKRBV0LM; LHKADCLMTSTATES TEM 1 TKR bias V0 - limit evaluation
	3	1	U12	LHKT1TKRBV0ST TEM 1 TKR bias V0 - read out status
	4	12	U12	LHKT1TKRBV0 TEM 1 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT1CAL33VDLM; LHKADCLMTSTATES TEM 1 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VDST TEM 1 CAL digital 3.3 V - read out status
	4	12	U12	LHKT1CAL33VD TEM 1 CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKT1TKRBV1LM; LHKADCLMTSTATES TEM 1 TKR bias V1 - limit evaluation
	3	1	U12	LHKT1TKRBV1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 1 TKR bias V1 - read out status
	4	12	U12	LHKT1TKRBV1
				TEM 1 TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKT1CAL33VALM; LHKADCLMTSTATES
				TEM 1 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VAST
				TEM 1 CAL analog 3.3 V - read out status
	4	12	U12	LHKT1CAL33VA
				TEM 1 CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKT1CALBSV1LM
				TEM 1 CAL bias V1 - limit evaluation
	3	1	U12	LHKT1CALBSV1ST
				TEM 1 CAL bias V1 - read out status
	4	12	U12	LHKT1CALBSV1
				TEM 1 CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKT1CALBSV0LM
				TEM 1 CAL bias V0 - limit evaluation
	3	1	U12	LHKT1CALBSV0ST
				TEM 1 CAL bias V0 - read out status
	4	12	U12	LHKT1CALBSV0
				TEM 1 CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKT1TEM28V0LM
				TEM 1 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT1TEM28V0ST
				TEM 1 TEM 28 V (V0) - read out status
	4	12	U12	LHKT1TEM28V0
				TEM 1 TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKT1TEM33VLM; LHKADCLMTSTATES
				TEM 1 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT1TEM33VST
				TEM 1 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT1TEM33V
				TEM 1 TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKT1TEM28V1LM; LHKADCLMTSTATES
				TEM 1 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT1TEM28V1ST
				TEM 1 TEM 28 V (V1) - read out status
	4	12	U12	LHKT1TEM28V1
				TEM 1 TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKT2TKR25VDLM; LHKADCLMTSTATES
				TEM 2 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VDST
				TEM 2 TKR digital 2.5 V - read out status
	4	12	U12	LHKT2TKR25VD
				TEM 2 TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKT2TKR15VAALM; LHKADCLMTSTATES
				TEM 2 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT2TKR15VAAST
				TEM 2 TKR analog 1.5 V - read out status
	4	12	U12	LHKT2TKR15VAA
				TEM 2 TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKT2TKR25VABLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VABST
				TEM 2 TKR analog 2.5 V - read out status
	4	12	U12	LHKT2TKR25VAB
				TEM 2 TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKT2TKRBV0LM; LHKADCLMTSTATES
				TEM 2 TKR bias V0 - limit evaluation
	3	1	U12	LHKT2TKRBV0ST
				TEM 2 TKR bias V0 - read out status
	4	12	U12	LHKT2TKRBV0
				TEM 2 TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKT2CAL33VDLM; LHKADCLMTSTATES
				TEM 2 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VDST
				TEM 2 CAL digital 3.3 V - read out status
	4	12	U12	LHKT2CAL33VD
				TEM 2 CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKT2TKRBV1LM; LHKADCLMTSTATES
				TEM 2 TKR bias V1 - limit evaluation
	3	1	U12	LHKT2TKRBV1ST
				TEM 2 TKR bias V1 - read out status
	4	12	U12	LHKT2TKRBV1
				TEM 2 TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKT2CAL33VALM; LHKADCLMTSTATES
				TEM 2 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VAST
				TEM 2 CAL analog 3.3 V - read out status
	4	12	U12	LHKT2CAL33VA
				TEM 2 CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKT2CALBSV1LM; LHKADCLMTSTATES
				TEM 2 CAL bias V1 - limit evaluation
	3	1	U12	LHKT2CALBSV1ST
				TEM 2 CAL bias V1 - read out status
	4	12	U12	LHKT2CALBSV1
				TEM 2 CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKT2CALBSV0LM; LHKADCLMTSTATES
				TEM 2 CAL bias V0 - limit evaluation
	3	1	U12	LHKT2CALBSV0ST
				TEM 2 CAL bias V0 - read out status
	4	12	U12	LHKT2CALBSV0
				TEM 2 CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKT2TEM28V0LM; LHKADCLMTSTATES
				TEM 2 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT2TEM28V0ST
				TEM 2 TEM 28 V (V0) - read out status
	4	12	U12	LHKT2TEM28V0
				TEM 2 TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKT2TEM33VLM; LHKADCLMTSTATES
				TEM 2 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT2TEM33VST
				TEM 2 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT2TEM33V

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKT2TEM28V1LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT2TEM28V1ST TEM 2 TEM 28 V (V1) - read out status
	4	12	U12	LHKT2TEM28V1 TEM 2 TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKT3TKR25VDLM; LHKADCLMTSTATES TEM 3 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VDST TEM 3 TKR digital 2.5 V - read out status
	4	12	U12	LHKT3TKR25VD TEM 3 TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKT3TKR15VAALM; LHKADCLMTSTATES TEM 3 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT3TKR15VAAST TEM 3 TKR analog 1.5 V - read out status
	4	12	U12	LHKT3TKR15VAA TEM 3 TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKT3TKR25VABLM; LHKADCLMTSTATES TEM 3 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VABST TEM 3 TKR analog 2.5 V - read out status
	4	12	U12	LHKT3TKR25VAB TEM 3 TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKT3TKRBV0LM; LHKADCLMTSTATES TEM 3 TKR bias V0 - limit evaluation
	3	1	U12	LHKT3TKRBV0ST TEM 3 TKR bias V0 - read out status
	4	12	U12	LHKT3TKRBV0 TEM 3 TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKT3CAL33VDLM; LHKADCLMTSTATES TEM 3 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VDST TEM 3 CAL digital 3.3 V - read out status
	4	12	U12	LHKT3CAL33VD TEM 3 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT3TKRBV1LM; LHKADCLMTSTATES TEM 3 TKR bias V1 - limit evaluation
	3	1	U12	LHKT3TKRBV1ST TEM 3 TKR bias V1 - read out status
	4	12	U12	LHKT3TKRBV1 TEM 3 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT3CAL33VALM; LHKADCLMTSTATES TEM 3 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VAST TEM 3 CAL analog 3.3 V - read out status
	4	12	U12	LHKT3CAL33VA TEM 3 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT3CALBSV1LM TEM 3 CAL bias V1 - limit evaluation
	3	1	U12	LHKT3CALBSV1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 CAL bias V1 - read out status
	4	12	U12	LHKT3CALBSV1 TEM 3 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT3CALBSV0LM TEM 3 CAL bias V0 - limit evaluation
	3	1	U12	LHKT3CALBSV0ST TEM 3 CAL bias V0 - read out status
	4	12	U12	LHKT3CALBSV0 TEM 3 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT3TEM28V0LM TEM 3 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT3TEM28V0ST TEM 3 TEM 28 V (V0) - read out status
	4	12	U12	LHKT3TEM28V0 TEM 3 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT3TEM33VLM; LHKADCLMTSTATES TEM 3 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT3TEM33VST TEM 3 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT3TEM33V TEM 3 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT3TEM28V1LM; LHKADCLMTSTATES TEM 3 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT3TEM28V1ST TEM 3 TEM 28 V (V1) - read out status
	4	12	U12	LHKT3TEM28V1 TEM 3 TEM 28 V (V1) - raw ADC value

14.3.40 TemEnvPwr01 (569/0x239)

Description:

"TEM power ADCs for TEMs 4-7" Telemetry Packet

TEM power ADCs for TEMs 4-7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR01 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT4TKR25VDLM; LHKADCLMTSTATES TEM 4 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VDST TEM 4 TKR digital 2.5 V - read out status
	4	12	U12	LHKT4TKR25VD TEM 4 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT4TKR15VAALM; LHKADCLMTSTATES TEM 4 TKR analog 1.5 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT4TKR15VAAST TEM 4 TKR analog 1.5 V - read out status
	4	12	U12	LHKT4TKR15VAA TEM 4 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT4TKR25VABLM; LHKADCLMTSTATES TEM 4 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VABST TEM 4 TKR analog 2.5 V - read out status
	4	12	U12	LHKT4TKR25VAB TEM 4 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT4TKRBV0LM; LHKADCLMTSTATES TEM 4 TKR bias V0 - limit evaluation
	3	1	U12	LHKT4TKRBV0ST TEM 4 TKR bias V0 - read out status
	4	12	U12	LHKT4TKRBV0 TEM 4 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT4CAL33VDLM; LHKADCLMTSTATES TEM 4 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VDST TEM 4 CAL digital 3.3 V - read out status
	4	12	U12	LHKT4CAL33VD TEM 4 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT4TKRBV1LM; LHKADCLMTSTATES TEM 4 TKR bias V1 - limit evaluation
	3	1	U12	LHKT4TKRBV1ST TEM 4 TKR bias V1 - read out status
	4	12	U12	LHKT4TKRBV1 TEM 4 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT4CAL33VALM; LHKADCLMTSTATES TEM 4 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VAST TEM 4 CAL analog 3.3 V - read out status
	4	12	U12	LHKT4CAL33VA TEM 4 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT4CALBSV1LM; LHKADCLMTSTATES TEM 4 CAL bias V1 - limit evaluation
	3	1	U12	LHKT4CALBSV1ST TEM 4 CAL bias V1 - read out status
	4	12	U12	LHKT4CALBSV1 TEM 4 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT4CALBSV0LM; LHKADCLMTSTATES TEM 4 CAL bias V0 - limit evaluation
	3	1	U12	LHKT4CALBSV0ST TEM 4 CAL bias V0 - read out status
	4	12	U12	LHKT4CALBSV0 TEM 4 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT4TEM28V0LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT4TEM28V0ST TEM 4 TEM 28 V (V0) - read out status
	4	12	U12	LHKT4TEM28V0 TEM 4 TEM 28 V (V0) - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x028	0	3	U12	LHKT4TEM33VLM; LHKADCLMTSTATES TEM 4 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT4TEM33VST TEM 4 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT4TEM33V TEM 4 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT4TEM28V1LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT4TEM28V1ST TEM 4 TEM 28 V (V1) - read out status
	4	12	U12	LHKT4TEM28V1 TEM 4 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT5TKR25VDLM; LHKADCLMTSTATES TEM 5 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VDST TEM 5 TKR digital 2.5 V - read out status
	4	12	U12	LHKT5TKR25VD TEM 5 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT5TKR15VAALM; LHKADCLMTSTATES TEM 5 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT5TKR15VAAST TEM 5 TKR analog 1.5 V - read out status
	4	12	U12	LHKT5TKR15VAA TEM 5 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT5TKR25VABLM; LHKADCLMTSTATES TEM 5 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VABST TEM 5 TKR analog 2.5 V - read out status
	4	12	U12	LHKT5TKR25VAB TEM 5 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT5TKRBV0LM; LHKADCLMTSTATES TEM 5 TKR bias V0 - limit evaluation
	3	1	U12	LHKT5TKRBV0ST TEM 5 TKR bias V0 - read out status
	4	12	U12	LHKT5TKRBV0 TEM 5 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT5CAL33VDLM; LHKADCLMTSTATES TEM 5 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VDST TEM 5 CAL digital 3.3 V - read out status
	4	12	U12	LHKT5CAL33VD TEM 5 CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKT5TKRBV1LM; LHKADCLMTSTATES TEM 5 TKR bias V1 - limit evaluation
	3	1	U12	LHKT5TKRBV1ST TEM 5 TKR bias V1 - read out status
	4	12	U12	LHKT5TKRBV1 TEM 5 TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKT5CAL33VALM; LHKADCLMTSTATES TEM 5 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VAST TEM 5 CAL analog 3.3 V - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT5CAL33VA TEM 5 CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKT5CALBSV1LM TEM 5 CAL bias V1 - limit evaluation
	3	1	U12	LHKT5CALBSV1ST TEM 5 CAL bias V1 - read out status
	4	12	U12	LHKT5CALBSV1 TEM 5 CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKT5CALBSV0LM TEM 5 CAL bias V0 - limit evaluation
	3	1	U12	LHKT5CALBSV0ST TEM 5 CAL bias V0 - read out status
	4	12	U12	LHKT5CALBSV0 TEM 5 CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKT5TEM28V0LM TEM 5 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT5TEM28V0ST TEM 5 TEM 28 V (V0) - read out status
	4	12	U12	LHKT5TEM28V0 TEM 5 TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKT5TEM33VLM; LHKADCLMTSTATES TEM 5 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT5TEM33VST TEM 5 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT5TEM33V TEM 5 TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKT5TEM28V1LM; LHKADCLMTSTATES TEM 5 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT5TEM28V1ST TEM 5 TEM 28 V (V1) - read out status
	4	12	U12	LHKT5TEM28V1 TEM 5 TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKT6TKR25VDLM; LHKADCLMTSTATES TEM 6 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VDST TEM 6 TKR digital 2.5 V - read out status
	4	12	U12	LHKT6TKR25VD TEM 6 TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKT6TKR15VAALM; LHKADCLMTSTATES TEM 6 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT6TKR15VAAST TEM 6 TKR analog 1.5 V - read out status
	4	12	U12	LHKT6TKR15VAA TEM 6 TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKT6TKR25VABLM; LHKADCLMTSTATES TEM 6 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VABST TEM 6 TKR analog 2.5 V - read out status
	4	12	U12	LHKT6TKR25VAB TEM 6 TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKT6TKRBV0LM; LHKADCLMTSTATES TEM 6 TKR bias V0 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT6TKRBV0ST TEM 6 TKR bias V0 - read out status
	4	12	U12	LHKT6TKRBV0 TEM 6 TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKT6CAL33VDLM; LHKADCLMTSTATES TEM 6 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VDST TEM 6 CAL digital 3.3 V - read out status
	4	12	U12	LHKT6CAL33VD TEM 6 CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKT6TKRBV1LM; LHKADCLMTSTATES TEM 6 TKR bias V1 - limit evaluation
	3	1	U12	LHKT6TKRBV1ST TEM 6 TKR bias V1 - read out status
	4	12	U12	LHKT6TKRBV1 TEM 6 TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKT6CAL33VALM; LHKADCLMTSTATES TEM 6 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VAST TEM 6 CAL analog 3.3 V - read out status
	4	12	U12	LHKT6CAL33VA TEM 6 CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKT6CALBSV1LM; LHKADCLMTSTATES TEM 6 CAL bias V1 - limit evaluation
	3	1	U12	LHKT6CALBSV1ST TEM 6 CAL bias V1 - read out status
	4	12	U12	LHKT6CALBSV1 TEM 6 CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKT6CALBSV0LM; LHKADCLMTSTATES TEM 6 CAL bias V0 - limit evaluation
	3	1	U12	LHKT6CALBSV0ST TEM 6 CAL bias V0 - read out status
	4	12	U12	LHKT6CALBSV0 TEM 6 CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKT6TEM28V0LM; LHKADCLMTSTATES TEM 6 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT6TEM28V0ST TEM 6 TEM 28 V (V0) - read out status
	4	12	U12	LHKT6TEM28V0 TEM 6 TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKT6TEM33VLM; LHKADCLMTSTATES TEM 6 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT6TEM33VST TEM 6 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT6TEM33V TEM 6 TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKT6TEM28V1LM; LHKADCLMTSTATES TEM 6 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT6TEM28V1ST TEM 6 TEM 28 V (V1) - read out status
	4	12	U12	LHKT6TEM28V1 TEM 6 TEM 28 V (V1) - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05C	0	3	U12	LHKT7TKR25VDLM; LHKADCLMTSTATES TEM 7 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VDST TEM 7 TKR digital 2.5 V - read out status
	4	12	U12	LHKT7TKR25VD TEM 7 TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKT7TKR15VAALM; LHKADCLMTSTATES TEM 7 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT7TKR15VAAST TEM 7 TKR analog 1.5 V - read out status
	4	12	U12	LHKT7TKR15VAA TEM 7 TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKT7TKR25VABLM; LHKADCLMTSTATES TEM 7 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VABST TEM 7 TKR analog 2.5 V - read out status
	4	12	U12	LHKT7TKR25VAB TEM 7 TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKT7TKRBV0LM; LHKADCLMTSTATES TEM 7 TKR bias V0 - limit evaluation
	3	1	U12	LHKT7TKRBV0ST TEM 7 TKR bias V0 - read out status
	4	12	U12	LHKT7TKRBV0 TEM 7 TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKT7CAL33VDLM; LHKADCLMTSTATES TEM 7 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VDST TEM 7 CAL digital 3.3 V - read out status
	4	12	U12	LHKT7CAL33VD TEM 7 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT7TKRBV1LM; LHKADCLMTSTATES TEM 7 TKR bias V1 - limit evaluation
	3	1	U12	LHKT7TKRBV1ST TEM 7 TKR bias V1 - read out status
	4	12	U12	LHKT7TKRBV1 TEM 7 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT7CAL33VALM; LHKADCLMTSTATES TEM 7 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VAST TEM 7 CAL analog 3.3 V - read out status
	4	12	U12	LHKT7CAL33VA TEM 7 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT7CALBSV1LM TEM 7 CAL bias V1 - limit evaluation
	3	1	U12	LHKT7CALBSV1ST TEM 7 CAL bias V1 - read out status
	4	12	U12	LHKT7CALBSV1 TEM 7 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT7CALBSV0LM TEM 7 CAL bias V0 - limit evaluation
	3	1	U12	LHKT7CALBSV0ST TEM 7 CAL bias V0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT7CALBSV0 TEM 7 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT7TEM28V0LM TEM 7 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT7TEM28V0ST TEM 7 TEM 28 V (V0) - read out status
	4	12	U12	LHKT7TEM28V0 TEM 7 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT7TEM33VLM; LHKADCLMTSTATES TEM 7 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT7TEM33VST TEM 7 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT7TEM33V TEM 7 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT7TEM28V1LM; LHKADCLMTSTATES TEM 7 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT7TEM28V1ST TEM 7 TEM 28 V (V1) - read out status
	4	12	U12	LHKT7TEM28V1 TEM 7 TEM 28 V (V1) - raw ADC value

14.3.41 `TemEnvPwr02` (570/0x23A)

Description:

"TEM power ADCs for TEMs 8-11" Telemetry Packet

TEM power ADCs for TEMs 8-11

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR02 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT8TKR25VDLM; LHKADCLMTSTATES TEM 8 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VDST TEM 8 TKR digital 2.5 V - read out status
	4	12	U12	LHKT8TKR25VD TEM 8 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT8TKR15VAALM; LHKADCLMTSTATES TEM 8 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT8TKR15VAAST TEM 8 TKR analog 1.5 V - read out status
	4	12	U12	LHKT8TKR15VAA TEM 8 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT8TKR25VABLM; LHKADCLMTSTATES TEM 8 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VABST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 8 TKR analog 2.5 V - read out status
	4	12	U12	LHKT8TKR25VAB
				TEM 8 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT8TKRBV0LM; LHKADCLMTSTATES
				TEM 8 TKR bias V0 - limit evaluation
	3	1	U12	LHKT8TKRBV0ST
				TEM 8 TKR bias V0 - read out status
	4	12	U12	LHKT8TKRBV0
				TEM 8 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT8CAL33VDLM; LHKADCLMTSTATES
				TEM 8 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VDST
				TEM 8 CAL digital 3.3 V - read out status
	4	12	U12	LHKT8CAL33VD
				TEM 8 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT8TKRBV1LM; LHKADCLMTSTATES
				TEM 8 TKR bias V1 - limit evaluation
	3	1	U12	LHKT8TKRBV1ST
				TEM 8 TKR bias V1 - read out status
	4	12	U12	LHKT8TKRBV1
				TEM 8 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT8CAL33VALM; LHKADCLMTSTATES
				TEM 8 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VAST
				TEM 8 CAL analog 3.3 V - read out status
	4	12	U12	LHKT8CAL33VA
				TEM 8 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT8CALBSV1LM; LHKADCLMTSTATES
				TEM 8 CAL bias V1 - limit evaluation
	3	1	U12	LHKT8CALBSV1ST
				TEM 8 CAL bias V1 - read out status
	4	12	U12	LHKT8CALBSV1
				TEM 8 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT8CALBSV0LM; LHKADCLMTSTATES
				TEM 8 CAL bias V0 - limit evaluation
	3	1	U12	LHKT8CALBSV0ST
				TEM 8 CAL bias V0 - read out status
	4	12	U12	LHKT8CALBSV0
				TEM 8 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT8TEM28V0LM; LHKADCLMTSTATES
				TEM 8 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT8TEM28V0ST
				TEM 8 TEM 28 V (V0) - read out status
	4	12	U12	LHKT8TEM28V0
				TEM 8 TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKT8TEM33VLM; LHKADCLMTSTATES
				TEM 8 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT8TEM33VST
				TEM 8 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT8TEM33V
				TEM 8 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT8TEM28V1LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 8 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT8TEM28V1ST
				TEM 8 TEM 28 V (V1) - read out status
	4	12	U12	LHKT8TEM28V1
				TEM 8 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT9TKR25VDLM; LHKADCLMTSTATES
				TEM 9 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VDST
				TEM 9 TKR digital 2.5 V - read out status
	4	12	U12	LHKT9TKR25VD
				TEM 9 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT9TKR15VAALM; LHKADCLMTSTATES
				TEM 9 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT9TKR15VAAST
				TEM 9 TKR analog 1.5 V - read out status
	4	12	U12	LHKT9TKR15VAA
				TEM 9 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT9TKR25VABLM; LHKADCLMTSTATES
				TEM 9 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VABST
				TEM 9 TKR analog 2.5 V - read out status
	4	12	U12	LHKT9TKR25VAB
				TEM 9 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT9TKRBV0LM; LHKADCLMTSTATES
				TEM 9 TKR bias V0 - limit evaluation
	3	1	U12	LHKT9TKRBV0ST
				TEM 9 TKR bias V0 - read out status
	4	12	U12	LHKT9TKRBV0
				TEM 9 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT9CAL33VDLM; LHKADCLMTSTATES
				TEM 9 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VDST
				TEM 9 CAL digital 3.3 V - read out status
	4	12	U12	LHKT9CAL33VD
				TEM 9 CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKT9TKRBV1LM; LHKADCLMTSTATES
				TEM 9 TKR bias V1 - limit evaluation
	3	1	U12	LHKT9TKRBV1ST
				TEM 9 TKR bias V1 - read out status
	4	12	U12	LHKT9TKRBV1
				TEM 9 TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKT9CAL33VALM; LHKADCLMTSTATES
				TEM 9 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VAST
				TEM 9 CAL analog 3.3 V - read out status
	4	12	U12	LHKT9CAL33VA
				TEM 9 CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKT9CALBSV1LM
				TEM 9 CAL bias V1 - limit evaluation
	3	1	U12	LHKT9CALBSV1ST
				TEM 9 CAL bias V1 - read out status
	4	12	U12	LHKT9CALBSV1

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 9 CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKT9CALBSV0LM
				TEM 9 CAL bias V0 - limit evaluation
	3	1	U12	LHKT9CALBSV0ST
				TEM 9 CAL bias V0 - read out status
	4	12	U12	LHKT9CALBSV0
				TEM 9 CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKT9TEM28V0LM
				TEM 9 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT9TEM28V0ST
				TEM 9 TEM 28 V (V0) - read out status
	4	12	U12	LHKT9TEM28V0
				TEM 9 TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKT9TEM33VLM; LHKADCLMTSTATES
				TEM 9 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT9TEM33VST
				TEM 9 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT9TEM33V
				TEM 9 TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKT9TEM28V1LM; LHKADCLMTSTATES
				TEM 9 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT9TEM28V1ST
				TEM 9 TEM 28 V (V1) - read out status
	4	12	U12	LHKT9TEM28V1
				TEM 9 TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKTATKR25VDLM; LHKADCLMTSTATES
				TEM A TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VDST
				TEM A TKR digital 2.5 V - read out status
	4	12	U12	LHKTATKR25VD
				TEM A TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKTATKR15VAALM; LHKADCLMTSTATES
				TEM A TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTATKR15VAAST
				TEM A TKR analog 1.5 V - read out status
	4	12	U12	LHKTATKR15VAA
				TEM A TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKTATKR25VABLM; LHKADCLMTSTATES
				TEM A TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VABST
				TEM A TKR analog 2.5 V - read out status
	4	12	U12	LHKTATKR25VAB
				TEM A TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKTATKRBV0LM; LHKADCLMTSTATES
				TEM A TKR bias V0 - limit evaluation
	3	1	U12	LHKTATKRBV0ST
				TEM A TKR bias V0 - read out status
	4	12	U12	LHKTATKRBV0
				TEM A TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKTACAL33VDLM; LHKADCLMTSTATES
				TEM A CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VDST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A CAL digital 3.3 V - read out status
	4	12	U12	LHKTACAL33VD
				TEM A CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKTATKRBV1LM; LHKADCLMTSTATES
				TEM A TKR bias V1 - limit evaluation
	3	1	U12	LHKTATKRBV1ST
				TEM A TKR bias V1 - read out status
	4	12	U12	LHKTATKRBV1
				TEM A TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKTACAL33VALM; LHKADCLMTSTATES
				TEM A CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VAST
				TEM A CAL analog 3.3 V - read out status
	4	12	U12	LHKTACAL33VA
				TEM A CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKTACALBSV1LM; LHKADCLMTSTATES
				TEM A CAL bias V1 - limit evaluation
	3	1	U12	LHKTACALBSV1ST
				TEM A CAL bias V1 - read out status
	4	12	U12	LHKTACALBSV1
				TEM A CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKTACALBSV0LM; LHKADCLMTSTATES
				TEM A CAL bias V0 - limit evaluation
	3	1	U12	LHKTACALBSV0ST
				TEM A CAL bias V0 - read out status
	4	12	U12	LHKTACALBSV0
				TEM A CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKTATEM28V0LM; LHKADCLMTSTATES
				TEM A TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTATEM28V0ST
				TEM A TEM 28 V (V0) - read out status
	4	12	U12	LHKTATEM28V0
				TEM A TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKTATEM33VLM; LHKADCLMTSTATES
				TEM A TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTATEM33VST
				TEM A TEM digitial 3.3 V - read out status
	4	12	U12	LHKTATEM33V
				TEM A TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKTATEM28V1LM; LHKADCLMTSTATES
				TEM A TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTATEM28V1ST
				TEM A TEM 28 V (V1) - read out status
	4	12	U12	LHKTATEM28V1
				TEM A TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKTBTKR25VDLM; LHKADCLMTSTATES
				TEM B TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VDST
				TEM B TKR digital 2.5 V - read out status
	4	12	U12	LHKTBTKR25VD
				TEM B TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKTBTKR15VAALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTBTKR15VAAST
				TEM B TKR analog 1.5 V - read out status
	4	12	U12	LHKTBTKR15VAA
				TEM B TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKTBTKR25VABLM; LHKADCLMTSTATES
				TEM B TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VABST
				TEM B TKR analog 2.5 V - read out status
	4	12	U12	LHKTBTKR25VAB
				TEM B TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKTBTKRBV0LM; LHKADCLMTSTATES
				TEM B TKR bias V0 - limit evaluation
	3	1	U12	LHKTBTKRBV0ST
				TEM B TKR bias V0 - read out status
	4	12	U12	LHKTBTKRBV0
				TEM B TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKTBCAL33VDLM; LHKADCLMTSTATES
				TEM B CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VDST
				TEM B CAL digital 3.3 V - read out status
	4	12	U12	LHKTBCAL33VD
				TEM B CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTBTKRBV1LM; LHKADCLMTSTATES
				TEM B TKR bias V1 - limit evaluation
	3	1	U12	LHKTBTKRBV1ST
				TEM B TKR bias V1 - read out status
	4	12	U12	LHKTBTKRBV1
				TEM B TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTBCAL33VALM; LHKADCLMTSTATES
				TEM B CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VAST
				TEM B CAL analog 3.3 V - read out status
	4	12	U12	LHKTBCAL33VA
				TEM B CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTBCALBSV1LM
				TEM B CAL bias V1 - limit evaluation
	3	1	U12	LHKTBCALBSV1ST
				TEM B CAL bias V1 - read out status
	4	12	U12	LHKTBCALBSV1
				TEM B CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTBCALBSV0LM
				TEM B CAL bias V0 - limit evaluation
	3	1	U12	LHKTBCALBSV0ST
				TEM B CAL bias V0 - read out status
	4	12	U12	LHKTBCALBSV0
				TEM B CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTBTEM28V0LM
				TEM B TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTBTEM28V0ST
				TEM B TEM 28 V (V0) - read out status
	4	12	U12	LHKTBTEM28V0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTBTEM33VLM; LHKADCLMTSTATES TEM B TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTBTEM33VST TEM B TEM digitial 3.3 V - read out status
	4	12	U12	LHKTBTEM33V TEM B TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTBTEM28V1LM; LHKADCLMTSTATES TEM B TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTBTEM28V1ST TEM B TEM 28 V (V1) - read out status
	4	12	U12	LHKTBTEM28V1 TEM B TEM 28 V (V1) - raw ADC value

14.3.42 `TemEnvPwr03` (571/0x23B)

Description:

"TEM power ADCs for TEMs 12-15" Telemetry Packet

TEM power ADCs for TEMs 12-15

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTWRPWR03 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTCTKR25VDLM; LHKADCLMTSTATES TEM C TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VDST TEM C TKR digital 2.5 V - read out status
	4	12	U12	LHKTCTKR25VD TEM C TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKTCTKR15VAALM; LHKADCLMTSTATES TEM C TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTCTKR15VAAST TEM C TKR analog 1.5 V - read out status
	4	12	U12	LHKTCTKR15VAA TEM C TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKTCTKR25VABLM; LHKADCLMTSTATES TEM C TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VABST TEM C TKR analog 2.5 V - read out status
	4	12	U12	LHKTCTKR25VAB TEM C TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKTCTKRBV0LM; LHKADCLMTSTATES TEM C TKR bias V0 - limit evaluation
	3	1	U12	LHKTCTKRBV0ST TEM C TKR bias V0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	`LHKTCTKRBV0` TEM C TKR bias V0 - raw ADC value
`0x01C`	0	3	U12	`LHKTCCAL33VDLM; LHKADCLMTSTATES` TEM C CAL digital 3.3 V - limit evaluation
	3	1	U12	`LHKTCCAL33VDST` TEM C CAL digital 3.3 V - read out status
	4	12	U12	`LHKTCCAL33VD` TEM C CAL digital 3.3 V - raw ADC value
`0x01E`	0	3	U12	`LHKTCTKRBV1LM; LHKADCLMTSTATES` TEM C TKR bias V1 - limit evaluation
	3	1	U12	`LHKTCTKRBV1ST` TEM C TKR bias V1 - read out status
	4	12	U12	`LHKTCTKRBV1` TEM C TKR bias V1 - raw ADC value
`0x020`	0	3	U12	`LHKTCCAL33VALM; LHKADCLMTSTATES` TEM C CAL analog 3.3 V - limit evaluation
	3	1	U12	`LHKTCCAL33VAST` TEM C CAL analog 3.3 V - read out status
	4	12	U12	`LHKTCCAL33VA` TEM C CAL analog 3.3 - raw ADC value
`0x022`	0	3	U12	`LHKTCCALBSV1LM; LHKADCLMTSTATES` TEM C CAL bias V1 - limit evaluation
	3	1	U12	`LHKTCCALBSV1ST` TEM C CAL bias V1 - read out status
	4	12	U12	`LHKTCCALBSV1` TEM C CAL bias V1 - raw ADC value
`0x024`	0	3	U12	`LHKTCCALBSV0LM; LHKADCLMTSTATES` TEM C CAL bias V0 - limit evaluation
	3	1	U12	`LHKTCCALBSV0ST` TEM C CAL bias V0 - read out status
	4	12	U12	`LHKTCCALBSV0` TEM C CAL bias V0 - raw ADC value
`0x026`	0	3	U12	`LHKTCTEM28V0LM; LHKADCLMTSTATES` TEM C TEM 28 V (V0) - limit evaluation
	3	1	U12	`LHKTCTEM28V0ST` TEM C TEM 28 V (V0) - read out status
	4	12	U12	`LHKTCTEM28V0` TEM C TEM 28 V (V0) - raw ADC value
`0x028`	0	3	U12	`LHKTCTEM33VLM; LHKADCLMTSTATES` TEM C TEM digitial 3.3 V - limit evaluation
	3	1	U12	`LHKTCTEM33VST` TEM C TEM digitial 3.3 V - read out status
	4	12	U12	`LHKTCTEM33V` TEM C TEM digitial 3.3 V - raw ADC value
`0x02A`	0	3	U12	`LHKTCTEM28V1LM; LHKADCLMTSTATES` TEM C TEM 28 V (V1) - limit evaluation
	3	1	U12	`LHKTCTEM28V1ST` TEM C TEM 28 V (V1) - read out status
	4	12	U12	`LHKTCTEM28V1` TEM C TEM 28 V (V1) - raw ADC value
`0x02C`	0	3	U12	`LHKTDTKR25VDLM; LHKADCLMTSTATES` TEM D TKR digital 2.5 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTDTKR25VDST TEM D TKR digital 2.5 V - read out status
	4	12	U12	LHKTDTKR25VD TEM D TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKTDTKR15VAALM; LHKADCLMTSTATES TEM D TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTDTKR15VAAST TEM D TKR analog 1.5 V - read out status
	4	12	U12	LHKTDTKR15VAA TEM D TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKTDTKR25VABLM; LHKADCLMTSTATES TEM D TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VABST TEM D TKR analog 2.5 V - read out status
	4	12	U12	LHKTDTKR25VAB TEM D TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKTDTKRBV0LM; LHKADCLMTSTATES TEM D TKR bias V0 - limit evaluation
	3	1	U12	LHKTDTKRBV0ST TEM D TKR bias V0 - read out status
	4	12	U12	LHKTDTKRBV0 TEM D TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKTDCAL33VDLM; LHKADCLMTSTATES TEM D CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VDST TEM D CAL digital 3.3 V - read out status
	4	12	U12	LHKTDCAL33VD TEM D CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKTDTKRBV1LM; LHKADCLMTSTATES TEM D TKR bias V1 - limit evaluation
	3	1	U12	LHKTDTKRBV1ST TEM D TKR bias V1 - read out status
	4	12	U12	LHKTDTKRBV1 TEM D TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKTDCAL33VALM; LHKADCLMTSTATES TEM D CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VAST TEM D CAL analog 3.3 V - read out status
	4	12	U12	LHKTDCAL33VA TEM D CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKTDCALBSV1LM TEM D CAL bias V1 - limit evaluation
	3	1	U12	LHKTDCALBSV1ST TEM D CAL bias V1 - read out status
	4	12	U12	LHKTDCALBSV1 TEM D CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKTDCALBSV0LM TEM D CAL bias V0 - limit evaluation
	3	1	U12	LHKTDCALBSV0ST TEM D CAL bias V0 - read out status
	4	12	U12	LHKTDCALBSV0 TEM D CAL bias V0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03E	0	3	U12	LHKTDTEM28V0LM TEM D TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTDTEM28V0ST TEM D TEM 28 V (V0) - read out status
	4	12	U12	LHKTDTEM28V0 TEM D TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKTDTEM33VLM; LHKADCLMTSTATES TEM D TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTDTEM33VST TEM D TEM digitial 3.3 V - read out status
	4	12	U12	LHKTDTEM33V TEM D TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKTDTEM28V1LM; LHKADCLMTSTATES TEM D TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTDTEM28V1ST TEM D TEM 28 V (V1) - read out status
	4	12	U12	LHKTDTEM28V1 TEM D TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKTETKR25VDLM; LHKADCLMTSTATES TEM E TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VDST TEM E TKR digital 2.5 V - read out status
	4	12	U12	LHKTETKR25VD TEM E TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKTETKR15VAALM; LHKADCLMTSTATES TEM E TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTETKR15VAAST TEM E TKR analog 1.5 V - read out status
	4	12	U12	LHKTETKR15VAA TEM E TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKTETKR25VABLM; LHKADCLMTSTATES TEM E TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VABST TEM E TKR analog 2.5 V - read out status
	4	12	U12	LHKTETKR25VAB TEM E TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKTETKRBV0LM; LHKADCLMTSTATES TEM E TKR bias V0 - limit evaluation
	3	1	U12	LHKTETKRBV0ST TEM E TKR bias V0 - read out status
	4	12	U12	LHKTETKRBV0 TEM E TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKTECAL33VDLM; LHKADCLMTSTATES TEM E CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VDST TEM E CAL digital 3.3 V - read out status
	4	12	U12	LHKTECAL33VD TEM E CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKTETKRBV1LM; LHKADCLMTSTATES TEM E TKR bias V1 - limit evaluation
	3	1	U12	LHKTETKRBV1ST TEM E TKR bias V1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTETKRBV1 TEM E TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKTECAL33VALM; LHKADCLMTSTATES TEM E CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VAST TEM E CAL analog 3.3 V - read out status
	4	12	U12	LHKTECAL33VA TEM E CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKTECALBSV1LM; LHKADCLMTSTATES TEM E CAL bias V1 - limit evaluation
	3	1	U12	LHKTECALBSV1ST TEM E CAL bias V1 - read out status
	4	12	U12	LHKTECALBSV1 TEM E CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKTECALBSV0LM; LHKADCLMTSTATES TEM E CAL bias V0 - limit evaluation
	3	1	U12	LHKTECALBSV0ST TEM E CAL bias V0 - read out status
	4	12	U12	LHKTECALBSV0 TEM E CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKTETEM28V0LM; LHKADCLMTSTATES TEM E TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTETEM28V0ST TEM E TEM 28 V (V0) - read out status
	4	12	U12	LHKTETEM28V0 TEM E TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKTETEM33VLM; LHKADCLMTSTATES TEM E TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTETEM33VST TEM E TEM digitial 3.3 V - read out status
	4	12	U12	LHKTETEM33V TEM E TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKTETEM28V1LM; LHKADCLMTSTATES TEM E TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTETEM28V1ST TEM E TEM 28 V (V1) - read out status
	4	12	U12	LHKTETEM28V1 TEM E TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKTFTKR25VDLM; LHKADCLMTSTATES TEM F TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTFTKR25VDST TEM F TKR digital 2.5 V - read out status
	4	12	U12	LHKTFTKR25VD TEM F TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKTFTKR15VAALM; LHKADCLMTSTATES TEM F TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTFTKR15VAAST TEM F TKR analog 1.5 V - read out status
	4	12	U12	LHKTFTKR15VAA TEM F TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKTFTKR25VABLM; LHKADCLMTSTATES TEM F TKR analog 2.5 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTFTKR25VABST TEM F TKR analog 2.5 V - read out status
	4	12	U12	LHKTFTKR25VAB TEM F TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKTFTKRBV0LM; LHKADCLMTSTATES TEM F TKR bias V0 - limit evaluation
	3	1	U12	LHKTFTKRBV0ST TEM F TKR bias V0 - read out status
	4	12	U12	LHKTFTKRBV0 TEM F TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKTFCAL33VDLM; LHKADCLMTSTATES TEM F CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VDST TEM F CAL digital 3.3 V - read out status
	4	12	U12	LHKTFCAL33VD TEM F CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTFTKRBV1LM; LHKADCLMTSTATES TEM F TKR bias V1 - limit evaluation
	3	1	U12	LHKTFTKRBV1ST TEM F TKR bias V1 - read out status
	4	12	U12	LHKTFTKRBV1 TEM F TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTFCAL33VALM; LHKADCLMTSTATES TEM F CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VAST TEM F CAL analog 3.3 V - read out status
	4	12	U12	LHKTFCAL33VA TEM F CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTFCALBSV1LM TEM F CAL bias V1 - limit evaluation
	3	1	U12	LHKTFCALBSV1ST TEM F CAL bias V1 - read out status
	4	12	U12	LHKTFCALBSV1 TEM F CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTFCALBSV0LM TEM F CAL bias V0 - limit evaluation
	3	1	U12	LHKTFCALBSV0ST TEM F CAL bias V0 - read out status
	4	12	U12	LHKTFCALBSV0 TEM F CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTFTEM28V0LM TEM F TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTFTEM28V0ST TEM F TEM 28 V (V0) - read out status
	4	12	U12	LHKTFTEM28V0 TEM F TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTFTEM33VLM; LHKADCLMTSTATES TEM F TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTFTEM33VST TEM F TEM digitial 3.3 V - read out status
	4	12	U12	LHKTFTEM33V TEM F TEM digitial 3.3 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x072	0	3	U12	LHKTFTEM28V1LM; LHKADCLMTSTATES TEM F TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTFTEM28V1ST TEM F TEM 28 V (V1) - read out status
	4	12	U12	LHKTFTEM28V1 TEM F TEM 28 V (V1) - raw ADC value

14.3.43 `AemEnv00` (572/0x23C)

Description:

"AEM environmental quantities for FREE boards 0-5 and the DAB" Telemetry Packet

AEM environmental quantities for FREE boards 0-5 and the DAB

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVAEMPWR00 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	? ?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?
	10	1	U12	? ?
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAFR33ISUMLM; LHKADCLMTSTATES AEM DAB FREE digital current sum - limit evaluation
	3	1	U12	LHKAFR33ISUMST

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM DAB FREE digital current sum - read out status
	4	12	U12	LHKAFR33ISUM AEM DAB FREE digital current sum - raw ADC value
0x016	0	3	U12	LHKADABTEMPLM; LHKADCLMTSTATES AEM DAB board temperature - limit evaluation
	3	1	U12	LHKADABTEMPSTAT AEM DAB board temperature - read out status
	4	12	U12	LHKADABTEMP AEM DAB board temperature - raw ADC value
0x018	0	3	U12	LHKAFR28ISUMLM; LHKADCLMTSTATES AEM DAB FREE HV current sum - limit evaluation
	3	1	U12	LHKAFR28ISUMST AEM DAB FREE HV current sum - read out status
	4	12	U12	LHKAFR28ISUM AEM DAB FREE HV current sum - raw ADC value
0x01A	0	3	U12	LHKADAB33VLM AEM DAB digital 3.3 V - limit evaluation
	3	1	U12	LHKADAB33VSTAT AEM DAB digital 3.3 V - read out status
	4	12	U12	LHKADAB33V AEM DAB digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKAEMFR0VDLM; LHKADCLMTSTATES AEM FREE board 0 VDD - limit evaluation
	3	1	U12	LHKAEMFR0VDST AEM FREE board 0 VDD - read out status
	4	12	U12	LHKAEMFR0VD AEM FREE board 0 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR0TLM; LHKADCLMTSTATES AEM FREE board 0 temperature - limit evaluation
	3	1	U12	LHKAEMFR0TST AEM FREE board 0 temperature - read out status
	4	12	U12	LHKAEMFR0T AEM FREE board 0 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR0V1LM; LHKADCLMTSTATES AEM FREE board 0 HV1 - limit evaluation
	3	1	U12	LHKAEMFR0V1ST AEM FREE board 0 HV1 - read out status
	4	12	U12	LHKAEMFR0V1 AEM FREE board 0 HV1 - raw ADC value
0x022	0	3	U12	LHKAEMFR0V2LM; LHKADCLMTSTATES AEM FREE board 0 HV2 - limit evaluation
	3	1	U12	LHKAEMFR0V2ST AEM FREE board 0 HV2 - read out status
	4	12	U12	LHKAEMFR0V2 AEM FREE board 0 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR1VDLM; LHKADCLMTSTATES AEM FREE board 1 VDD - limit evaluation
	3	1	U12	LHKAEMFR1VDST AEM FREE board 1 VDD - read out status
	4	12	U12	LHKAEMFR1VD AEM FREE board 1 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR1TLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 1 temperature - limit evaluation
	3	1	U12	LHKAEMFR1TST
				AEM FREE board 1 temperature - read out status
	4	12	U12	LHKAEMFR1T
				AEM FREE board 1 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR1V1LM; LHKADCLMTSTATES
				AEM FREE board 1 HV1 - limit evaluation
	3	1	U12	LHKAEMFR1V1ST
				AEM FREE board 1 HV1 - read out status
	4	12	U12	LHKAEMFR1V1
				AEM FREE board 1 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR1V2LM; LHKADCLMTSTATES
				AEM FREE board 1 HV2 - limit evaluation
	3	1	U12	LHKAEMFR1V2ST
				AEM FREE board 1 HV2 - read out status
	4	12	U12	LHKAEMFR1V2
				AEM FREE board 1 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR2VDLM; LHKADCLMTSTATES
				AEM FREE board 2 VDD - limit evaluation
	3	1	U12	LHKAEMFR2VDST
				AEM FREE board 2 VDD - read out status
	4	12	U12	LHKAEMFR2VD
				AEM FREE board 2 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR2TLM; LHKADCLMTSTATES
				AEM FREE board 2 temperature - limit evaluation
	3	1	U12	LHKAEMFR2TST
				AEM FREE board 2 temperature - read out status
	4	12	U12	LHKAEMFR2T
				AEM FREE board 2 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR2V1LM; LHKADCLMTSTATES
				AEM FREE board 2 HV1 - limit evaluation
	3	1	U12	LHKAEMFR2V1ST
				AEM FREE board 2 HV1 - read out status
	4	12	U12	LHKAEMFR2V1
				AEM FREE board 2 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR2V2LM; LHKADCLMTSTATES
				AEM FREE board 2 HV2 - limit evaluation
	3	1	U12	LHKAEMFR2V2ST
				AEM FREE board 2 HV2 - read out status
	4	12	U12	LHKAEMFR2V2
				AEM FREE board 2 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR3VDLM; LHKADCLMTSTATES
				AEM FREE board 3 VDD - limit evaluation
	3	1	U12	LHKAEMFR3VDST
				AEM FREE board 3 VDD - read out status
	4	12	U12	LHKAEMFR3VD
				AEM FREE board 3 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR3TLM; LHKADCLMTSTATES
				AEM FREE board 3 temperature - limit evaluation
	3	1	U12	LHKAEMFR3TST
				AEM FREE board 3 temperature - read out status
	4	12	U12	LHKAEMFR3T

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 3 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR3V1LM; LHKADCLMTSTATES AEM FREE board 3 HV1 - limit evaluation
	3	1	U12	LHKAEMFR3V1ST AEM FREE board 3 HV1 - read out status
	4	12	U12	LHKAEMFR3V1 AEM FREE board 3 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR3V2LM; LHKADCLMTSTATES AEM FREE board 3 HV2 - limit evaluation
	3	1	U12	LHKAEMFR3V2ST AEM FREE board 3 HV2 - read out status
	4	12	U12	LHKAEMFR3V2 AEM FREE board 3 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR4VDLM; LHKADCLMTSTATES AEM FREE board 4 VDD - limit evaluation
	3	1	U12	LHKAEMFR4VDST AEM FREE board 4 VDD - read out status
	4	12	U12	LHKAEMFR4VD AEM FREE board 4 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR4TLM; LHKADCLMTSTATES AEM FREE board 4 temperature - limit evaluation
	3	1	U12	LHKAEMFR4TST AEM FREE board 4 temperature - read out status
	4	12	U12	LHKAEMFR4T AEM FREE board 4 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR4V1LM; LHKADCLMTSTATES AEM FREE board 4 HV1 - limit evaluation
	3	1	U12	LHKAEMFR4V1ST AEM FREE board 4 HV1 - read out status
	4	12	U12	LHKAEMFR4V1 AEM FREE board 4 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR4V2LM; LHKADCLMTSTATES AEM FREE board 4 HV2 - limit evaluation
	3	1	U12	LHKAEMFR4V2ST AEM FREE board 4 HV2 - read out status
	4	12	U12	LHKAEMFR4V2 AEM FREE board 4 HV2 - raw ADC value
0x044	0	3	U12	LHKAEMFR5VDLM; LHKADCLMTSTATES AEM FREE board 5 VDD - limit evaluation
	3	1	U12	LHKAEMFR5VDST AEM FREE board 5 VDD - read out status
	4	12	U12	LHKAEMFR5VD AEM FREE board 5 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR5TLM; LHKADCLMTSTATES AEM FREE board 5 temperature - limit evaluation
	3	1	U12	LHKAEMFR5TST AEM FREE board 5 temperature - read out status
	4	12	U12	LHKAEMFR5T AEM FREE board 5 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR5V1LM; LHKADCLMTSTATES AEM FREE board 5 HV1 - limit evaluation
	3	1	U12	LHKAEMFR5V1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 5 HV1 - read out status
	4	12	U12	LHKAEMFR5V1 AEM FREE board 5 HV1 - raw ADC value
0x04A	0	3	U12	LHKAEMFR5V2LM; LHKADCLMTSTATES AEM FREE board 5 HV2 - limit evaluation
	3	1	U12	LHKAEMFR5V2ST AEM FREE board 5 HV2 - read out status
	4	12	U12	LHKAEMFR5V2 AEM FREE board 5 HV2 - raw ADC value
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.44 `AemEnv01` (573/0x23D)

Description:

"AEM environmental quantities for FREE boards 6-11 and the DAB" Telemetry Packet

AEM environmental quantities for FREE boards 6-11 and the DAB

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVAEMPWR01 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	? ?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?
	10	1	U12	? ?
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAFR33ISUMLM; LHKADCLMTSTATES AEM DAB FREE digital current sum - limit evaluation
	3	1	U12	LHKAFR33ISUMST AEM DAB FREE digital current sum - read out status
	4	12	U12	LHKAFR33ISUM AEM DAB FREE digital current sum - raw ADC value
0x016	0	3	U12	LHKADABTEMPLM; LHKADCLMTSTATES AEM DAB board temperature - limit evaluation
	3	1	U12	LHKADABTEMPSTAT AEM DAB board temperature - read out status
	4	12	U12	LHKADABTEMP

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM DAB board temperature - raw ADC value
0x018	0	3	U12	LHKAFR28ISUMLM; LHKADCLMTSTATES AEM DAB FREE HV current sum - limit evaluation
	3	1	U12	LHKAFR28ISUMST AEM DAB FREE HV current sum - read out status
	4	12	U12	LHKAFR28ISUM AEM DAB FREE HV current sum - raw ADC value
0x01A	0	3	U12	LHKADAB33VLM AEM DAB digital 3.3 V - limit evaluation
	3	1	U12	LHKADAB33VSTAT AEM DAB digital 3.3 V - read out status
	4	12	U12	LHKADAB33V AEM DAB digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKAEMFR6VDLM; LHKADCLMTSTATES AEM FREE board 6 VDD - limit evaluation
	3	1	U12	LHKAEMFR6VDST AEM FREE board 6 VDD - read out status
	4	12	U12	LHKAEMFR6VD AEM FREE board 6 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR6TLM; LHKADCLMTSTATES AEM FREE board 6 temperature - limit evaluation
	3	1	U12	LHKAEMFR6TST AEM FREE board 6 temperature - read out status
	4	12	U12	LHKAEMFR6T AEM FREE board 6 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR6V1LM; LHKADCLMTSTATES AEM FREE board 6 HV1 - limit evaluation
	3	1	U12	LHKAEMFR6V1ST AEM FREE board 6 HV1 - read out status
	4	12	U12	LHKAEMFR6V1 AEM FREE board 6 HV1 - raw ADC value
0x022	0	3	U12	LHKAEMFR6V2LM; LHKADCLMTSTATES AEM FREE board 6 HV2 - limit evaluation
	3	1	U12	LHKAEMFR6V2ST AEM FREE board 6 HV2 - read out status
	4	12	U12	LHKAEMFR6V2 AEM FREE board 6 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR7VDLM; LHKADCLMTSTATES AEM FREE board 7 VDD - limit evaluation
	3	1	U12	LHKAEMFR7VDST AEM FREE board 7 VDD - read out status
	4	12	U12	LHKAEMFR7VD AEM FREE board 7 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR7TLM; LHKADCLMTSTATES AEM FREE board 7 temperature - limit evaluation
	3	1	U12	LHKAEMFR7TST AEM FREE board 7 temperature - read out status
	4	12	U12	LHKAEMFR7T AEM FREE board 7 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR7V1LM; LHKADCLMTSTATES AEM FREE board 7 HV1 - limit evaluation
	3	1	U12	LHKAEMFR7V1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 7 HV1 - read out status
	4	12	U12	LHKAEMFR7V1
				AEM FREE board 7 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR7V2LM; LHKADCLMTSTATES
				AEM FREE board 7 HV2 - limit evaluation
	3	1	U12	LHKAEMFR7V2ST
				AEM FREE board 7 HV2 - read out status
	4	12	U12	LHKAEMFR7V2
				AEM FREE board 7 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR8VDLM; LHKADCLMTSTATES
				AEM FREE board 8 VDD - limit evaluation
	3	1	U12	LHKAEMFR8VDST
				AEM FREE board 8 VDD - read out status
	4	12	U12	LHKAEMFR8VD
				AEM FREE board 8 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR8TLM; LHKADCLMTSTATES
				AEM FREE board 8 temperature - limit evaluation
	3	1	U12	LHKAEMFR8TST
				AEM FREE board 8 temperature - read out status
	4	12	U12	LHKAEMFR8T
				AEM FREE board 8 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR8V1LM; LHKADCLMTSTATES
				AEM FREE board 8 HV1 - limit evaluation
	3	1	U12	LHKAEMFR8V1ST
				AEM FREE board 8 HV1 - read out status
	4	12	U12	LHKAEMFR8V1
				AEM FREE board 8 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR8V2LM; LHKADCLMTSTATES
				AEM FREE board 8 HV2 - limit evaluation
	3	1	U12	LHKAEMFR8V2ST
				AEM FREE board 8 HV2 - read out status
	4	12	U12	LHKAEMFR8V2
				AEM FREE board 8 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR9VDLM; LHKADCLMTSTATES
				AEM FREE board 9 VDD - limit evaluation
	3	1	U12	LHKAEMFR9VDST
				AEM FREE board 9 VDD - read out status
	4	12	U12	LHKAEMFR9VD
				AEM FREE board 9 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR9TLM; LHKADCLMTSTATES
				AEM FREE board 9 temperature - limit evaluation
	3	1	U12	LHKAEMFR9TST
				AEM FREE board 9 temperature - read out status
	4	12	U12	LHKAEMFR9T
				AEM FREE board 9 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR9V1LM; LHKADCLMTSTATES
				AEM FREE board 9 HV1 - limit evaluation
	3	1	U12	LHKAEMFR9V1ST
				AEM FREE board 9 HV1 - read out status
	4	12	U12	LHKAEMFR9V1
				AEM FREE board 9 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR9V2LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 9 HV2 - limit evaluation
	3	1	U12	LHKAEMFR9V2ST
				AEM FREE board 9 HV2 - read out status
	4	12	U12	LHKAEMFR9V2
				AEM FREE board 9 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR10VDLM; LHKADCLMTSTATES
				AEM FREE board 10 VDD - limit evaluation
	3	1	U12	LHKAEMFR10VDST
				AEM FREE board 10 VDD - read out status
	4	12	U12	LHKAEMFR10VD
				AEM FREE board 10 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR10TLM; LHKADCLMTSTATES
				AEM FREE board 10 temperature - limit evaluation
	3	1	U12	LHKAEMFR10TST
				AEM FREE board 10 temperature - read out status
	4	12	U12	LHKAEMFR10T
				AEM FREE board 10 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR10V1LM; LHKADCLMTSTATES
				AEM FREE board 10 HV1 - limit evaluation
	3	1	U12	LHKAEMFR10V1ST
				AEM FREE board 10 HV1 - read out status
	4	12	U12	LHKAEMFR10V1
				AEM FREE board 10 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR10V2LM; LHKADCLMTSTATES
				AEM FREE board 10 HV2 - limit evaluation
	3	1	U12	LHKAEMFR10V2ST
				AEM FREE board 10 HV2 - read out status
	4	12	U12	LHKAEMFR10V2
				AEM FREE board 10 HV2 - raw ADC value
0x044	0	3	U12	LHKAEMFR11VDLM; LHKADCLMTSTATES
				AEM FREE board 11 VDD - limit evaluation
	3	1	U12	LHKAEMFR11VDST
				AEM FREE board 11 VDD - read out status
	4	12	U12	LHKAEMFR11VD
				AEM FREE board 11 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR11TLM; LHKADCLMTSTATES
				AEM FREE board 11 temperature - limit evaluation
	3	1	U12	LHKAEMFR11TST
				AEM FREE board 11 temperature - read out status
	4	12	U12	LHKAEMFR11T
				AEM FREE board 11 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR11V1LM; LHKADCLMTSTATES
				AEM FREE board 11 HV1 - limit evaluation
	3	1	U12	LHKAEMFR11V1ST
				AEM FREE board 11 HV1 - read out status
	4	12	U12	LHKAEMFR11V1
				AEM FREE board 11 HV1 - raw ADC value
0x04A	0	3	U12	LHKAEMFR11V2LM; LHKADCLMTSTATES
				AEM FREE board 11 HV2 - limit evaluation
	3	1	U12	LHKAEMFR11V2ST
				AEM FREE board 11 HV2 - read out status
	4	12	U12	LHKAEMFR11V2

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 11 HV2 - raw ADC value
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.45 `StatusSiu` (576/0x240)

Description:

"SIU status packet" Telemetry Packet

Contains: SIU CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVSTATSIU Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKSIUUPTIME SIU time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKSIUPCIERR SIU count of PCI errors
0x016	0	16	U12	LHKSIUCMERR SIU count of correctable memory errors
0x018	0	16	U12	LHKSIUUMERR SIU count of uncorrectable memory errors
0x01A	0	16	U12	LHKSIUCPUJTEMP SIU CPU junction temperature
0x01C	0	32	U1234	LHKSIUSCRSTART SIU memory scrub - most recent start
0x020	0	32	U1234	LHKSIUSCREND SIU memory scrub - most recent end
0x024	0	32	U1234	LHKSIUSCRPERIOD SIU memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKSIUPIDSCIN2 SIU PID input 2 (from spacecraft)
	6	1	U1	LHKSIUPIDSCIN1 SIU PID input 1 (from spacecraft)
	7	1	U1	LHKSIUPIDSCIN0 SIU PID input 0 (from spacecraft)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKSIUTHSPPS SIU status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKSIUTHSTT SIU status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKSFILSTATE; LHKFILESTATES SIU file upload state
0x030	0	32	U1234	LHKSFILCURSIZE SIU file size current
0x034	0	32	U1234	LHKSFILPKTCNT SIU file packet count
0x038	0	32	U1234	LHKSFILERRCODE SIU file error code
0x03C	0	32	U1234	LHKSFILERRCNT SIU file error count
0x040	0	32	U1234	LHKSFILCOMID SIU file ID Commit
0x044	0	32	U1234	LHKSMEMLDSTAT SIU status of most recent load action
0x048	0	32	U1234	LHKSMEMLDACT SIU memory load active flag
0x04C	0	32	U1234	LHKSMEMLDSTART

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU starting memory load address
0x050	0	32	U1234	LHKSMEMLDBYTES SIU memory load total bytes
0x054	0	32	U1234	LHKSMEMLDOFST SIU memory load offset
0x058	0	32	U1234	LHKSMEMDMPSTAT SIU memory dump status
0x05C	0	32	U1234	LHKSMEMDMPACT SIU memory dump active
0x060	0	32	U1234	LHKSMEMDMPSTRT SIU memory dump start address
0x064	0	32	U1234	LHKSMEMDMPBYTES SIU memory dump bytes
0x068	0	32	U1234	LHKSMEMDMPADDR SIU memory dump address
0x06C	0	32	U1234	LHKSMEMDMPFCDE SIU memory dump function code
0x070	0	32	U1234	LHKSMEMDMPTID SIU memory dump transaction ID

14.3.46 `StatusEpu0` (577/0x241)

Description:

"EPU0 status packet" Telemetry Packet

Contains: EPU0 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVSTATEPU0 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKEPU0UPTIME EPU0 time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKEPU0PCIERR EPU0 count of PCI errors
0x016	0	16	U12	LHKEPU0CMERR EPU0 count of correctable memory errors
0x018	0	16	U12	LHKEPU0UMERR EPU0 count of uncorrectable memory errors
0x01A	0	16	U12	LHKEPU0CPUJTEMP EPU0 CPU junction temperature
0x01C	0	32	U1234	LHKEPU0SCRSTART EPU0 memory scrub - most recent start
0x020	0	32	U1234	LHKEPU0SCREND EPU0 memory scrub - most recent end
0x024	0	32	U1234	LHKEPU0SCRPERIOD EPU0 memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKEPU0PIDSCIN2

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU0 PID input 2 (unused)
	6	1	U1	LHKEPU0PIDSCIN1 EPU0 PID input 1 (unused)
	7	1	U1	LHKEPU0PIDSCIN0 EPU0 PID input 0 (unused)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKEPU0THSPPS EPU0 status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKEPU0THSTT EPU0 status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKE0FILSTATE; LHKFILESTATES EPU0 file upload state
0x030	0	32	U1234	LHKE0FILCURSIZE EPU0 file size current
0x034	0	32	U1234	LHKE0FILPKTCNT EPU0 file packet count
0x038	0	32	U1234	LHKE0FILERRCODE EPU0 file error code
0x03C	0	32	U1234	LHKE0FILERRCNT EPU0 file error count
0x040	0	32	U1234	LHKE0FILCOMID EPU0 file ID Commit
0x044	0	32	U1234	LHKE0MEMLDSTAT EPU0 status of most recent load action
0x048	0	32	U1234	LHKE0MEMLDACT EPU0 memory load active flag
0x04C	0	32	U1234	LHKE0MEMLDSTART EPU0 starting memory load address
0x050	0	32	U1234	LHKE0MEMLDBYTES EPU0 memory load total bytes
0x054	0	32	U1234	LHKE0MEMLDOFST EPU0 memory load offset
0x058	0	32	U1234	LHKE0MEMDMPSTAT EPU0 memory dump status
0x05C	0	32	U1234	LHKE0MEMDMPACT EPU0 memory dump active
0x060	0	32	U1234	LHKE0MEMDMPSTRT EPU0 memory dump start address
0x064	0	32	U1234	LHKE0MEMDMPBYTES EPU0 memory dump bytes
0x068	0	32	U1234	LHKE0MEMDMPADDR EPU0 memory dump address
0x06C	0	32	U1234	LHKE0MEMDMPFCDE EPU0 memory dump function code
0x070	0	32	U1234	LHKE0MEMDMPTID EPU0 memory dump transaction ID

14.3.47 `StatusEpu1` (578/0x242)

Description:

"EPU1 status packet" Telemetry Packet

Contains: EPU1 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVSTATEPU1 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKEPU1UPTIME EPU1 time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKEPU1PCIERR EPU1 count of PCI errors
0x016	0	16	U12	LHKEPU1CMERR EPU1 count of correctable memory errors
0x018	0	16	U12	LHKEPU1UMERR EPU1 count of uncorrectable memory errors
0x01A	0	16	U12	LHKEPU1CPUJTEMP EPU1 CPU junction temperature
0x01C	0	32	U1234	LHKEPU1SCRSTART EPU1 memory scrub - most recent start
0x020	0	32	U1234	LHKEPU1SCREND EPU1 memory scrub - most recent end
0x024	0	32	U1234	LHKEPU1SCRPERIOD EPU1 memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKEPU1PIDSCIN2 EPU1 PID input 2 (unused)
	6	1	U1	LHKEPU1PIDSCIN1 EPU1 PID input 1 (unused)
	7	1	U1	LHKEPU1PIDSCIN0 EPU1 PID input 0 (unused)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKEPU1THSPPS EPU1 status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKEPU1THSTT EPU1 status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKE1FILSTATE; LHKFILESTATES EPU1 file upload state
0x030	0	32	U1234	LHKE1FILCURSIZE EPU1 file size current
0x034	0	32	U1234	LHKE1FILPKTCNT EPU1 file packet count
0x038	0	32	U1234	LHKE1FILERRCODE EPU1 file error code

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03C	0	32	U1234	LHKE1FILERRCNT EPU1 file error count
0x040	0	32	U1234	LHKE1FILCOMID EPU1 file ID Commit
0x044	0	32	U1234	LHKE1MEMLDSTAT EPU1 status of most recent load action
0x048	0	32	U1234	LHKE1MEMLDACT EPU1 memory load active flag
0x04C	0	32	U1234	LHKE1MEMLDSTART EPU1 starting memory load address
0x050	0	32	U1234	LHKE1MEMLDBYTES EPU1 memory load total bytes
0x054	0	32	U1234	LHKE1MEMLDOFST EPU1 memory load offset
0x058	0	32	U1234	LHKE1MEMDMPSTAT EPU1 memory dump status
0x05C	0	32	U1234	LHKE1MEMDMPACT EPU1 memory dump active
0x060	0	32	U1234	LHKE1MEMDMPSTRT EPU1 memory dump start address
0x064	0	32	U1234	LHKE1MEMDMPBYTES EPU1 memory dump bytes
0x068	0	32	U1234	LHKE1MEMDMPADDR EPU1 memory dump address
0x06C	0	32	U1234	LHKE1MEMDMPFCDE EPU1 memory dump function code
0x070	0	32	U1234	LHKE1MEMDMPTID EPU1 memory dump transaction ID

14.3.48 `StatusEpu2` (579/0x243)

Description:

"EPU2 status packet" Telemetry Packet

Contains: EPU2 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVSTATEPU2 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKEPU2UPTIME EPU2 time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKEPU2PCIERR EPU2 count of PCI errors
0x016	0	16	U12	LHKEPU2CMERR EPU2 count of correctable memory errors
0x018	0	16	U12	LHKEPU2UMERR EPU2 count of uncorrectable memory errors
0x01A	0	16	U12	LHKEPU2CPUJTEMP EPU2 CPU junction temperature

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01C	0	32	U1234	LHKEPU2SCRSTART EPU2 memory scrub - most recent start
0x020	0	32	U1234	LHKEPU2SCREND EPU2 memory scrub - most recent end
0x024	0	32	U1234	LHKEPU2SCRPERIOD EPU2 memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKEPU2PIDSCIN2 EPU2 PID input 2 (unused)
	6	1	U1	LHKEPU2PIDSCIN1 EPU2 PID input 1 (unused)
	7	1	U1	LHKEPU2PIDSCIN0 EPU2 PID input 0 (unused)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKEPU2THSPPS EPU2 status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKEPU2THSTT EPU2 status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKE2FILSTATE; LHKFILESTATES EPU2 file upload state
0x030	0	32	U1234	LHKE2FILCURSIZE EPU2 file size current
0x034	0	32	U1234	LHKE2FILPKTCNT EPU2 file packet count
0x038	0	32	U1234	LHKE2FILERRCODE EPU2 file error code
0x03C	0	32	U1234	LHKE2FILERRCNT EPU2 file error count
0x040	0	32	U1234	LHKE2FILCOMID EPU2 file ID Commit
0x044	0	32	U1234	LHKE2MEMLDSTAT EPU2 status of most recent load action
0x048	0	32	U1234	LHKE2MEMLDACT EPU2 memory load active flag
0x04C	0	32	U1234	LHKE2MEMLDSTART EPU2 starting memory load address
0x050	0	32	U1234	LHKE2MEMLDBYTES EPU2 memory load total bytes
0x054	0	32	U1234	LHKE2MEMLDOFST EPU2 memory load offset
0x058	0	32	U1234	LHKE2MEMDMPSTAT EPU2 memory dump status
0x05C	0	32	U1234	LHKE2MEMDMPACT EPU2 memory dump active
0x060	0	32	U1234	LHKE2MEMDMPSTRT EPU2 memory dump start address
0x064	0	32	U1234	LHKE2MEMDMPBYTES EPU2 memory dump bytes

Offset	S	L	Type	ITOS name, attribute(s), and description
0x068	0	32	U1234	LHKE2MEMDMPADDR EPU2 memory dump address
0x06C	0	32	U1234	LHKE2MEMDMPFCDE EPU2 memory dump function code
0x070	0	32	U1234	LHKE2MEMDMPTID EPU2 memory dump transaction ID

14.3.49 `TaskCfgSiu` (581/0x245)

Description:

"ITC/MSG configuration of tasks on SIU" Telemetry Packet

ITC/MSG configuration of tasks on SIU

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTASKSIU Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKSMSGCTDB SIU message reporting level on CTDB (1553)
0x013	0	8	U1	LHKSMSGSSR SIU message reporting level on SSR
0x014	0	1	U1	LHKSANONDEF SIU task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSANONMSG SIU task ANON messaging level
	8	2	U1	LHKSANONCN_AE SIU task ANON command confirmation (normal,execute)
	10	2	U1	LHKSANONCN_AF SIU task ANON command confirmation (normal,forward)
	12	2	U1	LHKSANONCB_AE SIU task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKSANONCB_AF SIU task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKSLCMDEF SIU task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCMMSG SIU task LCM messaging level
	8	2	U1	LHKSLCMCN_AE SIU task LCM command confirmation (normal,execute)
	10	2	U1	LHKSLCMCN_AF SIU task LCM command confirmation (normal,forward)
	12	2	U1	LHKSLCMCB_AE SIU task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKSLCMCB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKSLFS_MDEF SIU task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLFS_MMSG SIU task LFS_M messaging level
	8	2	U1	LHKSLFS_MCN_AE SIU task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKSLFS_MCN_AF SIU task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKSLFS_MCB_AE SIU task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLFS_MCB_AF SIU task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKSLFS_SDEF SIU task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLFS_SMSG SIU task LFS_S messaging level
	8	2	U1	LHKSLFS_SCN_AE SIU task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKSLFS_SCN_AF SIU task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKSLFS_SCB_AE SIU task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLFS_SCB_AF SIU task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKSLHK_MDEF SIU task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLHK_MMSG SIU task LHK_M messaging level
	8	2	U1	LHKSLHK_MCN_AE SIU task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKSLHK_MCN_AF SIU task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKSLHK_MCB_AE SIU task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLHK_MCB_AF SIU task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKSLHK_SDEF SIU task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLHK_SMSG SIU task LHK_S messaging level
	8	2	U1	LHKSLHK_SCN_AE SIU task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKSLHK_SCN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKSLHK_SCB_AE
				SIU task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLHK_SCB_AF
				SIU task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKSLIM_MDEF
				SIU task LIM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIM_MMSG
				SIU task LIM_M messaging level
	8	2	U1	LHKSLIM_MCN_AE
				SIU task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKSLIM_MCN_AF
				SIU task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKSLIM_MCB_AE
				SIU task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLIM_MCB_AF
				SIU task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKSLIM_SDEF
				SIU task LIM_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIM_SMSG
				SIU task LIM_S messaging level
	8	2	U1	LHKSLIM_SCN_AE
				SIU task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKSLIM_SCN_AF
				SIU task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKSLIM_SCB_AE
				SIU task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLIM_SCB_AF
				SIU task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKSLSM_MDEF
				SIU task LSM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSM_MMSG
				SIU task LSM_M messaging level
	8	2	U1	LHKSLSM_MCN_AE
				SIU task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKSLSM_MCN_AF
				SIU task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKSLSM_MCB_AE
				SIU task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLSM_MCB_AF
				SIU task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKSLSM_SDEF
				SIU task LSM_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSM_SMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LSM_S messaging level
	8	2	U1	LHKSLSM_SCN_AE SIU task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKSLSM_SCN_AF SIU task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKSLSM_SCB_AE SIU task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLSM_SCB_AF SIU task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKSLSWDEF SIU task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSWMSG SIU task LSW messaging level
	8	2	U1	LHKSLSWCN_AE SIU task LSW command confirmation (normal,execute)
	10	2	U1	LHKSLSWCN_AF SIU task LSW command confirmation (normal,forward)
	12	2	U1	LHKSLSWCB_AE SIU task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKSLSWCB_AF SIU task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKSTID11DEF SIU task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID11MSG SIU task TID11 messaging level
	8	2	U1	LHKSTID11CN_AE SIU task TID11 command confirmation (normal,execute)
	10	2	U1	LHKSTID11CN_AF SIU task TID11 command confirmation (normal,forward)
	12	2	U1	LHKSTID11CB_AE SIU task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID11CB_AF SIU task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKSLCI_MDEF SIU task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCI_MMSG SIU task LCI_M messaging level
	8	2	U1	LHKSLCI_MCN_AE SIU task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKSLCI_MCN_AF SIU task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKSLCI_MCB_AE SIU task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLCI_MCB_AF SIU task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKSLCI_SDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCI_SMSG SIU task LCI_S messaging level
	8	2	U1	LHKSLCI_SCN_AE SIU task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKSLCI_SCN_AF SIU task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKSLCI_SCB_AE SIU task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLCI_SCB_AF SIU task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKSLMCDEF SIU task LMC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLMCMSG SIU task LMC messaging level
	8	2	U1	LHKSLMCCN_AE SIU task LMC command confirmation (normal,execute)
	10	2	U1	LHKSLMCCN_AF SIU task LMC command confirmation (normal,forward)
	12	2	U1	LHKSLMCCB_AE SIU task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKSLMCCB_AF SIU task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKSLPA_MDEF SIU task LPA_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLPA_MMSG SIU task LPA_M messaging level
	8	2	U1	LHKSLPA_MCN_AE SIU task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKSLPA_MCN_AF SIU task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKSLPA_MCB_AE SIU task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLPA_MCB_AF SIU task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKSLPA_SDEF SIU task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLPA_SMSG SIU task LPA_S messaging level
	8	2	U1	LHKSLPA_SCN_AE SIU task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKSLPA_SCN_AF SIU task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKSLPA_SCB_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLPA_SCB_AF
				SIU task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKSLRADEF
				SIU task LRA defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRAMSG
				SIU task LRA messaging level
	8	2	U1	LHKSLRACN_AE
				SIU task LRA command confirmation (normal,execute)
	10	2	U1	LHKSLRACN_AF
				SIU task LRA command confirmation (normal,forward)
	12	2	U1	LHKSLRACB_AE
				SIU task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKSLRACB_AF
				SIU task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKSLTCDEF
				SIU task LTC defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTCMSG
				SIU task LTC messaging level
	8	2	U1	LHKSLTCCN_AE
				SIU task LTC command confirmation (normal,execute)
	10	2	U1	LHKSLTCCN_AF
				SIU task LTC command confirmation (normal,forward)
	12	2	U1	LHKSLTCCB_AE
				SIU task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKSLTCCB_AF
				SIU task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKSGRBDEF
				SIU task GRB defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSGRBMSG
				SIU task GRB messaging level
	8	2	U1	LHKSGRBCN_AE
				SIU task GRB command confirmation (normal,execute)
	10	2	U1	LHKSGRBCN_AF
				SIU task GRB command confirmation (normal,forward)
	12	2	U1	LHKSGRBCB_AE
				SIU task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKSGRBCB_AF
				SIU task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKSLIHDEF
				SIU task LIH defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIHMSG
				SIU task LIH messaging level
	8	2	U1	LHKSLIHCN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LIH command confirmation (normal,execute)
	10	2	U1	LHKSLIHCN_AF SIU task LIH command confirmation (normal,forward)
	12	2	U1	LHKSLIHCB_AE SIU task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKSLIHCB_AF SIU task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKSTID21DEF SIU task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID21MSG SIU task TID21 messaging level
	8	2	U1	LHKSTID21CN_AE SIU task TID21 command confirmation (normal,execute)
	10	2	U1	LHKSTID21CN_AF SIU task TID21 command confirmation (normal,forward)
	12	2	U1	LHKSTID21CB_AE SIU task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID21CB_AF SIU task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKSCRXCDEF SIU task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCRXCMSG SIU task CRXC messaging level
	8	2	U1	LHKSCRXCCN_AE SIU task CRXC command confirmation (normal,execute)
	10	2	U1	LHKSCRXCCN_AF SIU task CRXC command confirmation (normal,forward)
	12	2	U1	LHKSCRXCCB_AE SIU task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKSCRXCCB_AF SIU task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKSCRXTDEF SIU task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCRXTMSG SIU task CRXT messaging level
	8	2	U1	LHKSCRXTCN_AE SIU task CRXT command confirmation (normal,execute)
	10	2	U1	LHKSCRXTCN_AF SIU task CRXT command confirmation (normal,forward)
	12	2	U1	LHKSCRXTCB_AE SIU task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKSCRXTCB_AF SIU task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKSLTX1DEF SIU task LTX1 defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTX1MSG SIU task LTX1 messaging level
	8	2	U1	LHKSLTX1CN_AE SIU task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKSLTX1CN_AF SIU task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKSLTX1CB_AE SIU task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKSLTX1CB_AF SIU task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKSLTX0DEF SIU task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTX0MSG SIU task LTX0 messaging level
	8	2	U1	LHKSLTX0CN_AE SIU task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKSLTX0CN_AF SIU task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKSLTX0CB_AE SIU task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKSLTX0CB_AF SIU task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKSLRXRDEF SIU task LRXR defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXRMSG SIU task LRXR messaging level
	8	2	U1	LHKSLRXRCN_AE SIU task LRXR command confirmation (normal,execute)
	10	2	U1	LHKSLRXRCN_AF SIU task LRXR command confirmation (normal,forward)
	12	2	U1	LHKSLRXRCB_AE SIU task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXRCB_AF SIU task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKSLRXEDEF SIU task LRXE defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXEMSG SIU task LRXE messaging level
	8	2	U1	LHKSLRXECN_AE SIU task LRXE command confirmation (normal,execute)
	10	2	U1	LHKSLRXECN_AF SIU task LRXE command confirmation (normal,forward)
	12	2	U1	LHKSLRXECB_AE SIU task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXECB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKSLRXNDEF
				SIU task LRXN defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXNMSG
				SIU task LRXN messaging level
	8	2	U1	LHKSLRXNCN_AE
				SIU task LRXN command confirmation (normal,execute)
	10	2	U1	LHKSLRXNCN_AF
				SIU task LRXN command confirmation (normal,forward)
	12	2	U1	LHKSLRXNCB_AE
				SIU task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXNCB_AF
				SIU task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKSCTXDEF
				SIU task CTX defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCTXMSG
				SIU task CTX messaging level
	8	2	U1	LHKSCTXCN_AE
				SIU task CTX command confirmation (normal,execute)
	10	2	U1	LHKSCTXCN_AF
				SIU task CTX command confirmation (normal,forward)
	12	2	U1	LHKSCTXCB_AE
				SIU task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKSCTXCB_AF
				SIU task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKSSTXDEF
				SIU task STX defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSSTXMSG
				SIU task STX messaging level
	8	2	U1	LHKSSTXCN_AE
				SIU task STX command confirmation (normal,execute)
	10	2	U1	LHKSSTXCN_AF
				SIU task STX command confirmation (normal,forward)
	12	2	U1	LHKSSTXCB_AE
				SIU task STX command confirmation (broadcast,execute)
	14	2	U1	LHKSSTXCB_AF
				SIU task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKSTID31DEF
				SIU task TID31 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID31MSG
				SIU task TID31 messaging level
	8	2	U1	LHKSTID31CN_AE
				SIU task TID31 command confirmation (normal,execute)
	10	2	U1	LHKSTID31CN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task TID31 command confirmation (normal,forward)
	12	2	U1	LHKSTID31CB_AE SIU task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID31CB_AF SIU task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.50 **TaskCfgEpu0** (582/0x246)

Description:

"ITC/MSG configuration of tasks on EPU0" Telemetry Packet

ITC/MSG configuration of tasks on EPU0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTASKEPU0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x012	0	8	U1	LHKE0MSGCTDB EPU0 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE0MSGSSR EPU0 message reporting level on SSR
0x014	0	1	U1	LHKE0ANONDEF EPU0 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0ANONMSG EPU0 task ANON messaging level
	8	2	U1	LHKE0ANONCN_AE EPU0 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE0ANONCN_AF EPU0 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE0ANONCB_AE EPU0 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE0ANONCB_AF EPU0 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE0LCMDEF EPU0 task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCMMSG EPU0 task LCM messaging level
	8	2	U1	LHKE0LCMCN_AE EPU0 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE0LCMCN_AF EPU0 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE0LCMCB_AE EPU0 task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKE0LCMCB_AF EPU0 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE0LFS_MDEF EPU0 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LFS_MMSG EPU0 task LFS_M messaging level
	8	2	U1	LHKE0LFS_MCN_AE EPU0 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE0LFS_MCN_AF EPU0 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE0LFS_MCB_AE EPU0 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LFS_MCB_AF EPU0 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE0LFS_SDEF EPU0 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LFS_SMSG EPU0 task LFS_S messaging level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKE0LFS_SCN_AE EPU0 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE0LFS_SCN_AF EPU0 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE0LFS_SCB_AE EPU0 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LFS_SCB_AF EPU0 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE0LHK_MDEF EPU0 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LHK_MMSG EPU0 task LHK_M messaging level
	8	2	U1	LHKE0LHK_MCN_AE EPU0 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE0LHK_MCN_AF EPU0 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE0LHK_MCB_AE EPU0 task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LHK_MCB_AF EPU0 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE0LHK_SDEF EPU0 task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LHK_SMSG EPU0 task LHK_S messaging level
	8	2	U1	LHKE0LHK_SCN_AE EPU0 task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKE0LHK_SCN_AF EPU0 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE0LHK_SCB_AE EPU0 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LHK_SCB_AF EPU0 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE0LIM_MDEF EPU0 task LIM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIM_MMSG EPU0 task LIM_M messaging level
	8	2	U1	LHKE0LIM_MCN_AE EPU0 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE0LIM_MCN_AF EPU0 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE0LIM_MCB_AE EPU0 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIM_MCB_AF EPU0 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE0LIM_SDEF EPU0 task LIM_S defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIM_SMSG EPU0 task LIM_S messaging level
	8	2	U1	LHKE0LIM_SCN_AE EPU0 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE0LIM_SCN_AF EPU0 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE0LIM_SCB_AE EPU0 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIM_SCB_AF EPU0 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE0LSM_MDEF EPU0 task LSM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LSM_MMSG EPU0 task LSM_M messaging level
	8	2	U1	LHKE0LSM_MCN_AE EPU0 task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKE0LSM_MCN_AF EPU0 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE0LSM_MCB_AE EPU0 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LSM_MCB_AF EPU0 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE0LSM_SDEF EPU0 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LSM_SMSG EPU0 task LSM_S messaging level
	8	2	U1	LHKE0LSM_SCN_AE EPU0 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE0LSM_SCN_AF EPU0 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE0LSM_SCB_AE EPU0 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LSM_SCB_AF EPU0 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE0LSWDEF EPU0 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LSWMSG EPU0 task LSW messaging level
	8	2	U1	LHKE0LSWCN_AE EPU0 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE0LSWCN_AF EPU0 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE0LSWCB_AE EPU0 task LSW command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKE0LSWCB_AF EPU0 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE0TID11DEF EPU0 task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID11MSG EPU0 task TID11 messaging level
	8	2	U1	LHKE0TID11CN_AE EPU0 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE0TID11CN_AF EPU0 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE0TID11CB_AE EPU0 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID11CB_AF EPU0 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE0LCI_MDEF EPU0 task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCI_MMSG EPU0 task LCI_M messaging level
	8	2	U1	LHKE0LCI_MCN_AE EPU0 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE0LCI_MCN_AF EPU0 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE0LCI_MCB_AE EPU0 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LCI_MCB_AF EPU0 task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKE0LCI_SDEF EPU0 task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCI_SMSG EPU0 task LCI_S messaging level
	8	2	U1	LHKE0LCI_SCN_AE EPU0 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE0LCI_SCN_AF EPU0 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE0LCI_SCB_AE EPU0 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LCI_SCB_AF EPU0 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE0LMCDEF EPU0 task LMC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LMCMSG EPU0 task LMC messaging level
	8	2	U1	LHKE0LMCCN_AE EPU0 task LMC command confirmation (normal,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	2	U1	LHKE0LMCCN_AF EPU0 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE0LMCCB_AE EPU0 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE0LMCCB_AF EPU0 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE0LPA_MDEF EPU0 task LPA_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LPA_MMSG EPU0 task LPA_M messaging level
	8	2	U1	LHKE0LPA_MCN_AE EPU0 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE0LPA_MCN_AF EPU0 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE0LPA_MCB_AE EPU0 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LPA_MCB_AF EPU0 task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKE0LPA_SDEF EPU0 task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LPA_SMSG EPU0 task LPA_S messaging level
	8	2	U1	LHKE0LPA_SCN_AE EPU0 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE0LPA_SCN_AF EPU0 task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKE0LPA_SCB_AE EPU0 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LPA_SCB_AF EPU0 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE0LRADEF EPU0 task LRA defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRAMSG EPU0 task LRA messaging level
	8	2	U1	LHKE0LRACN_AE EPU0 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE0LRACN_AF EPU0 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE0LRACB_AE EPU0 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRACB_AF EPU0 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE0LTCDEF EPU0 task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	2	U1	LHKE0LTCMSG EPU0 task LTC messaging level
	8	2	U1	LHKE0LTCCN_AE EPU0 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE0LTCCN_AF EPU0 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE0LTCCB_AE EPU0 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTCCB_AF EPU0 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE0GRBDEF EPU0 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0GRBMSG EPU0 task GRB messaging level
	8	2	U1	LHKE0GRBCN_AE EPU0 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE0GRBCN_AF EPU0 task GRB command confirmation (normal,forward)
	12	2	U1	LHKE0GRBCB_AE EPU0 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE0GRBCB_AF EPU0 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE0LIHDEF EPU0 task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIHMSG EPU0 task LIH messaging level
	8	2	U1	LHKE0LIHCN_AE EPU0 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE0LIHCN_AF EPU0 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE0LIHCB_AE EPU0 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIHCB_AF EPU0 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE0TID21DEF EPU0 task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID21MSG EPU0 task TID21 messaging level
	8	2	U1	LHKE0TID21CN_AE EPU0 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE0TID21CN_AF EPU0 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE0TID21CB_AE EPU0 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID21CB_AF EPU0 task TID21 command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x040	0	1	U1	LHKE0CRXCDEF EPU0 task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CRXCMSG EPU0 task CRXC messaging level
	8	2	U1	LHKE0CRXCCN_AE EPU0 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE0CRXCCN_AF EPU0 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE0CRXCCB_AE EPU0 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE0CRXCCB_AF EPU0 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE0CRXTDEF EPU0 task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CRXTMSG EPU0 task CRXT messaging level
	8	2	U1	LHKE0CRXTCN_AE EPU0 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE0CRXTCN_AF EPU0 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE0CRXTCB_AE EPU0 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE0CRXTCB_AF EPU0 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE0LTX1DEF EPU0 task LTX1 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LTX1MSG EPU0 task LTX1 messaging level
	8	2	U1	LHKE0LTX1CN_AE EPU0 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE0LTX1CN_AF EPU0 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE0LTX1CB_AE EPU0 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTX1CB_AF EPU0 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE0LTX0DEF EPU0 task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LTX0MSG EPU0 task LTX0 messaging level
	8	2	U1	LHKE0LTX0CN_AE EPU0 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE0LTX0CN_AF EPU0 task LTX0 command confirmation (normal,forward)

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	2	U1	LHKE0LTX0CB_AE EPU0 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTX0CB_AF EPU0 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE0LRXRDEF EPU0 task LRXR defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXRMSG EPU0 task LRXR messaging level
	8	2	U1	LHKE0LRXRCN_AE EPU0 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE0LRXRCN_AF EPU0 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE0LRXRCB_AE EPU0 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRXRCB_AF EPU0 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE0LRXEDEF EPU0 task LRXE defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXEMSG EPU0 task LRXE messaging level
	8	2	U1	LHKE0LRXECN_AE EPU0 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE0LRXECN_AF EPU0 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE0LRXECB_AE EPU0 task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRXECB_AF EPU0 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE0LRXNDEF EPU0 task LRXN defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXNMSG EPU0 task LRXN messaging level
	8	2	U1	LHKE0LRXNCN_AE EPU0 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE0LRXNCN_AF EPU0 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE0LRXNCB_AE EPU0 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRXNCB_AF EPU0 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE0CTXDEF EPU0 task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CTXMSG EPU0 task CTX messaging level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKE0CTXCN_AE EPU0 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE0CTXCN_AF EPU0 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE0CTXCB_AE EPU0 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE0CTXCB_AF EPU0 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE0STXDEF EPU0 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0STXMSG EPU0 task STX messaging level
	8	2	U1	LHKE0STXCN_AE EPU0 task STX command confirmation (normal,execute)
	10	2	U1	LHKE0STXCN_AF EPU0 task STX command confirmation (normal,forward)
	12	2	U1	LHKE0STXCB_AE EPU0 task STX command confirmation (broadcast,execute)
	14	2	U1	LHKE0STXCB_AF EPU0 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE0TID31DEF EPU0 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID31MSG EPU0 task TID31 messaging level
	8	2	U1	LHKE0TID31CN_AE EPU0 task TID31 command confirmation (normal,execute)
	10	2	U1	LHKE0TID31CN_AF EPU0 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE0TID31CB_AE EPU0 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID31CB_AF EPU0 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.51 TaskCfgEpu1 (583/0x247)

Description:

"ITC/MSG configuration of tasks on EPU1" Telemetry Packet

ITC/MSG configuration of tasks on EPU1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTASKEPU1 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKE1MSGCTDB EPU1 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE1MSGSSR EPU1 message reporting level on SSR
0x014	0	1	U1	LHKE1ANONDEF EPU1 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1ANONMSG EPU1 task ANON messaging level
	8	2	U1	LHKE1ANONCN_AE EPU1 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE1ANONCN_AF EPU1 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE1ANONCB_AE EPU1 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE1ANONCB_AF EPU1 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE1LCMDEF EPU1 task LCM defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCMMSG EPU1 task LCM messaging level
	8	2	U1	LHKE1LCMCN_AE EPU1 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE1LCMCN_AF EPU1 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE1LCMCB_AE EPU1 task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCMCB_AF EPU1 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE1LFS_MDEF EPU1 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LFS_MMSG EPU1 task LFS_M messaging level
	8	2	U1	LHKE1LFS_MCN_AE EPU1 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE1LFS_MCN_AF EPU1 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE1LFS_MCB_AE EPU1 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LFS_MCB_AF EPU1 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE1LFS_SDEF EPU1 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LFS_SMSG EPU1 task LFS_S messaging level
	8	2	U1	LHKE1LFS_SCN_AE EPU1 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE1LFS_SCN_AF EPU1 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE1LFS_SCB_AE EPU1 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LFS_SCB_AF EPU1 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE1LHK_MDEF EPU1 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LHK_MMSG EPU1 task LHK_M messaging level
	8	2	U1	LHKE1LHK_MCN_AE EPU1 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE1LHK_MCN_AF EPU1 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE1LHK_MCB_AE EPU1 task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LHK_MCB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE1LHK_SDEF
				EPU1 task LHK_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LHK_SMSG
				EPU1 task LHK_S messaging level
	8	2	U1	LHKE1LHK_SCN_AE
				EPU1 task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKE1LHK_SCN_AF
				EPU1 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE1LHK_SCB_AE
				EPU1 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LHK_SCB_AF
				EPU1 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE1LIM_MDEF
				EPU1 task LIM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIM_MMSG
				EPU1 task LIM_M messaging level
	8	2	U1	LHKE1LIM_MCN_AE
				EPU1 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE1LIM_MCN_AF
				EPU1 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE1LIM_MCB_AE
				EPU1 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIM_MCB_AF
				EPU1 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE1LIM_SDEF
				EPU1 task LIM_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIM_SMSG
				EPU1 task LIM_S messaging level
	8	2	U1	LHKE1LIM_SCN_AE
				EPU1 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE1LIM_SCN_AF
				EPU1 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE1LIM_SCB_AE
				EPU1 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIM_SCB_AF
				EPU1 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE1LSM_MDEF
				EPU1 task LSM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSM_MMSG
				EPU1 task LSM_M messaging level
	8	2	U1	LHKE1LSM_MCN_AE
				EPU1 task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKE1LSM_MCN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE1LSM_MCB_AE EPU1 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSM_MCB_AF EPU1 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE1LSM_SDEF EPU1 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSM_SMSG EPU1 task LSM_S messaging level
	8	2	U1	LHKE1LSM_SCN_AE EPU1 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE1LSM_SCN_AF EPU1 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE1LSM_SCB_AE EPU1 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSM_SCB_AF EPU1 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE1LSWDEF EPU1 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSWMSG EPU1 task LSW messaging level
	8	2	U1	LHKE1LSWCN_AE EPU1 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE1LSWCN_AF EPU1 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE1LSWCB_AE EPU1 task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSWCB_AF EPU1 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE1TID11DEF EPU1 task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID11MSG EPU1 task TID11 messaging level
	8	2	U1	LHKE1TID11CN_AE EPU1 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE1TID11CN_AF EPU1 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE1TID11CB_AE EPU1 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID11CB_AF EPU1 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE1LCI_MDEF EPU1 task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCI_MMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LCI_M messaging level
	8	2	U1	LHKE1LCI_MCN_AE EPU1 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE1LCI_MCN_AF EPU1 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE1LCI_MCB_AE EPU1 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCI_MCB_AF EPU1 task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKE1LCI_SDEF EPU1 task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCI_SMSG EPU1 task LCI_S messaging level
	8	2	U1	LHKE1LCI_SCN_AE EPU1 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE1LCI_SCN_AF EPU1 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE1LCI_SCB_AE EPU1 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCI_SCB_AF EPU1 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE1LMCDEF EPU1 task LMC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LMCMSG EPU1 task LMC messaging level
	8	2	U1	LHKE1LMCCN_AE EPU1 task LMC command confirmation (normal,execute)
	10	2	U1	LHKE1LMCCN_AF EPU1 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE1LMCCB_AE EPU1 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE1LMCCB_AF EPU1 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE1LPA_MDEF EPU1 task LPA_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LPA_MMSG EPU1 task LPA_M messaging level
	8	2	U1	LHKE1LPA_MCN_AE EPU1 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE1LPA_MCN_AF EPU1 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE1LPA_MCB_AE EPU1 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LPA_MCB_AF EPU1 task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKE1LPA_SDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LPA_SMSG EPU1 task LPA_S messaging level
	8	2	U1	LHKE1LPA_SCN_AE EPU1 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE1LPA_SCN_AF EPU1 task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKE1LPA_SCB_AE EPU1 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LPA_SCB_AF EPU1 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE1LRADEF EPU1 task LRA defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRAMSG EPU1 task LRA messaging level
	8	2	U1	LHKE1LRACN_AE EPU1 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE1LRACN_AF EPU1 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE1LRACB_AE EPU1 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRACB_AF EPU1 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE1LTCDEF EPU1 task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTCMSG EPU1 task LTC messaging level
	8	2	U1	LHKE1LTCCN_AE EPU1 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE1LTCCN_AF EPU1 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE1LTCCB_AE EPU1 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTCCB_AF EPU1 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE1GRBDEF EPU1 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1GRBMSG EPU1 task GRB messaging level
	8	2	U1	LHKE1GRBCN_AE EPU1 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE1GRBCN_AF EPU1 task GRB command confirmation (normal,forward)
	12	2	U1	LHKE1GRBCB_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE1GRBCB_AF
				EPU1 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE1LIHDEF
				EPU1 task LIH defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIHMSG
				EPU1 task LIH messaging level
	8	2	U1	LHKE1LIHCN_AE
				EPU1 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE1LIHCN_AF
				EPU1 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE1LIHCB_AE
				EPU1 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIHCB_AF
				EPU1 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE1TID21DEF
				EPU1 task TID21 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID21MSG
				EPU1 task TID21 messaging level
	8	2	U1	LHKE1TID21CN_AE
				EPU1 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE1TID21CN_AF
				EPU1 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE1TID21CB_AE
				EPU1 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID21CB_AF
				EPU1 task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKE1CRXCDEF
				EPU1 task CRXC defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CRXCMSG
				EPU1 task CRXC messaging level
	8	2	U1	LHKE1CRXCCN_AE
				EPU1 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE1CRXCCN_AF
				EPU1 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE1CRXCCB_AE
				EPU1 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE1CRXCCB_AF
				EPU1 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE1CRXTDEF
				EPU1 task CRXT defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CRXTMSG
				EPU1 task CRXT messaging level
	8	2	U1	LHKE1CRXTCN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE1CRXTCN_AF
				EPU1 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE1CRXTCB_AE
				EPU1 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE1CRXTCB_AF
				EPU1 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE1LTX1DEF
				EPU1 task LTX1 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTX1MSG
				EPU1 task LTX1 messaging level
	8	2	U1	LHKE1LTX1CN_AE
				EPU1 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE1LTX1CN_AF
				EPU1 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE1LTX1CB_AE
				EPU1 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTX1CB_AF
				EPU1 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE1LTX0DEF
				EPU1 task LTX0 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTX0MSG
				EPU1 task LTX0 messaging level
	8	2	U1	LHKE1LTX0CN_AE
				EPU1 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE1LTX0CN_AF
				EPU1 task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKE1LTX0CB_AE
				EPU1 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTX0CB_AF
				EPU1 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE1LRXRDEF
				EPU1 task LRXR defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXRMSG
				EPU1 task LRXR messaging level
	8	2	U1	LHKE1LRXRCN_AE
				EPU1 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE1LRXRCN_AF
				EPU1 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE1LRXRCB_AE
				EPU1 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXRCB_AF
				EPU1 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE1LRXEDEF
				EPU1 task LRXE defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXEMSG EPU1 task LRXE messaging level
	8	2	U1	LHKE1LRXECN_AE EPU1 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE1LRXECN_AF EPU1 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE1LRXECB_AE EPU1 task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXECB_AF EPU1 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE1LRXNDEF EPU1 task LRXN defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXNMSG EPU1 task LRXN messaging level
	8	2	U1	LHKE1LRXNCN_AE EPU1 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE1LRXNCN_AF EPU1 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE1LRXNCB_AE EPU1 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXNCB_AF EPU1 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE1CTXDEF EPU1 task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CTXMSG EPU1 task CTX messaging level
	8	2	U1	LHKE1CTXCN_AE EPU1 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE1CTXCN_AF EPU1 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE1CTXCB_AE EPU1 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE1CTXCB_AF EPU1 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE1STXDEF EPU1 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1STXMSG EPU1 task STX messaging level
	8	2	U1	LHKE1STXCN_AE EPU1 task STX command confirmation (normal,execute)
	10	2	U1	LHKE1STXCN_AF EPU1 task STX command confirmation (normal,forward)
	12	2	U1	LHKE1STXCB_AE EPU1 task STX command confirmation (broadcast,execute)
	14	2	U1	LHKE1STXCB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE1TID31DEF EPU1 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID31MSG EPU1 task TID31 messaging level
	8	2	U1	LHKE1TID31CN_AE EPU1 task TID31 command confirmation (normal,execute)
	10	2	U1	LHKE1TID31CN_AF EPU1 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE1TID31CB_AE EPU1 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID31CB_AF EPU1 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.52 `TaskCfgEpu2` (584/0x248)

Description:

"ITC/MSG configuration of tasks on EPU2" Telemetry Packet

ITC/MSG configuration of tasks on EPU2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVTASKEPU2 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKE2MSGCTDB EPU2 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE2MSGSSR EPU2 message reporting level on SSR
0x014	0	1	U1	LHKE2ANONDEF EPU2 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2ANONMSG EPU2 task ANON messaging level
	8	2	U1	LHKE2ANONCN_AE EPU2 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE2ANONCN_AF EPU2 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE2ANONCB_AE EPU2 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE2ANONCB_AF EPU2 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE2LCMDEF EPU2 task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LCMMSG EPU2 task LCM messaging level
	8	2	U1	LHKE2LCMCN_AE EPU2 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE2LCMCN_AF EPU2 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE2LCMCB_AE EPU2 task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCMCB_AF EPU2 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE2LFS_MDEF EPU2 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LFS_MMSG EPU2 task LFS_M messaging level
	8	2	U1	LHKE2LFS_MCN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE2LFS_MCN_AF EPU2 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE2LFS_MCB_AE EPU2 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LFS_MCB_AF EPU2 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE2LFS_SDEF EPU2 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LFS_SMSG EPU2 task LFS_S messaging level
	8	2	U1	LHKE2LFS_SCN_AE EPU2 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE2LFS_SCN_AF EPU2 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE2LFS_SCB_AE EPU2 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LFS_SCB_AF EPU2 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE2LHK_MDEF EPU2 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LHK_MMSG EPU2 task LHK_M messaging level
	8	2	U1	LHKE2LHK_MCN_AE EPU2 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE2LHK_MCN_AF EPU2 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE2LHK_MCB_AE EPU2 task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LHK_MCB_AF EPU2 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE2LHK_SDEF EPU2 task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LHK_SMSG EPU2 task LHK_S messaging level
	8	2	U1	LHKE2LHK_SCN_AE EPU2 task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKE2LHK_SCN_AF EPU2 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE2LHK_SCB_AE EPU2 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LHK_SCB_AF EPU2 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE2LIM_MDEF EPU2 task LIM_M defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIM_MMSG EPU2 task LIM_M messaging level
	8	2	U1	LHKE2LIM_MCN_AE EPU2 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE2LIM_MCN_AF EPU2 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE2LIM_MCB_AE EPU2 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIM_MCB_AF EPU2 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE2LIM_SDEF EPU2 task LIM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIM_SMSG EPU2 task LIM_S messaging level
	8	2	U1	LHKE2LIM_SCN_AE EPU2 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE2LIM_SCN_AF EPU2 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE2LIM_SCB_AE EPU2 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIM_SCB_AF EPU2 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE2LSM_MDEF EPU2 task LSM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSM_MMSG EPU2 task LSM_M messaging level
	8	2	U1	LHKE2LSM_MCN_AE EPU2 task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKE2LSM_MCN_AF EPU2 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE2LSM_MCB_AE EPU2 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSM_MCB_AF EPU2 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE2LSM_SDEF EPU2 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSM_SMSG EPU2 task LSM_S messaging level
	8	2	U1	LHKE2LSM_SCN_AE EPU2 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE2LSM_SCN_AF EPU2 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE2LSM_SCB_AE EPU2 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSM_SCB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE2LSWDEF EPU2 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSWMSG EPU2 task LSW messaging level
	8	2	U1	LHKE2LSWCN_AE EPU2 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE2LSWCN_AF EPU2 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE2LSWCB_AE EPU2 task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSWCB_AF EPU2 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE2TID11DEF EPU2 task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID11MSG EPU2 task TID11 messaging level
	8	2	U1	LHKE2TID11CN_AE EPU2 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE2TID11CN_AF EPU2 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE2TID11CB_AE EPU2 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID11CB_AF EPU2 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE2LCI_MDEF EPU2 task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LCI_MMSG EPU2 task LCI_M messaging level
	8	2	U1	LHKE2LCI_MCN_AE EPU2 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE2LCI_MCN_AF EPU2 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE2LCI_MCB_AE EPU2 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCI_MCB_AF EPU2 task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKE2LCI_SDEF EPU2 task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LCI_SMSG EPU2 task LCI_S messaging level
	8	2	U1	LHKE2LCI_SCN_AE EPU2 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE2LCI_SCN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE2LCI_SCB_AE
				EPU2 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCI_SCB_AF
				EPU2 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE2LMCDEF
				EPU2 task LMC defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LMCMSG
				EPU2 task LMC messaging level
	8	2	U1	LHKE2LMCCN_AE
				EPU2 task LMC command confirmation (normal,execute)
	10	2	U1	LHKE2LMCCN_AF
				EPU2 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE2LMCCB_AE
				EPU2 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE2LMCCB_AF
				EPU2 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE2LPA_MDEF
				EPU2 task LPA_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LPA_MMSG
				EPU2 task LPA_M messaging level
	8	2	U1	LHKE2LPA_MCN_AE
				EPU2 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE2LPA_MCN_AF
				EPU2 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE2LPA_MCB_AE
				EPU2 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LPA_MCB_AF
				EPU2 task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKE2LPA_SDEF
				EPU2 task LPA_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LPA_SMSG
				EPU2 task LPA_S messaging level
	8	2	U1	LHKE2LPA_SCN_AE
				EPU2 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE2LPA_SCN_AF
				EPU2 task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKE2LPA_SCB_AE
				EPU2 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LPA_SCB_AF
				EPU2 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE2LRADEF
				EPU2 task LRA defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRAMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LRA messaging level
	8	2	U1	LHKE2LRACN_AE EPU2 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE2LRACN_AF EPU2 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE2LRACB_AE EPU2 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRACB_AF EPU2 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE2LTCDEF EPU2 task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTCMSG EPU2 task LTC messaging level
	8	2	U1	LHKE2LTCCN_AE EPU2 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE2LTCCN_AF EPU2 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE2LTCCB_AE EPU2 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTCCB_AF EPU2 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE2GRBDEF EPU2 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2GRBMSG EPU2 task GRB messaging level
	8	2	U1	LHKE2GRBCN_AE EPU2 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE2GRBCN_AF EPU2 task GRB command confirmation (normal,forward)
	12	2	U1	LHKE2GRBCB_AE EPU2 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE2GRBCB_AF EPU2 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE2LIHDEF EPU2 task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIHMSG EPU2 task LIH messaging level
	8	2	U1	LHKE2LIHCN_AE EPU2 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE2LIHCN_AF EPU2 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE2LIHCB_AE EPU2 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIHCB_AF EPU2 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE2TID21DEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID21MSG EPU2 task TID21 messaging level
	8	2	U1	LHKE2TID21CN_AE EPU2 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE2TID21CN_AF EPU2 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE2TID21CB_AE EPU2 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID21CB_AF EPU2 task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKE2CRXCDEF EPU2 task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CRXCMSG EPU2 task CRXC messaging level
	8	2	U1	LHKE2CRXCCN_AE EPU2 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE2CRXCCN_AF EPU2 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE2CRXCCB_AE EPU2 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE2CRXCCB_AF EPU2 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE2CRXTDEF EPU2 task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CRXTMSG EPU2 task CRXT messaging level
	8	2	U1	LHKE2CRXTCN_AE EPU2 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE2CRXTCN_AF EPU2 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE2CRXTCB_AE EPU2 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE2CRXTCB_AF EPU2 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE2LTX1DEF EPU2 task LTX1 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTX1MSG EPU2 task LTX1 messaging level
	8	2	U1	LHKE2LTX1CN_AE EPU2 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE2LTX1CN_AF EPU2 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE2LTX1CB_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTX1CB_AF
				EPU2 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE2LTX0DEF
				EPU2 task LTX0 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTX0MSG
				EPU2 task LTX0 messaging level
	8	2	U1	LHKE2LTX0CN_AE
				EPU2 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE2LTX0CN_AF
				EPU2 task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKE2LTX0CB_AE
				EPU2 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTX0CB_AF
				EPU2 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE2LRXRDEF
				EPU2 task LRXR defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXRMSG
				EPU2 task LRXR messaging level
	8	2	U1	LHKE2LRXRCN_AE
				EPU2 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE2LRXRCN_AF
				EPU2 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE2LRXRCB_AE
				EPU2 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXRCB_AF
				EPU2 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE2LRXEDEF
				EPU2 task LRXE defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXEMSG
				EPU2 task LRXE messaging level
	8	2	U1	LHKE2LRXECN_AE
				EPU2 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE2LRXECN_AF
				EPU2 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE2LRXECB_AE
				EPU2 task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXECB_AF
				EPU2 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE2LRXNDEF
				EPU2 task LRXN defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXNMSG
				EPU2 task LRXN messaging level
	8	2	U1	LHKE2LRXNCN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE2LRXNCN_AF EPU2 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE2LRXNCB_AE EPU2 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXNCB_AF EPU2 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE2CTXDEF EPU2 task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CTXMSG EPU2 task CTX messaging level
	8	2	U1	LHKE2CTXCN_AE EPU2 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE2CTXCN_AF EPU2 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE2CTXCB_AE EPU2 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE2CTXCB_AF EPU2 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE2STXDEF EPU2 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2STXMSG EPU2 task STX messaging level
	8	2	U1	LHKE2STXCN_AE EPU2 task STX command confirmation (normal,execute)
	10	2	U1	LHKE2STXCN_AF EPU2 task STX command confirmation (normal,forward)
	12	2	U1	LHKE2STXCB_AE EPU2 task STX command confirmation (broadcast,execute)
	14	2	U1	LHKE2STXCB_AF EPU2 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE2TID31DEF EPU2 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID31MSG EPU2 task TID31 messaging level
	8	2	U1	LHKE2TID31CN_AE EPU2 task TID31 command confirmation (normal,execute)
	10	2	U1	LHKE2TID31CN_AF EPU2 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE2TID31CB_AE EPU2 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID31CB_AF EPU2 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.53 `LpaDb0Siu` (586/0x24A)

Description:

"LPA filter configuration (based on first LPA_DB instance) (SIU" Telemetry Packet

LPA filter configuration (based on first LPA_DB instance) (SIU)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0S Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0ST440 LPA (DB 0) configuration timestamp (SIU) (seconds)
0x014	0	32	U1234	LHKLPA0ST441 LPA (DB 0) configuration timestamp (SIU) (microseconds)
0x018	0	16	U12	LHKLPA0SHNDLRS LPA (DB 0) mask of available (filter) handlers (SIU)
0x01A	0	8	U1	LHKLPA0SOUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (SIU)
0x01B	0	8	U1	LHKLPA0SPSTMSK LPA (DB 0) mask of handlers enabled to post (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01C	0	8	U1	LHKLPA0SCOMP LPA (DB 0) compression level (SIU)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0SHNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (SIU)
0x026	0	16	U12	LHKLPA0SHNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (SIU)
0x028	0	16	U12	LHKLPA0SHNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (SIU)
0x02A	0	16	U12	LHKLPA0SHNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (SIU)
0x02C	0	16	U12	LHKLPA0SHNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (SIU)
0x02E	0	16	U12	LHKLPA0SHNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (SIU)
0x030	0	16	U12	LHKLPA0SHNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (SIU)
0x032	0	16	U12	LHKLPA0SHNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (SIU)
0x034	0	4	I1	LHKLPA0SH00M0P LPA (DB 0) parameter set for handler 0 mode 0 (SIU)
	4	4	I1	LHKLPA0SH00M1P LPA (DB 0) parameter set for handler 0 mode 1 (SIU)
	8	4	I1	LHKLPA0SH00M2P LPA (DB 0) parameter set for handler 0 mode 2 (SIU)
	12	4	I1	LHKLPA0SH00M3P LPA (DB 0) parameter set for handler 0 mode 3 (SIU)
	16	4	I1	LHKLPA0SH00M4P LPA (DB 0) parameter set for handler 0 mode 4 (SIU)
	20	4	I1	LHKLPA0SH00M5P LPA (DB 0) parameter set for handler 0 mode 5 (SIU)
	24	4	I1	LHKLPA0SH00M6P LPA (DB 0) parameter set for handler 0 mode 6 (SIU)
	28	4	I1	LHKLPA0SH00M7P LPA (DB 0) parameter set for handler 0 mode 7 (SIU)
0x038	0	4	I1	LHKLPA0SH01M0P LPA (DB 0) parameter set for handler 1 mode 0 (SIU)
	4	4	I1	LHKLPA0SH01M1P LPA (DB 0) parameter set for handler 1 mode 1 (SIU)
	8	4	I1	LHKLPA0SH01M2P LPA (DB 0) parameter set for handler 1 mode 2 (SIU)
	12	4	I1	LHKLPA0SH01M3P LPA (DB 0) parameter set for handler 1 mode 3 (SIU)
	16	4	I1	LHKLPA0SH01M4P LPA (DB 0) parameter set for handler 1 mode 4 (SIU)
	20	4	I1	LHKLPA0SH01M5P LPA (DB 0) parameter set for handler 1 mode 5 (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
	24	4	I1	LHKLPA0SH01M6P LPA (DB 0) parameter set for handler 1 mode 6 (SIU)
	28	4	I1	LHKLPA0SH01M7P LPA (DB 0) parameter set for handler 1 mode 7 (SIU)
0x03C	0	4	I1	LHKLPA0SH02M0P LPA (DB 0) parameter set for handler 2 mode 0 (SIU)
	4	4	I1	LHKLPA0SH02M1P LPA (DB 0) parameter set for handler 2 mode 1 (SIU)
	8	4	I1	LHKLPA0SH02M2P LPA (DB 0) parameter set for handler 2 mode 2 (SIU)
	12	4	I1	LHKLPA0SH02M3P LPA (DB 0) parameter set for handler 2 mode 3 (SIU)
	16	4	I1	LHKLPA0SH02M4P LPA (DB 0) parameter set for handler 2 mode 4 (SIU)
	20	4	I1	LHKLPA0SH02M5P LPA (DB 0) parameter set for handler 2 mode 5 (SIU)
	24	4	I1	LHKLPA0SH02M6P LPA (DB 0) parameter set for handler 2 mode 6 (SIU)
	28	4	I1	LHKLPA0SH02M7P LPA (DB 0) parameter set for handler 2 mode 7 (SIU)
0x040	0	4	I1	LHKLPA0SH03M0P LPA (DB 0) parameter set for handler 3 mode 0 (SIU)
	4	4	I1	LHKLPA0SH03M1P LPA (DB 0) parameter set for handler 3 mode 1 (SIU)
	8	4	I1	LHKLPA0SH03M2P LPA (DB 0) parameter set for handler 3 mode 2 (SIU)
	12	4	I1	LHKLPA0SH03M3P LPA (DB 0) parameter set for handler 3 mode 3 (SIU)
	16	4	I1	LHKLPA0SH03M4P LPA (DB 0) parameter set for handler 3 mode 4 (SIU)
	20	4	I1	LHKLPA0SH03M5P LPA (DB 0) parameter set for handler 3 mode 5 (SIU)
	24	4	I1	LHKLPA0SH03M6P LPA (DB 0) parameter set for handler 3 mode 6 (SIU)
	28	4	I1	LHKLPA0SH03M7P LPA (DB 0) parameter set for handler 3 mode 7 (SIU)
0x044	0	4	I1	LHKLPA0SH04M0P LPA (DB 0) parameter set for handler 4 mode 0 (SIU)
	4	4	I1	LHKLPA0SH04M1P LPA (DB 0) parameter set for handler 4 mode 1 (SIU)
	8	4	I1	LHKLPA0SH04M2P LPA (DB 0) parameter set for handler 4 mode 2 (SIU)
	12	4	I1	LHKLPA0SH04M3P LPA (DB 0) parameter set for handler 4 mode 3 (SIU)
	16	4	I1	LHKLPA0SH04M4P LPA (DB 0) parameter set for handler 4 mode 4 (SIU)
	20	4	I1	LHKLPA0SH04M5P LPA (DB 0) parameter set for handler 4 mode 5 (SIU)
	24	4	I1	LHKLPA0SH04M6P LPA (DB 0) parameter set for handler 4 mode 6 (SIU)
	28	4	I1	LHKLPA0SH04M7P LPA (DB 0) parameter set for handler 4 mode 7 (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	4	I1	LHKLPA0SH05M0P LPA (DB 0) parameter set for handler 5 mode 0 (SIU)
	4	4	I1	LHKLPA0SH05M1P LPA (DB 0) parameter set for handler 5 mode 1 (SIU)
	8	4	I1	LHKLPA0SH05M2P LPA (DB 0) parameter set for handler 5 mode 2 (SIU)
	12	4	I1	LHKLPA0SH05M3P LPA (DB 0) parameter set for handler 5 mode 3 (SIU)
	16	4	I1	LHKLPA0SH05M4P LPA (DB 0) parameter set for handler 5 mode 4 (SIU)
	20	4	I1	LHKLPA0SH05M5P LPA (DB 0) parameter set for handler 5 mode 5 (SIU)
	24	4	I1	LHKLPA0SH05M6P LPA (DB 0) parameter set for handler 5 mode 6 (SIU)
	28	4	I1	LHKLPA0SH05M7P LPA (DB 0) parameter set for handler 5 mode 7 (SIU)
0x04C	0	4	I1	LHKLPA0SH06M0P LPA (DB 0) parameter set for handler 6 mode 0 (SIU)
	4	4	I1	LHKLPA0SH06M1P LPA (DB 0) parameter set for handler 6 mode 1 (SIU)
	8	4	I1	LHKLPA0SH06M2P LPA (DB 0) parameter set for handler 6 mode 2 (SIU)
	12	4	I1	LHKLPA0SH06M3P LPA (DB 0) parameter set for handler 6 mode 3 (SIU)
	16	4	I1	LHKLPA0SH06M4P LPA (DB 0) parameter set for handler 6 mode 4 (SIU)
	20	4	I1	LHKLPA0SH06M5P LPA (DB 0) parameter set for handler 6 mode 5 (SIU)
	24	4	I1	LHKLPA0SH06M6P LPA (DB 0) parameter set for handler 6 mode 6 (SIU)
	28	4	I1	LHKLPA0SH06M7P LPA (DB 0) parameter set for handler 6 mode 7 (SIU)
0x050	0	4	I1	LHKLPA0SH07M1P LPA (DB 0) parameter set for handler 7 mode 0 (SIU)
	4	4	I1	LHKLPA0SH07M2P LPA (DB 0) parameter set for handler 7 mode 1 (SIU)
	8	4	I1	LHKLPA0SH07M3P LPA (DB 0) parameter set for handler 7 mode 2 (SIU)
	12	4	I1	LHKLPA0SH07M4P LPA (DB 0) parameter set for handler 7 mode 3 (SIU)
	16	4	I1	LHKLPA0SH07M5P LPA (DB 0) parameter set for handler 7 mode 4 (SIU)
	20	4	I1	LHKLPA0SH07M6P LPA (DB 0) parameter set for handler 7 mode 5 (SIU)
	24	4	I1	LHKLPA0SH07M7P LPA (DB 0) parameter set for handler 7 mode 6 (SIU)
	28	4	I1	LHKLPA0SH07M0P LPA (DB 0) parameter set for handler 7 mode 7 (SIU)
0x054	0	4	I1	LHKLPA0SH08M1P LPA (DB 0) parameter set for handler 8 mode 0 (SIU)
	4	4	I1	LHKLPA0SH08M2P LPA (DB 0) parameter set for handler 8 mode 1 (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	4	I1	LHKLPA0SH08M3P LPA (DB 0) parameter set for handler 8 mode 2 (SIU)
	12	4	I1	LHKLPA0SH08M4P LPA (DB 0) parameter set for handler 8 mode 3 (SIU)
	16	4	I1	LHKLPA0SH08M5P LPA (DB 0) parameter set for handler 8 mode 4 (SIU)
	20	4	I1	LHKLPA0SH08M6P LPA (DB 0) parameter set for handler 8 mode 5 (SIU)
	24	4	I1	LHKLPA0SH08M7P LPA (DB 0) parameter set for handler 8 mode 6 (SIU)
	28	4	I1	LHKLPA0SH08M0P LPA (DB 0) parameter set for handler 8 mode 7 (SIU)
0x058	0	4	I1	LHKLPA0SH09M1P LPA (DB 0) parameter set for handler 9 mode 0 (SIU)
	4	4	I1	LHKLPA0SH09M2P LPA (DB 0) parameter set for handler 9 mode 1 (SIU)
	8	4	I1	LHKLPA0SH09M3P LPA (DB 0) parameter set for handler 9 mode 2 (SIU)
	12	4	I1	LHKLPA0SH09M4P LPA (DB 0) parameter set for handler 9 mode 3 (SIU)
	16	4	I1	LHKLPA0SH09M5P LPA (DB 0) parameter set for handler 9 mode 4 (SIU)
	20	4	I1	LHKLPA0SH09M6P LPA (DB 0) parameter set for handler 9 mode 5 (SIU)
	24	4	I1	LHKLPA0SH09M7P LPA (DB 0) parameter set for handler 9 mode 6 (SIU)
	28	4	I1	LHKLPA0SH09M0P LPA (DB 0) parameter set for handler 9 mode 7 (SIU)
0x05C	0	4	I1	LHKLPA0SH10M0P LPA (DB 0) parameter set for handler 10 mode 0 (SIU)
	4	4	I1	LHKLPA0SH10M1P LPA (DB 0) parameter set for handler 10 mode 1 (SIU)
	8	4	I1	LHKLPA0SH10M2P LPA (DB 0) parameter set for handler 10 mode 2 (SIU)
	12	4	I1	LHKLPA0SH10M3P LPA (DB 0) parameter set for handler 10 mode 3 (SIU)
	16	4	I1	LHKLPA0SH10M4P LPA (DB 0) parameter set for handler 10 mode 4 (SIU)
	20	4	I1	LHKLPA0SH10M5P LPA (DB 0) parameter set for handler 10 mode 5 (SIU)
	24	4	I1	LHKLPA0SH10M6P LPA (DB 0) parameter set for handler 10 mode 6 (SIU)
	28	4	I1	LHKLPA0SH10M7P LPA (DB 0) parameter set for handler 10 mode 7 (SIU)
0x060	0	4	I1	LHKLPA0SH11M0P LPA (DB 0) parameter set for handler 11 mode 0 (SIU)
	4	4	I1	LHKLPA0SH11M1P LPA (DB 0) parameter set for handler 11 mode 1 (SIU)
	8	4	I1	LHKLPA0SH11M2P LPA (DB 0) parameter set for handler 11 mode 2 (SIU)
	12	4	I1	LHKLPA0SH11M3P LPA (DB 0) parameter set for handler 11 mode 3 (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
	16	4	I1	LHKLPA0SH11M4P LPA (DB 0) parameter set for handler 11 mode 4 (SIU)
	20	4	I1	LHKLPA0SH11M5P LPA (DB 0) parameter set for handler 11 mode 5 (SIU)
	24	4	I1	LHKLPA0SH11M6P LPA (DB 0) parameter set for handler 11 mode 6 (SIU)
	28	4	I1	LHKLPA0SH11M7P LPA (DB 0) parameter set for handler 11 mode 7 (SIU)
0x064	0	4	I1	LHKLPA0SH12M0P LPA (DB 0) parameter set for handler 12 mode 0 (SIU)
	4	4	I1	LHKLPA0SH12M1P LPA (DB 0) parameter set for handler 12 mode 1 (SIU)
	8	4	I1	LHKLPA0SH12M2P LPA (DB 0) parameter set for handler 12 mode 2 (SIU)
	12	4	I1	LHKLPA0SH12M3P LPA (DB 0) parameter set for handler 12 mode 3 (SIU)
	16	4	I1	LHKLPA0SH12M4P LPA (DB 0) parameter set for handler 12 mode 4 (SIU)
	20	4	I1	LHKLPA0SH12M5P LPA (DB 0) parameter set for handler 12 mode 5 (SIU)
	24	4	I1	LHKLPA0SH12M6P LPA (DB 0) parameter set for handler 12 mode 6 (SIU)
	28	4	I1	LHKLPA0SH12M7P LPA (DB 0) parameter set for handler 12 mode 7 (SIU)
0x068	0	4	I1	LHKLPA0SH13M0P LPA (DB 0) parameter set for handler 13 mode 0 (SIU)
	4	4	I1	LHKLPA0SH13M1P LPA (DB 0) parameter set for handler 13 mode 1 (SIU)
	8	4	I1	LHKLPA0SH13M2P LPA (DB 0) parameter set for handler 13 mode 2 (SIU)
	12	4	I1	LHKLPA0SH13M3P LPA (DB 0) parameter set for handler 13 mode 3 (SIU)
	16	4	I1	LHKLPA0SH13M4P LPA (DB 0) parameter set for handler 13 mode 4 (SIU)
	20	4	I1	LHKLPA0SH13M5P LPA (DB 0) parameter set for handler 13 mode 5 (SIU)
	24	4	I1	LHKLPA0SH13M6P LPA (DB 0) parameter set for handler 13 mode 6 (SIU)
	28	4	I1	LHKLPA0SH13M7P LPA (DB 0) parameter set for handler 13 mode 7 (SIU)
0x06C	0	4	I1	LHKLPA0SH14M0P LPA (DB 0) parameter set for handler 14 mode 0 (SIU)
	4	4	I1	LHKLPA0SH14M1P LPA (DB 0) parameter set for handler 14 mode 1 (SIU)
	8	4	I1	LHKLPA0SH14M2P LPA (DB 0) parameter set for handler 14 mode 2 (SIU)
	12	4	I1	LHKLPA0SH14M3P LPA (DB 0) parameter set for handler 14 mode 3 (SIU)
	16	4	I1	LHKLPA0SH14M4P LPA (DB 0) parameter set for handler 14 mode 4 (SIU)
	20	4	I1	LHKLPA0SH14M5P LPA (DB 0) parameter set for handler 14 mode 5 (SIU)

Offset	S	L	Type	ITOS name, attribute(s), and description
	24	4	I1	LHKLPA0SH14M6P LPA (DB 0) parameter set for handler 14 mode 6 (SIU)
	28	4	I1	LHKLPA0SH14M7P LPA (DB 0) parameter set for handler 14 mode 7 (SIU)
0x070	0	4	I1	LHKLPA0SH15M0P LPA (DB 0) parameter set for handler 15 mode 0 (SIU)
	4	4	I1	LHKLPA0SH15M1P LPA (DB 0) parameter set for handler 15 mode 1 (SIU)
	8	4	I1	LHKLPA0SH15M2P LPA (DB 0) parameter set for handler 15 mode 2 (SIU)
	12	4	I1	LHKLPA0SH15M3P LPA (DB 0) parameter set for handler 15 mode 3 (SIU)
	16	4	I1	LHKLPA0SH15M4P LPA (DB 0) parameter set for handler 15 mode 4 (SIU)
	20	4	I1	LHKLPA0SH15M5P LPA (DB 0) parameter set for handler 15 mode 5 (SIU)
	24	4	I1	LHKLPA0SH15M6P LPA (DB 0) parameter set for handler 15 mode 6 (SIU)
	28	4	I1	LHKLPA0SH15M7P LPA (DB 0) parameter set for handler 15 mode 7 (SIU)

14.3.54 `LpaDb0Epu0` (587/0x24B)

Description:

"LPA filter configuration (based on first LPA_DB instance) (EPU" Telemetry Packet

LPA filter configuration (based on first LPA_DB instance) (EPU0)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0E0 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E0T440 LPA (DB 0) configuration timestamp (EPU0) (seconds)
0x014	0	32	U1234	LHKLPA0E0T441 LPA (DB 0) configuration timestamp (EPU0) (microseconds)
0x018	0	16	U12	LHKLPA0E0HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU0)
0x01A	0	8	U1	LHKLPA0E0OUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU0)
0x01B	0	8	U1	LHKLPA0E0PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU0)
0x01C	0	8	U1	LHKLPA0E0COMP LPA (DB 0) compression level (EPU0)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E0HNDLRM0

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) mask of handlers enabled for mode 0 (EPU0)
0x026	0	16	U12	LHKLPA0E0HNDLRM1
				LPA (DB 0) mask of handlers enabled for mode 1 (EPU0)
0x028	0	16	U12	LHKLPA0E0HNDLRM2
				LPA (DB 0) mask of handlers enabled for mode 2 (EPU0)
0x02A	0	16	U12	LHKLPA0E0HNDLRM3
				LPA (DB 0) mask of handlers enabled for mode 3 (EPU0)
0x02C	0	16	U12	LHKLPA0E0HNDLRM4
				LPA (DB 0) mask of handlers enabled for mode 4 (EPU0)
0x02E	0	16	U12	LHKLPA0E0HNDLRM5
				LPA (DB 0) mask of handlers enabled for mode 5 (EPU0)
0x030	0	16	U12	LHKLPA0E0HNDLRM6
				LPA (DB 0) mask of handlers enabled for mode 6 (EPU0)
0x032	0	16	U12	LHKLPA0E0HNDLRM7
				LPA (DB 0) mask of handlers enabled for mode 7 (EPU0)
0x034	0	4	I1	LHKLPA0E0H00M0P
				LPA (DB 0) parameter set for handler 0 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H00M1P
				LPA (DB 0) parameter set for handler 0 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H00M2P
				LPA (DB 0) parameter set for handler 0 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H00M3P
				LPA (DB 0) parameter set for handler 0 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H00M4P
				LPA (DB 0) parameter set for handler 0 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H00M5P
				LPA (DB 0) parameter set for handler 0 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H00M6P
				LPA (DB 0) parameter set for handler 0 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H00M7P
				LPA (DB 0) parameter set for handler 0 mode 7 (EPU0)
0x038	0	4	I1	LHKLPA0E0H01M0P
				LPA (DB 0) parameter set for handler 1 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H01M1P
				LPA (DB 0) parameter set for handler 1 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H01M2P
				LPA (DB 0) parameter set for handler 1 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H01M3P
				LPA (DB 0) parameter set for handler 1 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H01M4P
				LPA (DB 0) parameter set for handler 1 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H01M5P
				LPA (DB 0) parameter set for handler 1 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H01M6P
				LPA (DB 0) parameter set for handler 1 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H01M7P
				LPA (DB 0) parameter set for handler 1 mode 7 (EPU0)
0x03C	0	4	I1	LHKLPA0E0H02M0P
				LPA (DB 0) parameter set for handler 2 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H02M1P
				LPA (DB 0) parameter set for handler 2 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H02M2P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 2 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H02M3P
				LPA (DB 0) parameter set for handler 2 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H02M4P
				LPA (DB 0) parameter set for handler 2 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H02M5P
				LPA (DB 0) parameter set for handler 2 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H02M6P
				LPA (DB 0) parameter set for handler 2 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H02M7P
				LPA (DB 0) parameter set for handler 2 mode 7 (EPU0)
0x040	0	4	I1	LHKLPA0E0H03M0P
				LPA (DB 0) parameter set for handler 3 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H03M1P
				LPA (DB 0) parameter set for handler 3 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H03M2P
				LPA (DB 0) parameter set for handler 3 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H03M3P
				LPA (DB 0) parameter set for handler 3 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H03M4P
				LPA (DB 0) parameter set for handler 3 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H03M5P
				LPA (DB 0) parameter set for handler 3 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H03M6P
				LPA (DB 0) parameter set for handler 3 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H03M7P
				LPA (DB 0) parameter set for handler 3 mode 7 (EPU0)
0x044	0	4	I1	LHKLPA0E0H04M0P
				LPA (DB 0) parameter set for handler 4 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H04M1P
				LPA (DB 0) parameter set for handler 4 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H04M2P
				LPA (DB 0) parameter set for handler 4 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H04M3P
				LPA (DB 0) parameter set for handler 4 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H04M4P
				LPA (DB 0) parameter set for handler 4 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H04M5P
				LPA (DB 0) parameter set for handler 4 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H04M6P
				LPA (DB 0) parameter set for handler 4 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H04M7P
				LPA (DB 0) parameter set for handler 4 mode 7 (EPU0)
0x048	0	4	I1	LHKLPA0E0H05M0P
				LPA (DB 0) parameter set for handler 5 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H05M1P
				LPA (DB 0) parameter set for handler 5 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H05M2P
				LPA (DB 0) parameter set for handler 5 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H05M3P
				LPA (DB 0) parameter set for handler 5 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H05M4P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 5 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H05M5P
				LPA (DB 0) parameter set for handler 5 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H05M6P
				LPA (DB 0) parameter set for handler 5 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H05M7P
				LPA (DB 0) parameter set for handler 5 mode 7 (EPU0)
0x04C	0	4	I1	LHKLPA0E0H06M0P
				LPA (DB 0) parameter set for handler 6 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H06M1P
				LPA (DB 0) parameter set for handler 6 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H06M2P
				LPA (DB 0) parameter set for handler 6 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H06M3P
				LPA (DB 0) parameter set for handler 6 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H06M4P
				LPA (DB 0) parameter set for handler 6 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H06M5P
				LPA (DB 0) parameter set for handler 6 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H06M6P
				LPA (DB 0) parameter set for handler 6 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H06M7P
				LPA (DB 0) parameter set for handler 6 mode 7 (EPU0)
0x050	0	4	I1	LHKLPA0E0H07M1P
				LPA (DB 0) parameter set for handler 7 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H07M2P
				LPA (DB 0) parameter set for handler 7 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H07M3P
				LPA (DB 0) parameter set for handler 7 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H07M4P
				LPA (DB 0) parameter set for handler 7 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H07M5P
				LPA (DB 0) parameter set for handler 7 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H07M6P
				LPA (DB 0) parameter set for handler 7 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H07M7P
				LPA (DB 0) parameter set for handler 7 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H07M0P
				LPA (DB 0) parameter set for handler 7 mode 7 (EPU0)
0x054	0	4	I1	LHKLPA0E0H08M1P
				LPA (DB 0) parameter set for handler 8 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H08M2P
				LPA (DB 0) parameter set for handler 8 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H08M3P
				LPA (DB 0) parameter set for handler 8 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H08M4P
				LPA (DB 0) parameter set for handler 8 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H08M5P
				LPA (DB 0) parameter set for handler 8 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H08M6P
				LPA (DB 0) parameter set for handler 8 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H08M7P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 8 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H08M0P
				LPA (DB 0) parameter set for handler 8 mode 7 (EPU0)
0x058	0	4	I1	LHKLPA0E0H09M1P
				LPA (DB 0) parameter set for handler 9 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H09M2P
				LPA (DB 0) parameter set for handler 9 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H09M3P
				LPA (DB 0) parameter set for handler 9 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H09M4P
				LPA (DB 0) parameter set for handler 9 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H09M5P
				LPA (DB 0) parameter set for handler 9 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H09M6P
				LPA (DB 0) parameter set for handler 9 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H09M7P
				LPA (DB 0) parameter set for handler 9 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H09M0P
				LPA (DB 0) parameter set for handler 9 mode 7 (EPU0)
0x05C	0	4	I1	LHKLPA0E0H10M0P
				LPA (DB 0) parameter set for handler 10 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H10M1P
				LPA (DB 0) parameter set for handler 10 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H10M2P
				LPA (DB 0) parameter set for handler 10 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H10M3P
				LPA (DB 0) parameter set for handler 10 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H10M4P
				LPA (DB 0) parameter set for handler 10 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H10M5P
				LPA (DB 0) parameter set for handler 10 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H10M6P
				LPA (DB 0) parameter set for handler 10 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H10M7P
				LPA (DB 0) parameter set for handler 10 mode 7 (EPU0)
0x060	0	4	I1	LHKLPA0E0H11M0P
				LPA (DB 0) parameter set for handler 11 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H11M1P
				LPA (DB 0) parameter set for handler 11 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H11M2P
				LPA (DB 0) parameter set for handler 11 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H11M3P
				LPA (DB 0) parameter set for handler 11 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H11M4P
				LPA (DB 0) parameter set for handler 11 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H11M5P
				LPA (DB 0) parameter set for handler 11 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H11M6P
				LPA (DB 0) parameter set for handler 11 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H11M7P
				LPA (DB 0) parameter set for handler 11 mode 7 (EPU0)
0x064	0	4	I1	LHKLPA0E0H12M0P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 12 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H12M1P LPA (DB 0) parameter set for handler 12 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H12M2P LPA (DB 0) parameter set for handler 12 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H12M3P LPA (DB 0) parameter set for handler 12 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H12M4P LPA (DB 0) parameter set for handler 12 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H12M5P LPA (DB 0) parameter set for handler 12 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H12M6P LPA (DB 0) parameter set for handler 12 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H12M7P LPA (DB 0) parameter set for handler 12 mode 7 (EPU0)
0x068	0	4	I1	LHKLPA0E0H13M0P LPA (DB 0) parameter set for handler 13 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H13M1P LPA (DB 0) parameter set for handler 13 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H13M2P LPA (DB 0) parameter set for handler 13 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H13M3P LPA (DB 0) parameter set for handler 13 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H13M4P LPA (DB 0) parameter set for handler 13 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H13M5P LPA (DB 0) parameter set for handler 13 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H13M6P LPA (DB 0) parameter set for handler 13 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H13M7P LPA (DB 0) parameter set for handler 13 mode 7 (EPU0)
0x06C	0	4	I1	LHKLPA0E0H14M0P LPA (DB 0) parameter set for handler 14 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H14M1P LPA (DB 0) parameter set for handler 14 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H14M2P LPA (DB 0) parameter set for handler 14 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H14M3P LPA (DB 0) parameter set for handler 14 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H14M4P LPA (DB 0) parameter set for handler 14 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU0)
0x070	0	4	I1	LHKLPA0E0H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H15M2P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 15 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU0)

14.3.55 `LpaDb0Epu1` (588/0x24C)

Description:

"LPA filter configuration (based on first LPA_DB instance) (EPU" Telemetry Packet

LPA filter configuration (based on first LPA_DB instance) (EPU1)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0E1 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E1T440 LPA (DB 0) configuration timestamp (EPU1) (seconds)
0x014	0	32	U1234	LHKLPA0E1T441 LPA (DB 0) configuration timestamp (EPU1) (microseconds)
0x018	0	16	U12	LHKLPA0E1HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU1)
0x01A	0	8	U1	LHKLPA0E1OUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU1)
0x01B	0	8	U1	LHKLPA0E1PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU1)
0x01C	0	8	U1	LHKLPA0E1COMP LPA (DB 0) compression level (EPU1)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E1HNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (EPU1)
0x026	0	16	U12	LHKLPA0E1HNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (EPU1)
0x028	0	16	U12	LHKLPA0E1HNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (EPU1)
0x02A	0	16	U12	LHKLPA0E1HNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (EPU1)
0x02C	0	16	U12	LHKLPA0E1HNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02E	0	16	U12	LHKLPA0E1HNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (EPU1)
0x030	0	16	U12	LHKLPA0E1HNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (EPU1)
0x032	0	16	U12	LHKLPA0E1HNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (EPU1)
0x034	0	4	I1	LHKLPA0E1H00M0P LPA (DB 0) parameter set for handler 0 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H00M1P LPA (DB 0) parameter set for handler 0 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H00M2P LPA (DB 0) parameter set for handler 0 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H00M3P LPA (DB 0) parameter set for handler 0 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H00M4P LPA (DB 0) parameter set for handler 0 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H00M5P LPA (DB 0) parameter set for handler 0 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H00M6P LPA (DB 0) parameter set for handler 0 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H00M7P LPA (DB 0) parameter set for handler 0 mode 7 (EPU1)
0x038	0	4	I1	LHKLPA0E1H01M0P LPA (DB 0) parameter set for handler 1 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H01M1P LPA (DB 0) parameter set for handler 1 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H01M2P LPA (DB 0) parameter set for handler 1 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H01M3P LPA (DB 0) parameter set for handler 1 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H01M4P LPA (DB 0) parameter set for handler 1 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H01M5P LPA (DB 0) parameter set for handler 1 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H01M6P LPA (DB 0) parameter set for handler 1 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H01M7P LPA (DB 0) parameter set for handler 1 mode 7 (EPU1)
0x03C	0	4	I1	LHKLPA0E1H02M0P LPA (DB 0) parameter set for handler 2 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H02M1P LPA (DB 0) parameter set for handler 2 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H02M2P LPA (DB 0) parameter set for handler 2 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H02M3P LPA (DB 0) parameter set for handler 2 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H02M4P LPA (DB 0) parameter set for handler 2 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H02M5P LPA (DB 0) parameter set for handler 2 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H02M6P LPA (DB 0) parameter set for handler 2 mode 6 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
	28	4	I1	LHKLPA0E1H02M7P LPA (DB 0) parameter set for handler 2 mode 7 (EPU1)
0x040	0	4	I1	LHKLPA0E1H03M0P LPA (DB 0) parameter set for handler 3 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H03M1P LPA (DB 0) parameter set for handler 3 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H03M2P LPA (DB 0) parameter set for handler 3 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H03M3P LPA (DB 0) parameter set for handler 3 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H03M4P LPA (DB 0) parameter set for handler 3 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H03M5P LPA (DB 0) parameter set for handler 3 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H03M6P LPA (DB 0) parameter set for handler 3 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H03M7P LPA (DB 0) parameter set for handler 3 mode 7 (EPU1)
0x044	0	4	I1	LHKLPA0E1H04M0P LPA (DB 0) parameter set for handler 4 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H04M1P LPA (DB 0) parameter set for handler 4 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H04M2P LPA (DB 0) parameter set for handler 4 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H04M3P LPA (DB 0) parameter set for handler 4 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H04M4P LPA (DB 0) parameter set for handler 4 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H04M5P LPA (DB 0) parameter set for handler 4 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H04M6P LPA (DB 0) parameter set for handler 4 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H04M7P LPA (DB 0) parameter set for handler 4 mode 7 (EPU1)
0x048	0	4	I1	LHKLPA0E1H05M0P LPA (DB 0) parameter set for handler 5 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H05M1P LPA (DB 0) parameter set for handler 5 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H05M2P LPA (DB 0) parameter set for handler 5 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H05M3P LPA (DB 0) parameter set for handler 5 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H05M4P LPA (DB 0) parameter set for handler 5 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H05M5P LPA (DB 0) parameter set for handler 5 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H05M6P LPA (DB 0) parameter set for handler 5 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H05M7P LPA (DB 0) parameter set for handler 5 mode 7 (EPU1)
0x04C	0	4	I1	LHKLPA0E1H06M0P LPA (DB 0) parameter set for handler 6 mode 0 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	I1	LHKLPA0E1H06M1P LPA (DB 0) parameter set for handler 6 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H06M2P LPA (DB 0) parameter set for handler 6 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H06M3P LPA (DB 0) parameter set for handler 6 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H06M4P LPA (DB 0) parameter set for handler 6 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H06M5P LPA (DB 0) parameter set for handler 6 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H06M6P LPA (DB 0) parameter set for handler 6 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H06M7P LPA (DB 0) parameter set for handler 6 mode 7 (EPU1)
0x050	0	4	I1	LHKLPA0E1H07M1P LPA (DB 0) parameter set for handler 7 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H07M2P LPA (DB 0) parameter set for handler 7 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H07M3P LPA (DB 0) parameter set for handler 7 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H07M4P LPA (DB 0) parameter set for handler 7 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H07M5P LPA (DB 0) parameter set for handler 7 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H07M6P LPA (DB 0) parameter set for handler 7 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H07M7P LPA (DB 0) parameter set for handler 7 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H07M0P LPA (DB 0) parameter set for handler 7 mode 7 (EPU1)
0x054	0	4	I1	LHKLPA0E1H08M1P LPA (DB 0) parameter set for handler 8 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H08M2P LPA (DB 0) parameter set for handler 8 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H08M3P LPA (DB 0) parameter set for handler 8 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H08M4P LPA (DB 0) parameter set for handler 8 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H08M5P LPA (DB 0) parameter set for handler 8 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H08M6P LPA (DB 0) parameter set for handler 8 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H08M7P LPA (DB 0) parameter set for handler 8 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H08M0P LPA (DB 0) parameter set for handler 8 mode 7 (EPU1)
0x058	0	4	I1	LHKLPA0E1H09M1P LPA (DB 0) parameter set for handler 9 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H09M2P LPA (DB 0) parameter set for handler 9 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H09M3P LPA (DB 0) parameter set for handler 9 mode 2 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	4	I1	LHKLPA0E1H09M4P LPA (DB 0) parameter set for handler 9 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H09M5P LPA (DB 0) parameter set for handler 9 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H09M6P LPA (DB 0) parameter set for handler 9 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H09M7P LPA (DB 0) parameter set for handler 9 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H09M0P LPA (DB 0) parameter set for handler 9 mode 7 (EPU1)
0x05C	0	4	I1	LHKLPA0E1H10M0P LPA (DB 0) parameter set for handler 10 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H10M1P LPA (DB 0) parameter set for handler 10 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H10M2P LPA (DB 0) parameter set for handler 10 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H10M3P LPA (DB 0) parameter set for handler 10 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H10M4P LPA (DB 0) parameter set for handler 10 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H10M5P LPA (DB 0) parameter set for handler 10 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H10M6P LPA (DB 0) parameter set for handler 10 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H10M7P LPA (DB 0) parameter set for handler 10 mode 7 (EPU1)
0x060	0	4	I1	LHKLPA0E1H11M0P LPA (DB 0) parameter set for handler 11 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H11M1P LPA (DB 0) parameter set for handler 11 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H11M2P LPA (DB 0) parameter set for handler 11 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H11M3P LPA (DB 0) parameter set for handler 11 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H11M4P LPA (DB 0) parameter set for handler 11 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H11M5P LPA (DB 0) parameter set for handler 11 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H11M6P LPA (DB 0) parameter set for handler 11 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H11M7P LPA (DB 0) parameter set for handler 11 mode 7 (EPU1)
0x064	0	4	I1	LHKLPA0E1H12M0P LPA (DB 0) parameter set for handler 12 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H12M1P LPA (DB 0) parameter set for handler 12 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H12M2P LPA (DB 0) parameter set for handler 12 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H12M3P LPA (DB 0) parameter set for handler 12 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H12M4P LPA (DB 0) parameter set for handler 12 mode 4 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
	20	4	I1	LHKLPA0E1H12M5P LPA (DB 0) parameter set for handler 12 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H12M6P LPA (DB 0) parameter set for handler 12 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H12M7P LPA (DB 0) parameter set for handler 12 mode 7 (EPU1)
0x068	0	4	I1	LHKLPA0E1H13M0P LPA (DB 0) parameter set for handler 13 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H13M1P LPA (DB 0) parameter set for handler 13 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H13M2P LPA (DB 0) parameter set for handler 13 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H13M3P LPA (DB 0) parameter set for handler 13 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H13M4P LPA (DB 0) parameter set for handler 13 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H13M5P LPA (DB 0) parameter set for handler 13 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H13M6P LPA (DB 0) parameter set for handler 13 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H13M7P LPA (DB 0) parameter set for handler 13 mode 7 (EPU1)
0x06C	0	4	I1	LHKLPA0E1H14M0P LPA (DB 0) parameter set for handler 14 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H14M1P LPA (DB 0) parameter set for handler 14 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H14M2P LPA (DB 0) parameter set for handler 14 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H14M3P LPA (DB 0) parameter set for handler 14 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H14M4P LPA (DB 0) parameter set for handler 14 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU1)
0x070	0	4	I1	LHKLPA0E1H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H15M2P LPA (DB 0) parameter set for handler 15 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU1)

Offset	S	L	Type	ITOS name, attribute(s), and description
	28	4	I1	LHKLPA0E1H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU1)

14.3.56 **LpaDb0Epu2** (589/0x24D)

Description:

"LPA filter configuration (based on first LPA_DB instance) (EPU" Telemetry Packet

LPA filter configuration (based on first LPA_DB instance) (EPU2)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0E2 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E2T440 LPA (DB 0) configuration timestamp (EPU2) (seconds)
0x014	0	32	U1234	LHKLPA0E2T441 LPA (DB 0) configuration timestamp (EPU2) (microseconds)
0x018	0	16	U12	LHKLPA0E2HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU2)
0x01A	0	8	U1	LHKLPA0E2OUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU2)
0x01B	0	8	U1	LHKLPA0E2PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU2)
0x01C	0	8	U1	LHKLPA0E2COMP LPA (DB 0) compression level (EPU2)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E2HNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (EPU2)
0x026	0	16	U12	LHKLPA0E2HNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (EPU2)
0x028	0	16	U12	LHKLPA0E2HNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (EPU2)
0x02A	0	16	U12	LHKLPA0E2HNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (EPU2)
0x02C	0	16	U12	LHKLPA0E2HNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (EPU2)
0x02E	0	16	U12	LHKLPA0E2HNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (EPU2)
0x030	0	16	U12	LHKLPA0E2HNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (EPU2)
0x032	0	16	U12	LHKLPA0E2HNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (EPU2)
0x034	0	4	I1	LHKLPA0E2H00M0P LPA (DB 0) parameter set for handler 0 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H00M1P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 0 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H00M2P
				LPA (DB 0) parameter set for handler 0 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H00M3P
				LPA (DB 0) parameter set for handler 0 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H00M4P
				LPA (DB 0) parameter set for handler 0 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H00M5P
				LPA (DB 0) parameter set for handler 0 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H00M6P
				LPA (DB 0) parameter set for handler 0 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H00M7P
				LPA (DB 0) parameter set for handler 0 mode 7 (EPU2)
0x038	0	4	I1	LHKLPA0E2H01M0P
				LPA (DB 0) parameter set for handler 1 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H01M1P
				LPA (DB 0) parameter set for handler 1 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H01M2P
				LPA (DB 0) parameter set for handler 1 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H01M3P
				LPA (DB 0) parameter set for handler 1 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H01M4P
				LPA (DB 0) parameter set for handler 1 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H01M5P
				LPA (DB 0) parameter set for handler 1 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H01M6P
				LPA (DB 0) parameter set for handler 1 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H01M7P
				LPA (DB 0) parameter set for handler 1 mode 7 (EPU2)
0x03C	0	4	I1	LHKLPA0E2H02M0P
				LPA (DB 0) parameter set for handler 2 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H02M1P
				LPA (DB 0) parameter set for handler 2 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H02M2P
				LPA (DB 0) parameter set for handler 2 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H02M3P
				LPA (DB 0) parameter set for handler 2 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H02M4P
				LPA (DB 0) parameter set for handler 2 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H02M5P
				LPA (DB 0) parameter set for handler 2 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H02M6P
				LPA (DB 0) parameter set for handler 2 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H02M7P
				LPA (DB 0) parameter set for handler 2 mode 7 (EPU2)
0x040	0	4	I1	LHKLPA0E2H03M0P
				LPA (DB 0) parameter set for handler 3 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H03M1P
				LPA (DB 0) parameter set for handler 3 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H03M2P
				LPA (DB 0) parameter set for handler 3 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H03M3P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 3 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H03M4P
				LPA (DB 0) parameter set for handler 3 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H03M5P
				LPA (DB 0) parameter set for handler 3 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H03M6P
				LPA (DB 0) parameter set for handler 3 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H03M7P
				LPA (DB 0) parameter set for handler 3 mode 7 (EPU2)
0x044	0	4	I1	LHKLPA0E2H04M0P
				LPA (DB 0) parameter set for handler 4 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H04M1P
				LPA (DB 0) parameter set for handler 4 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H04M2P
				LPA (DB 0) parameter set for handler 4 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H04M3P
				LPA (DB 0) parameter set for handler 4 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H04M4P
				LPA (DB 0) parameter set for handler 4 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H04M5P
				LPA (DB 0) parameter set for handler 4 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H04M6P
				LPA (DB 0) parameter set for handler 4 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H04M7P
				LPA (DB 0) parameter set for handler 4 mode 7 (EPU2)
0x048	0	4	I1	LHKLPA0E2H05M0P
				LPA (DB 0) parameter set for handler 5 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H05M1P
				LPA (DB 0) parameter set for handler 5 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H05M2P
				LPA (DB 0) parameter set for handler 5 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H05M3P
				LPA (DB 0) parameter set for handler 5 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H05M4P
				LPA (DB 0) parameter set for handler 5 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H05M5P
				LPA (DB 0) parameter set for handler 5 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H05M6P
				LPA (DB 0) parameter set for handler 5 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H05M7P
				LPA (DB 0) parameter set for handler 5 mode 7 (EPU2)
0x04C	0	4	I1	LHKLPA0E2H06M0P
				LPA (DB 0) parameter set for handler 6 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H06M1P
				LPA (DB 0) parameter set for handler 6 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H06M2P
				LPA (DB 0) parameter set for handler 6 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H06M3P
				LPA (DB 0) parameter set for handler 6 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H06M4P
				LPA (DB 0) parameter set for handler 6 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H06M5P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 6 mode 5 (EPU2)
	24	4	`I1`	`LHKLPA0E2H06M6P`
				LPA (DB 0) parameter set for handler 6 mode 6 (EPU2)
	28	4	`I1`	`LHKLPA0E2H06M7P`
				LPA (DB 0) parameter set for handler 6 mode 7 (EPU2)
`0x050`	0	4	`I1`	`LHKLPA0E2H07M1P`
				LPA (DB 0) parameter set for handler 7 mode 0 (EPU2)
	4	4	`I1`	`LHKLPA0E2H07M2P`
				LPA (DB 0) parameter set for handler 7 mode 1 (EPU2)
	8	4	`I1`	`LHKLPA0E2H07M3P`
				LPA (DB 0) parameter set for handler 7 mode 2 (EPU2)
	12	4	`I1`	`LHKLPA0E2H07M4P`
				LPA (DB 0) parameter set for handler 7 mode 3 (EPU2)
	16	4	`I1`	`LHKLPA0E2H07M5P`
				LPA (DB 0) parameter set for handler 7 mode 4 (EPU2)
	20	4	`I1`	`LHKLPA0E2H07M6P`
				LPA (DB 0) parameter set for handler 7 mode 5 (EPU2)
	24	4	`I1`	`LHKLPA0E2H07M7P`
				LPA (DB 0) parameter set for handler 7 mode 6 (EPU2)
	28	4	`I1`	`LHKLPA0E2H07M0P`
				LPA (DB 0) parameter set for handler 7 mode 7 (EPU2)
`0x054`	0	4	`I1`	`LHKLPA0E2H08M1P`
				LPA (DB 0) parameter set for handler 8 mode 0 (EPU2)
	4	4	`I1`	`LHKLPA0E2H08M2P`
				LPA (DB 0) parameter set for handler 8 mode 1 (EPU2)
	8	4	`I1`	`LHKLPA0E2H08M3P`
				LPA (DB 0) parameter set for handler 8 mode 2 (EPU2)
	12	4	`I1`	`LHKLPA0E2H08M4P`
				LPA (DB 0) parameter set for handler 8 mode 3 (EPU2)
	16	4	`I1`	`LHKLPA0E2H08M5P`
				LPA (DB 0) parameter set for handler 8 mode 4 (EPU2)
	20	4	`I1`	`LHKLPA0E2H08M6P`
				LPA (DB 0) parameter set for handler 8 mode 5 (EPU2)
	24	4	`I1`	`LHKLPA0E2H08M7P`
				LPA (DB 0) parameter set for handler 8 mode 6 (EPU2)
	28	4	`I1`	`LHKLPA0E2H08M0P`
				LPA (DB 0) parameter set for handler 8 mode 7 (EPU2)
`0x058`	0	4	`I1`	`LHKLPA0E2H09M1P`
				LPA (DB 0) parameter set for handler 9 mode 0 (EPU2)
	4	4	`I1`	`LHKLPA0E2H09M2P`
				LPA (DB 0) parameter set for handler 9 mode 1 (EPU2)
	8	4	`I1`	`LHKLPA0E2H09M3P`
				LPA (DB 0) parameter set for handler 9 mode 2 (EPU2)
	12	4	`I1`	`LHKLPA0E2H09M4P`
				LPA (DB 0) parameter set for handler 9 mode 3 (EPU2)
	16	4	`I1`	`LHKLPA0E2H09M5P`
				LPA (DB 0) parameter set for handler 9 mode 4 (EPU2)
	20	4	`I1`	`LHKLPA0E2H09M6P`
				LPA (DB 0) parameter set for handler 9 mode 5 (EPU2)
	24	4	`I1`	`LHKLPA0E2H09M7P`
				LPA (DB 0) parameter set for handler 9 mode 6 (EPU2)
	28	4	`I1`	`LHKLPA0E2H09M0P`

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 9 mode 7 (EPU2)
0x05C	0	4	I1	LHKLPA0E2H10M0P
				LPA (DB 0) parameter set for handler 10 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H10M1P
				LPA (DB 0) parameter set for handler 10 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H10M2P
				LPA (DB 0) parameter set for handler 10 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H10M3P
				LPA (DB 0) parameter set for handler 10 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H10M4P
				LPA (DB 0) parameter set for handler 10 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H10M5P
				LPA (DB 0) parameter set for handler 10 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H10M6P
				LPA (DB 0) parameter set for handler 10 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H10M7P
				LPA (DB 0) parameter set for handler 10 mode 7 (EPU2)
0x060	0	4	I1	LHKLPA0E2H11M0P
				LPA (DB 0) parameter set for handler 11 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H11M1P
				LPA (DB 0) parameter set for handler 11 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H11M2P
				LPA (DB 0) parameter set for handler 11 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H11M3P
				LPA (DB 0) parameter set for handler 11 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H11M4P
				LPA (DB 0) parameter set for handler 11 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H11M5P
				LPA (DB 0) parameter set for handler 11 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H11M6P
				LPA (DB 0) parameter set for handler 11 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H11M7P
				LPA (DB 0) parameter set for handler 11 mode 7 (EPU2)
0x064	0	4	I1	LHKLPA0E2H12M0P
				LPA (DB 0) parameter set for handler 12 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H12M1P
				LPA (DB 0) parameter set for handler 12 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H12M2P
				LPA (DB 0) parameter set for handler 12 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H12M3P
				LPA (DB 0) parameter set for handler 12 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H12M4P
				LPA (DB 0) parameter set for handler 12 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H12M5P
				LPA (DB 0) parameter set for handler 12 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H12M6P
				LPA (DB 0) parameter set for handler 12 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H12M7P
				LPA (DB 0) parameter set for handler 12 mode 7 (EPU2)
0x068	0	4	I1	LHKLPA0E2H13M0P
				LPA (DB 0) parameter set for handler 13 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H13M1P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 13 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H13M2P LPA (DB 0) parameter set for handler 13 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H13M3P LPA (DB 0) parameter set for handler 13 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H13M4P LPA (DB 0) parameter set for handler 13 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H13M5P LPA (DB 0) parameter set for handler 13 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H13M6P LPA (DB 0) parameter set for handler 13 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H13M7P LPA (DB 0) parameter set for handler 13 mode 7 (EPU2)
0x06C	0	4	I1	LHKLPA0E2H14M0P LPA (DB 0) parameter set for handler 14 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H14M1P LPA (DB 0) parameter set for handler 14 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H14M2P LPA (DB 0) parameter set for handler 14 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H14M3P LPA (DB 0) parameter set for handler 14 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H14M4P LPA (DB 0) parameter set for handler 14 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU2)
0x070	0	4	I1	LHKLPA0E2H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H15M2P LPA (DB 0) parameter set for handler 15 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU2)

14.3.57 `GasuCounts` (591/0x24F)

Description:

"GASU counter packet (both GEM and EBM)" Telemetry Packet

GASU counter packet (both GEM and EBM)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVGASUCNT Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKGEMT440 Timestamp for most recent GEM acquisition (seconds)
0x014	0	32	U1234	LHKGEMT441 Timestamp for most recent GEM acquisition (microseconds)
0x018	0	32	U1234	LHKGEMTIMEBASE GEM timebase counter (extended)
0x01C	0	32	U1234	LHKGEMLIVETIME GEM livetime counter (extended)
0x020	0	32	U1234	LHKGEMPRESCALE GEM prescale counter (extended)
0x024	0	32	U1234	LHKGEMDISCARD GEM discard counter (extended)
0x028	0	32	U1234	LHKGEMSENT GEM sent counter (extended)
0x02C	0	32	U1234	LHKGEMDEADZONE GEM dead zone counter (extended)
0x030	0	32	U1234	LHKEBMT440 Timestamp for most recent EBM acquisition (seconds)
0x034	0	32	U1234	LHKEBMT441 Timestamp for most recent EBM acquisition (microseconds)
0x038	0	32	U1234	LHKEBMGEMR EBM packet counter - received from GEM (extended)
0x03C	0	32	U1234	LHKEBMAEMR EBM packet counter - received from AEM (extended)
0x040	0	32	U1234	LHKEBMSIU0R EBM packet counter - received from SIU0 (extended)
0x044	0	32	U1234	LHKEBMSIU1R EBM packet counter - received from SIU1 (extended)
0x048	0	32	U1234	LHKEBMSIUER EBM packet counter - received from SIUE (extended)
0x04C	0	32	U1234	LHKEBMEPU0R EBM packet counter - received from EPU0 (extended)
0x050	0	32	U1234	LHKEBMEPU1R EBM packet counter - received from EPU1 (extended)
0x054	0	32	U1234	LHKEBMEPU2R EBM packet counter - received from EPU2 (extended)
0x058	0	32	U1234	LHKEBMSIU0S EBM packet counter - sent to SIU0 (extended)
0x05C	0	32	U1234	LHKEBMSIU1S EBM packet counter - sent to SIU1 (extended)
0x060	0	32	U1234	LHKEBMSIUES EBM packet counter - sent to SIUE (extended)
0x064	0	32	U1234	LHKEBMEPU0S EBM packet counter - sent to EPU0 (extended)
0x068	0	32	U1234	LHKEBMEPU1S EBM packet counter - sent to EPU1 (extended)
0x06C	0	32	U1234	LHKEBMEPU2S EBM packet counter - sent to EPU2 (extended)
0x070	0	32	U1234	LHKEBMSSRS

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM packet counter - sent to SSR (extended)

14.3.58 `LatcStatus` (592/0x250)

Description:

"LATC status packet" Telemetry Packet

Current LATC status, with separate entries for the most recent LATC application and the most recent LATC verification.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLATC Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x014	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x018	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x01C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x020	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x021	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x022	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x023	0	8	U1	LHKLATCDIRTY Dirty configuration - registers have been changed since configuration applied
0x024	0	8	U1	LHKLATCAPPSOURCE Source of most recect LATC application request (Command, LPA, LCI)
0x025	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x026	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x027	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x028	0	32	U1234	LHKLATCAPPRUNID Run ID associated with most recent LATC application
0x02C	0	32	U1234	LHKLATCAPPT440 Timestamp for most recent LATC application (seconds)
0x030	0	32	U1234	LHKLATCAPPT441 Timestamp for most recent LATC application (microseconds)
0x034	0	32	U1234	LHKLATCAPPSTATUS Completion status for most recent LATC application
0x038	0	32	U1234	LHKLATCAPPCONFIG Configuration file ID for most recent LATC application
0x03C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x040	0	32	U1234	LHKSPARE32U1234

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 32 bit pad in unsigned int
0x044	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x048	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x04C	0	8	U1	LHKLATCVERSOURCE Source of most recect LATC verification request (Command, LPA, LCI)
0x04D	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x04E	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x04F	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x050	0	32	U1234	LHKLATCVERRUNID Run ID associated with most recent LATC verification
0x054	0	32	U1234	LHKLATCVERT440 Timestamp for most recent LATC verification (seconds)
0x058	0	32	U1234	LHKLATCVERT441 Timestamp for most recent LATC verification (microseconds)
0x05C	0	32	U1234	LHKLATCVERSTATUS Completion status for most recent LATC verification
0x060	0	32	U1234	LHKLATCVERCONFIG Configuration file ID for most recent LATC verification
0x064	0	32	U1234	LHKLATCVERIGNORE Ignore file ID for most recent LATC verification
0x068	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x06C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x070	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int

14.3.59 `LimStatus` (593/0x251)

Description:

"LIM status/summary packet (including LPA and LCI status)" Telemetry Packet

LIM status/summary packet (including LPA and LCI status)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLIMSTATUS Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LIMTSTATUS LIM most recent action status
0x014	0	16	U12	LIMTACTION LIM most recent action
0x016	0	8	U1	LIMTOPMODE LIM current operating mode
0x017	0	8	U1	LIMTVIRTMODE LIM virtual mode

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	8	U1	LIMTSAATRANSIT LIM SAA transit status
0x019	0	8	U1	LIMTLCISTATE LIM state of task LCI
0x01A	0	8	U1	LIMTLDFSTATE LIM state of task LDF
0x01B	0	8	U1	LIMTLPASTATE LIM state of task LPA
0x01C	0	32	U1234	LIMTTOOREMAINSEC LIM TOO, seconds remaining
0x020	0	32	U1234	LIMTARRREMAINSEC LIM ARR, seconds remaining
0x024	0	32	U1234	LIMTDISREMAINSEC LIM GBM interrupt disable, seconds remaining
0x028	0	5	U1	LIMTTOOPAD LIM (spare 5 bits)
	5	1	U1	LIMTTOOSTARTED LIM TOO started status
	6	1	U1	LIMTTOOACTIVE LIM TOO active status
	7	1	U1	LIMTTOOREADY LIM TOO ready status
0x029	0	2	U1	LIMTARRPAD LIM (spare 2 bits)
	2	1	U1	LIMTARRREPPEND LIM ARR repoint request pending
	3	3	U1	LIMTARRGRBSTATE LIM ARR GRB state
	6	1	U1	LIMTARRACTIVE LIM ARR active status
	7	1	U1	LIMTARRREADY LIM ARR ready status
0x02A	0	5	U1	LIMTGBMPAD LIM (spare 5 bits)
	5	1	U1	LIMTPRIINTALLOW LIM GBM primary interrupt allowed
	6	1	U1	LIMTREDINTALLOW LIM GBM redundant interrupt allowed
	7	1	U1	LIMTGBMREPALLOW LIM GBM repoint request allowed
0x02B	0	7	U1	LIMTHVPAD LIM (spare 7 bits)
	7	1	U1	LIMTHVALLOW LIM ACD high voltage allowed status
0x02C	0	32	U1234	LHKLPARUNID LPA run ID
0x030	0	32	U1234	LHKLPASTARTT440 LPA run started (seconds)
0x034	0	32	U1234	LHKLPASTARTT441 LPA run started (microseconds)
0x038	0	32	U1234	LHKLPAENDT440 LPA run ended (seconds)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03C	0	32	U1234	LHKLPAENDT441 LPA run ended (microseconds)
0x040	0	32	U1234	LHKLPASTATUS LPA run completion status
0x044	0	32	U1234	LHKLPALATCUSEFID LPA apply LATC configuration file ID
0x048	0	32	U1234	LHKLPALATCIGNFID LPA ignore LATC configuration file ID
0x04C	0	8	U1	LHKLPADBID LPA LPA_DB instance for this run
0x04D	0	8	U1	LHKLPAMODE LPA run mode
0x04E	0	16	U12	LHKLPASPARE LPA reserved
0x050	0	32	U1234	LHKLCIRUNID LCI run ID
0x054	0	32	U1234	LHKLCISTARTT440 LCI run started (seconds)
0x058	0	32	U1234	LHKLCISTARTT441 LCI run started (microseconds)
0x05C	0	32	U1234	LHKLCIENDT440 LCI run ended (seconds)
0x060	0	32	U1234	LHKLCIENDT441 LCI run ended (microseconds)
0x064	0	32	U1234	LHKLCISTATUS LCI run completion status
0x068	0	32	U1234	LHKLCILATCFID LCI apply LATC configuration file ID
0x06C	0	32	U1234	LHKLCICFGFID LCI script file ID
0x070	0	32	U1234	LHKLCISPARE LCI reserved

14.3.60 `CtdbCounts` (594/0x252)

Description:

"CTDB (1553) counters" Telemetry Packet

CTDB (1553) counters

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVCTDB Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKRTERRCNT 1553 error count
0x014	0	32	U1234	LHKRTINTRCNT 1553 interrupts
0x018	0	32	U1234	LHKRTCXPCNT 1553 command Rx packet count
0x01C	0	32	U1234	LHKRTCXBCNT

Offset	S	L	Type	ITOS name, attribute(s), and description
				1553 command Rx byte count
0x020	0	32	U1234	LHKRTTXPCNT 1553 command Tx packet count
0x024	0	32	U1234	LHKRTTXBCNT 1553 command Tx byte count
0x028	0	32	U1234	LHKRTHKPCNT 1553 housekeeping packet count
0x02C	0	32	U1234	LHKRTHKBCNT 1553 housekeeping byte count
0x030	0	32	U1234	LHKRTTLMPCNT 1553 telemetry packet count
0x034	0	32	U1234	LHKRTTLMBCNT 1553 telemetry byte count
0x038	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x046	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x048	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.61 `MiscSlow` (595/0x253)

Description:

"Miscellaneous nearly static information" Telemetry Packet

Miscellaneous nearly static information

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVMISCSLOW Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPALATCUSE Default LATC configuration file if none specified
0x014	0	32	U1234	LHKLPALATCIGN Default LATC ignore file if none specified
0x018	0	32	U1234	LHKLPADBFILE Default LPA_DB file if none specified (quoi)
0x01C	0	16	U12	LHKLPADBINST Default LPA_DB instance if none specified (quoi)
0x01E	0	8	U1	LHKLPAEPUENABLE LPA EPU enable mask
0x01F	0	8	U1	LHKLPAGBMENABLE LPA GBM enable (quoi)
0x020	0	32	U1234	LHKSKEDFILE Housekeeping scheduling file ID
0x024	0	32	U1234	LHKSKEDINST Housekeeping scheduling file instance
0x028	0	32	U1234	LHKLIHLIMITFILE Limit checking file ID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02C	0	32	U1234	LHKLIHLIMITINST Limit checking file instance
0x030	0	32	U1234	LHKLTCCONFIG LTC configuration file ID
0x034	0	32	U1234	LHKGRBCONFIG GRB configuration file ID
0x038	0	8	U1	LHKLIHACTENABL Limit checking actions enable
0x039	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x040	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x044	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x048	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x04C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x050	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x054	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x058	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x05C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x060	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x064	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x068	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x06C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x070	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int

14.3.62 `PigStatus` (596/0x254)

Description:

"PIG configuration information" Telemetry Packet

PIG configuration information, derived from the SIB power control register, three CRU registers (including PPS and GBM selectors), and 8 EBM registers (including SSR selector)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVPIGSTAT LHK reserved field
0x010	0	16	U1234	LHKSPARE16U1234 Explicit 16 bit pad in unsigned short
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	27	1	U12	LHKSIBMAINFEED Mainfeed primary/redundant selector
	28	1	U12	LHKSIBPDUPRIM SIB PDU primary power switch
	29	1	U12	LHKSIBPDURED SIB PDU redundant power switch
	30	1	U12	LHKSIBGASUPRIM SIB GASU primary power switch
	31	1	U12	LHKSIBGASURED SIB GASU redundant power switch
0x014	0	1	U12	LHKCRUCONFIGST; LHKSETTLESTATES CRU configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKCRUVERSIONID CRU hardware version ID
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	27	1	U1	LHKCRUEVENCELL CRU configuration enable even parity (cell)
	28	1	U1	LHKCRUEVENHDR CRU configuration enable even parity (header)
	29	1	U12	LHKCRUGBMSELECT CRU configuration GBM signal path selector
	30	1	U12	LHKCRUPPSSELECT CRU configuration PPS signal path selector
	31	1	U1	LHKCRUPPSGEN CRU configuration enable internal PPS generator
0x018	0	1	U12	LHKCRUCOMMANDST; LHKSETTLESTATES CRU command enable register read status
	1	1	U1234	LHKSPARE1U1234 PID status
	2	1	U1	LHKCRUCMDEPU2 CRU command enable EPU2
	3	1	U1	LHKCRUCMDEPU1 CRU command enable EPU1
	4	1	U1	LHKCRUCMDEPU0 CRU command enable EPU0
	5	1	U1	LHKCRUCMDSIU1 CRU command enable SIU1
	6	1	U1	LHKCRUCMDSIU0 CRU command enable SIU0

Offset	S	L	Type	ITOS name, attribute(s), and description
	7	1	U1	LHKCRUCMDSIUE CRU command enable SIUE
	8	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	11	1	U1	LHKCRUCMDPDU1 CRU command enable PDU1
	12	1	U1	LHKCRUCMDPDU0 CRU command enable PDU0
	13	1	U1	LHKCRUCMDEBM CRU command enable EBM
	14	1	U1	LHKCRUCMDAEM CRU command enable AEM
	15	1	U1	LHKCRUCMDGEM CRU command enable GEM
	16	1	U1	LHKCRUCMDTEMF CRU command enable TEM F
	17	1	U1	LHKCRUCMDTEME CRU command enable TEM E
	18	1	U1	LHKCRUCMDTEMD CRU command enable TEM D
	19	1	U1	LHKCRUCMDTEMC CRU command enable TEM C
	20	1	U1	LHKCRUCMDTEMB CRU command enable TEM B
	21	1	U1	LHKCRUCMDTEMA CRU command enable TEM A
	22	1	U1	LHKCRUCMDTEM9 CRU command enable TEM 9
	23	1	U1	LHKCRUCMDTEM8 CRU command enable TEM 8
	24	1	U1	LHKCRUCMDTEM7 CRU command enable TEM 7
	25	1	U1	LHKCRUCMDTEM6 CRU command enable TEM 6
	26	1	U1	LHKCRUCMDTEM5 CRU command enable TEM 5
	27	1	U1	LHKCRUCMDTEM4 CRU command enable TEM 4
	28	1	U1	LHKCRUCMDTEM3 CRU command enable TEM 3
	29	1	U1	LHKCRUCMDTEM2 CRU command enable TEM 2
	30	1	U1	LHKCRUCMDTEM1 CRU command enable TEM 1
	31	1	U1	LHKCRUCMDTEM0 CRU command enable TEM 0
0x01C	0	1	U12	LHKCRURSPST CRU response enable register read status
	1	1	U1234	LHKSPARE1U1234 Explicit 1 bit pad in unsigned char
	2	1	U1	LHKCRURSPEPU2 CRU response enable EPU2

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U1	LHKCRURSPEPU1 CRU response enable EPU1
	4	1	U1	LHKCRURSPEPU0 CRU response enable EPU0
	5	1	U1	LHKCRURSPSIU1 CRU response enable SIU1
	6	1	U1	LHKCRURSPSIU0 CRU response enable SIU0
	7	1	U1	LHKCRURSPSIUE CRU response enable SIUE
	8	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	11	1	U1	LHKCRURSPPDU1 CRU response enable PDU1
	12	1	U1	LHKCRURSPPDU0 CRU response enable PDU0
	13	1	U1	LHKCRURSPEBM CRU response enable EBM
	14	1	U1	LHKCRURSPAEM CRU response enable AEM
	15	1	U1	LHKCRURSPGEM CRU response enable GEM
	16	1	U1	LHKCRURSPTEMF CRU response enable TEM F
	17	1	U1	LHKCRURSPTEME CRU response enable TEM E
	18	1	U1	LHKCRURSPTEMD CRU response enable TEM D
	19	1	U1	LHKCRURSPTEMC CRU response enable TEM C
	20	1	U1	LHKCRURSPTEMB CRU response enable TEM B
	21	1	U1	LHKCRURSPTEMA CRU response enable TEM A
	22	1	U1	LHKCRURSPTEM9 CRU response enable TEM 9
	23	1	U1	LHKCRURSPTEM8 CRU response enable TEM 8
	24	1	U1	LHKCRURSPTEM7 CRU response enable TEM 7
	25	1	U1	LHKCRURSPTEM6 CRU response enable TEM 6
	26	1	U1	LHKCRURSPTEM5 CRU response enable TEM 5
	27	1	U1	LHKCRURSPTEM4 CRU response enable TEM 4
	28	1	U1	LHKCRURSPTEM3 CRU response enable TEM 3
	29	1	U1	LHKCRURSPTEM2 CRU response enable TEM 2
	30	1	U1	LHKCRURSPTEM1 CRU response enable TEM 1

Offset	S	L	Type	ITOS name, attribute(s), and description
	31	1	U1	LHKCRURSPTEM0 CRU response enable TEM 0
0x020	0	1	U12	LHKEBMBECFGST; LHKSETTLESTATES EBM back-end configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKEBMBEVID EBM back-end hardware version ID
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	1	U1	LHKEBMBESSRSEND EBM back-end configuration output SSR header word
	25	1	U1	LHKEBMBEEVENDC EBM back-end configuration send even parity (data, cell)
	26	1	U1	LHKEBMBEEVENDH EBM back-end configuration send even parity (data, header)
	27	1	U1	LHKEBMBEEVENEC EBM back-end configuration send even parity (event, cell)
	28	1	U1	LHKEBMBEEVENEH EBM back-end configuration send even parity (event, header)
	29	1	U1	LHKEBMBEEVENRC EBM back-end configuration send even parity (response, cell)
	30	1	U1	LHKEBMBEEVENRH EBM back-end configuration send even parity (response, header)
	31	1	U1	LHKEBMBESSRPATH EBM back-end configuration SSR path selector
0x024	0	1	U12	LHKEBMFEACFGST; LHKSETTLESTATES EBM front-end A configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKEBMFEAVID EBM front-end A-end hardware version ID
	16	8	U1	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	8	U1	LHKEBMFEARELOC EBM front-end A relocation control
0x028	0	1	U12	LHKEBMFEBCFGST; LHKSETTLESTATES EBM front-end B configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKEBMFEBVID EBM front-end B hardware version ID
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	8	U1	LHKEBMFEBRELOC EBM front-end B relocation control
0x02C	0	1	U12	LHKEBMADDRESSST EBM address register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char

Offset	S	L	Type	ITOS name, attribute(s), and description
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	8	U1	LHKEBMADDRESS EBM node address on command/response fabric
0x030	0	1	U12	LHKEBMINPUTST; LHKSETTLESTATES EBM input enables register read status
	1	7	U1	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	1	U1	LHKEBMINPUTEPU2 EBM input enable EPU2
	9	1	U1	LHKEBMINPUTEPU1 EBM input enable EPU1
	10	1	U1	LHKEBMINPUTEPU0 EBM input enable EPU0
	11	1	U1	LHKEBMINPUTSIU1 EBM input enable SIU1
	12	1	U1	LHKEBMINPUTSIU0 EBM input enable SIU0
	13	1	U1	LHKEBMINPUTSIUE EBM input enable SIUE
	14	1	U1	LHKEBMINPUTAEM EBM input enable AEM
	15	1	U1	LHKEBMINPUTTEMF EBM input enable TEM F
	16	1	U1	LHKEBMINPUTTEME EBM input enable TEM E
	17	1	U1	LHKEBMINPUTTEMD EBM input enable TEM D
	18	1	U1	LHKEBMINPUTTEMC EBM input enable TEM C
	19	1	U1	LHKEBMINPUTTEMB EBM input enable TEM B
	20	1	U1	LHKEBMINPUTTEMA EBM input enable TEM A
	21	1	U1	LHKEBMINPUTTEM9 EBM input enable TEM 9
	22	1	U1	LHKEBMINPUTTEM8 EBM input enable TEM 8
	23	1	U1	LHKEBMINPUTTEM7 EBM input enable TEM 7
	24	1	U1	LHKEBMINPUTTEM6 EBM input enable TEM 6
	25	1	U1	LHKEBMINPUTTEM5 EBM input enable TEM 5
	26	1	U1	LHKEBMINPUTTEM4 EBM input enable TEM 4
	27	1	U1	LHKEBMINPUTTEM3 EBM input enable TEM 3
	28	1	U1	LHKEBMINPUTTEM2 EBM input enable TEM 2
	29	1	U1	LHKEBMINPUTTEM1 EBM input enable TEM 1

Offset	S	L	Type	ITOS name, attribute(s), and description
	30	1	U1	LHKEBMINPUTTEM0 EBM input enable TEM 0
	31	1	U1	LHKEBMINPUTGEM EBM input enable GEM
0x034	0	1	U12	LHKEBMCTRBST; LHKSETTLESTATES EBM contributor enables register read status
	1	7	U1	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	1	U1	LHKEBMCTRBEPU2 EBM contributor enable EPU2
	9	1	U1	LHKEBMCTRBEPU1 EBM contributor enable EPU1
	10	1	U1	LHKEBMCTRBEPU0 EBM contributor enable EPU0
	11	1	U1	LHKEBMCTRBSIU1 EBM contributor enable SIU1
	12	1	U1	LHKEBMCTRBSIU0 EBM contributor enable SIU0
	13	1	U1	LHKEBMCTRBSIUE EBM contributor enable SIUE
	14	1	U1	LHKEBMCTRBAEM EBM contributor enable AEM
	15	1	U1	LHKEBMCTRBTEMF EBM contributor enable TEM F
	16	1	U1	LHKEBMCTRBTEME EBM contributor enable TEM E
	17	1	U1	LHKEBMCTRBTEMD EBM contributor enable TEM D
	18	1	U1	LHKEBMCTRBTEMC EBM contributor enable TEM C
	19	1	U1	LHKEBMCTRBTEMB EBM contributor enable TEM B
	20	1	U1	LHKEBMCTRBTEMA EBM contributor enable TEM A
	21	1	U1	LHKEBMCTRBTEM9 EBM contributor enable TEM 9
	22	1	U1	LHKEBMCTRBTEM8 EBM contributor enable TEM 8
	23	1	U1	LHKEBMCTRBTEM7 EBM contributor enable TEM 7
	24	1	U1	LHKEBMCTRBTEM6 EBM contributor enable TEM 6
	25	1	U1	LHKEBMCTRBTEM5 EBM contributor enable TEM 5
	26	1	U1	LHKEBMCTRBTEM4 EBM contributor enable TEM 4
	27	1	U1	LHKEBMCTRBTEM3 EBM contributor enable TEM 3
	28	1	U1	LHKEBMCTRBTEM2 EBM contributor enable TEM 2
	29	1	U1	LHKEBMCTRBTEM1 EBM contributor enable TEM 1

Offset	S	L	Type	ITOS name, attribute(s), and description
	30	1	U1	LHKEBMCTRBTEM0 EBM contributor enable TEM 0
	31	1	U1	LHKEBMCTRBGEM EBM contributor enable GEM
0x038	0	1	U12	LHKEBMDESTST; LHKSETTLESTATES EBM destination enables register read status
	1	1	U1234	LHKSPARE1U1234 Explicit 1 bit pad in unsigned char
	2	1	U1	LHKEBMDSTDBEPU2 EBM destination enable EPU2 (data,broadcast)
	3	1	U1	LHKEBMDSTDBEPU1 EBM destination enable EPU1 (data,broadcast)
	4	1	U1	LHKEBMDSTDBEPU0 EBM destination enable EPU0 (data,broadcast)
	5	1	U1	LHKEBMDSTDBSIU1 EBM destination enable SIU1 (data,broadcast)
	6	1	U1	LHKEBMDSTDBSIU0 EBM destination enable SIU0 (data,broadcast)
	7	1	U1	LHKEBMDSTDBSIUE EBM destination enable SIUE (data,broadcast)
	8	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	16	2	U1234	LHKSPARE2U1234 Explicit 2 bit pad in unsigned char
	18	1	U1	LHKEBMDSTEBEPU2 EBM destination enable EPU2 (events,broadcast)
	19	1	U1	LHKEBMDSTEBEPU1 EBM destination enable EPU1 (events,broadcast)
	20	1	U1	LHKEBMDSTEBEPU0 EBM destination enable EPU0 (events,broadcast)
	21	1	U1	LHKEBMDSTEBSIU1 EBM destination enable SIU1 (events,broadcast)
	22	1	U1	LHKEBMDSTEBSIU0 EBM destination enable SIU0 (events,broadcast)
	23	1	U1	LHKEBMDSTEBSIUE EBM destination enable SIUE (events,broadcast)
	24	2	U1234	? ?
	26	1	U1	? ?
	27	1	U1	? ?
	28	1	U1	? ?
	29	1	U1	? ?
	30	1	U1	? ?
	31	1	U1	? ?
0x03C	0	1	U12	LHKEBMTIMEOUTST EBM timeout register read status

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	14	U1234	LHKSPARE14U1234 Explicit 14 bit pad in unsigned int
	15	17	U1234	LHKEBMTIMEOUT EBM timeout (17 bits)
0x040	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x044	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x048	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x04C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x050	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x054	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x058	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x05C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x060	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x064	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x068	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x06C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x070	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int

14.3.63 DiagTemEnvPwr0 (624/0x270)

Description:

"Diagnostic TEM Power Packet 0" Telemetry Packet

Contains power specific ADC values for TEMs 0, 1, and 2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR0 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT0TKR25VDLM; LHKADCLMTSTATES TEM 0 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VDST TEM 0 TKR digital 2.5 V - read out status
	4	12	U12	LHKT0TKR25VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT0TKR15VAALM; LHKADCLMTSTATES TEM 0 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT0TKR15VAAST TEM 0 TKR analog 1.5 V - read out status
	4	12	U12	LHKT0TKR15VAA TEM 0 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT0TKR25VABLM TEM 0 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VABST TEM 0 TKR analog 2.5 V - read out status
	4	12	U12	LHKT0TKR25VAB TEM 0 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT0TKRBV0LM; LHKADCLMTSTATES TEM 0 TKR bias V0 - limit evaluation
	3	1	U12	LHKT0TKRBV0ST TEM 0 TKR bias V0 - read out status
	4	12	U12	LHKT0TKRBV0 TEM 0 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT0CAL33VDLM; LHKADCLMTSTATES TEM 0 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VDST TEM 0 CAL digital 3.3 V - read out status
	4	12	U12	LHKT0CAL33VD TEM 0 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT0TKRBV1LM; LHKADCLMTSTATES TEM 0 TKR bias V1 - limit evaluation
	3	1	U12	LHKT0TKRBV1ST TEM 0 TKR bias V1 - read out status
	4	12	U12	LHKT0TKRBV1 TEM 0 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT0CAL33VALM; LHKADCLMTSTATES TEM 0 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VAST TEM 0 CAL analog 3.3 V - read out status
	4	12	U12	LHKT0CAL33VA TEM 0 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT0CALBSV1LM TEM 0 CAL bias V1 - limit evaluation
	3	1	U12	LHKT0CALBSV1ST TEM 0 CAL bias V1 - read out status
	4	12	U12	LHKT0CALBSV1 TEM 0 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT0CALBSV0LM

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 CAL bias V0 - limit evaluation
	3	1	U12	LHKT0CALBSV0ST
				TEM 0 CAL bias V0 - read out status
	4	12	U12	LHKT0CALBSV0
				TEM 0 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT0TEM28V0LM
				TEM 0 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT0TEM28V0ST
				TEM 0 TEM 28 V (V0) - read out status
	4	12	U12	LHKT0TEM28V0
				TEM 0 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT0TEM33VLM; LHKADCLMTSTATES
				TEM 0 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT0TEM33VST
				TEM 0 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT0TEM33V
				TEM 0 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT0TEM28V1LM; LHKADCLMTSTATES
				TEM 0 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT0TEM28V1ST
				TEM 0 TEM 28 V (V1) - read out status
	4	12	U12	LHKT0TEM28V1
				TEM 0 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT1TKR25VDLM; LHKADCLMTSTATES
				TEM 1 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VDST
				TEM 1 TKR digital 2.5 V - read out status
	4	12	U12	LHKT1TKR25VD
				TEM 1 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT1TKR15VAALM; LHKADCLMTSTATES
				TEM 1 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT1TKR15VAAST
				TEM 1 TKR analog 1.5 V - read out status
	4	12	U12	LHKT1TKR15VAA
				TEM 1 TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKT1TKR25VABLM
				TEM 1 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VABST
				TEM 1 TKR analog 2.5 V - read out status
	4	12	U12	LHKT1TKR25VAB
				TEM 1 TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKT1TKRBV0LM; LHKADCLMTSTATES
				TEM 1 TKR bias V0 - limit evaluation
	3	1	U12	LHKT1TKRBV0ST
				TEM 1 TKR bias V0 - read out status
	4	12	U12	LHKT1TKRBV0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 1 TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKT1CAL33VDLM; LHKADCLMTSTATES TEM 1 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VDST TEM 1 CAL digital 3.3 V - read out status
	4	12	U12	LHKT1CAL33VD TEM 1 CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKT1TKRBV1LM; LHKADCLMTSTATES TEM 1 TKR bias V1 - limit evaluation
	3	1	U12	LHKT1TKRBV1ST TEM 1 TKR bias V1 - read out status
	4	12	U12	LHKT1TKRBV1 TEM 1 TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKT1CAL33VALM; LHKADCLMTSTATES TEM 1 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VAST TEM 1 CAL analog 3.3 V - read out status
	4	12	U12	LHKT1CAL33VA TEM 1 CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKT1CALBSV1LM TEM 1 CAL bias V1 - limit evaluation
	3	1	U12	LHKT1CALBSV1ST TEM 1 CAL bias V1 - read out status
	4	12	U12	LHKT1CALBSV1 TEM 1 CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKT1CALBSV0LM TEM 1 CAL bias V0 - limit evaluation
	3	1	U12	LHKT1CALBSV0ST TEM 1 CAL bias V0 - read out status
	4	12	U12	LHKT1CALBSV0 TEM 1 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT1TEM28V0LM TEM 1 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT1TEM28V0ST TEM 1 TEM 28 V (V0) - read out status
	4	12	U12	LHKT1TEM28V0 TEM 1 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT1TEM33VLM; LHKADCLMTSTATES TEM 1 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT1TEM33VST TEM 1 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT1TEM33V TEM 1 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT1TEM28V1LM; LHKADCLMTSTATES TEM 1 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT1TEM28V1ST TEM 1 TEM 28 V (V1) - read out status
	4	12	U12	LHKT1TEM28V1 TEM 1 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT2TKR25VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VDST
				TEM 2 TKR digital 2.5 V - read out status
	4	12	U12	LHKT2TKR25VD
				TEM 2 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT2TKR15VAALM; LHKADCLMTSTATES
				TEM 2 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT2TKR15VAAST
				TEM 2 TKR analog 1.5 V - read out status
	4	12	U12	LHKT2TKR15VAA
				TEM 2 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT2TKR25VABLM
				TEM 2 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VABST
				TEM 2 TKR analog 2.5 V - read out status
	4	12	U12	LHKT2TKR25VAB
				TEM 2 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT2TKRBV0LM; LHKADCLMTSTATES
				TEM 2 TKR bias V0 - limit evaluation
	3	1	U12	LHKT2TKRBV0ST
				TEM 2 TKR bias V0 - read out status
	4	12	U12	LHKT2TKRBV0
				TEM 2 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT2CAL33VDLM; LHKADCLMTSTATES
				TEM 2 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VDST
				TEM 2 CAL digital 3.3 V - read out status
	4	12	U12	LHKT2CAL33VD
				TEM 2 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT2TKRBV1LM; LHKADCLMTSTATES
				TEM 2 TKR bias V1 - limit evaluation
	3	1	U12	LHKT2TKRBV1ST
				TEM 2 TKR bias V1 - read out status
	4	12	U12	LHKT2TKRBV1
				TEM 2 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT2CAL33VALM; LHKADCLMTSTATES
				TEM 2 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VAST
				TEM 2 CAL analog 3.3 V - read out status
	4	12	U12	LHKT2CAL33VA
				TEM 2 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT2CALBSV1LM
				TEM 2 CAL bias V1 - limit evaluation
	3	1	U12	LHKT2CALBSV1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 CAL bias V1 - read out status
	4	12	U12	LHKT2CALBSV1 TEM 2 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT2CALBSV0LM TEM 2 CAL bias V0 - limit evaluation
	3	1	U12	LHKT2CALBSV0ST TEM 2 CAL bias V0 - read out status
	4	12	U12	LHKT2CALBSV0 TEM 2 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT2TEM28V0LM TEM 2 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT2TEM28V0ST TEM 2 TEM 28 V (V0) - read out status
	4	12	U12	LHKT2TEM28V0 TEM 2 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT2TEM33VLM; LHKADCLMTSTATES TEM 2 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT2TEM33VST TEM 2 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT2TEM33V TEM 2 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT2TEM28V1LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT2TEM28V1ST TEM 2 TEM 28 V (V1) - read out status
	4	12	U12	LHKT2TEM28V1 TEM 2 TEM 28 V (V1) - raw ADC value

14.3.64 DiagTemEnvPwr1 (625/0x271)

Description:

"Diagnostic TEM Power Packet 1" Telemetry Packet

Contains power specific ADC values for TEMs 3, 4, and 5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR1 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT3TKR25VDLM; LHKADCLMTSTATES TEM 3 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VDST TEM 3 TKR digital 2.5 V - read out status
	4	12	U12	LHKT3TKR25VD TEM 3 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	3	U12	LHKT3TKR15VAALM; LHKADCLMTSTATES TEM 3 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT3TKR15VAAST TEM 3 TKR analog 1.5 V - read out status
	4	12	U12	LHKT3TKR15VAA TEM 3 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT3TKR25VABLM; LHKADCLMTSTATES TEM 3 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VABST TEM 3 TKR analog 2.5 V - read out status
	4	12	U12	LHKT3TKR25VAB TEM 3 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT3TKRBV0LM; LHKADCLMTSTATES TEM 3 TKR bias V0 - limit evaluation
	3	1	U12	LHKT3TKRBV0ST TEM 3 TKR bias V0 - read out status
	4	12	U12	LHKT3TKRBV0 TEM 3 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT3CAL33VDLM; LHKADCLMTSTATES TEM 3 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VDST TEM 3 CAL digital 3.3 V - read out status
	4	12	U12	LHKT3CAL33VD TEM 3 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT3TKRBV1LM; LHKADCLMTSTATES TEM 3 TKR bias V1 - limit evaluation
	3	1	U12	LHKT3TKRBV1ST TEM 3 TKR bias V1 - read out status
	4	12	U12	LHKT3TKRBV1 TEM 3 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT3CAL33VALM; LHKADCLMTSTATES TEM 3 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VAST TEM 3 CAL analog 3.3 V - read out status
	4	12	U12	LHKT3CAL33VA TEM 3 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT3CALBSV1LM TEM 3 CAL bias V1 - limit evaluation
	3	1	U12	LHKT3CALBSV1ST TEM 3 CAL bias V1 - read out status
	4	12	U12	LHKT3CALBSV1 TEM 3 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT3CALBSV0LM TEM 3 CAL bias V0 - limit evaluation
	3	1	U12	LHKT3CALBSV0ST TEM 3 CAL bias V0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT3CALBSV0 TEM 3 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT3TEM28V0LM TEM 3 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT3TEM28V0ST TEM 3 TEM 28 V (V0) - read out status
	4	12	U12	LHKT3TEM28V0 TEM 3 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT3TEM33VLM; LHKADCLMTSTATES TEM 3 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT3TEM33VST TEM 3 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT3TEM33V TEM 3 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT3TEM28V1LM; LHKADCLMTSTATES TEM 3 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT3TEM28V1ST TEM 3 TEM 28 V (V1) - read out status
	4	12	U12	LHKT3TEM28V1 TEM 3 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT4TKR25VDLM; LHKADCLMTSTATES TEM 4 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VDST TEM 4 TKR digital 2.5 V - read out status
	4	12	U12	LHKT4TKR25VD TEM 4 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT4TKR15VAALM; LHKADCLMTSTATES TEM 4 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT4TKR15VAAST TEM 4 TKR analog 1.5 V - read out status
	4	12	U12	LHKT4TKR15VAA TEM 4 TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKT4TKR25VABLM; LHKADCLMTSTATES TEM 4 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VABST TEM 4 TKR analog 2.5 V - read out status
	4	12	U12	LHKT4TKR25VAB TEM 4 TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKT4TKRBV0LM; LHKADCLMTSTATES TEM 4 TKR bias V0 - limit evaluation
	3	1	U12	LHKT4TKRBV0ST TEM 4 TKR bias V0 - read out status
	4	12	U12	LHKT4TKRBV0 TEM 4 TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x044	0	3	U12	LHKT4CAL33VDLM; LHKADCLMTSTATES TEM 4 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VDST TEM 4 CAL digital 3.3 V - read out status
	4	12	U12	LHKT4CAL33VD TEM 4 CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKT4TKRBV1LM; LHKADCLMTSTATES TEM 4 TKR bias V1 - limit evaluation
	3	1	U12	LHKT4TKRBV1ST TEM 4 TKR bias V1 - read out status
	4	12	U12	LHKT4TKRBV1 TEM 4 TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKT4CAL33VALM; LHKADCLMTSTATES TEM 4 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VAST TEM 4 CAL analog 3.3 V - read out status
	4	12	U12	LHKT4CAL33VA TEM 4 CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKT4CALBSV1LM; LHKADCLMTSTATES TEM 4 CAL bias V1 - limit evaluation
	3	1	U12	LHKT4CALBSV1ST TEM 4 CAL bias V1 - read out status
	4	12	U12	LHKT4CALBSV1 TEM 4 CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKT4CALBSV0LM; LHKADCLMTSTATES TEM 4 CAL bias V0 - limit evaluation
	3	1	U12	LHKT4CALBSV0ST TEM 4 CAL bias V0 - read out status
	4	12	U12	LHKT4CALBSV0 TEM 4 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT4TEM28V0LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT4TEM28V0ST TEM 4 TEM 28 V (V0) - read out status
	4	12	U12	LHKT4TEM28V0 TEM 4 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT4TEM33VLM; LHKADCLMTSTATES TEM 4 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT4TEM33VST TEM 4 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT4TEM33V TEM 4 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT4TEM28V1LM; LHKADCLMTSTATES TEM 4 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT4TEM28V1ST TEM 4 TEM 28 V (V1) - read out status
	4	12	U12	LHKT4TEM28V1 TEM 4 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT5TKR25VDLM; LHKADCLMTSTATES TEM 5 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VDST TEM 5 TKR digital 2.5 V - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT5TKR25VD TEM 5 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT5TKR15VAALM; LHKADCLMTSTATES TEM 5 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT5TKR15VAAST TEM 5 TKR analog 1.5 V - read out status
	4	12	U12	LHKT5TKR15VAA TEM 5 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT5TKR25VABLM; LHKADCLMTSTATES TEM 5 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VABST TEM 5 TKR analog 2.5 V - read out status
	4	12	U12	LHKT5TKR25VAB TEM 5 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT5TKRBV0LM; LHKADCLMTSTATES TEM 5 TKR bias V0 - limit evaluation
	3	1	U12	LHKT5TKRBV0ST TEM 5 TKR bias V0 - read out status
	4	12	U12	LHKT5TKRBV0 TEM 5 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT5CAL33VDLM; LHKADCLMTSTATES TEM 5 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VDST TEM 5 CAL digital 3.3 V - read out status
	4	12	U12	LHKT5CAL33VD TEM 5 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT5TKRBV1LM; LHKADCLMTSTATES TEM 5 TKR bias V1 - limit evaluation
	3	1	U12	LHKT5TKRBV1ST TEM 5 TKR bias V1 - read out status
	4	12	U12	LHKT5TKRBV1 TEM 5 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT5CAL33VALM; LHKADCLMTSTATES TEM 5 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VAST TEM 5 CAL analog 3.3 V - read out status
	4	12	U12	LHKT5CAL33VA TEM 5 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT5CALBSV1LM TEM 5 CAL bias V1 - limit evaluation
	3	1	U12	LHKT5CALBSV1ST TEM 5 CAL bias V1 - read out status
	4	12	U12	LHKT5CALBSV1 TEM 5 CAL bias V1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06C	0	3	U12	LHKT5CALBSV0LM TEM 5 CAL bias V0 - limit evaluation
	3	1	U12	LHKT5CALBSV0ST TEM 5 CAL bias V0 - read out status
	4	12	U12	LHKT5CALBSV0 TEM 5 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT5TEM28V0LM TEM 5 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT5TEM28V0ST TEM 5 TEM 28 V (V0) - read out status
	4	12	U12	LHKT5TEM28V0 TEM 5 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT5TEM33VLM; LHKADCLMTSTATES TEM 5 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT5TEM33VST TEM 5 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT5TEM33V TEM 5 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT5TEM28V1LM; LHKADCLMTSTATES TEM 5 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT5TEM28V1ST TEM 5 TEM 28 V (V1) - read out status
	4	12	U12	LHKT5TEM28V1 TEM 5 TEM 28 V (V1) - raw ADC value

14.3.65 `DiagTemEnvPwr2` (626/0x272)

Description:

"Diagnostic TEM Power Packet 2" Telemetry Packet

Contains power specific ADC values for TEMs 6, 7, and 8

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR2 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT6TKR25VDLM; LHKADCLMTSTATES TEM 6 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VDST TEM 6 TKR digital 2.5 V - read out status
	4	12	U12	LHKT6TKR25VD TEM 6 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT6TKR15VAALM; LHKADCLMTSTATES TEM 6 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT6TKR15VAAST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TKR analog 1.5 V - read out status
	4	12	U12	LHKT6TKR15VAA
				TEM 6 TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT6TKR25VABLM; LHKADCLMTSTATES
				TEM 6 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VABST
				TEM 6 TKR analog 2.5 V - read out status
	4	12	U12	LHKT6TKR25VAB
				TEM 6 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT6TKRBV0LM; LHKADCLMTSTATES
				TEM 6 TKR bias V0 - limit evaluation
	3	1	U12	LHKT6TKRBV0ST
				TEM 6 TKR bias V0 - read out status
	4	12	U12	LHKT6TKRBV0
				TEM 6 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT6CAL33VDLM; LHKADCLMTSTATES
				TEM 6 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VDST
				TEM 6 CAL digital 3.3 V - read out status
	4	12	U12	LHKT6CAL33VD
				TEM 6 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT6TKRBV1LM; LHKADCLMTSTATES
				TEM 6 TKR bias V1 - limit evaluation
	3	1	U12	LHKT6TKRBV1ST
				TEM 6 TKR bias V1 - read out status
	4	12	U12	LHKT6TKRBV1
				TEM 6 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT6CAL33VALM; LHKADCLMTSTATES
				TEM 6 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VAST
				TEM 6 CAL analog 3.3 V - read out status
	4	12	U12	LHKT6CAL33VA
				TEM 6 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT6CALBSV1LM; LHKADCLMTSTATES
				TEM 6 CAL bias V1 - limit evaluation
	3	1	U12	LHKT6CALBSV1ST
				TEM 6 CAL bias V1 - read out status
	4	12	U12	LHKT6CALBSV1
				TEM 6 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT6CALBSV0LM; LHKADCLMTSTATES
				TEM 6 CAL bias V0 - limit evaluation
	3	1	U12	LHKT6CALBSV0ST
				TEM 6 CAL bias V0 - read out status
	4	12	U12	LHKT6CALBSV0
				TEM 6 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT6TEM28V0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT6TEM28V0ST
				TEM 6 TEM 28 V (V0) - read out status
	4	12	U12	LHKT6TEM28V0
				TEM 6 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT6TEM33VLM; LHKADCLMTSTATES
				TEM 6 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT6TEM33VST
				TEM 6 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT6TEM33V
				TEM 6 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT6TEM28V1LM; LHKADCLMTSTATES
				TEM 6 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT6TEM28V1ST
				TEM 6 TEM 28 V (V1) - read out status
	4	12	U12	LHKT6TEM28V1
				TEM 6 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKT7TKR25VDLM; LHKADCLMTSTATES
				TEM 7 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VDST
				TEM 7 TKR digital 2.5 V - read out status
	4	12	U12	LHKT7TKR25VD
				TEM 7 TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKT7TKR15VAALM; LHKADCLMTSTATES
				TEM 7 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT7TKR15VAAST
				TEM 7 TKR analog 1.5 V - read out status
	4	12	U12	LHKT7TKR15VAA
				TEM 7 TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKT7TKR25VABLM; LHKADCLMTSTATES
				TEM 7 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VABST
				TEM 7 TKR analog 2.5 V - read out status
	4	12	U12	LHKT7TKR25VAB
				TEM 7 TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKT7TKRBV0LM; LHKADCLMTSTATES
				TEM 7 TKR bias V0 - limit evaluation
	3	1	U12	LHKT7TKRBV0ST
				TEM 7 TKR bias V0 - read out status
	4	12	U12	LHKT7TKRBV0
				TEM 7 TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKT7CAL33VDLM; LHKADCLMTSTATES
				TEM 7 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VDST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 CAL digital 3.3 V - read out status
	4	12	U12	LHKT7CAL33VD
				TEM 7 CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKT7TKRBV1LM; LHKADCLMTSTATES
				TEM 7 TKR bias V1 - limit evaluation
	3	1	U12	LHKT7TKRBV1ST
				TEM 7 TKR bias V1 - read out status
	4	12	U12	LHKT7TKRBV1
				TEM 7 TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKT7CAL33VALM; LHKADCLMTSTATES
				TEM 7 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VAST
				TEM 7 CAL analog 3.3 V - read out status
	4	12	U12	LHKT7CAL33VA
				TEM 7 CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKT7CALBSV1LM
				TEM 7 CAL bias V1 - limit evaluation
	3	1	U12	LHKT7CALBSV1ST
				TEM 7 CAL bias V1 - read out status
	4	12	U12	LHKT7CALBSV1
				TEM 7 CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKT7CALBSV0LM
				TEM 7 CAL bias V0 - limit evaluation
	3	1	U12	LHKT7CALBSV0ST
				TEM 7 CAL bias V0 - read out status
	4	12	U12	LHKT7CALBSV0
				TEM 7 CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKT7TEM28V0LM
				TEM 7 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT7TEM28V0ST
				TEM 7 TEM 28 V (V0) - read out status
	4	12	U12	LHKT7TEM28V0
				TEM 7 TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKT7TEM33VLM; LHKADCLMTSTATES
				TEM 7 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT7TEM33VST
				TEM 7 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT7TEM33V
				TEM 7 TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKT7TEM28V1LM; LHKADCLMTSTATES
				TEM 7 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT7TEM28V1ST
				TEM 7 TEM 28 V (V1) - read out status
	4	12	U12	LHKT7TEM28V1
				TEM 7 TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKT8TKR25VDLM; LHKADCLMTSTATES
				TEM 8 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VDST
				TEM 8 TKR digital 2.5 V - read out status
	4	12	U12	LHKT8TKR25VD
				TEM 8 TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKT8TKR15VAALM; LHKADCLMTSTATES TEM 8 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT8TKR15VAAST TEM 8 TKR analog 1.5 V - read out status
	4	12	U12	LHKT8TKR15VAA TEM 8 TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKT8TKR25VABLM; LHKADCLMTSTATES TEM 8 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VABST TEM 8 TKR analog 2.5 V - read out status
	4	12	U12	LHKT8TKR25VAB TEM 8 TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKT8TKRBV0LM; LHKADCLMTSTATES TEM 8 TKR bias V0 - limit evaluation
	3	1	U12	LHKT8TKRBV0ST TEM 8 TKR bias V0 - read out status
	4	12	U12	LHKT8TKRBV0 TEM 8 TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKT8CAL33VDLM; LHKADCLMTSTATES TEM 8 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VDST TEM 8 CAL digital 3.3 V - read out status
	4	12	U12	LHKT8CAL33VD TEM 8 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT8TKRBV1LM; LHKADCLMTSTATES TEM 8 TKR bias V1 - limit evaluation
	3	1	U12	LHKT8TKRBV1ST TEM 8 TKR bias V1 - read out status
	4	12	U12	LHKT8TKRBV1 TEM 8 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT8CAL33VALM; LHKADCLMTSTATES TEM 8 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VAST TEM 8 CAL analog 3.3 V - read out status
	4	12	U12	LHKT8CAL33VA TEM 8 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT8CALBSV1LM; LHKADCLMTSTATES TEM 8 CAL bias V1 - limit evaluation
	3	1	U12	LHKT8CALBSV1ST TEM 8 CAL bias V1 - read out status
	4	12	U12	LHKT8CALBSV1 TEM 8 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT8CALBSV0LM; LHKADCLMTSTATES TEM 8 CAL bias V0 - limit evaluation
	3	1	U12	LHKT8CALBSV0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 8 CAL bias V0 - read out status
	4	12	U12	LHKT8CALBSV0
				TEM 8 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT8TEM28V0LM; LHKADCLMTSTATES
				TEM 8 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT8TEM28V0ST
				TEM 8 TEM 28 V (V0) - read out status
	4	12	U12	LHKT8TEM28V0
				TEM 8 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT8TEM33VLM; LHKADCLMTSTATES
				TEM 8 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT8TEM33VST
				TEM 8 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT8TEM33V
				TEM 8 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT8TEM28V1LM; LHKADCLMTSTATES
				TEM 8 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT8TEM28V1ST
				TEM 8 TEM 28 V (V1) - read out status
	4	12	U12	LHKT8TEM28V1
				TEM 8 TEM 28 V (V1) - raw ADC value

14.3.66 `DiagTemEnvPwr3` (627/0x273)

Description:

"Diagnostic TEM Power Packet 3" Telemetry Packet

Contains power specific ADC values for TEMs 9, A, and B

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR3
				LHK reserved field
0x010	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT9TKR25VDLM; LHKADCLMTSTATES
				TEM 9 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VDST
				TEM 9 TKR digital 2.5 V - read out status
	4	12	U12	LHKT9TKR25VD
				TEM 9 TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKT9TKR15VAALM; LHKADCLMTSTATES
				TEM 9 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT9TKR15VAAST
				TEM 9 TKR analog 1.5 V - read out status
	4	12	U12	LHKT9TKR15VAA
				TEM 9 TKR analog 1.5 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKT9TKR25VABLM; LHKADCLMTSTATES TEM 9 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VABST TEM 9 TKR analog 2.5 V - read out status
	4	12	U12	LHKT9TKR25VAB TEM 9 TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKT9TKRBV0LM; LHKADCLMTSTATES TEM 9 TKR bias V0 - limit evaluation
	3	1	U12	LHKT9TKRBV0ST TEM 9 TKR bias V0 - read out status
	4	12	U12	LHKT9TKRBV0 TEM 9 TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKT9CAL33VDLM; LHKADCLMTSTATES TEM 9 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VDST TEM 9 CAL digital 3.3 V - read out status
	4	12	U12	LHKT9CAL33VD TEM 9 CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKT9TKRBV1LM; LHKADCLMTSTATES TEM 9 TKR bias V1 - limit evaluation
	3	1	U12	LHKT9TKRBV1ST TEM 9 TKR bias V1 - read out status
	4	12	U12	LHKT9TKRBV1 TEM 9 TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKT9CAL33VALM; LHKADCLMTSTATES TEM 9 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT9CAL33VAST TEM 9 CAL analog 3.3 V - read out status
	4	12	U12	LHKT9CAL33VA TEM 9 CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKT9CALBSV1LM TEM 9 CAL bias V1 - limit evaluation
	3	1	U12	LHKT9CALBSV1ST TEM 9 CAL bias V1 - read out status
	4	12	U12	LHKT9CALBSV1 TEM 9 CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKT9CALBSV0LM TEM 9 CAL bias V0 - limit evaluation
	3	1	U12	LHKT9CALBSV0ST TEM 9 CAL bias V0 - read out status
	4	12	U12	LHKT9CALBSV0 TEM 9 CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKT9TEM28V0LM TEM 9 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT9TEM28V0ST TEM 9 TEM 28 V (V0) - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT9TEM28V0 TEM 9 TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKT9TEM33VLM; LHKADCLMTSTATES TEM 9 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT9TEM33VST TEM 9 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT9TEM33V TEM 9 TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKT9TEM28V1LM; LHKADCLMTSTATES TEM 9 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT9TEM28V1ST TEM 9 TEM 28 V (V1) - read out status
	4	12	U12	LHKT9TEM28V1 TEM 9 TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKTATKR25VDLM; LHKADCLMTSTATES TEM A TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VDST TEM A TKR digital 2.5 V - read out status
	4	12	U12	LHKTATKR25VD TEM A TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKTATKR15VAALM; LHKADCLMTSTATES TEM A TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTATKR15VAAST TEM A TKR analog 1.5 V - read out status
	4	12	U12	LHKTATKR15VAA TEM A TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKTATKR25VABLM; LHKADCLMTSTATES TEM A TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VABST TEM A TKR analog 2.5 V - read out status
	4	12	U12	LHKTATKR25VAB TEM A TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKTATKRBV0LM; LHKADCLMTSTATES TEM A TKR bias V0 - limit evaluation
	3	1	U12	LHKTATKRBV0ST TEM A TKR bias V0 - read out status
	4	12	U12	LHKTATKRBV0 TEM A TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKTACAL33VDLM; LHKADCLMTSTATES TEM A CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VDST TEM A CAL digital 3.3 V - read out status
	4	12	U12	LHKTACAL33VD TEM A CAL digital 3.3 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x046	0	3	U12	LHKTATKRBV1LM; LHKADCLMTSTATES TEM A TKR bias V1 - limit evaluation
	3	1	U12	LHKTATKRBV1ST TEM A TKR bias V1 - read out status
	4	12	U12	LHKTATKRBV1 TEM A TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKTACAL33VALM; LHKADCLMTSTATES TEM A CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VAST TEM A CAL analog 3.3 V - read out status
	4	12	U12	LHKTACAL33VA TEM A CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKTACALBSV1LM; LHKADCLMTSTATES TEM A CAL bias V1 - limit evaluation
	3	1	U12	LHKTACALBSV1ST TEM A CAL bias V1 - read out status
	4	12	U12	LHKTACALBSV1 TEM A CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKTACALBSV0LM; LHKADCLMTSTATES TEM A CAL bias V0 - limit evaluation
	3	1	U12	LHKTACALBSV0ST TEM A CAL bias V0 - read out status
	4	12	U12	LHKTACALBSV0 TEM A CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKTATEM28V0LM; LHKADCLMTSTATES TEM A TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTATEM28V0ST TEM A TEM 28 V (V0) - read out status
	4	12	U12	LHKTATEM28V0 TEM A TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKTATEM33VLM; LHKADCLMTSTATES TEM A TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTATEM33VST TEM A TEM digitial 3.3 V - read out status
	4	12	U12	LHKTATEM33V TEM A TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKTATEM28V1LM; LHKADCLMTSTATES TEM A TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTATEM28V1ST TEM A TEM 28 V (V1) - read out status
	4	12	U12	LHKTATEM28V1 TEM A TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKTBTKR25VDLM; LHKADCLMTSTATES TEM B TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VDST TEM B TKR digital 2.5 V - read out status
	4	12	U12	LHKTBTKR25VD TEM B TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKTBTKR15VAALM; LHKADCLMTSTATES TEM B TKR analog 1.5 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTBTKR15VAAST TEM B TKR analog 1.5 V - read out status
	4	12	U12	LHKTBTKR15VAA TEM B TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKTBTKR25VABLM; LHKADCLMTSTATES TEM B TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VABST TEM B TKR analog 2.5 V - read out status
	4	12	U12	LHKTBTKR25VAB TEM B TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKTBTKRBV0LM; LHKADCLMTSTATES TEM B TKR bias V0 - limit evaluation
	3	1	U12	LHKTBTKRBV0ST TEM B TKR bias V0 - read out status
	4	12	U12	LHKTBTKRBV0 TEM B TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKTBCAL33VDLM; LHKADCLMTSTATES TEM B CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VDST TEM B CAL digital 3.3 V - read out status
	4	12	U12	LHKTBCAL33VD TEM B CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTBTKRBV1LM; LHKADCLMTSTATES TEM B TKR bias V1 - limit evaluation
	3	1	U12	LHKTBTKRBV1ST TEM B TKR bias V1 - read out status
	4	12	U12	LHKTBTKRBV1 TEM B TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTBCAL33VALM; LHKADCLMTSTATES TEM B CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VAST TEM B CAL analog 3.3 V - read out status
	4	12	U12	LHKTBCAL33VA TEM B CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTBCALBSV1LM TEM B CAL bias V1 - limit evaluation
	3	1	U12	LHKTBCALBSV1ST TEM B CAL bias V1 - read out status
	4	12	U12	LHKTBCALBSV1 TEM B CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTBCALBSV0LM TEM B CAL bias V0 - limit evaluation
	3	1	U12	LHKTBCALBSV0ST TEM B CAL bias V0 - read out status
	4	12	U12	LHKTBCALBSV0 TEM B CAL bias V0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06E	0	3	U12	LHKTBTEM28V0LM TEM B TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTBTEM28V0ST TEM B TEM 28 V (V0) - read out status
	4	12	U12	LHKTBTEM28V0 TEM B TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTBTEM33VLM; LHKADCLMTSTATES TEM B TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTBTEM33VST TEM B TEM digitial 3.3 V - read out status
	4	12	U12	LHKTBTEM33V TEM B TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTBTEM28V1LM; LHKADCLMTSTATES TEM B TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTBTEM28V1ST TEM B TEM 28 V (V1) - read out status
	4	12	U12	LHKTBTEM28V1 TEM B TEM 28 V (V1) - raw ADC value

14.3.67 `DiagTemEnvPwr4` (628/0x274)

Description:

"Diagnostic TEM Power Packet 4" Telemetry Packet

Contains power specific ADC values for TEMs C, D, and E

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR4 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTCTKR25VDLM; LHKADCLMTSTATES TEM C TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VDST TEM C TKR digital 2.5 V - read out status
	4	12	U12	LHKTCTKR25VD TEM C TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKTCTKR15VAALM; LHKADCLMTSTATES TEM C TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTCTKR15VAAST TEM C TKR analog 1.5 V - read out status
	4	12	U12	LHKTCTKR15VAA TEM C TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKTCTKR25VABLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM C TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VABST
				TEM C TKR analog 2.5 V - read out status
	4	12	U12	LHKTCTKR25VAB
				TEM C TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKTCTKRBV0LM; LHKADCLMTSTATES
				TEM C TKR bias V0 - limit evaluation
	3	1	U12	LHKTCTKRBV0ST
				TEM C TKR bias V0 - read out status
	4	12	U12	LHKTCTKRBV0
				TEM C TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKTCCAL33VDLM; LHKADCLMTSTATES
				TEM C CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VDST
				TEM C CAL digital 3.3 V - read out status
	4	12	U12	LHKTCCAL33VD
				TEM C CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKTCTKRBV1LM; LHKADCLMTSTATES
				TEM C TKR bias V1 - limit evaluation
	3	1	U12	LHKTCTKRBV1ST
				TEM C TKR bias V1 - read out status
	4	12	U12	LHKTCTKRBV1
				TEM C TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKTCCAL33VALM; LHKADCLMTSTATES
				TEM C CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VAST
				TEM C CAL analog 3.3 V - read out status
	4	12	U12	LHKTCCAL33VA
				TEM C CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKTCCALBSV1LM; LHKADCLMTSTATES
				TEM C CAL bias V1 - limit evaluation
	3	1	U12	LHKTCCALBSV1ST
				TEM C CAL bias V1 - read out status
	4	12	U12	LHKTCCALBSV1
				TEM C CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKTCCALBSV0LM; LHKADCLMTSTATES
				TEM C CAL bias V0 - limit evaluation
	3	1	U12	LHKTCCALBSV0ST
				TEM C CAL bias V0 - read out status
	4	12	U12	LHKTCCALBSV0
				TEM C CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKTCTEM28V0LM; LHKADCLMTSTATES
				TEM C TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTCTEM28V0ST
				TEM C TEM 28 V (V0) - read out status
	4	12	U12	LHKTCTEM28V0
				TEM C TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKTCTEM33VLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM C TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTCTEM33VST
				TEM C TEM digitial 3.3 V - read out status
	4	12	U12	LHKTCTEM33V
				TEM C TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKTCTEM28V1LM; LHKADCLMTSTATES
				TEM C TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTCTEM28V1ST
				TEM C TEM 28 V (V1) - read out status
	4	12	U12	LHKTCTEM28V1
				TEM C TEM 28 V (V1) - raw ADC value
0x034	0	3	U12	LHKTDTKR25VDLM; LHKADCLMTSTATES
				TEM D TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VDST
				TEM D TKR digital 2.5 V - read out status
	4	12	U12	LHKTDTKR25VD
				TEM D TKR digital 2.5 V - raw ADC value
0x036	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x038	0	3	U12	LHKTDTKR15VAALM; LHKADCLMTSTATES
				TEM D TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTDTKR15VAAST
				TEM D TKR analog 1.5 V - read out status
	4	12	U12	LHKTDTKR15VAA
				TEM D TKR analog 1.5 V - raw ADC value
0x03A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x03C	0	3	U12	LHKTDTKR25VABLM; LHKADCLMTSTATES
				TEM D TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VABST
				TEM D TKR analog 2.5 V - read out status
	4	12	U12	LHKTDTKR25VAB
				TEM D TKR analog 2.5 V - raw ADC value
0x03E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x040	0	3	U12	LHKTDTKRBV0LM; LHKADCLMTSTATES
				TEM D TKR bias V0 - limit evaluation
	3	1	U12	LHKTDTKRBV0ST
				TEM D TKR bias V0 - read out status
	4	12	U12	LHKTDTKRBV0
				TEM D TKR bias V0 - raw ADC value
0x042	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x044	0	3	U12	LHKTDCAL33VDLM; LHKADCLMTSTATES
				TEM D CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VDST
				TEM D CAL digital 3.3 V - read out status
	4	12	U12	LHKTDCAL33VD
				TEM D CAL digital 3.3 V - raw ADC value
0x046	0	3	U12	LHKTDTKRBV1LM; LHKADCLMTSTATES
				TEM D TKR bias V1 - limit evaluation
	3	1	U12	LHKTDTKRBV1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM D TKR bias V1 - read out status
	4	12	U12	LHKTDTKRBV1
				TEM D TKR bias V1 - raw ADC value
0x048	0	3	U12	LHKTDCAL33VALM; LHKADCLMTSTATES
				TEM D CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VAST
				TEM D CAL analog 3.3 V - read out status
	4	12	U12	LHKTDCAL33VA
				TEM D CAL analog 3.3 - raw ADC value
0x04A	0	3	U12	LHKTDCALBSV1LM
				TEM D CAL bias V1 - limit evaluation
	3	1	U12	LHKTDCALBSV1ST
				TEM D CAL bias V1 - read out status
	4	12	U12	LHKTDCALBSV1
				TEM D CAL bias V1 - raw ADC value
0x04C	0	3	U12	LHKTDCALBSV0LM
				TEM D CAL bias V0 - limit evaluation
	3	1	U12	LHKTDCALBSV0ST
				TEM D CAL bias V0 - read out status
	4	12	U12	LHKTDCALBSV0
				TEM D CAL bias V0 - raw ADC value
0x04E	0	3	U12	LHKTDTEM28V0LM
				TEM D TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTDTEM28V0ST
				TEM D TEM 28 V (V0) - read out status
	4	12	U12	LHKTDTEM28V0
				TEM D TEM 28 V (V0) - raw ADC value
0x050	0	3	U12	LHKTDTEM33VLM; LHKADCLMTSTATES
				TEM D TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTDTEM33VST
				TEM D TEM digitial 3.3 V - read out status
	4	12	U12	LHKTDTEM33V
				TEM D TEM digitial 3.3 V - raw ADC value
0x052	0	3	U12	LHKTDTEM28V1LM; LHKADCLMTSTATES
				TEM D TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTDTEM28V1ST
				TEM D TEM 28 V (V1) - read out status
	4	12	U12	LHKTDTEM28V1
				TEM D TEM 28 V (V1) - raw ADC value
0x054	0	3	U12	LHKTETKR25VDLM; LHKADCLMTSTATES
				TEM E TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VDST
				TEM E TKR digital 2.5 V - read out status
	4	12	U12	LHKTETKR25VD
				TEM E TKR digital 2.5 V - raw ADC value
0x056	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x058	0	3	U12	LHKTETKR15VAALM; LHKADCLMTSTATES
				TEM E TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTETKR15VAAST
				TEM E TKR analog 1.5 V - read out status
	4	12	U12	LHKTETKR15VAA

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E TKR analog 1.5 V - raw ADC value
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	3	U12	LHKTETKR25VABLM; LHKADCLMTSTATES TEM E TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VABST TEM E TKR analog 2.5 V - read out status
	4	12	U12	LHKTETKR25VAB TEM E TKR analog 2.5 V - raw ADC value
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	3	U12	LHKTETKRBV0LM; LHKADCLMTSTATES TEM E TKR bias V0 - limit evaluation
	3	1	U12	LHKTETKRBV0ST TEM E TKR bias V0 - read out status
	4	12	U12	LHKTETKRBV0 TEM E TKR bias V0 - raw ADC value
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	3	U12	LHKTECAL33VDLM; LHKADCLMTSTATES TEM E CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VDST TEM E CAL digital 3.3 V - read out status
	4	12	U12	LHKTECAL33VD TEM E CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTETKRBV1LM; LHKADCLMTSTATES TEM E TKR bias V1 - limit evaluation
	3	1	U12	LHKTETKRBV1ST TEM E TKR bias V1 - read out status
	4	12	U12	LHKTETKRBV1 TEM E TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTECAL33VALM; LHKADCLMTSTATES TEM E CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VAST TEM E CAL analog 3.3 V - read out status
	4	12	U12	LHKTECAL33VA TEM E CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTECALBSV1LM; LHKADCLMTSTATES TEM E CAL bias V1 - limit evaluation
	3	1	U12	LHKTECALBSV1ST TEM E CAL bias V1 - read out status
	4	12	U12	LHKTECALBSV1 TEM E CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTECALBSV0LM; LHKADCLMTSTATES TEM E CAL bias V0 - limit evaluation
	3	1	U12	LHKTECALBSV0ST TEM E CAL bias V0 - read out status
	4	12	U12	LHKTECALBSV0 TEM E CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTETEM28V0LM; LHKADCLMTSTATES TEM E TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTETEM28V0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E TEM 28 V (V0) - read out status
	4	12	U12	LHKTETEM28V0 TEM E TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTETEM33VLM; LHKADCLMTSTATES TEM E TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTETEM33VST TEM E TEM digitial 3.3 V - read out status
	4	12	U12	LHKTETEM33V TEM E TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTETEM28V1LM; LHKADCLMTSTATES TEM E TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTETEM28V1ST TEM E TEM 28 V (V1) - read out status
	4	12	U12	LHKTETEM28V1 TEM E TEM 28 V (V1) - raw ADC value

14.3.68 `DiagTemEnvPwr5` (629/0x275)

Description:

"Diagnostic TEM Power Packet 5" Telemetry Packet

Contains power specific ADC values for TEM F

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTEMPWR5 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTFTKR25VDLM; LHKADCLMTSTATES TEM F TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTFTKR25VDST TEM F TKR digital 2.5 V - read out status
	4	12	U12	LHKTFTKR25VD TEM F TKR digital 2.5 V - raw ADC value
0x016	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x018	0	3	U12	LHKTFTKR15VAALM; LHKADCLMTSTATES TEM F TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTFTKR15VAAST TEM F TKR analog 1.5 V - read out status
	4	12	U12	LHKTFTKR15VAA TEM F TKR analog 1.5 V - raw ADC value
0x01A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x01C	0	3	U12	LHKTFTKR25VABLM; LHKADCLMTSTATES TEM F TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTFTKR25VABST TEM F TKR analog 2.5 V - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTFTKR25VAB TEM F TKR analog 2.5 V - raw ADC value
0x01E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x020	0	3	U12	LHKTFTKRBV0LM; LHKADCLMTSTATES TEM F TKR bias V0 - limit evaluation
	3	1	U12	LHKTFTKRBV0ST TEM F TKR bias V0 - read out status
	4	12	U12	LHKTFTKRBV0 TEM F TKR bias V0 - raw ADC value
0x022	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x024	0	3	U12	LHKTFCAL33VDLM; LHKADCLMTSTATES TEM F CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VDST TEM F CAL digital 3.3 V - read out status
	4	12	U12	LHKTFCAL33VD TEM F CAL digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKTFTKRBV1LM; LHKADCLMTSTATES TEM F TKR bias V1 - limit evaluation
	3	1	U12	LHKTFTKRBV1ST TEM F TKR bias V1 - read out status
	4	12	U12	LHKTFTKRBV1 TEM F TKR bias V1 - raw ADC value
0x028	0	3	U12	LHKTFCAL33VALM; LHKADCLMTSTATES TEM F CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VAST TEM F CAL analog 3.3 V - read out status
	4	12	U12	LHKTFCAL33VA TEM F CAL analog 3.3 - raw ADC value
0x02A	0	3	U12	LHKTFCALBSV1LM TEM F CAL bias V1 - limit evaluation
	3	1	U12	LHKTFCALBSV1ST TEM F CAL bias V1 - read out status
	4	12	U12	LHKTFCALBSV1 TEM F CAL bias V1 - raw ADC value
0x02C	0	3	U12	LHKTFCALBSV0LM TEM F CAL bias V0 - limit evaluation
	3	1	U12	LHKTFCALBSV0ST TEM F CAL bias V0 - read out status
	4	12	U12	LHKTFCALBSV0 TEM F CAL bias V0 - raw ADC value
0x02E	0	3	U12	LHKTFTEM28V0LM TEM F TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTFTEM28V0ST TEM F TEM 28 V (V0) - read out status
	4	12	U12	LHKTFTEM28V0 TEM F TEM 28 V (V0) - raw ADC value
0x030	0	3	U12	LHKTFTEM33VLM; LHKADCLMTSTATES TEM F TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTFTEM33VST TEM F TEM digitial 3.3 V - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTFTEM33V TEM F TEM digitial 3.3 V - raw ADC value
0x032	0	3	U12	LHKTFTEM28V1LM; LHKADCLMTSTATES TEM F TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTFTEM28V1ST TEM F TEM 28 V (V1) - read out status
	4	12	U12	LHKTFTEM28V1 TEM F TEM 28 V (V1) - raw ADC value
0x034	0	32	U1234	LHKRTERRCNT 1553 Error Count
0x038	0	32	U1234	LHKRTINTRCNT 1553 Interrupts
0x03C	0	32	U1234	LHKRTCXPCNT 1553 Cmd Rx Packet Count
0x040	0	32	U1234	LHKRTCXBCNT 1553 Cmd Rx Byte Count
0x044	0	32	U1234	LHKRTTXPCNT 1553 Cmd Tx Packet Count
0x048	0	32	U1234	LHKRTTXBCNT 1553 Cmd Tx Byte Count
0x04C	0	32	U1234	LHKRTHKPCNT 1553 Housekeeping Packet Count
0x050	0	32	U1234	LHKRTHKBCNT 1553 Housekeeping Byte Count
0x054	0	32	U1234	LHKRTTLMPCNT 1553 Telemetry Packet Count
0x058	0	32	U1234	LHKRTTLMBCNT 1553 Telemertry Byte Count
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.69 `DiagTemEnvTemp0` (630/0x276)

Description:

"TEM temperature ADCs for TEMs 0-1" Telemetry Packet

TEM temperature ADCs for TEMs 0-1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP0 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT0CALAF0T0LM; LHKADCLMTSTATES TEM 0 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF0T0ST TEM 0 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT0CALAF0T0 TEM 0 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT0CALAF0T1LM; LHKADCLMTSTATES TEM 0 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF0T1ST TEM 0 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT0CALAF0T1 TEM 0 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT0CALAF1T0LM; LHKADCLMTSTATES TEM 0 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF1T0ST TEM 0 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT0CALAF1T0 TEM 0 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT0CALAF1T1LM TEM 0 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF1T1ST TEM 0 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT0CALAF1T1 TEM 0 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT0CALAF2T0LM TEM 0 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF2T0ST TEM 0 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT0CALAF2T0 TEM 0 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT0CALAF2T1LM TEM 0 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF2T1ST TEM 0 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT0CALAF2T1 TEM 0 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT0CALAF3T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT0CALAF3T0ST
				TEM 0 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT0CALAF3T0
				TEM 0 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT0CALAF3T1LM; LHKADCLMTSTATES
				TEM 0 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT0CALAF3T1ST
				TEM 0 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT0CALAF3T1
				TEM 0 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT0TKRC0T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC0T0ST
				TEM 0 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT0TKRC0T0
				TEM 0 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT0TKRC0T1LM; LHKADCLMTSTATES
				TEM 0 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC0T1ST
				TEM 0 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT0TKRC0T1
				TEM 0 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT0TKRC1T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC1T0ST
				TEM 0 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT0TKRC1T0
				TEM 0 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT0TKRC1T1LM
				TEM 0 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC1T1ST
				TEM 0 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT0TKRC1T1
				TEM 0 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT0TKRC2T0LM
				TEM 0 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC2T0ST
				TEM 0 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT0TKRC2T0
				TEM 0 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT0TKRC2T1LM
				TEM 0 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC2T1ST
				TEM 0 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT0TKRC2T1
				TEM 0 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT0TKRC3T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC3T0ST
				TEM 0 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT0TKRC3T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT0TKRC3T1LM; LHKADCLMTSTATES
				TEM 0 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC3T1ST
				TEM 0 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT0TKRC3T1
				TEM 0 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT0TKRC4T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC4T0ST
				TEM 0 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT0TKRC4T0
				TEM 0 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT0TKRC4T1LM; LHKADCLMTSTATES
				TEM 0 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC4T1ST
				TEM 0 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT0TKRC4T1
				TEM 0 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT0TKRC5T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC5T0ST
				TEM 0 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT0TKRC5T0
				TEM 0 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT0TKRC5T1LM
				TEM 0 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC5T1ST
				TEM 0 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT0TKRC5T1
				TEM 0 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT0TKRC6T0LM
				TEM 0 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC6T0ST
				TEM 0 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT0TKRC6T0
				TEM 0 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT0TKRC6T1LM
				TEM 0 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC6T1ST
				TEM 0 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT0TKRC6T1
				TEM 0 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT0TKRC7T0LM; LHKADCLMTSTATES
				TEM 0 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT0TKRC7T0ST
				TEM 0 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT0TKRC7T0
				TEM 0 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT0TKRC7T1LM; LHKADCLMTSTATES
				TEM 0 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT0TKRC7T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 0 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT0TKRC7T1
				TEM 0 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT1CALAF2T0LM; LHKADCLMTSTATES
				TEM 1 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF2T0ST
				TEM 1 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT1CALAF2T0
				TEM 1 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT1CALAF2T1LM; LHKADCLMTSTATES
				TEM 1 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF2T1ST
				TEM 1 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT1CALAF2T1
				TEM 1 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT1CALAF3T0LM; LHKADCLMTSTATES
				TEM 1 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF3T0ST
				TEM 1 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT1CALAF3T0
				TEM 1 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT1CALAF3T1LM
				TEM 1 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF3T1ST
				TEM 1 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT1CALAF3T1
				TEM 1 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT1CALAF0T0LM
				TEM 1 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF0T0ST
				TEM 1 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT1CALAF0T0
				TEM 1 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT1CALAF0T1LM
				TEM 1 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF0T1ST
				TEM 1 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT1CALAF0T1
				TEM 1 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT1CALAF1T0LM; LHKADCLMTSTATES
				TEM 1 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT1CALAF1T0ST
				TEM 1 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT1CALAF1T0
				TEM 1 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT1CALAF1T1LM; LHKADCLMTSTATES
				TEM 1 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT1CALAF1T1ST
				TEM 1 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT1CALAF1T1
				TEM 1 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT1TKRC4T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 1 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC4T0ST
				TEM 1 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT1TKRC4T0
				TEM 1 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT1TKRC4T1LM; LHKADCLMTSTATES
				TEM 1 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC4T1ST
				TEM 1 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT1TKRC4T1
				TEM 1 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT1TKRC5T0LM; LHKADCLMTSTATES
				TEM 1 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC5T0ST
				TEM 1 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT1TKRC5T0
				TEM 1 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT1TKRC5T1LM
				TEM 1 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC5T1ST
				TEM 1 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT1TKRC5T1
				TEM 1 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT1TKRC6T0LM
				TEM 1 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC6T0ST
				TEM 1 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT1TKRC6T0
				TEM 1 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT1TKRC6T1LM
				TEM 1 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC6T1ST
				TEM 1 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT1TKRC6T1
				TEM 1 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT1TKRC7T0LM; LHKADCLMTSTATES
				TEM 1 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC7T0ST
				TEM 1 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT1TKRC7T0
				TEM 1 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT1TKRC7T1LM; LHKADCLMTSTATES
				TEM 1 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC7T1ST
				TEM 1 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT1TKRC7T1
				TEM 1 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT1TKRC0T0LM; LHKADCLMTSTATES
				TEM 1 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC0T0ST
				TEM 1 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT1TKRC0T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 1 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT1TKRC0T1LM; LHKADCLMTSTATES TEM 1 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC0T1ST TEM 1 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT1TKRC0T1 TEM 1 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT1TKRC1T0LM; LHKADCLMTSTATES TEM 1 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC1T0ST TEM 1 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT1TKRC1T0 TEM 1 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT1TKRC1T1LM TEM 1 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC1T1ST TEM 1 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT1TKRC1T1 TEM 1 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT1TKRC2T0LM TEM 1 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC2T0ST TEM 1 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT1TKRC2T0 TEM 1 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT1TKRC2T1LM TEM 1 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC2T1ST TEM 1 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT1TKRC2T1 TEM 1 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT1TKRC3T0LM; LHKADCLMTSTATES TEM 1 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT1TKRC3T0ST TEM 1 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT1TKRC3T0 TEM 1 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT1TKRC3T1LM; LHKADCLMTSTATES TEM 1 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT1TKRC3T1ST TEM 1 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT1TKRC3T1 TEM 1 TKR cable 3 temperature 1 - raw ADC value

14.3.70 `DiagTemEnvTemp1` (631/0x277)

Description:

"TEM temperature ADCs for TEMs 2-3" Telemetry Packet

TEM temperature ADCs for TEMs 2-3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP1 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT2CALAF0T0LM; LHKADCLMTSTATES TEM 2 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF0T0ST TEM 2 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT2CALAF0T0 TEM 2 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT2CALAF0T1LM; LHKADCLMTSTATES TEM 2 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF0T1ST TEM 2 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT2CALAF0T1 TEM 2 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT2CALAF1T0LM; LHKADCLMTSTATES TEM 2 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF1T0ST TEM 2 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT2CALAF1T0 TEM 2 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT2CALAF1T1LM TEM 2 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF1T1ST TEM 2 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT2CALAF1T1 TEM 2 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT2CALAF2T0LM TEM 2 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF2T0ST TEM 2 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT2CALAF2T0 TEM 2 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT2CALAF2T1LM TEM 2 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF2T1ST TEM 2 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT2CALAF2T1 TEM 2 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT2CALAF3T0LM; LHKADCLMTSTATES TEM 2 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT2CALAF3T0ST TEM 2 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT2CALAF3T0 TEM 2 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT2CALAF3T1LM; LHKADCLMTSTATES TEM 2 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT2CALAF3T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT2CALAF3T1
				TEM 2 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT2TKRC0T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC0T0ST
				TEM 2 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT2TKRC0T0
				TEM 2 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT2TKRC0T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC0T1ST
				TEM 2 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT2TKRC0T1
				TEM 2 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT2TKRC1T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC1T0ST
				TEM 2 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT2TKRC1T0
				TEM 2 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT2TKRC1T1LM
				TEM 2 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC1T1ST
				TEM 2 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT2TKRC1T1
				TEM 2 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT2TKRC2T0LM
				TEM 2 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC2T0ST
				TEM 2 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT2TKRC2T0
				TEM 2 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT2TKRC2T1LM
				TEM 2 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC2T1ST
				TEM 2 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT2TKRC2T1
				TEM 2 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT2TKRC3T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC3T0ST
				TEM 2 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT2TKRC3T0
				TEM 2 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT2TKRC3T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC3T1ST
				TEM 2 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT2TKRC3T1
				TEM 2 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT2TKRC4T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 2 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC4T0ST
				TEM 2 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT2TKRC4T0
				TEM 2 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT2TKRC4T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC4T1ST
				TEM 2 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT2TKRC4T1
				TEM 2 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT2TKRC5T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC5T0ST
				TEM 2 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT2TKRC5T0
				TEM 2 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT2TKRC5T1LM
				TEM 2 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC5T1ST
				TEM 2 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT2TKRC5T1
				TEM 2 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT2TKRC6T0LM
				TEM 2 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC6T0ST
				TEM 2 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT2TKRC6T0
				TEM 2 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT2TKRC6T1LM
				TEM 2 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC6T1ST
				TEM 2 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT2TKRC6T1
				TEM 2 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT2TKRC7T0LM; LHKADCLMTSTATES
				TEM 2 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT2TKRC7T0ST
				TEM 2 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT2TKRC7T0
				TEM 2 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT2TKRC7T1LM; LHKADCLMTSTATES
				TEM 2 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT2TKRC7T1ST
				TEM 2 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT2TKRC7T1
				TEM 2 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT3CALAF2T0LM; LHKADCLMTSTATES
				TEM 3 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF2T0ST
				TEM 3 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT3CALAF2T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT3CALAF2T1LM; LHKADCLMTSTATES TEM 3 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF2T1ST TEM 3 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT3CALAF2T1 TEM 3 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT3CALAF3T0LM; LHKADCLMTSTATES TEM 3 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF3T0ST TEM 3 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT3CALAF3T0 TEM 3 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT3CALAF3T1LM TEM 3 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF3T1ST TEM 3 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT3CALAF3T1 TEM 3 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT3CALAF0T0LM TEM 3 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF0T0ST TEM 3 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT3CALAF0T0 TEM 3 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT3CALAF0T1LM TEM 3 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF0T1ST TEM 3 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT3CALAF0T1 TEM 3 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT3CALAF1T0LM; LHKADCLMTSTATES TEM 3 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT3CALAF1T0ST TEM 3 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT3CALAF1T0 TEM 3 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT3CALAF1T1LM; LHKADCLMTSTATES TEM 3 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT3CALAF1T1ST TEM 3 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT3CALAF1T1 TEM 3 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT3TKRC4T0LM; LHKADCLMTSTATES TEM 3 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC4T0ST TEM 3 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT3TKRC4T0 TEM 3 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT3TKRC4T1LM; LHKADCLMTSTATES TEM 3 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC4T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT3TKRC4T1
				TEM 3 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT3TKRC5T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC5T0ST
				TEM 3 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT3TKRC5T0
				TEM 3 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT3TKRC5T1LM
				TEM 3 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC5T1ST
				TEM 3 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT3TKRC5T1
				TEM 3 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT3TKRC6T0LM
				TEM 3 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC6T0ST
				TEM 3 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT3TKRC6T0
				TEM 3 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT3TKRC6T1LM
				TEM 3 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC6T1ST
				TEM 3 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT3TKRC6T1
				TEM 3 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT3TKRC7T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC7T0ST
				TEM 3 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT3TKRC7T0
				TEM 3 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT3TKRC7T1LM; LHKADCLMTSTATES
				TEM 3 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC7T1ST
				TEM 3 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT3TKRC7T1
				TEM 3 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT3TKRC0T0LM; LHKADCLMTSTATES
				TEM 3 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC0T0ST
				TEM 3 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT3TKRC0T0
				TEM 3 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT3TKRC0T1LM; LHKADCLMTSTATES
				TEM 3 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC0T1ST
				TEM 3 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT3TKRC0T1
				TEM 3 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT3TKRC1T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 3 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC1T0ST TEM 3 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT3TKRC1T0 TEM 3 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT3TKRC1T1LM TEM 3 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC1T1ST TEM 3 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT3TKRC1T1 TEM 3 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT3TKRC2T0LM TEM 3 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC2T0ST TEM 3 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT3TKRC2T0 TEM 3 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT3TKRC2T1LM TEM 3 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC2T1ST TEM 3 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT3TKRC2T1 TEM 3 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT3TKRC3T0LM; LHKADCLMTSTATES TEM 3 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT3TKRC3T0ST TEM 3 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT3TKRC3T0 TEM 3 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT3TKRC3T1LM; LHKADCLMTSTATES TEM 3 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT3TKRC3T1ST TEM 3 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT3TKRC3T1 TEM 3 TKR cable 3 temperature 1 - raw ADC value

14.3.71 `DiagTemEnvTemp2` (632/0x278)

Description:

"TEM temperature ADCs for TEMs 4-5" Telemetry Packet

TEM temperature ADCs for TEMs 4-5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP2 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	3	U12	LHKT4CALAF0T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF0T0ST TEM 4 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT4CALAF0T0 TEM 4 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT4CALAF0T1LM; LHKADCLMTSTATES TEM 4 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF0T1ST TEM 4 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT4CALAF0T1 TEM 4 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT4CALAF1T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF1T0ST TEM 4 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT4CALAF1T0 TEM 4 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT4CALAF1T1LM TEM 4 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF1T1ST TEM 4 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT4CALAF1T1 TEM 4 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT4CALAF2T0LM TEM 4 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF2T0ST TEM 4 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT4CALAF2T0 TEM 4 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT4CALAF2T1LM TEM 4 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF2T1ST TEM 4 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT4CALAF2T1 TEM 4 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT4CALAF3T0LM; LHKADCLMTSTATES TEM 4 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT4CALAF3T0ST TEM 4 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT4CALAF3T0 TEM 4 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT4CALAF3T1LM; LHKADCLMTSTATES TEM 4 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT4CALAF3T1ST TEM 4 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT4CALAF3T1 TEM 4 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT4TKRC0T0LM; LHKADCLMTSTATES TEM 4 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC0T0ST TEM 4 TKR cable 0 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT4TKRC0T0 TEM 4 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT4TKRC0T1LM; LHKADCLMTSTATES TEM 4 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC0T1ST TEM 4 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT4TKRC0T1 TEM 4 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT4TKRC1T0LM; LHKADCLMTSTATES TEM 4 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC1T0ST TEM 4 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT4TKRC1T0 TEM 4 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT4TKRC1T1LM TEM 4 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC1T1ST TEM 4 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT4TKRC1T1 TEM 4 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT4TKRC2T0LM TEM 4 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC2T0ST TEM 4 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT4TKRC2T0 TEM 4 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT4TKRC2T1LM TEM 4 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC2T1ST TEM 4 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT4TKRC2T1 TEM 4 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT4TKRC3T0LM; LHKADCLMTSTATES TEM 4 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC3T0ST TEM 4 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT4TKRC3T0 TEM 4 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT4TKRC3T1LM; LHKADCLMTSTATES TEM 4 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC3T1ST TEM 4 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT4TKRC3T1 TEM 4 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT4TKRC4T0LM; LHKADCLMTSTATES TEM 4 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC4T0ST TEM 4 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT4TKRC4T0 TEM 4 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT4TKRC4T1LM; LHKADCLMTSTATES TEM 4 TKR cable 4 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT4TKRC4T1ST TEM 4 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT4TKRC4T1 TEM 4 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT4TKRC5T0LM; LHKADCLMTSTATES TEM 4 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC5T0ST TEM 4 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT4TKRC5T0 TEM 4 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT4TKRC5T1LM TEM 4 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC5T1ST TEM 4 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT4TKRC5T1 TEM 4 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT4TKRC6T0LM TEM 4 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC6T0ST TEM 4 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT4TKRC6T0 TEM 4 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT4TKRC6T1LM TEM 4 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC6T1ST TEM 4 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT4TKRC6T1 TEM 4 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT4TKRC7T0LM; LHKADCLMTSTATES TEM 4 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT4TKRC7T0ST TEM 4 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT4TKRC7T0 TEM 4 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT4TKRC7T1LM; LHKADCLMTSTATES TEM 4 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT4TKRC7T1ST TEM 4 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT4TKRC7T1 TEM 4 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT5CALAF2T0LM; LHKADCLMTSTATES TEM 5 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF2T0ST TEM 5 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT5CALAF2T0 TEM 5 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT5CALAF2T1LM; LHKADCLMTSTATES TEM 5 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF2T1ST TEM 5 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT5CALAF2T1 TEM 5 CAL AFEE 2 temperature 1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	3	U12	LHKT5CALAF3T0LM; LHKADCLMTSTATES TEM 5 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF3T0ST TEM 5 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT5CALAF3T0 TEM 5 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT5CALAF3T1LM TEM 5 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF3T1ST TEM 5 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT5CALAF3T1 TEM 5 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT5CALAF0T0LM TEM 5 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF0T0ST TEM 5 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT5CALAF0T0 TEM 5 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT5CALAF0T1LM TEM 5 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF0T1ST TEM 5 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT5CALAF0T1 TEM 5 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT5CALAF1T0LM; LHKADCLMTSTATES TEM 5 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT5CALAF1T0ST TEM 5 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT5CALAF1T0 TEM 5 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT5CALAF1T1LM; LHKADCLMTSTATES TEM 5 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT5CALAF1T1ST TEM 5 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT5CALAF1T1 TEM 5 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT5TKRC4T0LM; LHKADCLMTSTATES TEM 5 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC4T0ST TEM 5 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT5TKRC4T0 TEM 5 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT5TKRC4T1LM; LHKADCLMTSTATES TEM 5 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC4T1ST TEM 5 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT5TKRC4T1 TEM 5 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT5TKRC5T0LM; LHKADCLMTSTATES TEM 5 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC5T0ST TEM 5 TKR cable 5 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT5TKRC5T0 TEM 5 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT5TKRC5T1LM TEM 5 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC5T1ST TEM 5 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT5TKRC5T1 TEM 5 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT5TKRC6T0LM TEM 5 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC6T0ST TEM 5 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT5TKRC6T0 TEM 5 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT5TKRC6T1LM TEM 5 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC6T1ST TEM 5 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT5TKRC6T1 TEM 5 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT5TKRC7T0LM; LHKADCLMTSTATES TEM 5 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC7T0ST TEM 5 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT5TKRC7T0 TEM 5 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT5TKRC7T1LM; LHKADCLMTSTATES TEM 5 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC7T1ST TEM 5 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT5TKRC7T1 TEM 5 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT5TKRC0T0LM; LHKADCLMTSTATES TEM 5 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC0T0ST TEM 5 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT5TKRC0T0 TEM 5 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT5TKRC0T1LM; LHKADCLMTSTATES TEM 5 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC0T1ST TEM 5 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT5TKRC0T1 TEM 5 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT5TKRC1T0LM; LHKADCLMTSTATES TEM 5 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC1T0ST TEM 5 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT5TKRC1T0 TEM 5 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT5TKRC1T1LM TEM 5 TKR cable 1 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT5TKRC1T1ST TEM 5 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT5TKRC1T1 TEM 5 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT5TKRC2T0LM TEM 5 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC2T0ST TEM 5 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT5TKRC2T0 TEM 5 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT5TKRC2T1LM TEM 5 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC2T1ST TEM 5 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT5TKRC2T1 TEM 5 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT5TKRC3T0LM; LHKADCLMTSTATES TEM 5 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT5TKRC3T0ST TEM 5 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT5TKRC3T0 TEM 5 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT5TKRC3T1LM; LHKADCLMTSTATES TEM 5 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT5TKRC3T1ST TEM 5 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT5TKRC3T1 TEM 5 TKR cable 3 temperature 1 - raw ADC value

14.3.72 `DiagTemEnvTemp3` (633/0x279)

Description:

"TEM temperature ADCs for TEMs 6-7" Telemetry Packet

TEM temperature ADCs for TEMs 6-7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP3 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT6CALAF0T0LM; LHKADCLMTSTATES TEM 6 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF0T0ST TEM 6 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT6CALAF0T0 TEM 6 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT6CALAF0T1LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF0T1ST
				TEM 6 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT6CALAF0T1
				TEM 6 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT6CALAF1T0LM; LHKADCLMTSTATES
				TEM 6 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF1T0ST
				TEM 6 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT6CALAF1T0
				TEM 6 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT6CALAF1T1LM
				TEM 6 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF1T1ST
				TEM 6 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT6CALAF1T1
				TEM 6 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT6CALAF2T0LM
				TEM 6 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF2T0ST
				TEM 6 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT6CALAF2T0
				TEM 6 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT6CALAF2T1LM
				TEM 6 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF2T1ST
				TEM 6 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT6CALAF2T1
				TEM 6 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT6CALAF3T0LM; LHKADCLMTSTATES
				TEM 6 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT6CALAF3T0ST
				TEM 6 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT6CALAF3T0
				TEM 6 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT6CALAF3T1LM; LHKADCLMTSTATES
				TEM 6 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT6CALAF3T1ST
				TEM 6 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT6CALAF3T1
				TEM 6 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT6TKRC0T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC0T0ST
				TEM 6 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT6TKRC0T0
				TEM 6 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT6TKRC0T1LM; LHKADCLMTSTATES
				TEM 6 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC0T1ST
				TEM 6 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT6TKRC0T1

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT6TKRC1T0LM; LHKADCLMTSTATES TEM 6 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC1T0ST TEM 6 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT6TKRC1T0 TEM 6 TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKT6TKRC1T1LM TEM 6 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC1T1ST TEM 6 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT6TKRC1T1 TEM 6 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT6TKRC2T0LM TEM 6 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC2T0ST TEM 6 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT6TKRC2T0 TEM 6 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT6TKRC2T1LM TEM 6 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC2T1ST TEM 6 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT6TKRC2T1 TEM 6 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT6TKRC3T0LM; LHKADCLMTSTATES TEM 6 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC3T0ST TEM 6 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT6TKRC3T0 TEM 6 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT6TKRC3T1LM; LHKADCLMTSTATES TEM 6 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC3T1ST TEM 6 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT6TKRC3T1 TEM 6 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT6TKRC4T0LM; LHKADCLMTSTATES TEM 6 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC4T0ST TEM 6 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT6TKRC4T0 TEM 6 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT6TKRC4T1LM; LHKADCLMTSTATES TEM 6 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC4T1ST TEM 6 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT6TKRC4T1 TEM 6 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT6TKRC5T0LM; LHKADCLMTSTATES TEM 6 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC5T0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT6TKRC5T0
				TEM 6 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT6TKRC5T1LM
				TEM 6 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC5T1ST
				TEM 6 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT6TKRC5T1
				TEM 6 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT6TKRC6T0LM
				TEM 6 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC6T0ST
				TEM 6 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT6TKRC6T0
				TEM 6 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT6TKRC6T1LM
				TEM 6 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC6T1ST
				TEM 6 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT6TKRC6T1
				TEM 6 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT6TKRC7T0LM; LHKADCLMTSTATES
				TEM 6 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT6TKRC7T0ST
				TEM 6 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT6TKRC7T0
				TEM 6 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT6TKRC7T1LM; LHKADCLMTSTATES
				TEM 6 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT6TKRC7T1ST
				TEM 6 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT6TKRC7T1
				TEM 6 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT7CALAF2T0LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF2T0ST
				TEM 7 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT7CALAF2T0
				TEM 7 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT7CALAF2T1LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF2T1ST
				TEM 7 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT7CALAF2T1
				TEM 7 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT7CALAF3T0LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF3T0ST
				TEM 7 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT7CALAF3T0
				TEM 7 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT7CALAF3T1LM

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF3T1ST
				TEM 7 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT7CALAF3T1
				TEM 7 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT7CALAF0T0LM
				TEM 7 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF0T0ST
				TEM 7 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT7CALAF0T0
				TEM 7 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT7CALAF0T1LM
				TEM 7 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF0T1ST
				TEM 7 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT7CALAF0T1
				TEM 7 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT7CALAF1T0LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT7CALAF1T0ST
				TEM 7 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT7CALAF1T0
				TEM 7 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT7CALAF1T1LM; LHKADCLMTSTATES
				TEM 7 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT7CALAF1T1ST
				TEM 7 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT7CALAF1T1
				TEM 7 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT7TKRC4T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC4T0ST
				TEM 7 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT7TKRC4T0
				TEM 7 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT7TKRC4T1LM; LHKADCLMTSTATES
				TEM 7 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC4T1ST
				TEM 7 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT7TKRC4T1
				TEM 7 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT7TKRC5T0LM; LHKADCLMTSTATES
				TEM 7 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC5T0ST
				TEM 7 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT7TKRC5T0
				TEM 7 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT7TKRC5T1LM
				TEM 7 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC5T1ST
				TEM 7 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT7TKRC5T1

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT7TKRC6T0LM TEM 7 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC6T0ST TEM 7 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT7TKRC6T0 TEM 7 TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKT7TKRC6T1LM TEM 7 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC6T1ST TEM 7 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT7TKRC6T1 TEM 7 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT7TKRC7T0LM; LHKADCLMTSTATES TEM 7 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC7T0ST TEM 7 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT7TKRC7T0 TEM 7 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT7TKRC7T1LM; LHKADCLMTSTATES TEM 7 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC7T1ST TEM 7 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT7TKRC7T1 TEM 7 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT7TKRC0T0LM; LHKADCLMTSTATES TEM 7 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC0T0ST TEM 7 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT7TKRC0T0 TEM 7 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT7TKRC0T1LM; LHKADCLMTSTATES TEM 7 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC0T1ST TEM 7 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT7TKRC0T1 TEM 7 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT7TKRC1T0LM; LHKADCLMTSTATES TEM 7 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC1T0ST TEM 7 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT7TKRC1T0 TEM 7 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT7TKRC1T1LM TEM 7 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC1T1ST TEM 7 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT7TKRC1T1 TEM 7 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT7TKRC2T0LM TEM 7 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC2T0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT7TKRC2T0 TEM 7 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT7TKRC2T1LM TEM 7 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC2T1ST TEM 7 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT7TKRC2T1 TEM 7 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT7TKRC3T0LM; LHKADCLMTSTATES TEM 7 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT7TKRC3T0ST TEM 7 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT7TKRC3T0 TEM 7 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT7TKRC3T1LM; LHKADCLMTSTATES TEM 7 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT7TKRC3T1ST TEM 7 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT7TKRC3T1 TEM 7 TKR cable 3 temperature 1 - raw ADC value

14.3.73 `DiagTemEnvTemp4` (634/0x27A)

Description:

"TEM temperature ADCs for TEMs 8-9" Telemetry Packet

TEM temperature ADCs for TEMs 8-9

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP4 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT8CALAF0T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF0T0ST TEM 8 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT8CALAF0T0 TEM 8 CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKT8CALAF0T1LM; LHKADCLMTSTATES TEM 8 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF0T1ST TEM 8 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT8CALAF0T1 TEM 8 CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKT8CALAF1T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 1 temperature 0 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT8CALAF1T0ST TEM 8 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT8CALAF1T0 TEM 8 CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKT8CALAF1T1LM TEM 8 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF1T1ST TEM 8 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT8CALAF1T1 TEM 8 CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKT8CALAF2T0LM TEM 8 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF2T0ST TEM 8 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT8CALAF2T0 TEM 8 CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKT8CALAF2T1LM TEM 8 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF2T1ST TEM 8 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT8CALAF2T1 TEM 8 CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKT8CALAF3T0LM; LHKADCLMTSTATES TEM 8 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT8CALAF3T0ST TEM 8 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT8CALAF3T0 TEM 8 CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKT8CALAF3T1LM; LHKADCLMTSTATES TEM 8 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT8CALAF3T1ST TEM 8 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT8CALAF3T1 TEM 8 CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKT8TKRC0T0LM; LHKADCLMTSTATES TEM 8 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC0T0ST TEM 8 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT8TKRC0T0 TEM 8 TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKT8TKRC0T1LM; LHKADCLMTSTATES TEM 8 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC0T1ST TEM 8 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT8TKRC0T1 TEM 8 TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKT8TKRC1T0LM; LHKADCLMTSTATES TEM 8 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC1T0ST TEM 8 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT8TKRC1T0 TEM 8 TKR cable 1 temperature 0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02A	0	3	U12	LHKT8TKRC1T1LM TEM 8 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC1T1ST TEM 8 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT8TKRC1T1 TEM 8 TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKT8TKRC2T0LM TEM 8 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC2T0ST TEM 8 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT8TKRC2T0 TEM 8 TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKT8TKRC2T1LM TEM 8 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC2T1ST TEM 8 TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKT8TKRC2T1 TEM 8 TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKT8TKRC3T0LM; LHKADCLMTSTATES TEM 8 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC3T0ST TEM 8 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT8TKRC3T0 TEM 8 TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKT8TKRC3T1LM; LHKADCLMTSTATES TEM 8 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC3T1ST TEM 8 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT8TKRC3T1 TEM 8 TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKT8TKRC4T0LM; LHKADCLMTSTATES TEM 8 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC4T0ST TEM 8 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT8TKRC4T0 TEM 8 TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKT8TKRC4T1LM; LHKADCLMTSTATES TEM 8 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC4T1ST TEM 8 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT8TKRC4T1 TEM 8 TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKT8TKRC5T0LM; LHKADCLMTSTATES TEM 8 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC5T0ST TEM 8 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT8TKRC5T0 TEM 8 TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKT8TKRC5T1LM TEM 8 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC5T1ST TEM 8 TKR cable 5 temperature 1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT8TKRC5T1 TEM 8 TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKT8TKRC6T0LM TEM 8 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC6T0ST TEM 8 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT8TKRC6T0 TEM 8 TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKT8TKRC6T1LM TEM 8 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC6T1ST TEM 8 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT8TKRC6T1 TEM 8 TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKT8TKRC7T0LM; LHKADCLMTSTATES TEM 8 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT8TKRC7T0ST TEM 8 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT8TKRC7T0 TEM 8 TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKT8TKRC7T1LM; LHKADCLMTSTATES TEM 8 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT8TKRC7T1ST TEM 8 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT8TKRC7T1 TEM 8 TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKT9CALAF2T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF2T0ST TEM 9 CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKT9CALAF2T0 TEM 9 CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKT9CALAF2T1LM; LHKADCLMTSTATES TEM 9 CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF2T1ST TEM 9 CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKT9CALAF2T1 TEM 9 CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKT9CALAF3T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF3T0ST TEM 9 CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKT9CALAF3T0 TEM 9 CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKT9CALAF3T1LM TEM 9 CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF3T1ST TEM 9 CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKT9CALAF3T1 TEM 9 CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKT9CALAF0T0LM TEM 9 CAL AFEE 0 temperature 0 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT9CALAF0T0ST TEM 9 CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKT9CALAF0T0 TEM 9 CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKT9CALAF0T1LM TEM 9 CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF0T1ST TEM 9 CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKT9CALAF0T1 TEM 9 CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKT9CALAF1T0LM; LHKADCLMTSTATES TEM 9 CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKT9CALAF1T0ST TEM 9 CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKT9CALAF1T0 TEM 9 CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKT9CALAF1T1LM; LHKADCLMTSTATES TEM 9 CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKT9CALAF1T1ST TEM 9 CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKT9CALAF1T1 TEM 9 CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKT9TKRC4T0LM; LHKADCLMTSTATES TEM 9 TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC4T0ST TEM 9 TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKT9TKRC4T0 TEM 9 TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKT9TKRC4T1LM; LHKADCLMTSTATES TEM 9 TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC4T1ST TEM 9 TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKT9TKRC4T1 TEM 9 TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKT9TKRC5T0LM; LHKADCLMTSTATES TEM 9 TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC5T0ST TEM 9 TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKT9TKRC5T0 TEM 9 TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKT9TKRC5T1LM TEM 9 TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC5T1ST TEM 9 TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKT9TKRC5T1 TEM 9 TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKT9TKRC6T0LM TEM 9 TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC6T0ST TEM 9 TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKT9TKRC6T0 TEM 9 TKR cable 6 temperature 0 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05E	0	3	U12	LHKT9TKRC6T1LM TEM 9 TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC6T1ST TEM 9 TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKT9TKRC6T1 TEM 9 TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKT9TKRC7T0LM; LHKADCLMTSTATES TEM 9 TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC7T0ST TEM 9 TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKT9TKRC7T0 TEM 9 TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKT9TKRC7T1LM; LHKADCLMTSTATES TEM 9 TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC7T1ST TEM 9 TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKT9TKRC7T1 TEM 9 TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKT9TKRC0T0LM; LHKADCLMTSTATES TEM 9 TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC0T0ST TEM 9 TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKT9TKRC0T0 TEM 9 TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKT9TKRC0T1LM; LHKADCLMTSTATES TEM 9 TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC0T1ST TEM 9 TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKT9TKRC0T1 TEM 9 TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKT9TKRC1T0LM; LHKADCLMTSTATES TEM 9 TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC1T0ST TEM 9 TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKT9TKRC1T0 TEM 9 TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKT9TKRC1T1LM TEM 9 TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC1T1ST TEM 9 TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKT9TKRC1T1 TEM 9 TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKT9TKRC2T0LM TEM 9 TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC2T0ST TEM 9 TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKT9TKRC2T0 TEM 9 TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKT9TKRC2T1LM TEM 9 TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC2T1ST TEM 9 TKR cable 2 temperature 1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT9TKRC2T1 TEM 9 TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKT9TKRC3T0LM; LHKADCLMTSTATES TEM 9 TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKT9TKRC3T0ST TEM 9 TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKT9TKRC3T0 TEM 9 TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKT9TKRC3T1LM; LHKADCLMTSTATES TEM 9 TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKT9TKRC3T1ST TEM 9 TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKT9TKRC3T1 TEM 9 TKR cable 3 temperature 1 - raw ADC value

14.3.74 `DiagTemEnvTemp5` (635/0x27B)

Description:

"TEM temperature ADCs for TEMs A-B" Telemetry Packet

TEM temperature ADCs for TEMs A-B

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP5 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTACALAF0T0LM; LHKADCLMTSTATES TEM A CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF0T0ST TEM A CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTACALAF0T0 TEM A CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTACALAF0T1LM; LHKADCLMTSTATES TEM A CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF0T1ST TEM A CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTACALAF0T1 TEM A CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTACALAF1T0LM; LHKADCLMTSTATES TEM A CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF1T0ST TEM A CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTACALAF1T0 TEM A CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTACALAF1T1LM TEM A CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF1T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTACALAF1T1
				TEM A CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTACALAF2T0LM
				TEM A CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF2T0ST
				TEM A CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTACALAF2T0
				TEM A CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTACALAF2T1LM
				TEM A CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF2T1ST
				TEM A CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTACALAF2T1
				TEM A CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTACALAF3T0LM; LHKADCLMTSTATES
				TEM A CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTACALAF3T0ST
				TEM A CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTACALAF3T0
				TEM A CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTACALAF3T1LM; LHKADCLMTSTATES
				TEM A CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTACALAF3T1ST
				TEM A CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTACALAF3T1
				TEM A CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTATKRC0T0LM; LHKADCLMTSTATES
				TEM A TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC0T0ST
				TEM A TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTATKRC0T0
				TEM A TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTATKRC0T1LM; LHKADCLMTSTATES
				TEM A TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC0T1ST
				TEM A TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTATKRC0T1
				TEM A TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTATKRC1T0LM; LHKADCLMTSTATES
				TEM A TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC1T0ST
				TEM A TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTATKRC1T0
				TEM A TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTATKRC1T1LM
				TEM A TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC1T1ST
				TEM A TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTATKRC1T1
				TEM A TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTATKRC2T0LM

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC2T0ST
				TEM A TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTATKRC2T0
				TEM A TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTATKRC2T1LM
				TEM A TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC2T1ST
				TEM A TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTATKRC2T1
				TEM A TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTATKRC3T0LM; LHKADCLMTSTATES
				TEM A TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC3T0ST
				TEM A TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTATKRC3T0
				TEM A TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTATKRC3T1LM; LHKADCLMTSTATES
				TEM A TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC3T1ST
				TEM A TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTATKRC3T1
				TEM A TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTATKRC4T0LM; LHKADCLMTSTATES
				TEM A TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC4T0ST
				TEM A TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTATKRC4T0
				TEM A TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTATKRC4T1LM; LHKADCLMTSTATES
				TEM A TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC4T1ST
				TEM A TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTATKRC4T1
				TEM A TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTATKRC5T0LM; LHKADCLMTSTATES
				TEM A TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC5T0ST
				TEM A TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTATKRC5T0
				TEM A TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTATKRC5T1LM
				TEM A TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC5T1ST
				TEM A TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTATKRC5T1
				TEM A TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTATKRC6T0LM
				TEM A TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC6T0ST
				TEM A TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTATKRC6T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTATKRC6T1LM
				TEM A TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC6T1ST
				TEM A TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTATKRC6T1
				TEM A TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKTATKRC7T0LM; LHKADCLMTSTATES
				TEM A TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTATKRC7T0ST
				TEM A TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTATKRC7T0
				TEM A TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTATKRC7T1LM; LHKADCLMTSTATES
				TEM A TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTATKRC7T1ST
				TEM A TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTATKRC7T1
				TEM A TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTBCALAF2T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF2T0ST
				TEM B CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTBCALAF2T0
				TEM B CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTBCALAF2T1LM; LHKADCLMTSTATES
				TEM B CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF2T1ST
				TEM B CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTBCALAF2T1
				TEM B CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKTBCALAF3T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF3T0ST
				TEM B CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTBCALAF3T0
				TEM B CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTBCALAF3T1LM
				TEM B CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF3T1ST
				TEM B CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTBCALAF3T1
				TEM B CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTBCALAF0T0LM
				TEM B CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF0T0ST
				TEM B CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTBCALAF0T0
				TEM B CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTBCALAF0T1LM
				TEM B CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF0T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTBCALAF0T1
				TEM B CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTBCALAF1T0LM; LHKADCLMTSTATES
				TEM B CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTBCALAF1T0ST
				TEM B CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTBCALAF1T0
				TEM B CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTBCALAF1T1LM; LHKADCLMTSTATES
				TEM B CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTBCALAF1T1ST
				TEM B CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTBCALAF1T1
				TEM B CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTBTKRC4T0LM; LHKADCLMTSTATES
				TEM B TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC4T0ST
				TEM B TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTBTKRC4T0
				TEM B TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTBTKRC4T1LM; LHKADCLMTSTATES
				TEM B TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC4T1ST
				TEM B TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTBTKRC4T1
				TEM B TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTBTKRC5T0LM; LHKADCLMTSTATES
				TEM B TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC5T0ST
				TEM B TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTBTKRC5T0
				TEM B TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKTBTKRC5T1LM
				TEM B TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC5T1ST
				TEM B TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTBTKRC5T1
				TEM B TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKTBTKRC6T0LM
				TEM B TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC6T0ST
				TEM B TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTBTKRC6T0
				TEM B TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKTBTKRC6T1LM
				TEM B TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC6T1ST
				TEM B TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTBTKRC6T1
				TEM B TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKTBTKRC7T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC7T0ST
				TEM B TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTBTKRC7T0
				TEM B TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKTBTKRC7T1LM; LHKADCLMTSTATES
				TEM B TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC7T1ST
				TEM B TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTBTKRC7T1
				TEM B TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKTBTKRC0T0LM; LHKADCLMTSTATES
				TEM B TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC0T0ST
				TEM B TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTBTKRC0T0
				TEM B TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKTBTKRC0T1LM; LHKADCLMTSTATES
				TEM B TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC0T1ST
				TEM B TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTBTKRC0T1
				TEM B TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKTBTKRC1T0LM; LHKADCLMTSTATES
				TEM B TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC1T0ST
				TEM B TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTBTKRC1T0
				TEM B TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKTBTKRC1T1LM
				TEM B TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC1T1ST
				TEM B TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTBTKRC1T1
				TEM B TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTBTKRC2T0LM
				TEM B TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC2T0ST
				TEM B TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTBTKRC2T0
				TEM B TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTBTKRC2T1LM
				TEM B TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC2T1ST
				TEM B TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTBTKRC2T1
				TEM B TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTBTKRC3T0LM; LHKADCLMTSTATES
				TEM B TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTBTKRC3T0ST
				TEM B TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTBTKRC3T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTBTKRC3T1LM; LHKADCLMTSTATES
				TEM B TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTBTKRC3T1ST
				TEM B TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTBTKRC3T1
				TEM B TKR cable 3 temperature 1 - raw ADC value

14.3.75 `DiagTemEnvTemp6` (636/0x27C)

Description:

"TEM temperature ADCs for TEMs C-D" Telemetry Packet

TEM temperature ADCs for TEMs C-D

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP6
				LHK reserved field
0x010	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTCCALAF0T0LM; LHKADCLMTSTATES
				TEM C CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF0T0ST
				TEM C CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTCCALAF0T0
				TEM C CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTCCALAF0T1LM; LHKADCLMTSTATES
				TEM C CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF0T1ST
				TEM C CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTCCALAF0T1
				TEM C CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTCCALAF1T0LM; LHKADCLMTSTATES
				TEM C CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF1T0ST
				TEM C CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTCCALAF1T0
				TEM C CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTCCALAF1T1LM
				TEM C CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF1T1ST
				TEM C CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTCCALAF1T1
				TEM C CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTCCALAF2T0LM
				TEM C CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF2T0ST
				TEM C CAL AFEE 2 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTCCALAF2T0 TEM C CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTCCALAF2T1LM TEM C CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF2T1ST TEM C CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTCCALAF2T1 TEM C CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTCCALAF3T0LM; LHKADCLMTSTATES TEM C CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTCCALAF3T0ST TEM C CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTCCALAF3T0 TEM C CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTCCALAF3T1LM; LHKADCLMTSTATES TEM C CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTCCALAF3T1ST TEM C CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTCCALAF3T1 TEM C CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTCTKRC0T0LM; LHKADCLMTSTATES TEM C TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC0T0ST TEM C TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTCTKRC0T0 TEM C TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTCTKRC0T1LM; LHKADCLMTSTATES TEM C TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC0T1ST TEM C TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTCTKRC0T1 TEM C TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTCTKRC1T0LM; LHKADCLMTSTATES TEM C TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC1T0ST TEM C TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTCTKRC1T0 TEM C TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTCTKRC1T1LM TEM C TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC1T1ST TEM C TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTCTKRC1T1 TEM C TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTCTKRC2T0LM TEM C TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC2T0ST TEM C TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTCTKRC2T0 TEM C TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTCTKRC2T1LM TEM C TKR cable 2 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTCTKRC2T1ST TEM C TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTCTKRC2T1 TEM C TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTCTKRC3T0LM; LHKADCLMTSTATES TEM C TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC3T0ST TEM C TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTCTKRC3T0 TEM C TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTCTKRC3T1LM; LHKADCLMTSTATES TEM C TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC3T1ST TEM C TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTCTKRC3T1 TEM C TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTCTKRC4T0LM; LHKADCLMTSTATES TEM C TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC4T0ST TEM C TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTCTKRC4T0 TEM C TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTCTKRC4T1LM; LHKADCLMTSTATES TEM C TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC4T1ST TEM C TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTCTKRC4T1 TEM C TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTCTKRC5T0LM; LHKADCLMTSTATES TEM C TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC5T0ST TEM C TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTCTKRC5T0 TEM C TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTCTKRC5T1LM TEM C TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC5T1ST TEM C TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTCTKRC5T1 TEM C TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTCTKRC6T0LM TEM C TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC6T0ST TEM C TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTCTKRC6T0 TEM C TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTCTKRC6T1LM TEM C TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC6T1ST TEM C TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTCTKRC6T1 TEM C TKR cable 6 temperature 1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x040	0	3	U12	LHKTCTKRC7T0LM; LHKADCLMTSTATES TEM C TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTCTKRC7T0ST TEM C TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTCTKRC7T0 TEM C TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTCTKRC7T1LM; LHKADCLMTSTATES TEM C TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTCTKRC7T1ST TEM C TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTCTKRC7T1 TEM C TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTDCALAF2T0LM; LHKADCLMTSTATES TEM D CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF2T0ST TEM D CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTDCALAF2T0 TEM D CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTDCALAF2T1LM; LHKADCLMTSTATES TEM D CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF2T1ST TEM D CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTDCALAF2T1 TEM D CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKTDCALAF3T0LM; LHKADCLMTSTATES TEM D CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF3T0ST TEM D CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTDCALAF3T0 TEM D CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTDCALAF3T1LM TEM D CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF3T1ST TEM D CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTDCALAF3T1 TEM D CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTDCALAF0T0LM TEM D CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF0T0ST TEM D CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTDCALAF0T0 TEM D CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTDCALAF0T1LM TEM D CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF0T1ST TEM D CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTDCALAF0T1 TEM D CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTDCALAF1T0LM; LHKADCLMTSTATES TEM D CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTDCALAF1T0ST TEM D CAL AFEE 1 temperature 0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTDCALAF1T0 TEM D CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTDCALAF1T1LM; LHKADCLMTSTATES TEM D CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTDCALAF1T1ST TEM D CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTDCALAF1T1 TEM D CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTDTKRC4T0LM; LHKADCLMTSTATES TEM D TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC4T0ST TEM D TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTDTKRC4T0 TEM D TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTDTKRC4T1LM; LHKADCLMTSTATES TEM D TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC4T1ST TEM D TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTDTKRC4T1 TEM D TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTDTKRC5T0LM; LHKADCLMTSTATES TEM D TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC5T0ST TEM D TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTDTKRC5T0 TEM D TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKTDTKRC5T1LM TEM D TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC5T1ST TEM D TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTDTKRC5T1 TEM D TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKTDTKRC6T0LM TEM D TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC6T0ST TEM D TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTDTKRC6T0 TEM D TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKTDTKRC6T1LM TEM D TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC6T1ST TEM D TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTDTKRC6T1 TEM D TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKTDTKRC7T0LM; LHKADCLMTSTATES TEM D TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC7T0ST TEM D TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTDTKRC7T0 TEM D TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKTDTKRC7T1LM; LHKADCLMTSTATES TEM D TKR cable 7 temperature 1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTDTKRC7T1ST TEM D TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTDTKRC7T1 TEM D TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKTDTKRC0T0LM; LHKADCLMTSTATES TEM D TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC0T0ST TEM D TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTDTKRC0T0 TEM D TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKTDTKRC0T1LM; LHKADCLMTSTATES TEM D TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC0T1ST TEM D TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTDTKRC0T1 TEM D TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKTDTKRC1T0LM; LHKADCLMTSTATES TEM D TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC1T0ST TEM D TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTDTKRC1T0 TEM D TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKTDTKRC1T1LM TEM D TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC1T1ST TEM D TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTDTKRC1T1 TEM D TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTDTKRC2T0LM TEM D TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC2T0ST TEM D TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTDTKRC2T0 TEM D TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTDTKRC2T1LM TEM D TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC2T1ST TEM D TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTDTKRC2T1 TEM D TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTDTKRC3T0LM; LHKADCLMTSTATES TEM D TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTDTKRC3T0ST TEM D TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTDTKRC3T0 TEM D TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTDTKRC3T1LM; LHKADCLMTSTATES TEM D TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTDTKRC3T1ST TEM D TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTDTKRC3T1 TEM D TKR cable 3 temperature 1 - raw ADC value

14.3.76 `DiagTemEnvTemp7` (637/0x27D)

Description:

"TEM temperature ADCs for TEMs E-F" Telemetry Packet

TEM temperature ADCs for TEMs E-F

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRTMP7 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKTECALAF0T0LM; LHKADCLMTSTATES TEM E CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF0T0ST TEM E CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTECALAF0T0 TEM E CAL AFEE 0 temperature 0 - raw ADC value
0x016	0	3	U12	LHKTECALAF0T1LM; LHKADCLMTSTATES TEM E CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF0T1ST TEM E CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTECALAF0T1 TEM E CAL AFEE 0 temperature 1 - raw ADC value
0x018	0	3	U12	LHKTECALAF1T0LM; LHKADCLMTSTATES TEM E CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF1T0ST TEM E CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTECALAF1T0 TEM E CAL AFEE 1 temperature 0 - raw ADC value
0x01A	0	3	U12	LHKTECALAF1T1LM TEM E CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF1T1ST TEM E CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTECALAF1T1 TEM E CAL AFEE 1 temperature 1 - raw ADC value
0x01C	0	3	U12	LHKTECALAF2T0LM TEM E CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF2T0ST TEM E CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTECALAF2T0 TEM E CAL AFEE 2 temperature 0 - raw ADC value
0x01E	0	3	U12	LHKTECALAF2T1LM TEM E CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF2T1ST TEM E CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTECALAF2T1 TEM E CAL AFEE 2 temperature 1 - raw ADC value
0x020	0	3	U12	LHKTECALAF3T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTECALAF3T0ST TEM E CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTECALAF3T0 TEM E CAL AFEE 3 temperature 0 - raw ADC value
0x022	0	3	U12	LHKTECALAF3T1LM; LHKADCLMTSTATES TEM E CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTECALAF3T1ST TEM E CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTECALAF3T1 TEM E CAL AFEE 3 temperature 1 - raw ADC value
0x024	0	3	U12	LHKTETKRC0T0LM; LHKADCLMTSTATES TEM E TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC0T0ST TEM E TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTETKRC0T0 TEM E TKR cable 0 temperature 0 - raw ADC value
0x026	0	3	U12	LHKTETKRC0T1LM; LHKADCLMTSTATES TEM E TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC0T1ST TEM E TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTETKRC0T1 TEM E TKR cable 0 temperature 1 - raw ADC value
0x028	0	3	U12	LHKTETKRC1T0LM; LHKADCLMTSTATES TEM E TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC1T0ST TEM E TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTETKRC1T0 TEM E TKR cable 1 temperature 0 - raw ADC value
0x02A	0	3	U12	LHKTETKRC1T1LM TEM E TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC1T1ST TEM E TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTETKRC1T1 TEM E TKR cable 1 temperature 1 - raw ADC value
0x02C	0	3	U12	LHKTETKRC2T0LM TEM E TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC2T0ST TEM E TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTETKRC2T0 TEM E TKR cable 2 temperature 0 - raw ADC value
0x02E	0	3	U12	LHKTETKRC2T1LM TEM E TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC2T1ST TEM E TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTETKRC2T1 TEM E TKR cable 2 temperature 1 - raw ADC value
0x030	0	3	U12	LHKTETKRC3T0LM; LHKADCLMTSTATES TEM E TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC3T0ST TEM E TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTETKRC3T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E TKR cable 3 temperature 0 - raw ADC value
0x032	0	3	U12	LHKTETKRC3T1LM; LHKADCLMTSTATES
				TEM E TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC3T1ST
				TEM E TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTETKRC3T1
				TEM E TKR cable 3 temperature 1 - raw ADC value
0x034	0	3	U12	LHKTETKRC4T0LM; LHKADCLMTSTATES
				TEM E TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC4T0ST
				TEM E TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTETKRC4T0
				TEM E TKR cable 4 temperature 0 - raw ADC value
0x036	0	3	U12	LHKTETKRC4T1LM; LHKADCLMTSTATES
				TEM E TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC4T1ST
				TEM E TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTETKRC4T1
				TEM E TKR cable 4 temperature 1 - raw ADC value
0x038	0	3	U12	LHKTETKRC5T0LM; LHKADCLMTSTATES
				TEM E TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC5T0ST
				TEM E TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTETKRC5T0
				TEM E TKR cable 5 temperature 0 - raw ADC value
0x03A	0	3	U12	LHKTETKRC5T1LM
				TEM E TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC5T1ST
				TEM E TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTETKRC5T1
				TEM E TKR cable 5 temperature 1 - raw ADC value
0x03C	0	3	U12	LHKTETKRC6T0LM
				TEM E TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC6T0ST
				TEM E TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTETKRC6T0
				TEM E TKR cable 6 temperature 0 - raw ADC value
0x03E	0	3	U12	LHKTETKRC6T1LM
				TEM E TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC6T1ST
				TEM E TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTETKRC6T1
				TEM E TKR cable 6 temperature 1 - raw ADC value
0x040	0	3	U12	LHKTETKRC7T0LM; LHKADCLMTSTATES
				TEM E TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTETKRC7T0ST
				TEM E TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTETKRC7T0
				TEM E TKR cable 7 temperature 0 - raw ADC value
0x042	0	3	U12	LHKTETKRC7T1LM; LHKADCLMTSTATES
				TEM E TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTETKRC7T1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM E TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTETKRC7T1
				TEM E TKR cable 7 temperature 1 - raw ADC value
0x044	0	3	U12	LHKTFCALAF2T0LM; LHKADCLMTSTATES
				TEM F CAL AFEE 2 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF2T0ST
				TEM F CAL AFEE 2 temperature 0 - read out status
	4	12	U12	LHKTFCALAF2T0
				TEM F CAL AFEE 2 temperature 0 - raw ADC value
0x046	0	3	U12	LHKTFCALAF2T1LM; LHKADCLMTSTATES
				TEM F CAL AFEE 2 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF2T1ST
				TEM F CAL AFEE 2 temperature 1 - read out status
	4	12	U12	LHKTFCALAF2T1
				TEM F CAL AFEE 2 temperature 1 - raw ADC value
0x048	0	3	U12	LHKTFCALAF3T0LM; LHKADCLMTSTATES
				TEM F CAL AFEE 3 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF3T0ST
				TEM F CAL AFEE 3 temperature 0 - read out status
	4	12	U12	LHKTFCALAF3T0
				TEM F CAL AFEE 3 temperature 0 - raw ADC value
0x04A	0	3	U12	LHKTFCALAF3T1LM
				TEM F CAL AFEE 3 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF3T1ST
				TEM F CAL AFEE 3 temperature 1 - read out status
	4	12	U12	LHKTFCALAF3T1
				TEM F CAL AFEE 3 temperature 1 - raw ADC value
0x04C	0	3	U12	LHKTFCALAF0T0LM
				TEM F CAL AFEE 0 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF0T0ST
				TEM F CAL AFEE 0 temperature 0 - read out status
	4	12	U12	LHKTFCALAF0T0
				TEM F CAL AFEE 0 temperature 0 - raw ADC value
0x04E	0	3	U12	LHKTFCALAF0T1LM
				TEM F CAL AFEE 0 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF0T1ST
				TEM F CAL AFEE 0 temperature 1 - read out status
	4	12	U12	LHKTFCALAF0T1
				TEM F CAL AFEE 0 temperature 1 - raw ADC value
0x050	0	3	U12	LHKTFCALAF1T0LM; LHKADCLMTSTATES
				TEM F CAL AFEE 1 temperature 0 - limit evaluation
	3	1	U12	LHKTFCALAF1T0ST
				TEM F CAL AFEE 1 temperature 0 - read out status
	4	12	U12	LHKTFCALAF1T0
				TEM F CAL AFEE 1 temperature 0 - raw ADC value
0x052	0	3	U12	LHKTFCALAF1T1LM; LHKADCLMTSTATES
				TEM F CAL AFEE 1 temperature 1 - limit evaluation
	3	1	U12	LHKTFCALAF1T1ST
				TEM F CAL AFEE 1 temperature 1 - read out status
	4	12	U12	LHKTFCALAF1T1
				TEM F CAL AFEE 1 temperature 1 - raw ADC value
0x054	0	3	U12	LHKTFTKRC4T0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM F TKR cable 4 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC4T0ST
				TEM F TKR cable 4 temperature 0 - read out status
	4	12	U12	LHKTFTKRC4T0
				TEM F TKR cable 4 temperature 0 - raw ADC value
0x056	0	3	U12	LHKTFTKRC4T1LM; LHKADCLMTSTATES
				TEM F TKR cable 4 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC4T1ST
				TEM F TKR cable 4 temperature 1 - read out status
	4	12	U12	LHKTFTKRC4T1
				TEM F TKR cable 4 temperature 1 - raw ADC value
0x058	0	3	U12	LHKTFTKRC5T0LM; LHKADCLMTSTATES
				TEM F TKR cable 5 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC5T0ST
				TEM F TKR cable 5 temperature 0 - read out status
	4	12	U12	LHKTFTKRC5T0
				TEM F TKR cable 5 temperature 0 - raw ADC value
0x05A	0	3	U12	LHKTFTKRC5T1LM
				TEM F TKR cable 5 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC5T1ST
				TEM F TKR cable 5 temperature 1 - read out status
	4	12	U12	LHKTFTKRC5T1
				TEM F TKR cable 5 temperature 1 - raw ADC value
0x05C	0	3	U12	LHKTFTKRC6T0LM
				TEM F TKR cable 6 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC6T0ST
				TEM F TKR cable 6 temperature 0 - read out status
	4	12	U12	LHKTFTKRC6T0
				TEM F TKR cable 6 temperature 0 - raw ADC value
0x05E	0	3	U12	LHKTFTKRC6T1LM
				TEM F TKR cable 6 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC6T1ST
				TEM F TKR cable 6 temperature 1 - read out status
	4	12	U12	LHKTFTKRC6T1
				TEM F TKR cable 6 temperature 1 - raw ADC value
0x060	0	3	U12	LHKTFTKRC7T0LM; LHKADCLMTSTATES
				TEM F TKR cable 7 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC7T0ST
				TEM F TKR cable 7 temperature 0 - read out status
	4	12	U12	LHKTFTKRC7T0
				TEM F TKR cable 7 temperature 0 - raw ADC value
0x062	0	3	U12	LHKTFTKRC7T1LM; LHKADCLMTSTATES
				TEM F TKR cable 7 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC7T1ST
				TEM F TKR cable 7 temperature 1 - read out status
	4	12	U12	LHKTFTKRC7T1
				TEM F TKR cable 7 temperature 1 - raw ADC value
0x064	0	3	U12	LHKTFTKRC0T0LM; LHKADCLMTSTATES
				TEM F TKR cable 0 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC0T0ST
				TEM F TKR cable 0 temperature 0 - read out status
	4	12	U12	LHKTFTKRC0T0

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM F TKR cable 0 temperature 0 - raw ADC value
0x066	0	3	U12	LHKTFTKRC0T1LM; LHKADCLMTSTATES TEM F TKR cable 0 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC0T1ST TEM F TKR cable 0 temperature 1 - read out status
	4	12	U12	LHKTFTKRC0T1 TEM F TKR cable 0 temperature 1 - raw ADC value
0x068	0	3	U12	LHKTFTKRC1T0LM; LHKADCLMTSTATES TEM F TKR cable 1 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC1T0ST TEM F TKR cable 1 temperature 0 - read out status
	4	12	U12	LHKTFTKRC1T0 TEM F TKR cable 1 temperature 0 - raw ADC value
0x06A	0	3	U12	LHKTFTKRC1T1LM TEM F TKR cable 1 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC1T1ST TEM F TKR cable 1 temperature 1 - read out status
	4	12	U12	LHKTFTKRC1T1 TEM F TKR cable 1 temperature 1 - raw ADC value
0x06C	0	3	U12	LHKTFTKRC2T0LM TEM F TKR cable 2 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC2T0ST TEM F TKR cable 2 temperature 0 - read out status
	4	12	U12	LHKTFTKRC2T0 TEM F TKR cable 2 temperature 0 - raw ADC value
0x06E	0	3	U12	LHKTFTKRC2T1LM TEM F TKR cable 2 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC2T1ST TEM F TKR cable 2 temperature 1 - read out status
	4	12	U12	LHKTFTKRC2T1 TEM F TKR cable 2 temperature 1 - raw ADC value
0x070	0	3	U12	LHKTFTKRC3T0LM; LHKADCLMTSTATES TEM F TKR cable 3 temperature 0 - limit evaluation
	3	1	U12	LHKTFTKRC3T0ST TEM F TKR cable 3 temperature 0 - read out status
	4	12	U12	LHKTFTKRC3T0 TEM F TKR cable 3 temperature 0 - raw ADC value
0x072	0	3	U12	LHKTFTKRC3T1LM; LHKADCLMTSTATES TEM F TKR cable 3 temperature 1 - limit evaluation
	3	1	U12	LHKTFTKRC3T1ST TEM F TKR cable 3 temperature 1 - read out status
	4	12	U12	LHKTFTKRC3T1 TEM F TKR cable 3 temperature 1 - raw ADC value

14.3.77 `DiagPduEnv0` (638/0x27E)

Description:

"Diagnostic PDU Environmental Packet 0" Telemetry Packet

Diagnostic PDU Environmental Packet 0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	1	U12	LHKP0TEMFPM; LHKSWITCHSTATES PDU0 TEM F power management switch
	1	1	U12	LHKP0TEMEPM PDU0 TEM E power management switch
	2	1	U12	LHKP0TEMDPM PDU0 TEM D power management switch
	3	1	U12	LHKP0TEMCPM PDU0 TEM C power management switch
	4	1	U12	LHKP0TEMBPM PDU0 TEM B power management switch
	5	1	U12	LHKP0TEMAPM PDU0 TEM A power management switch
	6	1	U12	LHKP0TEM9PM PDU0 TEM 9 power management switch
	7	1	U12	LHKP0TEM8PM PDU0 TEM 8 power management switch
	8	1	U12	LHKP0TEM7PM PDU0 TEM 7 power management switch
	9	1	U12	LHKP0TEM6PM PDU0 TEM 6 power management switch
	10	1	U12	LHKP0TEM5PM PDU0 TEM 5 power management switch
	11	1	U12	LHKP0TEM4PM PDU0 TEM 4 power management switch
	12	1	U12	LHKP0TEM3PM PDU0 TEM 3 power management switch
	13	1	U12	LHKP0TEM2PM PDU0 TEM 2 power management switch
	14	1	U12	LHKP0TEM1PM PDU0 TEM 1 power management switch
	15	1	U12	LHKP0TEM0PM PDU0 TEM 0 power management switch
0x016	0	13	U12	LHKSPARE13U12 Explicit 13 bit pad in unsigned short
	13	1	U12	LHKP0EPU2PM PDU0 EPU 2 power management switch
	14	1	U12	LHKP0EPU1PM PDU0 EPU 1 power management switch
	15	1	U12	LHKP0EPU0PM PDU0 EPU 0 power management switch
0x018	0	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	3	1	U12	LHKP0TEMPWREGST PDU0 TEM power switches - read out status
	4	3	U12	LHKSPARE3U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 3 bit pad in unsigned short
	7	1	U12	LHKP0EPUPWREGST PDU0 EPU power switches - read out status
	8	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	11	1	U12	LHKP0ACDPWREGST PDU0 ACD power switches - read out status
	12	2	U12	LHKSPARE2U12 Explicit 2 bit pad in unsigned short
	14	1	U12	LHKP0ACDPSP PDU0 ACD power supply selector (primary/redundant)
	15	1	U12	LHKP0ACDPM PDU0 ACD power management switch
0x01A	0	3	U12	LHKP0TEM033VLM PDU0 TEM 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM033VST PDU0 TEM 0 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM033V PDU0 TEM 0 digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKP0TEM133VLM PDU0 TEM 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM133VST PDU0 TEM 1 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM133V PDU0 TEM 1 digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKP0TEM233VLM PDU0 TEM 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM233VST PDU0 TEM 2 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM233V PDU0 TEM 2 digital 3.3 V - raw ADC value
0x020	0	3	U12	LHKP0TEM333VLM; LHKADCLMTSTATES PDU0 TEM 3 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM333VST PDU0 TEM 3 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM333V PDU0 TEM 3 digital 3.3 V - raw ADC value
0x022	0	3	U12	LHKP0TEM433VLM; LHKADCLMTSTATES PDU0 TEM 4 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM433VST PDU0 TEM 4 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM433V PDU0 TEM 4 digital 3.3 V - raw ADC value
0x024	0	3	U12	LHKP0TEM533VLM; LHKADCLMTSTATES PDU0 TEM 5 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM533VST PDU0 TEM 5 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM533V PDU0 TEM 5 digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKP0TEM633VLM; LHKADCLMTSTATES PDU0 TEM 6 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM633VST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 6 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM633V
				PDU0 TEM 6 digital 3.3 V - raw ADC value
0x028	0	3	U12	LHKP0TEM733VLM; LHKADCLMTSTATES
				PDU0 TEM 7 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM733VST
				PDU0 TEM 7 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM733V
				PDU0 TEM 7 digital 3.3 V - raw ADC value
0x02A	0	3	U12	LHKP0TEM833VLM
				PDU0 TEM 8 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM833VST
				PDU0 TEM 8 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM833V
				PDU0 TEM 8 digital 3.3 V - raw ADC value
0x02C	0	3	U12	LHKP0TEM933VLM
				PDU0 TEM 9 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEM933VST
				PDU0 TEM 9 digital 3.3 V - read out status
	4	12	U12	LHKP0TEM933V
				PDU0 TEM 9 digital 3.3 V - raw ADC value
0x02E	0	3	U12	LHKP0TEMA33VLM
				PDU0 TEM A digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMA33VST
				PDU0 TEM A digital 3.3 V - read out status
	4	12	U12	LHKP0TEMA33V
				PDU0 TEM A digital 3.3 V - raw ADC value
0x030	0	3	U12	LHKP0TEMB33VLM; LHKADCLMTSTATES
				PDU0 TEM B digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMB33VST
				PDU0 TEM B digital 3.3 V - read out status
	4	12	U12	LHKP0TEMB33V
				PDU0 TEM B digital 3.3 V - raw ADC value
0x032	0	3	U12	LHKP0TEMC33VLM; LHKADCLMTSTATES
				PDU0 TEM C digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMC33VST
				PDU0 TEM C digital 3.3 V - read out status
	4	12	U12	LHKP0TEMC33V
				PDU0 TEM C digital 3.3 V - raw ADC value
0x034	0	3	U12	LHKP0TEMD33VLM; LHKADCLMTSTATES
				PDU0 TEM D digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMD33VST
				PDU0 TEM D digital 3.3 V - read out status
	4	12	U12	LHKP0TEMD33V
				PDU0 TEM D digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKP0TEME33VLM; LHKADCLMTSTATES
				PDU0 TEM E digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEME33VST
				PDU0 TEM E digital 3.3 V - read out status
	4	12	U12	LHKP0TEME33V
				PDU0 TEM E digital 3.3 V - raw ADC value
0x038	0	3	U12	LHKP0TEMF33VLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM F digital 3.3 V - limit evaluation
	3	1	U12	LHKP0TEMF33VST
				PDU0 TEM F digital 3.3 V - read out status
	4	12	U12	LHKP0TEMF33V
				PDU0 TEM F digital 3.3 V - raw ADC value
0x03A	0	3	U12	LHKP0TEM0PSTLM
				PDU0 TEM 0 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM0PSTST
				PDU0 TEM 0 power supply temperature - read out status
	4	12	U12	LHKP0TEM0PST
				PDU0 TEM 0 power supply temperature - raw ADC value
0x03C	0	3	U12	LHKP0TEM1PSTLM
				PDU0 TEM 1 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM1PSTST
				PDU0 TEM 1 power supply temperature - read out status
	4	12	U12	LHKP0TEM1PST
				PDU0 TEM 1 power supply temperature - raw ADC value
0x03E	0	3	U12	LHKP0TEM2PSTLM
				PDU0 TEM 2 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM2PSTST
				PDU0 TEM 2 power supply temperature - read out status
	4	12	U12	LHKP0TEM2PST
				PDU0 TEM 2 power supply temperature - raw ADC value
0x040	0	3	U12	LHKP0TEM3PSTLM; LHKADCLMTSTATES
				PDU0 TEM 3 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM3PSTST
				PDU0 TEM 3 power supply temperature - read out status
	4	12	U12	LHKP0TEM3PST
				PDU0 TEM 3 power supply temperature - raw ADC value
0x042	0	3	U12	LHKP0TEM4PSTLM; LHKADCLMTSTATES
				PDU0 TEM 4 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM4PSTST
				PDU0 TEM 4 power supply temperature - read out status
	4	12	U12	LHKP0TEM4PST
				PDU0 TEM 4 power supply temperature - raw ADC value
0x044	0	3	U12	LHKP0TEM5PSTLM; LHKADCLMTSTATES
				PDU0 TEM 5 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM5PSTST
				PDU0 TEM 5 power supply temperature - read out status
	4	12	U12	LHKP0TEM5PST
				PDU0 TEM 5 power supply temperature - raw ADC value
0x046	0	3	U12	LHKP0TEM6PSTLM; LHKADCLMTSTATES
				PDU0 TEM 6 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM6PSTST
				PDU0 TEM 6 power supply temperature - read out status
	4	12	U12	LHKP0TEM6PST
				PDU0 TEM 6 power supply temperature - raw ADC value
0x048	0	3	U12	LHKP0TEM7PSTLM; LHKADCLMTSTATES
				PDU0 TEM 7 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM7PSTST
				PDU0 TEM 7 power supply temperature - read out status
	4	12	U12	LHKP0TEM7PST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 7 power supply temperature - raw ADC value
0x04A	0	3	U12	LHKP0TEM8PSTLM
				PDU0 TEM 8 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM8PSTST
				PDU0 TEM 8 power supply temperature - read out status
	4	12	U12	LHKP0TEM8PST
				PDU0 TEM 8 power supply temperature - raw ADC value
0x04C	0	3	U12	LHKP0TEM9PSTLM
				PDU0 TEM 9 power supply temperature - limit evaluation
	3	1	U12	LHKP0TEM9PSTST
				PDU0 TEM 9 power supply temperature - read out status
	4	12	U12	LHKP0TEM9PST
				PDU0 TEM 9 power supply temperature - raw ADC value
0x04E	0	3	U12	LHKP0TEMAPSTLM
				PDU0 TEM A power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMAPSTST
				PDU0 TEM A power supply temperature - read out status
	4	12	U12	LHKP0TEMAPST
				PDU0 TEM A power supply temperature - raw ADC value
0x050	0	3	U12	LHKP0TEMBPSTLM; LHKADCLMTSTATES
				PDU0 TEM B power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMBPSTST
				PDU0 TEM B power supply temperature - read out status
	4	12	U12	LHKP0TEMBPST
				PDU0 TEM B power supply temperature - raw ADC value
0x052	0	3	U12	LHKP0TEMCPSTLM; LHKADCLMTSTATES
				PDU0 TEM C power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMCPSTST
				PDU0 TEM C power supply temperature - read out status
	4	12	U12	LHKP0TEMCPST
				PDU0 TEM C power supply temperature - raw ADC value
0x054	0	3	U12	LHKP0TEMDPSTLM; LHKADCLMTSTATES
				PDU0 TEM D power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMDPSTST
				PDU0 TEM D power supply temperature - read out status
	4	12	U12	LHKP0TEMDPST
				PDU0 TEM D power supply temperature - raw ADC value
0x056	0	3	U12	LHKP0TEMEPSTLM; LHKADCLMTSTATES
				PDU0 TEM E power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMEPSTST
				PDU0 TEM E power supply temperature - read out status
	4	12	U12	LHKP0TEMEPST
				PDU0 TEM E power supply temperature - raw ADC value
0x058	0	3	U12	LHKP0TEMFPSTLM; LHKADCLMTSTATES
				PDU0 TEM F power supply temperature - limit evaluation
	3	1	U12	LHKP0TEMFPSTST
				PDU0 TEM F power supply temperature - read out status
	4	12	U12	LHKP0TEMFPST
				PDU0 TEM F power supply temperature - raw ADC value
0x05A	0	3	U12	LHKP0EPU033VLM
				PDU0 EPU 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU033VST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 EPU 0 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU033V
				PDU0 EPU 0 digital 3.3 V - raw ADC value
0x05C	0	3	U12	LHKP0EPU133VLM
				PDU0 EPU 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU133VST
				PDU0 EPU 1 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU133V
				PDU0 EPU 1 digital 3.3 V - raw ADC value
0x05E	0	3	U12	LHKP0EPU233VLM
				PDU0 EPU 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP0EPU233VST
				PDU0 EPU 2 digital 3.3 V - read out status
	4	12	U12	LHKP0EPU233V
				PDU0 EPU 2 digital 3.3 V - raw ADC value
0x060	0	3	U12	LHKP0EPU0TLM; LHKADCLMTSTATES
				PDU0 EPU 0 temperature - limit evaluation
	3	1	U12	LHKP0EPU0TST
				PDU0 EPU 0 temperature - read out status
	4	12	U12	LHKP0EPU0T
				PDU0 EPU 0 temperature - raw ADC value
0x062	0	3	U12	LHKP0EPU1TLM; LHKADCLMTSTATES
				PDU0 EPU 1 temperature - limit evaluation
	3	1	U12	LHKP0EPU1TST
				PDU0 EPU 1 temperature - read out status
	4	12	U12	LHKP0EPU1T
				PDU0 EPU 1 temperature - raw ADC value
0x064	0	3	U12	LHKP0EPU2TLM; LHKADCLMTSTATES
				PDU0 EPU 2 temperature - limit evaluation
	3	1	U12	LHKP0EPU2TST
				PDU0 EPU 2 temperature - read out status
	4	12	U12	LHKP0EPU2T
				PDU0 EPU 2 temperature - raw ADC value
0x066	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short

14.3.78 `DiagPduEnv1` (639/0x27F)

Description:

"Diagnostic PDU Environmental Packet 1" Telemetry Packet

Diagnostic PDU Environmental Packet 1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV1 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP0TEM0PCTLM; LHKADCLMTSTATES PDU0 TEM 0 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM0PCTST PDU0 TEM 0 PCB temperature - read out status
	4	12	U12	LHKP0TEM0PCT PDU0 TEM 0 PCB temperature - raw ADC value
0x016	0	3	U12	LHKP0TEM1PCTLM; LHKADCLMTSTATES PDU0 TEM 1 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM1PCTST PDU0 TEM 1 PCB temperature - read out status
	4	12	U12	LHKP0TEM1PCT PDU0 TEM 1 PCB temperature - raw ADC value
0x018	0	3	U12	LHKP0TEM2PCTLM; LHKADCLMTSTATES PDU0 TEM 2 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM2PCTST PDU0 TEM 2 PCB temperature - read out status
	4	12	U12	LHKP0TEM2PCT PDU0 TEM 2 PCB temperature - raw ADC value
0x01A	0	3	U12	LHKP0TEM3PCTLM PDU0 TEM 3 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM3PCTST PDU0 TEM 3 PCB temperature - read out status
	4	12	U12	LHKP0TEM3PCT PDU0 TEM 3 PCB temperature - raw ADC value
0x01C	0	3	U12	LHKP0TEM4PCTLM PDU0 TEM 4 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM4PCTST PDU0 TEM 4 PCB temperature - read out status
	4	12	U12	LHKP0TEM4PCT PDU0 TEM 4 PCB temperature - raw ADC value
0x01E	0	3	U12	LHKP0TEM5PCTLM PDU0 TEM 5 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM5PCTST PDU0 TEM 5 PCB temperature - read out status
	4	12	U12	LHKP0TEM5PCT PDU0 TEM 5 PCB temperature - raw ADC value
0x020	0	3	U12	LHKP0TEM6PCTLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM 6 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM6PCTST
				PDU0 TEM 6 PCB temperature - read out status
	4	12	U12	LHKP0TEM6PCT
				PDU0 TEM 6 PCB temperature - raw ADC value
0x022	0	3	U12	LHKP0TEM7PCTLM; LHKADCLMTSTATES
				PDU0 TEM 7 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM7PCTST
				PDU0 TEM 7 PCB temperature - read out status
	4	12	U12	LHKP0TEM7PCT
				PDU0 TEM 7 PCB temperature - raw ADC value
0x024	0	3	U12	LHKP0TEM8PCTLM; LHKADCLMTSTATES
				PDU0 TEM 8 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM8PCTST
				PDU0 TEM 8 PCB temperature - read out status
	4	12	U12	LHKP0TEM8PCT
				PDU0 TEM 8 PCB temperature - raw ADC value
0x026	0	3	U12	LHKP0TEM9PCTLM; LHKADCLMTSTATES
				PDU0 TEM 9 PCB temperature - limit evaluation
	3	1	U12	LHKP0TEM9PCTST
				PDU0 TEM 9 PCB temperature - read out status
	4	12	U12	LHKP0TEM9PCT
				PDU0 TEM 9 PCB temperature - raw ADC value
0x028	0	3	U12	LHKP0TEMAPCTLM; LHKADCLMTSTATES
				PDU0 TEM A PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMAPCTST
				PDU0 TEM A PCB temperature - read out status
	4	12	U12	LHKP0TEMAPCT
				PDU0 TEM A PCB temperature - raw ADC value
0x02A	0	3	U12	LHKP0TEMBPCTLM
				PDU0 TEM B PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMBPCTST
				PDU0 TEM B PCB temperature - read out status
	4	12	U12	LHKP0TEMBPCT
				PDU0 TEM B PCB temperature - raw ADC value
0x02C	0	3	U12	LHKP0TEMCPCTLM
				PDU0 TEM C PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMCPCTST
				PDU0 TEM C PCB temperature - read out status
	4	12	U12	LHKP0TEMCPCT
				PDU0 TEM C PCB temperature - raw ADC value
0x02E	0	3	U12	LHKP0TEMDPCTLM
				PDU0 TEM D PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMDPCTST
				PDU0 TEM D PCB temperature - read out status
	4	12	U12	LHKP0TEMDPCT
				PDU0 TEM D PCB temperature - raw ADC value
0x030	0	3	U12	LHKP0TEMEPCTLM; LHKADCLMTSTATES
				PDU0 TEM E PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMEPCTST
				PDU0 TEM E PCB temperature - read out status
	4	12	U12	LHKP0TEMEPCT

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM E PCB temperature - raw ADC value
0x032	0	3	U12	LHKP0TEMFPCTLM; LHKADCLMTSTATES
				PDU0 TEM F PCB temperature - limit evaluation
	3	1	U12	LHKP0TEMFPCTST
				PDU0 TEM F PCB temperature - read out status
	4	12	U12	LHKP0TEMFPCT
				PDU0 TEM F PCB temperature - raw ADC value
0x034	0	3	U12	LHKP0CAL8BPTLM; LHKADCLMTSTATES
				PDU0 TEM 8 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL8BPTST
				PDU0 TEM 8 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL8BPT
				PDU0 TEM 8 CAL baseplate temperature - raw ADC value
0x036	0	3	U12	LHKP0CAL9BPTLM; LHKADCLMTSTATES
				PDU0 TEM 9 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL9BPTST
				PDU0 TEM 9 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL9BPT
				PDU0 TEM 9 CAL baseplate temperature - raw ADC value
0x038	0	3	U12	LHKP0CALFBPTLM; LHKADCLMTSTATES
				PDU0 TEM F CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALFBPTST
				PDU0 TEM F CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALFBPT
				PDU0 TEM F CAL baseplate temperature - raw ADC value
0x03A	0	3	U12	LHKP0CALBBPTLM
				PDU0 TEM B CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALBBPTST
				PDU0 TEM B CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALBBPT
				PDU0 TEM B CAL baseplate temperature - raw ADC value
0x03C	0	3	U12	LHKP0CALCBPTLM
				PDU0 TEM C CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALCBPTST
				PDU0 TEM C CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALCBPT
				PDU0 TEM C CAL baseplate temperature - raw ADC value
0x03E	0	3	U12	LHKP0CALDBPTLM
				PDU0 TEM D CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALDBPTST
				PDU0 TEM D CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALDBPT
				PDU0 TEM D CAL baseplate temperature - raw ADC value
0x040	0	3	U12	LHKP0CALEBPTLM; LHKADCLMTSTATES
				PDU0 TEM E CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALEBPTST
				PDU0 TEM E CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALEBPT
				PDU0 TEM E CAL baseplate temperature - raw ADC value
0x042	0	3	U12	LHKP0CALABPTLM; LHKADCLMTSTATES
				PDU0 TEM A CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CALABPTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 TEM A CAL baseplate temperature - read out status
	4	12	U12	LHKP0CALABPT
				PDU0 TEM A CAL baseplate temperature - raw ADC value
0x044	0	3	U12	LHKP0CAL0BPTLM; LHKADCLMTSTATES
				PDU0 TEM 0 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL0BPTST
				PDU0 TEM 0 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL0BPT
				PDU0 TEM 0 CAL baseplate temperature - raw ADC value
0x046	0	3	U12	LHKP0CAL1BPTLM; LHKADCLMTSTATES
				PDU0 TEM 1 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL1BPTST
				PDU0 TEM 1 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL1BPT
				PDU0 TEM 1 CAL baseplate temperature - raw ADC value
0x048	0	3	U12	LHKP0CAL7BPTLM; LHKADCLMTSTATES
				PDU0 TEM 7 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL7BPTST
				PDU0 TEM 7 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL7BPT
				PDU0 TEM 7 CAL baseplate temperature - raw ADC value
0x04A	0	3	U12	LHKP0CAL3BPTLM
				PDU0 TEM 3 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL3BPTST
				PDU0 TEM 3 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL3BPT
				PDU0 TEM 3 CAL baseplate temperature - raw ADC value
0x04C	0	3	U12	LHKP0CAL4BPTLM
				PDU0 TEM 4 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL4BPTST
				PDU0 TEM 4 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL4BPT
				PDU0 TEM 4 CAL baseplate temperature - raw ADC value
0x04E	0	3	U12	LHKP0CAL5BPTLM
				PDU0 TEM 5 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL5BPTST
				PDU0 TEM 5 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL5BPT
				PDU0 TEM 5 CAL baseplate temperature - raw ADC value
0x050	0	3	U12	LHKP0CAL6BPTLM; LHKADCLMTSTATES
				PDU0 TEM 6 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL6BPTST
				PDU0 TEM 6 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL6BPT
				PDU0 TEM 6 CAL baseplate temperature - raw ADC value
0x052	0	3	U12	LHKP0CAL2BPTLM; LHKADCLMTSTATES
				PDU0 TEM 2 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP0CAL2BPTST
				PDU0 TEM 2 CAL baseplate temperature - read out status
	4	12	U12	LHKP0CAL2BPT
				PDU0 TEM 2 CAL baseplate temperature - raw ADC value
0x054	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.79 `DiagPduEnv2` (640/0x280)

Description:

"Diagnostic PDU Environmental Packet 2" Telemetry Packet

Diagnostic PDU Environmental Packet 2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV2 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	3	U12	LHKP0PHP0XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP0XLITST PDU0 +Y VCHP 0 XLHP interface temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP0PHP0XLIT PDU0 +Y VCHP 0 XLHP interface temperature - raw ADC value
0x016	0	3	U12	LHKP0PHP1XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP1XLITST PDU0 +Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP1XLIT PDU0 +Y VCHP 1 XLHP interface temperature - raw ADC value
0x018	0	3	U12	LHKP0PHP2XLITLM; LHKADCLMTSTATES PDU0 +Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP2XLITST PDU0 +Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP2XLIT PDU0 +Y VCHP 2 XLHP interface temperature - raw ADC value
0x01A	0	3	U12	LHKP0PHP3XLITLM PDU0 +Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP3XLITST PDU0 +Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP3XLIT PDU0 +Y VCHP 3 XLHP interface temperature - raw ADC value
0x01C	0	3	U12	LHKP0PHP4XLITLM PDU0 +Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP4XLITST PDU0 +Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP4XLIT PDU0 +Y VCHP 4 XLHP interface temperature - raw ADC value
0x01E	0	3	U12	LHKP0PHP5XLITLM PDU0 +Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP5XLITST PDU0 +Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP0PHP5XLIT PDU0 +Y VCHP 5 XLHP interface temperature - raw ADC value
0x020	0	3	U12	LHKP0MHP0XLITLM; LHKADCLMTSTATES PDU0 -Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP0XLITST PDU0 -Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP0XLIT PDU0 -Y VCHP 0 XLHP interface temperature - raw ADC value
0x022	0	3	U12	LHKP0MHP1XLITLM; LHKADCLMTSTATES PDU0 -Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP1XLITST PDU0 -Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP1XLIT PDU0 -Y VCHP 1 XLHP interface temperature - raw ADC value
0x024	0	3	U12	LHKP0MHP2XLITLM; LHKADCLMTSTATES PDU0 -Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP2XLITST PDU0 -Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP2XLIT PDU0 -Y VCHP 2 XLHP interface temperature - raw ADC value
0x026	0	3	U12	LHKP0MHP3XLITLM; LHKADCLMTSTATES PDU0 -Y VCHP 3 XLHP interface temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP0MHP3XLITST PDU0 -Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP3XLIT PDU0 -Y VCHP 3 XLHP interface temperature - raw ADC value
0x028	0	3	U12	LHKP0MHP4XLITLM; LHKADCLMTSTATES PDU0 -Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP4XLITST PDU0 -Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP4XLIT PDU0 -Y VCHP 4 XLHP interface temperature - raw ADC value
0x02A	0	3	U12	LHKP0MHP5XLITLM PDU0 -Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP5XLITST PDU0 -Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP0MHP5XLIT PDU0 -Y VCHP 5 XLHP interface temperature - raw ADC value
0x02C	0	3	U12	LHKP0PHP0DSITLM PDU0 +Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP0DSITST PDU0 +Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP0DSIT PDU0 +Y VCHP 0 DSHP interface temperature - raw ADC value
0x02E	0	3	U12	LHKP0PHP1DSITLM PDU0 +Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP1DSITST PDU0 +Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP1DSIT PDU0 +Y VCHP 1 DSHP interface temperature - raw ADC value
0x030	0	3	U12	LHKP0PHP2DSITLM; LHKADCLMTSTATES PDU0 +Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP2DSITST PDU0 +Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP2DSIT PDU0 +Y VCHP 2 DSHP interface temperature - raw ADC value
0x032	0	3	U12	LHKP0PHP5DSITLM; LHKADCLMTSTATES PDU0 +Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP5DSITST PDU0 +Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP5DSIT PDU0 +Y VCHP 5 DSHP interface temperature - raw ADC value
0x034	0	3	U12	LHKP0PHP4DSITLM; LHKADCLMTSTATES PDU0 +Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP4DSITST PDU0 +Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP4DSIT PDU0 +Y VCHP 4 DSHP interface temperature - raw ADC value
0x036	0	3	U12	LHKP0PHP3DSITLM; LHKADCLMTSTATES PDU0 +Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0PHP3DSITST PDU0 +Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP0PHP3DSIT PDU0 +Y VCHP 3 DSHP interface temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x038	0	3	U12	LHKP0MHP0DSITLM; LHKADCLMTSTATES PDU0 -Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP0DSITST PDU0 -Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP0DSIT PDU0 -Y VCHP 0 DSHP interface temperature - raw ADC value
0x03A	0	3	U12	LHKP0MHP1DSITLM PDU0 -Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP1DSITST PDU0 -Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP1DSIT PDU0 -Y VCHP 1 DSHP interface temperature - raw ADC value
0x03C	0	3	U12	LHKP0MHP2DSITLM PDU0 -Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP2DSITST PDU0 -Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP2DSIT PDU0 -Y VCHP 2 DSHP interface temperature - raw ADC value
0x03E	0	3	U12	LHKP0MHP5DSITLM PDU0 -Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP5DSITST PDU0 -Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP5DSIT PDU0 -Y VCHP 5 DSHP interface temperature - raw ADC value
0x040	0	3	U12	LHKP0MHP4DSITLM; LHKADCLMTSTATES PDU0 -Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP4DSITST PDU0 -Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP4DSIT PDU0 -Y VCHP 4 DSHP interface temperature - raw ADC value
0x042	0	3	U12	LHKP0MHP3DSITLM; LHKADCLMTSTATES PDU0 -Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP0MHP3DSITST PDU0 -Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP0MHP3DSIT PDU0 -Y VCHP 3 DSHP interface temperature - raw ADC value
0x044	0	3	U12	LHKP0PHP0RVHTLM; LHKADCLMTSTATES PDU0 +Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP0RVHTST PDU0 +Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP0RVHT PDU0 +Y VCHP 0 reservoir heater temperature - raw ADC value
0x046	0	3	U12	LHKP0PHP1RVHTLM; LHKADCLMTSTATES PDU0 +Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP1RVHTST PDU0 +Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP1RVHT PDU0 +Y VCHP 1 reservoir heater temperature - raw ADC value
0x048	0	3	U12	LHKP0PHP2RVHTLM; LHKADCLMTSTATES PDU0 +Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP2RVHTST PDU0 +Y VCHP 2 reservoir heater temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP0PHP2RVHT PDU0 +Y VCHP 2 reservoir heater temperature - raw ADC value
0x04A	0	3	U12	LHKP0PHP3RVHTLM PDU0 +Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP3RVHTST PDU0 +Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP3RVHT PDU0 +Y VCHP 3 reservoir heater temperature - raw ADC value
0x04C	0	3	U12	LHKP0PHP4RVHTLM PDU0 +Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP4RVHTST PDU0 +Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP4RVHT PDU0 +Y VCHP 4 reservoir heater temperature - raw ADC value
0x04E	0	3	U12	LHKP0PHP5RVHTLM PDU0 +Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0PHP5RVHTST PDU0 +Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP0PHP5RVHT PDU0 +Y VCHP 5 reservoir heater temperature - raw ADC value
0x050	0	3	U12	LHKP0MHP0RVHTLM; LHKADCLMTSTATES PDU0 -Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP0RVHTST PDU0 -Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP0RVHT PDU0 -Y VCHP 0 reservoir heater temperature - raw ADC value
0x052	0	3	U12	LHKP0MHP1RVHTLM; LHKADCLMTSTATES PDU0 -Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP1RVHTST PDU0 -Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP1RVHT PDU0 -Y VCHP 1 reservoir heater temperature - raw ADC value
0x054	0	3	U12	LHKP0MHP2RVHTLM; LHKADCLMTSTATES PDU0 -Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP2RVHTST PDU0 -Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP2RVHT PDU0 -Y VCHP 2 reservoir heater temperature - raw ADC value
0x056	0	3	U12	LHKP0MHP3RVHTLM; LHKADCLMTSTATES PDU0 -Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP3RVHTST PDU0 -Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP3RVHT PDU0 -Y VCHP 3 reservoir heater temperature - raw ADC value
0x058	0	3	U12	LHKP0MHP4RVHTLM; LHKADCLMTSTATES PDU0 -Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP0MHP4RVHTST PDU0 -Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP4RVHT PDU0 -Y VCHP 4 reservoir heater temperature - raw ADC value
0x05A	0	3	U12	LHKP0MHP5RVHTLM PDU0 -Y VCHP 5 reservoir heater temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP0MHP5RVHTST PDU0 -Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP0MHP5RVHT PDU0 -Y VCHP 5 reservoir heater temperature - raw ADC value
0x05C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x064	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.80 `DiagPduEnv3` (641/0x281)

Description:

"Diagnostic PDU Environmental Packet 3" Telemetry Packet

Diagnostic PDU Environmental Packet 3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV3 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP0GRID6TLM; LHKADCLMTSTATES PDU0 Grid 6 temperature - limit evaluation
	3	1	U12	LHKP0GRID6TST PDU0 Grid 6 temperature - read out status
	4	12	U12	LHKP0GRID6T PDU0 Grid 6 temperature - raw ADC value
0x016	0	3	U12	LHKP0GRID7TLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 Grid 7 temperature - limit evaluation
	3	1	U12	LHKP0GRID7TST PDU0 Grid 7 temperature - read out status
	4	12	U12	LHKP0GRID7T PDU0 Grid 7 temperature - raw ADC value
0x018	0	3	U12	LHKP0GRID8TLM; LHKADCLMTSTATES PDU0 Grid 8 temperature - limit evaluation
	3	1	U12	LHKP0GRID8TST PDU0 Grid 8 temperature - read out status
	4	12	U12	LHKP0GRID8T PDU0 Grid 8 temperature - raw ADC value
0x01A	0	3	U12	LHKP0GRID9TLM PDU0 Grid 9 temperature - limit evaluation
	3	1	U12	LHKP0GRID9TST PDU0 Grid 9 temperature - read out status
	4	12	U12	LHKP0GRID9T PDU0 Grid 9 temperature - raw ADC value
0x01C	0	3	U12	LHKP0GRID10TLM PDU0 Grid 10 temperature - limit evaluation
	3	1	U12	LHKP0GRID10TST PDU0 Grid 10 temperature - read out status
	4	12	U12	LHKP0GRID10T PDU0 Grid 10 temperature - raw ADC value
0x01E	0	3	U12	LHKP0GRID11TLM PDU0 Grid 11 temperature - limit evaluation
	3	1	U12	LHKP0GRID11TST PDU0 Grid 11 temperature - read out status
	4	12	U12	LHKP0GRID11T PDU0 Grid 11 temperature - raw ADC value
0x020	0	3	U12	LHKP0GRID0TLM; LHKADCLMTSTATES PDU0 Grid 0 temperature - limit evaluation
	3	1	U12	LHKP0GRID0TST PDU0 Grid 0 temperature - read out status
	4	12	U12	LHKP0GRID0T PDU0 Grid 0 temperature - raw ADC value
0x022	0	3	U12	LHKP0GRID1TLM; LHKADCLMTSTATES PDU0 Grid 1 temperature - limit evaluation
	3	1	U12	LHKP0GRID1TST PDU0 Grid 1 temperature - read out status
	4	12	U12	LHKP0GRID1T PDU0 Grid 1 temperature - raw ADC value
0x024	0	3	U12	LHKP0GRID2TLM; LHKADCLMTSTATES PDU0 Grid 2 temperature - limit evaluation
	3	1	U12	LHKP0GRID2TST PDU0 Grid 2 temperature - read out status
	4	12	U12	LHKP0GRID2T PDU0 Grid 2 temperature - raw ADC value
0x026	0	3	U12	LHKP0GRID3TLM; LHKADCLMTSTATES PDU0 Grid 3 temperature - limit evaluation
	3	1	U12	LHKP0GRID3TST PDU0 Grid 3 temperature - read out status
	4	12	U12	LHKP0GRID3T

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 Grid 3 temperature - raw ADC value
0x028	0	3	U12	LHKP0GRID4TLM; LHKADCLMTSTATES PDU0 Grid 4 temperature - limit evaluation
	3	1	U12	LHKP0GRID4TST PDU0 Grid 4 temperature - read out status
	4	12	U12	LHKP0GRID4T PDU0 Grid 4 temperature - raw ADC value
0x02A	0	3	U12	LHKP0GRID5TLM PDU0 Grid 5 temperature - limit evaluation
	3	1	U12	LHKP0GRID5TST PDU0 Grid 5 temperature - read out status
	4	12	U12	LHKP0GRID5T PDU0 Grid 5 temperature - raw ADC value
0x02C	0	3	U12	LHKP0ACDSHT0LM PDU0 ACD shell temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDSHT0ST PDU0 ACD shell temperature 0 - read out status
	4	12	U12	LHKP0ACDSHT0 PDU0 ACD shell temperature 0 - raw ADC value
0x02E	0	3	U12	LHKP0ACDSHT1LM PDU0 ACD shell temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDSHT1ST PDU0 ACD shell temperature 1 - read out status
	4	12	U12	LHKP0ACDSHT1 PDU0 ACD shell temperature 1 - raw ADC value
0x030	0	3	U12	LHKP0ACDPRT0LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDPRT0ST PDU0 ACD PMT rail temperature 0 - read out status
	4	12	U12	LHKP0ACDPRT0 PDU0 ACD PMT rail temperature 0 - raw ADC value
0x032	0	3	U12	LHKP0ACDPRT1LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDPRT1ST PDU0 ACD PMT rail temperature 1 - read out status
	4	12	U12	LHKP0ACDPRT1 PDU0 ACD PMT rail temperature 1 - raw ADC value
0x034	0	3	U12	LHKP0ACDPRT2LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 2 - limit evaluation
	3	1	U12	LHKP0ACDPRT2ST PDU0 ACD PMT rail temperature 2 - read out status
	4	12	U12	LHKP0ACDPRT2 PDU0 ACD PMT rail temperature 2 - raw ADC value
0x036	0	3	U12	LHKP0ACDPRT3LM; LHKADCLMTSTATES PDU0 ACD PMT rail temperature 3 - limit evaluation
	3	1	U12	LHKP0ACDPRT3ST PDU0 ACD PMT rail temperature 3 - read out status
	4	12	U12	LHKP0ACDPRT3 PDU0 ACD PMT rail temperature 3 - raw ADC value
0x038	0	3	U12	LHKP0ACDBGT0LM; LHKADCLMTSTATES PDU0 ACD BEA grid temperature 0 - limit evaluation
	3	1	U12	LHKP0ACDBGT0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 ACD BEA grid temperature 0 - read out status
	4	12	U12	LHKP0ACDBGT0
				PDU0 ACD BEA grid temperature 0 - raw ADC value
0x03A	0	3	U12	LHKP0ACDBGT1LM
				PDU0 ACD BEA grid temperature 1 - limit evaluation
	3	1	U12	LHKP0ACDBGT1ST
				PDU0 ACD BEA grid temperature 1 - read out status
	4	12	U12	LHKP0ACDBGT1
				PDU0 ACD BEA grid temperature 1 - raw ADC value
0x03C	0	3	U12	LHKP0RADAFHT1LM
				PDU0 +Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP0RADAFHT1ST
				PDU0 +Y antifreeze heater temperature - read out status
	4	12	U12	LHKP0RADAFHT1
				PDU0 +Y antifreeze heater temperature - raw ADC value
0x03E	0	3	U12	LHKP0RADAFHT0LM
				PDU0 -Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP0RADAFHT0ST
				PDU0 -Y antifreeze heater temperature - read out status
	4	12	U12	LHKP0RADAFHT0
				PDU0 -Y antifreeze heater temperature - raw ADC value
0x040	0	3	U12	LHKP0GRAD2IFTLM; LHKADCLMTSTATES
				PDU0 Grid radiator 2 +Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD2IFTST
				PDU0 Grid radiator 2 +Y temperature - read out status
	4	12	U12	LHKP0GRAD2IFT
				PDU0 Grid radiator 2 +Y temperature - raw ADC value
0x042	0	3	U12	LHKP0GRAD3IFTLM; LHKADCLMTSTATES
				PDU0 Grid radiator 3 +Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD3IFTST
				PDU0 Grid radiator 3 +Y temperature - read out status
	4	12	U12	LHKP0GRAD3IFT
				PDU0 Grid radiator 3 +Y temperature - raw ADC value
0x044	0	3	U12	LHKP0GRAD0IFTLM; LHKADCLMTSTATES
				PDU0 Grid radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD0IFTST
				PDU0 Grid radiator 0 -Y temperature - read out status
	4	12	U12	LHKP0GRAD0IFT
				PDU0 Grid radiator 0 -Y temperature - raw ADC value
0x046	0	3	U12	LHKP0GRAD1IFTLM; LHKADCLMTSTATES
				PDU0 Grid radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP0GRAD1IFTST
				PDU0 Grid radiator 1 -Y temperature - read out status
	4	12	U12	LHKP0GRAD1IFT
				PDU0 Grid radiator 1 -Y temperature - raw ADC value
0x048	0	3	U12	LHKP0RAD6TLM; LHKADCLMTSTATES
				PDU0 Radiator 6 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD6TST
				PDU0 Radiator 6 +Y temperature - read out status
	4	12	U12	LHKP0RAD6T
				PDU0 Radiator 6 +Y temperature - raw ADC value
0x04A	0	3	U12	LHKP0RAD7TLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 Radiator 7 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD7TST
				PDU0 Radiator 7 +Y temperature - read out status
	4	12	U12	LHKP0RAD7T
				PDU0 Radiator 7 +Y temperature - raw ADC value
0x04C	0	3	U12	LHKP0RAD8TLM
				PDU0 Radiator 8 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD8TST
				PDU0 Radiator 8 +Y temperature - read out status
	4	12	U12	LHKP0RAD8T
				PDU0 Radiator 8 +Y temperature - raw ADC value
0x04E	0	3	U12	LHKP0RAD9TLM
				PDU0 Radiator 9 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD9TST
				PDU0 Radiator 9 +Y temperature - read out status
	4	12	U12	LHKP0RAD9T
				PDU0 Radiator 9 +Y temperature - raw ADC value
0x050	0	3	U12	LHKP0RAD10TLM; LHKADCLMTSTATES
				PDU0 Radiator 10 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD10TST
				PDU0 Radiator 10 +Y temperature - read out status
	4	12	U12	LHKP0RAD10T
				PDU0 Radiator 10 +Y temperature - raw ADC value
0x052	0	3	U12	LHKP0RAD11TLM; LHKADCLMTSTATES
				PDU0 Radiator 11 +Y temperature - limit evaluation
	3	1	U12	LHKP0RAD11TST
				PDU0 Radiator 11 +Y temperature - read out status
	4	12	U12	LHKP0RAD11T
				PDU0 Radiator 11 +Y temperature - raw ADC value
0x054	0	3	U12	LHKP0RAD0TLM; LHKADCLMTSTATES
				PDU0 Radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD0TST
				PDU0 Radiator 0 -Y temperature - read out status
	4	12	U12	LHKP0RAD0T
				PDU0 Radiator 0 -Y temperature - raw ADC value
0x056	0	3	U12	LHKP0RAD1TLM; LHKADCLMTSTATES
				PDU0 Radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD1TST
				PDU0 Radiator 1 -Y temperature - read out status
	4	12	U12	LHKP0RAD1T
				PDU0 Radiator 1 -Y temperature - raw ADC value
0x058	0	3	U12	LHKP0RAD2TLM; LHKADCLMTSTATES
				PDU0 Radiator 2 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD2TST
				PDU0 Radiator 2 -Y temperature - read out status
	4	12	U12	LHKP0RAD2T
				PDU0 Radiator 2 -Y temperature - raw ADC value
0x05A	0	3	U12	LHKP0RAD3TLM
				PDU0 Radiator 3 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD3TST
				PDU0 Radiator 3 -Y temperature - read out status
	4	12	U12	LHKP0RAD3T

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU0 Radiator 3 -Y temperature - raw ADC value
0x05C	0	3	U12	LHKP0RAD4TLM PDU0 Radiator 4 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD4TST PDU0 Radiator 4 -Y temperature - read out status
	4	12	U12	LHKP0RAD4T PDU0 Radiator 4 -Y temperature - raw ADC value
0x05E	0	3	U12	LHKP0RAD5TLM PDU0 Radiator 5 -Y temperature - limit evaluation
	3	1	U12	LHKP0RAD5TST PDU0 Radiator 5 -Y temperature - read out status
	4	12	U12	LHKP0RAD5T PDU0 Radiator 5 -Y temperature - raw ADC value
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.81 `DiagPduEnv4` (642/0x282)

Description:

"Diagnostic PDU Environmental Packet 4" Telemetry Packet

Diagnostic PDU Environmental Packet 4

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV4 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	1	U12	LHKP1TEMFPM; LHKSWITCHSTATES PDU1 TEM F power management switch

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	1	U12	LHKP1TEMEPM PDU1 TEM E power management switch
	2	1	U12	LHKP1TEMDPM PDU1 TEM D power management switch
	3	1	U12	LHKP1TEMCPM PDU1 TEM C power management switch
	4	1	U12	LHKP1TEMBPM PDU1 TEM B power management switch
	5	1	U12	LHKP1TEMAPM PDU1 TEM A power management switch
	6	1	U12	LHKP1TEM9PM PDU1 TEM 9 power management switch
	7	1	U12	LHKP1TEM8PM PDU1 TEM 8 power management switch
	8	1	U12	LHKP1TEM7PM PDU1 TEM 7 power management switch
	9	1	U12	LHKP1TEM6PM PDU1 TEM 6 power management switch
	10	1	U12	LHKP1TEM5PM PDU1 TEM 5 power management switch
	11	1	U12	LHKP1TEM4PM PDU1 TEM 4 power management switch
	12	1	U12	LHKP1TEM3PM PDU1 TEM 3 power management switch
	13	1	U12	LHKP1TEM2PM PDU1 TEM 2 power management switch
	14	1	U12	LHKP1TEM1PM PDU1 TEM 1 power management switch
	15	1	U12	LHKP1TEM0PM PDU1 TEM 0 power management switch
0x016	0	13	U12	LHKSPARE13U12 Explicit 13 bit pad in unsigned short
	13	1	U12	LHKP1EPU2PM PDU1 EPU 2 power management switch
	14	1	U12	LHKP1EPU1PM PDU1 EPU 1 power management switch
	15	1	U12	LHKP1EPU0PM PDU1 EPU 0 power management switch
0x018	0	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	3	1	U12	LHKP1TEMPWREGST PDU1 TEM power switches - read out status
	4	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	7	1	U12	LHKP1EPUPWREGST PDU1 EPU power switches - read out status
	8	3	U12	LHKSPARE3U12 Explicit 3 bit pad in unsigned short
	11	1	U12	LHKP1ACDPWREGST PDU1 ACD power switches - read out status
	12	2	U12	LHKSPARE2U12 Explicit 2 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	1	U12	LHKP1ACDPSP PDU1 ACD power supply selector (primary/redundant)
	15	1	U12	LHKP1ACDPM PDU1 ACD power management switch
0x01A	0	3	U12	LHKP1TEM033VLM PDU1 TEM 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM033VST PDU1 TEM 0 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM033V PDU1 TEM 0 digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKP1TEM133VLM PDU1 TEM 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM133VST PDU1 TEM 1 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM133V PDU1 TEM 1 digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKP1TEM233VLM PDU1 TEM 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM233VST PDU1 TEM 2 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM233V PDU1 TEM 2 digital 3.3 V - raw ADC value
0x020	0	3	U12	LHKP1TEM333VLM; LHKADCLMTSTATES PDU1 TEM 3 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM333VST PDU1 TEM 3 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM333V PDU1 TEM 3 digital 3.3 V - raw ADC value
0x022	0	3	U12	LHKP1TEM433VLM; LHKADCLMTSTATES PDU1 TEM 4 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM433VST PDU1 TEM 4 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM433V PDU1 TEM 4 digital 3.3 V - raw ADC value
0x024	0	3	U12	LHKP1TEM533VLM; LHKADCLMTSTATES PDU1 TEM 5 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM533VST PDU1 TEM 5 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM533V PDU1 TEM 5 digital 3.3 V - raw ADC value
0x026	0	3	U12	LHKP1TEM633VLM; LHKADCLMTSTATES PDU1 TEM 6 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM633VST PDU1 TEM 6 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM633V PDU1 TEM 6 digital 3.3 V - raw ADC value
0x028	0	3	U12	LHKP1TEM733VLM; LHKADCLMTSTATES PDU1 TEM 7 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM733VST PDU1 TEM 7 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM733V PDU1 TEM 7 digital 3.3 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02A	0	3	U12	LHKP1TEM833VLM PDU1 TEM 8 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM833VST PDU1 TEM 8 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM833V PDU1 TEM 8 digital 3.3 V - raw ADC value
0x02C	0	3	U12	LHKP1TEM933VLM PDU1 TEM 9 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEM933VST PDU1 TEM 9 digital 3.3 V - read out status
	4	12	U12	LHKP1TEM933V PDU1 TEM 9 digital 3.3 V - raw ADC value
0x02E	0	3	U12	LHKP1TEMA33VLM PDU1 TEM A digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMA33VST PDU1 TEM A digital 3.3 V - read out status
	4	12	U12	LHKP1TEMA33V PDU1 TEM A digital 3.3 V - raw ADC value
0x030	0	3	U12	LHKP1TEMB33VLM; LHKADCLMTSTATES PDU1 TEM B digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMB33VST PDU1 TEM B digital 3.3 V - read out status
	4	12	U12	LHKP1TEMB33V PDU1 TEM B digital 3.3 V - raw ADC value
0x032	0	3	U12	LHKP1TEMC33VLM; LHKADCLMTSTATES PDU1 TEM C digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMC33VST PDU1 TEM C digital 3.3 V - read out status
	4	12	U12	LHKP1TEMC33V PDU1 TEM C digital 3.3 V - raw ADC value
0x034	0	3	U12	LHKP1TEMD33VLM; LHKADCLMTSTATES PDU1 TEM D digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMD33VST PDU1 TEM D digital 3.3 V - read out status
	4	12	U12	LHKP1TEMD33V PDU1 TEM D digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKP1TEME33VLM; LHKADCLMTSTATES PDU1 TEM E digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEME33VST PDU1 TEM E digital 3.3 V - read out status
	4	12	U12	LHKP1TEME33V PDU1 TEM E digital 3.3 V - raw ADC value
0x038	0	3	U12	LHKP1TEMF33VLM; LHKADCLMTSTATES PDU1 TEM F digital 3.3 V - limit evaluation
	3	1	U12	LHKP1TEMF33VST PDU1 TEM F digital 3.3 V - read out status
	4	12	U12	LHKP1TEMF33V PDU1 TEM F digital 3.3 V - raw ADC value
0x03A	0	3	U12	LHKP1TEM0PSTLM PDU1 TEM 0 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM0PSTST PDU1 TEM 0 power supply temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP1TEM0PST PDU1 TEM 0 power supply temperature - raw ADC value
0x03C	0	3	U12	LHKP1TEM1PSTLM PDU1 TEM 1 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM1PSTST PDU1 TEM 1 power supply temperature - read out status
	4	12	U12	LHKP1TEM1PST PDU1 TEM 1 power supply temperature - raw ADC value
0x03E	0	3	U12	LHKP1TEM2PSTLM PDU1 TEM 2 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM2PSTST PDU1 TEM 2 power supply temperature - read out status
	4	12	U12	LHKP1TEM2PST PDU1 TEM 2 power supply temperature - raw ADC value
0x040	0	3	U12	LHKP1TEM3PSTLM; LHKADCLMTSTATES PDU1 TEM 3 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM3PSTST PDU1 TEM 3 power supply temperature - read out status
	4	12	U12	LHKP1TEM3PST PDU1 TEM 3 power supply temperature - raw ADC value
0x042	0	3	U12	LHKP1TEM4PSTLM; LHKADCLMTSTATES PDU1 TEM 4 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM4PSTST PDU1 TEM 4 power supply temperature - read out status
	4	12	U12	LHKP1TEM4PST PDU1 TEM 4 power supply temperature - raw ADC value
0x044	0	3	U12	LHKP1TEM5PSTLM; LHKADCLMTSTATES PDU1 TEM 5 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM5PSTST PDU1 TEM 5 power supply temperature - read out status
	4	12	U12	LHKP1TEM5PST PDU1 TEM 5 power supply temperature - raw ADC value
0x046	0	3	U12	LHKP1TEM6PSTLM; LHKADCLMTSTATES PDU1 TEM 6 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM6PSTST PDU1 TEM 6 power supply temperature - read out status
	4	12	U12	LHKP1TEM6PST PDU1 TEM 6 power supply temperature - raw ADC value
0x048	0	3	U12	LHKP1TEM7PSTLM; LHKADCLMTSTATES PDU1 TEM 7 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM7PSTST PDU1 TEM 7 power supply temperature - read out status
	4	12	U12	LHKP1TEM7PST PDU1 TEM 7 power supply temperature - raw ADC value
0x04A	0	3	U12	LHKP1TEM8PSTLM PDU1 TEM 8 power supply temperature - limit evaluation
	3	1	U12	LHKP1TEM8PSTST PDU1 TEM 8 power supply temperature - read out status
	4	12	U12	LHKP1TEM8PST PDU1 TEM 8 power supply temperature - raw ADC value
0x04C	0	3	U12	LHKP1TEM9PSTLM PDU1 TEM 9 power supply temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP1TEM9PSTST PDU1 TEM 9 power supply temperature - read out status
	4	12	U12	LHKP1TEM9PST PDU1 TEM 9 power supply temperature - raw ADC value
0x04E	0	3	U12	LHKP1TEMAPSTLM PDU1 TEM A power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMAPSTST PDU1 TEM A power supply temperature - read out status
	4	12	U12	LHKP1TEMAPST PDU1 TEM A power supply temperature - raw ADC value
0x050	0	3	U12	LHKP1TEMBPSTLM; LHKADCLMTSTATES PDU1 TEM B power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMBPSTST PDU1 TEM B power supply temperature - read out status
	4	12	U12	LHKP1TEMBPST PDU1 TEM B power supply temperature - raw ADC value
0x052	0	3	U12	LHKP1TEMCPSTLM; LHKADCLMTSTATES PDU1 TEM C power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMCPSTST PDU1 TEM C power supply temperature - read out status
	4	12	U12	LHKP1TEMCPST PDU1 TEM C power supply temperature - raw ADC value
0x054	0	3	U12	LHKP1TEMDPSTLM; LHKADCLMTSTATES PDU1 TEM D power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMDPSTST PDU1 TEM D power supply temperature - read out status
	4	12	U12	LHKP1TEMDPST PDU1 TEM D power supply temperature - raw ADC value
0x056	0	3	U12	LHKP1TEMEPSTLM; LHKADCLMTSTATES PDU1 TEM E power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMEPSTST PDU1 TEM E power supply temperature - read out status
	4	12	U12	LHKP1TEMEPST PDU1 TEM E power supply temperature - raw ADC value
0x058	0	3	U12	LHKP1TEMFPSTLM; LHKADCLMTSTATES PDU1 TEM F power supply temperature - limit evaluation
	3	1	U12	LHKP1TEMFPSTST PDU1 TEM F power supply temperature - read out status
	4	12	U12	LHKP1TEMFPST PDU1 TEM F power supply temperature - raw ADC value
0x05A	0	3	U12	LHKP1EPU033VLM PDU1 EPU 0 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU033VST PDU1 EPU 0 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU033V PDU1 EPU 0 digital 3.3 V - raw ADC value
0x05C	0	3	U12	LHKP1EPU133VLM PDU1 EPU 1 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU133VST PDU1 EPU 1 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU133V PDU1 EPU 1 digital 3.3 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05E	0	3	U12	LHKP1EPU233VLM PDU1 EPU 2 digital 3.3 V - limit evaluation
	3	1	U12	LHKP1EPU233VST PDU1 EPU 2 digital 3.3 V - read out status
	4	12	U12	LHKP1EPU233V PDU1 EPU 2 digital 3.3 V - raw ADC value
0x060	0	3	U12	LHKP1EPU0TLM; LHKADCLMTSTATES PDU1 EPU 0 temperature - limit evaluation
	3	1	U12	LHKP1EPU0TST PDU1 EPU 0 temperature - read out status
	4	12	U12	LHKP1EPU0T PDU1 EPU 0 temperature - raw ADC value
0x062	0	3	U12	LHKP1EPU1TLM; LHKADCLMTSTATES PDU1 EPU 1 temperature - limit evaluation
	3	1	U12	LHKP1EPU1TST PDU1 EPU 1 temperature - read out status
	4	12	U12	LHKP1EPU1T PDU1 EPU 1 temperature - raw ADC value
0x064	0	3	U12	LHKP1EPU2TLM; LHKADCLMTSTATES PDU1 EPU 2 temperature - limit evaluation
	3	1	U12	LHKP1EPU2TST PDU1 EPU 2 temperature - read out status
	4	12	U12	LHKP1EPU2T PDU1 EPU 2 temperature - raw ADC value
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.82 `DiagPduEnv5` (643/0x283)

Description:

"Diagnostic PDU Environmental Packet 5" Telemetry Packet

Diagnostic PDU Environmental Packet 5

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV5 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP1TEM0PCTLM; LHKADCLMTSTATES PDU1 TEM 0 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM0PCTST PDU1 TEM 0 PCB temperature - read out status
	4	12	U12	LHKP1TEM0PCT PDU1 TEM 0 PCB temperature - raw ADC value
0x016	0	3	U12	LHKP1TEM1PCTLM; LHKADCLMTSTATES PDU1 TEM 1 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM1PCTST PDU1 TEM 1 PCB temperature - read out status
	4	12	U12	LHKP1TEM1PCT PDU1 TEM 1 PCB temperature - raw ADC value
0x018	0	3	U12	LHKP1TEM2PCTLM; LHKADCLMTSTATES PDU1 TEM 2 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM2PCTST PDU1 TEM 2 PCB temperature - read out status
	4	12	U12	LHKP1TEM2PCT PDU1 TEM 2 PCB temperature - raw ADC value
0x01A	0	3	U12	LHKP1TEM3PCTLM PDU1 TEM 3 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM3PCTST PDU1 TEM 3 PCB temperature - read out status
	4	12	U12	LHKP1TEM3PCT PDU1 TEM 3 PCB temperature - raw ADC value
0x01C	0	3	U12	LHKP1TEM4PCTLM PDU1 TEM 4 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM4PCTST PDU1 TEM 4 PCB temperature - read out status
	4	12	U12	LHKP1TEM4PCT PDU1 TEM 4 PCB temperature - raw ADC value
0x01E	0	3	U12	LHKP1TEM5PCTLM PDU1 TEM 5 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM5PCTST PDU1 TEM 5 PCB temperature - read out status
	4	12	U12	LHKP1TEM5PCT PDU1 TEM 5 PCB temperature - raw ADC value
0x020	0	3	U12	LHKP1TEM6PCTLM; LHKADCLMTSTATES PDU1 TEM 6 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM6PCTST PDU1 TEM 6 PCB temperature - read out status
	4	12	U12	LHKP1TEM6PCT PDU1 TEM 6 PCB temperature - raw ADC value
0x022	0	3	U12	LHKP1TEM7PCTLM; LHKADCLMTSTATES PDU1 TEM 7 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM7PCTST PDU1 TEM 7 PCB temperature - read out status
	4	12	U12	LHKP1TEM7PCT PDU1 TEM 7 PCB temperature - raw ADC value
0x024	0	3	U12	LHKP1TEM8PCTLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 8 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM8PCTST
				PDU1 TEM 8 PCB temperature - read out status
	4	12	U12	LHKP1TEM8PCT
				PDU1 TEM 8 PCB temperature - raw ADC value
0x026	0	3	U12	LHKP1TEM9PCTLM; LHKADCLMTSTATES
				PDU1 TEM 9 PCB temperature - limit evaluation
	3	1	U12	LHKP1TEM9PCTST
				PDU1 TEM 9 PCB temperature - read out status
	4	12	U12	LHKP1TEM9PCT
				PDU1 TEM 9 PCB temperature - raw ADC value
0x028	0	3	U12	LHKP1TEMAPCTLM; LHKADCLMTSTATES
				PDU1 TEM A PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMAPCTST
				PDU1 TEM A PCB temperature - read out status
	4	12	U12	LHKP1TEMAPCT
				PDU1 TEM A PCB temperature - raw ADC value
0x02A	0	3	U12	LHKP1TEMBPCTLM
				PDU1 TEM B PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMBPCTST
				PDU1 TEM B PCB temperature - read out status
	4	12	U12	LHKP1TEMBPCT
				PDU1 TEM B PCB temperature - raw ADC value
0x02C	0	3	U12	LHKP1TEMCPCTLM
				PDU1 TEM C PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMCPCTST
				PDU1 TEM C PCB temperature - read out status
	4	12	U12	LHKP1TEMCPCT
				PDU1 TEM C PCB temperature - raw ADC value
0x02E	0	3	U12	LHKP1TEMDPCTLM
				PDU1 TEM D PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMDPCTST
				PDU1 TEM D PCB temperature - read out status
	4	12	U12	LHKP1TEMDPCT
				PDU1 TEM D PCB temperature - raw ADC value
0x030	0	3	U12	LHKP1TEMEPCTLM; LHKADCLMTSTATES
				PDU1 TEM E PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMEPCTST
				PDU1 TEM E PCB temperature - read out status
	4	12	U12	LHKP1TEMEPCT
				PDU1 TEM E PCB temperature - raw ADC value
0x032	0	3	U12	LHKP1TEMFPCTLM; LHKADCLMTSTATES
				PDU1 TEM F PCB temperature - limit evaluation
	3	1	U12	LHKP1TEMFPCTST
				PDU1 TEM F PCB temperature - read out status
	4	12	U12	LHKP1TEMFPCT
				PDU1 TEM F PCB temperature - raw ADC value
0x034	0	3	U12	LHKP1CAL8BPTLM; LHKADCLMTSTATES
				PDU1 TEM 8 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL8BPTST
				PDU1 TEM 8 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL8BPT

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 8 CAL baseplate temperature - raw ADC value
0x036	0	3	U12	LHKP1CAL9BPTLM; LHKADCLMTSTATES PDU1 TEM 9 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL9BPTST PDU1 TEM 9 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL9BPT PDU1 TEM 9 CAL baseplate temperature - raw ADC value
0x038	0	3	U12	LHKP1CALFBPTLM; LHKADCLMTSTATES PDU1 TEM F CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALFBPTST PDU1 TEM F CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALFBPT PDU1 TEM F CAL baseplate temperature - raw ADC value
0x03A	0	3	U12	LHKP1CALBBPTLM PDU1 TEM B CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALBBPTST PDU1 TEM B CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALBBPT PDU1 TEM B CAL baseplate temperature - raw ADC value
0x03C	0	3	U12	LHKP1CALCBPTLM PDU1 TEM C CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALCBPTST PDU1 TEM C CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALCBPT PDU1 TEM C CAL baseplate temperature - raw ADC value
0x03E	0	3	U12	LHKP1CALDBPTLM PDU1 TEM D CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALDBPTST PDU1 TEM D CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALDBPT PDU1 TEM D CAL baseplate temperature - raw ADC value
0x040	0	3	U12	LHKP1CALEBPTLM; LHKADCLMTSTATES PDU1 TEM E CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALEBPTST PDU1 TEM E CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALEBPT PDU1 TEM E CAL baseplate temperature - raw ADC value
0x042	0	3	U12	LHKP1CALABPTLM; LHKADCLMTSTATES PDU1 TEM A CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CALABPTST PDU1 TEM A CAL baseplate temperature - read out status
	4	12	U12	LHKP1CALABPT PDU1 TEM A CAL baseplate temperature - raw ADC value
0x044	0	3	U12	LHKP1CAL0BPTLM; LHKADCLMTSTATES PDU1 TEM 0 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL0BPTST PDU1 TEM 0 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL0BPT PDU1 TEM 0 CAL baseplate temperature - raw ADC value
0x046	0	3	U12	LHKP1CAL1BPTLM; LHKADCLMTSTATES PDU1 TEM 1 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL1BPTST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 TEM 1 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL1BPT
				PDU1 TEM 1 CAL baseplate temperature - raw ADC value
0x048	0	3	U12	LHKP1CAL7BPTLM; LHKADCLMTSTATES
				PDU1 TEM 7 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL7BPTST
				PDU1 TEM 7 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL7BPT
				PDU1 TEM 7 CAL baseplate temperature - raw ADC value
0x04A	0	3	U12	LHKP1CAL3BPTLM
				PDU1 TEM 3 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL3BPTST
				PDU1 TEM 3 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL3BPT
				PDU1 TEM 3 CAL baseplate temperature - raw ADC value
0x04C	0	3	U12	LHKP1CAL4BPTLM
				PDU1 TEM 4 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL4BPTST
				PDU1 TEM 4 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL4BPT
				PDU1 TEM 4 CAL baseplate temperature - raw ADC value
0x04E	0	3	U12	LHKP1CAL5BPTLM
				PDU1 TEM 5 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL5BPTST
				PDU1 TEM 5 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL5BPT
				PDU1 TEM 5 CAL baseplate temperature - raw ADC value
0x050	0	3	U12	LHKP1CAL6BPTLM; LHKADCLMTSTATES
				PDU1 TEM 6 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL6BPTST
				PDU1 TEM 6 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL6BPT
				PDU1 TEM 6 CAL baseplate temperature - raw ADC value
0x052	0	3	U12	LHKP1CAL2BPTLM; LHKADCLMTSTATES
				PDU1 TEM 2 CAL baseplate temperature - limit evaluation
	3	1	U12	LHKP1CAL2BPTST
				PDU1 TEM 2 CAL baseplate temperature - read out status
	4	12	U12	LHKP1CAL2BPT
				PDU1 TEM 2 CAL baseplate temperature - raw ADC value
0x054	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12
				Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.83 `DiagPduEnv6` (644/0x284)

Description:

"Diagnostic PDU Environmental Packet 6" Telemetry Packet

Diagnostic PDU Environmental Packet 6

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV6 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	3	U12	LHKP1PHP0XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP0XLITST PDU1 +Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP0XLIT PDU1 +Y VCHP 0 XLHP interface temperature - raw ADC value
0x016	0	3	U12	LHKP1PHP1XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP1XLITST PDU1 +Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP1XLIT PDU1 +Y VCHP 1 XLHP interface temperature - raw ADC value
0x018	0	3	U12	LHKP1PHP2XLITLM; LHKADCLMTSTATES PDU1 +Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP2XLITST PDU1 +Y VCHP 2 XLHP interface temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP1PHP2XLIT PDU1 +Y VCHP 2 XLHP interface temperature - raw ADC value
0x01A	0	3	U12	LHKP1PHP3XLITLM PDU1 +Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP3XLITST PDU1 +Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP3XLIT PDU1 +Y VCHP 3 XLHP interface temperature - raw ADC value
0x01C	0	3	U12	LHKP1PHP4XLITLM PDU1 +Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP4XLITST PDU1 +Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP4XLIT PDU1 +Y VCHP 4 XLHP interface temperature - raw ADC value
0x01E	0	3	U12	LHKP1PHP5XLITLM PDU1 +Y VCHP 5 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP5XLITST PDU1 +Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP1PHP5XLIT PDU1 +Y VCHP 5 XLHP interface temperature - raw ADC value
0x020	0	3	U12	LHKP1MHP0XLITLM; LHKADCLMTSTATES PDU1 -Y VCHP 0 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP0XLITST PDU1 -Y VCHP 0 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP0XLIT PDU1 -Y VCHP 0 XLHP interface temperature - raw ADC value
0x022	0	3	U12	LHKP1MHP1XLITLM; LHKADCLMTSTATES PDU1 -Y VCHP 1 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP1XLITST PDU1 -Y VCHP 1 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP1XLIT PDU1 -Y VCHP 1 XLHP interface temperature - raw ADC value
0x024	0	3	U12	LHKP1MHP2XLITLM; LHKADCLMTSTATES PDU1 -Y VCHP 2 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP2XLITST PDU1 -Y VCHP 2 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP2XLIT PDU1 -Y VCHP 2 XLHP interface temperature - raw ADC value
0x026	0	3	U12	LHKP1MHP3XLITLM; LHKADCLMTSTATES PDU1 -Y VCHP 3 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP3XLITST PDU1 -Y VCHP 3 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP3XLIT PDU1 -Y VCHP 3 XLHP interface temperature - raw ADC value
0x028	0	3	U12	LHKP1MHP4XLITLM; LHKADCLMTSTATES PDU1 -Y VCHP 4 XLHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP4XLITST PDU1 -Y VCHP 4 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP4XLIT PDU1 -Y VCHP 4 XLHP interface temperature - raw ADC value
0x02A	0	3	U12	LHKP1MHP5XLITLM PDU1 -Y VCHP 5 XLHP interface temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKP1MHP5XLITST PDU1 -Y VCHP 5 XLHP interface temperature - read out status
	4	12	U12	LHKP1MHP5XLIT PDU1 -Y VCHP 5 XLHP interface temperature - raw ADC value
0x02C	0	3	U12	LHKP1PHP0DSITLM PDU1 +Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP0DSITST PDU1 +Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP0DSIT PDU1 +Y VCHP 0 DSHP interface temperature - raw ADC value
0x02E	0	3	U12	LHKP1PHP1DSITLM PDU1 +Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP1DSITST PDU1 +Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP1DSIT PDU1 +Y VCHP 1 DSHP interface temperature - raw ADC value
0x030	0	3	U12	LHKP1PHP2DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP2DSITST PDU1 +Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP2DSIT PDU1 +Y VCHP 2 DSHP interface temperature - raw ADC value
0x032	0	3	U12	LHKP1PHP5DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP5DSITST PDU1 +Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP5DSIT PDU1 +Y VCHP 5 DSHP interface temperature - raw ADC value
0x034	0	3	U12	LHKP1PHP4DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP4DSITST PDU1 +Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP4DSIT PDU1 +Y VCHP 4 DSHP interface temperature - raw ADC value
0x036	0	3	U12	LHKP1PHP3DSITLM; LHKADCLMTSTATES PDU1 +Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1PHP3DSITST PDU1 +Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP1PHP3DSIT PDU1 +Y VCHP 3 DSHP interface temperature - raw ADC value
0x038	0	3	U12	LHKP1MHP0DSITLM; LHKADCLMTSTATES PDU1 -Y VCHP 0 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP0DSITST PDU1 -Y VCHP 0 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP0DSIT PDU1 -Y VCHP 0 DSHP interface temperature - raw ADC value
0x03A	0	3	U12	LHKP1MHP1DSITLM PDU1 -Y VCHP 1 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP1DSITST PDU1 -Y VCHP 1 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP1DSIT PDU1 -Y VCHP 1 DSHP interface temperature - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03C	0	3	U12	LHKP1MHP2DSITLM PDU1 -Y VCHP 2 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP2DSITST PDU1 -Y VCHP 2 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP2DSIT PDU1 -Y VCHP 2 DSHP interface temperature - raw ADC value
0x03E	0	3	U12	LHKP1MHP5DSITLM PDU1 -Y VCHP 5 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP5DSITST PDU1 -Y VCHP 5 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP5DSIT PDU1 -Y VCHP 5 DSHP interface temperature - raw ADC value
0x040	0	3	U12	LHKP1MHP4DSITLM; LHKADCLMTSTATES PDU1 -Y VCHP 4 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP4DSITST PDU1 -Y VCHP 4 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP4DSIT PDU1 -Y VCHP 4 DSHP interface temperature - raw ADC value
0x042	0	3	U12	LHKP1MHP3DSITLM; LHKADCLMTSTATES PDU1 -Y VCHP 3 DSHP interface temperature - limit evaluation
	3	1	U12	LHKP1MHP3DSITST PDU1 -Y VCHP 3 DSHP interface temperature - read out status
	4	12	U12	LHKP1MHP3DSIT PDU1 -Y VCHP 3 DSHP interface temperature - raw ADC value
0x044	0	3	U12	LHKP1PHP0RVHTLM; LHKADCLMTSTATES PDU1 +Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP0RVHTST PDU1 +Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP0RVHT PDU1 +Y VCHP 0 reservoir heater temperature - raw ADC value
0x046	0	3	U12	LHKP1PHP1RVHTLM; LHKADCLMTSTATES PDU1 +Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP1RVHTST PDU1 +Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP1RVHT PDU1 +Y VCHP 1 reservoir heater temperature - raw ADC value
0x048	0	3	U12	LHKP1PHP2RVHTLM; LHKADCLMTSTATES PDU1 +Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP2RVHTST PDU1 +Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP2RVHT PDU1 +Y VCHP 2 reservoir heater temperature - raw ADC value
0x04A	0	3	U12	LHKP1PHP3RVHTLM PDU1 +Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP3RVHTST PDU1 +Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP3RVHT PDU1 +Y VCHP 3 reservoir heater temperature - raw ADC value
0x04C	0	3	U12	LHKP1PHP4RVHTLM PDU1 +Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP4RVHTST PDU1 +Y VCHP 4 reservoir heater temperature - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKP1PHP4RVHT PDU1 +Y VCHP 4 reservoir heater temperature - raw ADC value
0x04E	0	3	U12	LHKP1PHP5RVHTLM PDU1 +Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1PHP5RVHTST PDU1 +Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP1PHP5RVHT PDU1 +Y VCHP 5 reservoir heater temperature - raw ADC value
0x050	0	3	U12	LHKP1MHP0RVHTLM; LHKADCLMTSTATES PDU1 -Y VCHP 0 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP0RVHTST PDU1 -Y VCHP 0 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP0RVHT PDU1 -Y VCHP 0 reservoir heater temperature - raw ADC value
0x052	0	3	U12	LHKP1MHP1RVHTLM; LHKADCLMTSTATES PDU1 -Y VCHP 1 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP1RVHTST PDU1 -Y VCHP 1 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP1RVHT PDU1 -Y VCHP 1 reservoir heater temperature - raw ADC value
0x054	0	3	U12	LHKP1MHP2RVHTLM; LHKADCLMTSTATES PDU1 -Y VCHP 2 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP2RVHTST PDU1 -Y VCHP 2 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP2RVHT PDU1 -Y VCHP 2 reservoir heater temperature - raw ADC value
0x056	0	3	U12	LHKP1MHP3RVHTLM; LHKADCLMTSTATES PDU1 -Y VCHP 3 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP3RVHTST PDU1 -Y VCHP 3 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP3RVHT PDU1 -Y VCHP 3 reservoir heater temperature - raw ADC value
0x058	0	3	U12	LHKP1MHP4RVHTLM; LHKADCLMTSTATES PDU1 -Y VCHP 4 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP4RVHTST PDU1 -Y VCHP 4 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP4RVHT PDU1 -Y VCHP 4 reservoir heater temperature - raw ADC value
0x05A	0	3	U12	LHKP1MHP5RVHTLM PDU1 -Y VCHP 5 reservoir heater temperature - limit evaluation
	3	1	U12	LHKP1MHP5RVHTST PDU1 -Y VCHP 5 reservoir heater temperature - read out status
	4	12	U12	LHKP1MHP5RVHT PDU1 -Y VCHP 5 reservoir heater temperature - raw ADC value
0x05C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12 Spare 16 bit field

Offset	S	L	Type	ITOS name, attribute(s), and description
0x064	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.84 DiagPduEnv7 (645/0x285)

Description:

"Diagnostic PDU Environmental Packet 7" Telemetry Packet

Diagnostic PDU Environmental Packet 7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPDUENV7 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKP1GRID6TLM; LHKADCLMTSTATES PDU1 Grid 6 temperature - limit evaluation
	3	1	U12	LHKP1GRID6TST PDU1 Grid 6 temperature - read out status
	4	12	U12	LHKP1GRID6T PDU1 Grid 6 temperature - raw ADC value
0x016	0	3	U12	LHKP1GRID7TLM; LHKADCLMTSTATES PDU1 Grid 7 temperature - limit evaluation
	3	1	U12	LHKP1GRID7TST PDU1 Grid 7 temperature - read out status
	4	12	U12	LHKP1GRID7T PDU1 Grid 7 temperature - raw ADC value
0x018	0	3	U12	LHKP1GRID8TLM; LHKADCLMTSTATES PDU1 Grid 8 temperature - limit evaluation
	3	1	U12	LHKP1GRID8TST PDU1 Grid 8 temperature - read out status
	4	12	U12	LHKP1GRID8T PDU1 Grid 8 temperature - raw ADC value
0x01A	0	3	U12	LHKP1GRID9TLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Grid 9 temperature - limit evaluation
	3	1	U12	LHKP1GRID9TST
				PDU1 Grid 9 temperature - read out status
	4	12	U12	LHKP1GRID9T
				PDU1 Grid 9 temperature - raw ADC value
0x01C	0	3	U12	LHKP1GRID10TLM
				PDU1 Grid 10 temperature - limit evaluation
	3	1	U12	LHKP1GRID10TST
				PDU1 Grid 10 temperature - read out status
	4	12	U12	LHKP1GRID10T
				PDU1 Grid 10 temperature - raw ADC value
0x01E	0	3	U12	LHKP1GRID11TLM
				PDU1 Grid 11 temperature - limit evaluation
	3	1	U12	LHKP1GRID11TST
				PDU1 Grid 11 temperature - read out status
	4	12	U12	LHKP1GRID11T
				PDU1 Grid 11 temperature - raw ADC value
0x020	0	3	U12	LHKP1GRID0TLM; LHKADCLMTSTATES
				PDU1 Grid 0 temperature - limit evaluation
	3	1	U12	LHKP1GRID0TST
				PDU1 Grid 0 temperature - read out status
	4	12	U12	LHKP1GRID0T
				PDU1 Grid 0 temperature - raw ADC value
0x022	0	3	U12	LHKP1GRID1TLM; LHKADCLMTSTATES
				PDU1 Grid 1 temperature - limit evaluation
	3	1	U12	LHKP1GRID1TST
				PDU1 Grid 1 temperature - read out status
	4	12	U12	LHKP1GRID1T
				PDU1 Grid 1 temperature - raw ADC value
0x024	0	3	U12	LHKP1GRID2TLM; LHKADCLMTSTATES
				PDU1 Grid 2 temperature - limit evaluation
	3	1	U12	LHKP1GRID2TST
				PDU1 Grid 2 temperature - read out status
	4	12	U12	LHKP1GRID2T
				PDU1 Grid 2 temperature - raw ADC value
0x026	0	3	U12	LHKP1GRID3TLM; LHKADCLMTSTATES
				PDU1 Grid 3 temperature - limit evaluation
	3	1	U12	LHKP1GRID3TST
				PDU1 Grid 3 temperature - read out status
	4	12	U12	LHKP1GRID3T
				PDU1 Grid 3 temperature - raw ADC value
0x028	0	3	U12	LHKP1GRID4TLM; LHKADCLMTSTATES
				PDU1 Grid 4 temperature - limit evaluation
	3	1	U12	LHKP1GRID4TST
				PDU1 Grid 4 temperature - read out status
	4	12	U12	LHKP1GRID4T
				PDU1 Grid 4 temperature - raw ADC value
0x02A	0	3	U12	LHKP1GRID5TLM
				PDU1 Grid 5 temperature - limit evaluation
	3	1	U12	LHKP1GRID5TST
				PDU1 Grid 5 temperature - read out status
	4	12	U12	LHKP1GRID5T

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Grid 5 temperature - raw ADC value
0x02C	0	3	U12	LHKP1ACDSHT0LM PDU1 ACD shell temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDSHT0ST PDU1 ACD shell temperature 0 - read out status
	4	12	U12	LHKP1ACDSHT0 PDU1 ACD shell temperature 0 - raw ADC value
0x02E	0	3	U12	LHKP1ACDSHT1LM PDU1 ACD shell temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDSHT1ST PDU1 ACD shell temperature 1 - read out status
	4	12	U12	LHKP1ACDSHT1 PDU1 ACD shell temperature 1 - raw ADC value
0x030	0	3	U12	LHKP1ACDPRT0LM; LHKADCLMTSTATES PDU1 ACD PMT rail temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDPRT0ST PDU1 ACD PMT rail temperature 0 - read out status
	4	12	U12	LHKP1ACDPRT0 PDU1 ACD PMT rail temperature 0 - raw ADC value
0x032	0	3	U12	LHKP1ACDPRT1LM; LHKADCLMTSTATES PDU1 ACD PMT rail temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDPRT1ST PDU1 ACD PMT rail temperature 1 - read out status
	4	12	U12	LHKP1ACDPRT1 PDU1 ACD PMT rail temperature 1 - raw ADC value
0x034	0	3	U12	LHKP1ACDPRT2LM; LHKADCLMTSTATES PDU1 ACD PMT rail temperature 2 - limit evaluation
	3	1	U12	LHKP1ACDPRT2ST PDU1 ACD PMT rail temperature 2 - read out status
	4	12	U12	LHKP1ACDPRT2 PDU1 ACD PMT rail temperature 2 - raw ADC value
0x036	0	3	U12	LHKP1ACDPRT3LM; LHKADCLMTSTATES PDU1 ACD PMT rail temperature 3 - limit evaluation
	3	1	U12	LHKP1ACDPRT3ST PDU1 ACD PMT rail temperature 3 - read out status
	4	12	U12	LHKP1ACDPRT3 PDU1 ACD PMT rail temperature 3 - raw ADC value
0x038	0	3	U12	LHKP1ACDBGT0LM; LHKADCLMTSTATES PDU1 ACD BEA grid temperature 0 - limit evaluation
	3	1	U12	LHKP1ACDBGT0ST PDU1 ACD BEA grid temperature 0 - read out status
	4	12	U12	LHKP1ACDBGT0 PDU1 ACD BEA grid temperature 0 - raw ADC value
0x03A	0	3	U12	LHKP1ACDBGT1LM PDU1 ACD BEA grid temperature 1 - limit evaluation
	3	1	U12	LHKP1ACDBGT1ST PDU1 ACD BEA grid temperature 1 - read out status
	4	12	U12	LHKP1ACDBGT1 PDU1 ACD BEA grid temperature 1 - raw ADC value
0x03C	0	3	U12	LHKP1RADAFHT1LM PDU1 +Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP1RADAFHT1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 +Y antifreeze heater temperature - read out status
	4	12	U12	LHKP1RADAFHT1
				PDU1 +Y antifreeze heater temperature - raw ADC value
0x03E	0	3	U12	LHKP1RADAFHT0LM
				PDU1 -Y antifreeze heater temperature - limit evaluation
	3	1	U12	LHKP1RADAFHT0ST
				PDU1 -Y antifreeze heater temperature - read out status
	4	12	U12	LHKP1RADAFHT0
				PDU1 -Y antifreeze heater temperature - raw ADC value
0x040	0	3	U12	LHKP1GRAD2IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 2 +Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD2IFTST
				PDU1 Grid radiator 2 +Y temperature - read out status
	4	12	U12	LHKP1GRAD2IFT
				PDU1 Grid radiator 2 +Y temperature - raw ADC value
0x042	0	3	U12	LHKP1GRAD3IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 3 +Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD3IFTST
				PDU1 Grid radiator 3 +Y temperature - read out status
	4	12	U12	LHKP1GRAD3IFT
				PDU1 Grid radiator 3 +Y temperature - raw ADC value
0x044	0	3	U12	LHKP1GRAD0IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD0IFTST
				PDU1 Grid radiator 0 -Y temperature - read out status
	4	12	U12	LHKP1GRAD0IFT
				PDU1 Grid radiator 0 -Y temperature - raw ADC value
0x046	0	3	U12	LHKP1GRAD1IFTLM; LHKADCLMTSTATES
				PDU1 Grid radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP1GRAD1IFTST
				PDU1 Grid radiator 1 -Y temperature - read out status
	4	12	U12	LHKP1GRAD1IFT
				PDU1 Grid radiator 1 -Y temperature - raw ADC value
0x048	0	3	U12	LHKP1RAD6TLM; LHKADCLMTSTATES
				PDU1 Radiator 6 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD6TST
				PDU1 Radiator 6 +Y temperature - read out status
	4	12	U12	LHKP1RAD6T
				PDU1 Radiator 6 +Y temperature - raw ADC value
0x04A	0	3	U12	LHKP1RAD7TLM
				PDU1 Radiator 7 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD7TST
				PDU1 Radiator 7 +Y temperature - read out status
	4	12	U12	LHKP1RAD7T
				PDU1 Radiator 7 +Y temperature - raw ADC value
0x04C	0	3	U12	LHKP1RAD8TLM
				PDU1 Radiator 8 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD8TST
				PDU1 Radiator 8 +Y temperature - read out status
	4	12	U12	LHKP1RAD8T
				PDU1 Radiator 8 +Y temperature - raw ADC value
0x04E	0	3	U12	LHKP1RAD9TLM

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Radiator 9 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD9TST
				PDU1 Radiator 9 +Y temperature - read out status
	4	12	U12	LHKP1RAD9T
				PDU1 Radiator 9 +Y temperature - raw ADC value
0x050	0	3	U12	LHKP1RAD10TLM; LHKADCLMTSTATES
				PDU1 Radiator 10 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD10TST
				PDU1 Radiator 10 +Y temperature - read out status
	4	12	U12	LHKP1RAD10T
				PDU1 Radiator 10 +Y temperature - raw ADC value
0x052	0	3	U12	LHKP1RAD11TLM; LHKADCLMTSTATES
				PDU1 Radiator 11 +Y temperature - limit evaluation
	3	1	U12	LHKP1RAD11TST
				PDU1 Radiator 11 +Y temperature - read out status
	4	12	U12	LHKP1RAD11T
				PDU1 Radiator 11 +Y temperature - raw ADC value
0x054	0	3	U12	LHKP1RAD0TLM; LHKADCLMTSTATES
				PDU1 Radiator 0 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD0TST
				PDU1 Radiator 0 -Y temperature - read out status
	4	12	U12	LHKP1RAD0T
				PDU1 Radiator 0 -Y temperature - raw ADC value
0x056	0	3	U12	LHKP1RAD1TLM; LHKADCLMTSTATES
				PDU1 Radiator 1 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD1TST
				PDU1 Radiator 1 -Y temperature - read out status
	4	12	U12	LHKP1RAD1T
				PDU1 Radiator 1 -Y temperature - raw ADC value
0x058	0	3	U12	LHKP1RAD2TLM; LHKADCLMTSTATES
				PDU1 Radiator 2 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD2TST
				PDU1 Radiator 2 -Y temperature - read out status
	4	12	U12	LHKP1RAD2T
				PDU1 Radiator 2 -Y temperature - raw ADC value
0x05A	0	3	U12	LHKP1RAD3TLM
				PDU1 Radiator 3 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD3TST
				PDU1 Radiator 3 -Y temperature - read out status
	4	12	U12	LHKP1RAD3T
				PDU1 Radiator 3 -Y temperature - raw ADC value
0x05C	0	3	U12	LHKP1RAD4TLM
				PDU1 Radiator 4 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD4TST
				PDU1 Radiator 4 -Y temperature - read out status
	4	12	U12	LHKP1RAD4T
				PDU1 Radiator 4 -Y temperature - raw ADC value
0x05E	0	3	U12	LHKP1RAD5TLM
				PDU1 Radiator 5 -Y temperature - limit evaluation
	3	1	U12	LHKP1RAD5TST
				PDU1 Radiator 5 -Y temperature - read out status
	4	12	U12	LHKP1RAD5T

Offset	S	L	Type	ITOS name, attribute(s), and description
				PDU1 Radiator 5 -Y temperature - raw ADC value
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.85 `DiagAemEnv0` (646/0x286)

Description:

"Diagnostic AEM Environmental Monitor Packet 0" Telemetry Packet

Diagnostic AEM Environmental Monitor Packet 0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDAEMENV0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	? ?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	1	U12	? ?
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAEMFR0VDLM; LHKADCLMTSTATES AEM FREE board 0 VDD - limit evaluation
	3	1	U12	LHKAEMFR0VDST AEM FREE board 0 VDD - read out status
	4	12	U12	LHKAEMFR0VD AEM FREE board 0 VDD - raw ADC value
0x016	0	3	U12	LHKAEMFR0TLM; LHKADCLMTSTATES AEM FREE board 0 temperature - limit evaluation
	3	1	U12	LHKAEMFR0TST AEM FREE board 0 temperature - read out status
	4	12	U12	LHKAEMFR0T AEM FREE board 0 temperature - raw ADC value
0x018	0	3	U12	LHKAEMFR0V1LM; LHKADCLMTSTATES AEM FREE board 0 HV1 - limit evaluation
	3	1	U12	LHKAEMFR0V1ST AEM FREE board 0 HV1 - read out status
	4	12	U12	LHKAEMFR0V1 AEM FREE board 0 HV1 - raw ADC value
0x01A	0	3	U12	LHKAEMFR0V2LM; LHKADCLMTSTATES AEM FREE board 0 HV2 - limit evaluation
	3	1	U12	LHKAEMFR0V2ST AEM FREE board 0 HV2 - read out status
	4	12	U12	LHKAEMFR0V2 AEM FREE board 0 HV2 - raw ADC value
0x01C	0	3	U12	LHKAEMFR1VDLM; LHKADCLMTSTATES AEM FREE board 1 VDD - limit evaluation
	3	1	U12	LHKAEMFR1VDST AEM FREE board 1 VDD - read out status
	4	12	U12	LHKAEMFR1VD AEM FREE board 1 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR1TLM; LHKADCLMTSTATES AEM FREE board 1 temperature - limit evaluation
	3	1	U12	LHKAEMFR1TST AEM FREE board 1 temperature - read out status
	4	12	U12	LHKAEMFR1T AEM FREE board 1 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR1V1LM; LHKADCLMTSTATES AEM FREE board 1 HV1 - limit evaluation
	3	1	U12	LHKAEMFR1V1ST AEM FREE board 1 HV1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKAEMFR1V1 AEM FREE board 1 HV1 - raw ADC value
0x022	0	3	U12	LHKAEMFR1V2LM; LHKADCLMTSTATES AEM FREE board 1 HV2 - limit evaluation
	3	1	U12	LHKAEMFR1V2ST AEM FREE board 1 HV2 - read out status
	4	12	U12	LHKAEMFR1V2 AEM FREE board 1 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR2VDLM; LHKADCLMTSTATES AEM FREE board 2 VDD - limit evaluation
	3	1	U12	LHKAEMFR2VDST AEM FREE board 2 VDD - read out status
	4	12	U12	LHKAEMFR2VD AEM FREE board 2 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR2TLM; LHKADCLMTSTATES AEM FREE board 2 temperature - limit evaluation
	3	1	U12	LHKAEMFR2TST AEM FREE board 2 temperature - read out status
	4	12	U12	LHKAEMFR2T AEM FREE board 2 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR2V1LM; LHKADCLMTSTATES AEM FREE board 2 HV1 - limit evaluation
	3	1	U12	LHKAEMFR2V1ST AEM FREE board 2 HV1 - read out status
	4	12	U12	LHKAEMFR2V1 AEM FREE board 2 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR2V2LM; LHKADCLMTSTATES AEM FREE board 2 HV2 - limit evaluation
	3	1	U12	LHKAEMFR2V2ST AEM FREE board 2 HV2 - read out status
	4	12	U12	LHKAEMFR2V2 AEM FREE board 2 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR3VDLM; LHKADCLMTSTATES AEM FREE board 3 VDD - limit evaluation
	3	1	U12	LHKAEMFR3VDST AEM FREE board 3 VDD - read out status
	4	12	U12	LHKAEMFR3VD AEM FREE board 3 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR3TLM; LHKADCLMTSTATES AEM FREE board 3 temperature - limit evaluation
	3	1	U12	LHKAEMFR3TST AEM FREE board 3 temperature - read out status
	4	12	U12	LHKAEMFR3T AEM FREE board 3 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR3V1LM; LHKADCLMTSTATES AEM FREE board 3 HV1 - limit evaluation
	3	1	U12	LHKAEMFR3V1ST AEM FREE board 3 HV1 - read out status
	4	12	U12	LHKAEMFR3V1 AEM FREE board 3 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR3V2LM; LHKADCLMTSTATES AEM FREE board 3 HV2 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKAEMFR3V2ST AEM FREE board 3 HV2 - read out status
	4	12	U12	LHKAEMFR3V2 AEM FREE board 3 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR4VDLM; LHKADCLMTSTATES AEM FREE board 4 VDD - limit evaluation
	3	1	U12	LHKAEMFR4VDST AEM FREE board 4 VDD - read out status
	4	12	U12	LHKAEMFR4VD AEM FREE board 4 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR4TLM; LHKADCLMTSTATES AEM FREE board 4 temperature - limit evaluation
	3	1	U12	LHKAEMFR4TST AEM FREE board 4 temperature - read out status
	4	12	U12	LHKAEMFR4T AEM FREE board 4 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR4V1LM; LHKADCLMTSTATES AEM FREE board 4 HV1 - limit evaluation
	3	1	U12	LHKAEMFR4V1ST AEM FREE board 4 HV1 - read out status
	4	12	U12	LHKAEMFR4V1 AEM FREE board 4 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR4V2LM; LHKADCLMTSTATES AEM FREE board 4 HV2 - limit evaluation
	3	1	U12	LHKAEMFR4V2ST AEM FREE board 4 HV2 - read out status
	4	12	U12	LHKAEMFR4V2 AEM FREE board 4 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR5VDLM; LHKADCLMTSTATES AEM FREE board 5 VDD - limit evaluation
	3	1	U12	LHKAEMFR5VDST AEM FREE board 5 VDD - read out status
	4	12	U12	LHKAEMFR5VD AEM FREE board 5 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR5TLM; LHKADCLMTSTATES AEM FREE board 5 temperature - limit evaluation
	3	1	U12	LHKAEMFR5TST AEM FREE board 5 temperature - read out status
	4	12	U12	LHKAEMFR5T AEM FREE board 5 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR5V1LM; LHKADCLMTSTATES AEM FREE board 5 HV1 - limit evaluation
	3	1	U12	LHKAEMFR5V1ST AEM FREE board 5 HV1 - read out status
	4	12	U12	LHKAEMFR5V1 AEM FREE board 5 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR5V2LM; LHKADCLMTSTATES AEM FREE board 5 HV2 - limit evaluation
	3	1	U12	LHKAEMFR5V2ST AEM FREE board 5 HV2 - read out status
	4	12	U12	LHKAEMFR5V2 AEM FREE board 5 HV2 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x044	0	3	U12	LHKAEMFR6VDLM; LHKADCLMTSTATES AEM FREE board 6 VDD - limit evaluation
	3	1	U12	LHKAEMFR6VDST AEM FREE board 6 VDD - read out status
	4	12	U12	LHKAEMFR6VD AEM FREE board 6 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR6TLM; LHKADCLMTSTATES AEM FREE board 6 temperature - limit evaluation
	3	1	U12	LHKAEMFR6TST AEM FREE board 6 temperature - read out status
	4	12	U12	LHKAEMFR6T AEM FREE board 6 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR6V1LM; LHKADCLMTSTATES AEM FREE board 6 HV1 - limit evaluation
	3	1	U12	LHKAEMFR6V1ST AEM FREE board 6 HV1 - read out status
	4	12	U12	LHKAEMFR6V1 AEM FREE board 6 HV1 - raw ADC value
0x04A	0	3	U12	LHKAEMFR6V2LM; LHKADCLMTSTATES AEM FREE board 6 HV2 - limit evaluation
	3	1	U12	LHKAEMFR6V2ST AEM FREE board 6 HV2 - read out status
	4	12	U12	LHKAEMFR6V2 AEM FREE board 6 HV2 - raw ADC value
0x04C	0	3	U12	LHKAEMFR7VDLM; LHKADCLMTSTATES AEM FREE board 7 VDD - limit evaluation
	3	1	U12	LHKAEMFR7VDST AEM FREE board 7 VDD - read out status
	4	12	U12	LHKAEMFR7VD AEM FREE board 7 VDD - raw ADC value
0x04E	0	3	U12	LHKAEMFR7TLM; LHKADCLMTSTATES AEM FREE board 7 temperature - limit evaluation
	3	1	U12	LHKAEMFR7TST AEM FREE board 7 temperature - read out status
	4	12	U12	LHKAEMFR7T AEM FREE board 7 temperature - raw ADC value
0x050	0	3	U12	LHKAEMFR7V1LM; LHKADCLMTSTATES AEM FREE board 7 HV1 - limit evaluation
	3	1	U12	LHKAEMFR7V1ST AEM FREE board 7 HV1 - read out status
	4	12	U12	LHKAEMFR7V1 AEM FREE board 7 HV1 - raw ADC value
0x052	0	3	U12	LHKAEMFR7V2LM; LHKADCLMTSTATES AEM FREE board 7 HV2 - limit evaluation
	3	1	U12	LHKAEMFR7V2ST AEM FREE board 7 HV2 - read out status
	4	12	U12	LHKAEMFR7V2 AEM FREE board 7 HV2 - raw ADC value
0x054	0	3	U12	LHKAEMFR8VDLM; LHKADCLMTSTATES AEM FREE board 8 VDD - limit evaluation
	3	1	U12	LHKAEMFR8VDST AEM FREE board 8 VDD - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKAEMFR8VD AEM FREE board 8 VDD - raw ADC value
0x056	0	3	U12	LHKAEMFR8TLM; LHKADCLMTSTATES AEM FREE board 8 temperature - limit evaluation
	3	1	U12	LHKAEMFR8TST AEM FREE board 8 temperature - read out status
	4	12	U12	LHKAEMFR8T AEM FREE board 8 temperature - raw ADC value
0x058	0	3	U12	LHKAEMFR8V1LM; LHKADCLMTSTATES AEM FREE board 8 HV1 - limit evaluation
	3	1	U12	LHKAEMFR8V1ST AEM FREE board 8 HV1 - read out status
	4	12	U12	LHKAEMFR8V1 AEM FREE board 8 HV1 - raw ADC value
0x05A	0	3	U12	LHKAEMFR8V2LM; LHKADCLMTSTATES AEM FREE board 8 HV2 - limit evaluation
	3	1	U12	LHKAEMFR8V2ST AEM FREE board 8 HV2 - read out status
	4	12	U12	LHKAEMFR8V2 AEM FREE board 8 HV2 - raw ADC value
0x05C	0	3	U12	LHKAEMFR9VDLM; LHKADCLMTSTATES AEM FREE board 9 VDD - limit evaluation
	3	1	U12	LHKAEMFR9VDST AEM FREE board 9 VDD - read out status
	4	12	U12	LHKAEMFR9VD AEM FREE board 9 VDD - raw ADC value
0x05E	0	3	U12	LHKAEMFR9TLM; LHKADCLMTSTATES AEM FREE board 9 temperature - limit evaluation
	3	1	U12	LHKAEMFR9TST AEM FREE board 9 temperature - read out status
	4	12	U12	LHKAEMFR9T AEM FREE board 9 temperature - raw ADC value
0x060	0	3	U12	LHKAEMFR9V1LM; LHKADCLMTSTATES AEM FREE board 9 HV1 - limit evaluation
	3	1	U12	LHKAEMFR9V1ST AEM FREE board 9 HV1 - read out status
	4	12	U12	LHKAEMFR9V1 AEM FREE board 9 HV1 - raw ADC value
0x062	0	3	U12	LHKAEMFR9V2LM; LHKADCLMTSTATES AEM FREE board 9 HV2 - limit evaluation
	3	1	U12	LHKAEMFR9V2ST AEM FREE board 9 HV2 - read out status
	4	12	U12	LHKAEMFR9V2 AEM FREE board 9 HV2 - raw ADC value
0x064	0	3	U12	LHKAEMFR10VDLM; LHKADCLMTSTATES AEM FREE board 10 VDD - limit evaluation
	3	1	U12	LHKAEMFR10VDST AEM FREE board 10 VDD - read out status
	4	12	U12	LHKAEMFR10VD AEM FREE board 10 VDD - raw ADC value
0x066	0	3	U12	LHKAEMFR10TLM; LHKADCLMTSTATES AEM FREE board 10 temperature - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKAEMFR10TST AEM FREE board 10 temperature - read out status
	4	12	U12	LHKAEMFR10T AEM FREE board 10 temperature - raw ADC value
0x068	0	3	U12	LHKAEMFR10V1LM; LHKADCLMTSTATES AEM FREE board 10 HV1 - limit evaluation
	3	1	U12	LHKAEMFR10V1ST AEM FREE board 10 HV1 - read out status
	4	12	U12	LHKAEMFR10V1 AEM FREE board 10 HV1 - raw ADC value
0x06A	0	3	U12	LHKAEMFR10V2LM; LHKADCLMTSTATES AEM FREE board 10 HV2 - limit evaluation
	3	1	U12	LHKAEMFR10V2ST AEM FREE board 10 HV2 - read out status
	4	12	U12	LHKAEMFR10V2 AEM FREE board 10 HV2 - raw ADC value
0x06C	0	3	U12	LHKAEMFR11VDLM; LHKADCLMTSTATES AEM FREE board 11 VDD - limit evaluation
	3	1	U12	LHKAEMFR11VDST AEM FREE board 11 VDD - read out status
	4	12	U12	LHKAEMFR11VD AEM FREE board 11 VDD - raw ADC value
0x06E	0	3	U12	LHKAEMFR11TLM; LHKADCLMTSTATES AEM FREE board 11 temperature - limit evaluation
	3	1	U12	LHKAEMFR11TST AEM FREE board 11 temperature - read out status
	4	12	U12	LHKAEMFR11T AEM FREE board 11 temperature - raw ADC value
0x070	0	3	U12	LHKAEMFR11V1LM; LHKADCLMTSTATES AEM FREE board 11 HV1 - limit evaluation
	3	1	U12	LHKAEMFR11V1ST AEM FREE board 11 HV1 - read out status
	4	12	U12	LHKAEMFR11V1 AEM FREE board 11 HV1 - raw ADC value
0x072	0	3	U12	LHKAEMFR11V2LM; LHKADCLMTSTATES AEM FREE board 11 HV2 - limit evaluation
	3	1	U12	LHKAEMFR11V2ST AEM FREE board 11 HV2 - read out status
	4	12	U12	LHKAEMFR11V2 AEM FREE board 11 HV2 - raw ADC value

14.3.86 `DiagLrs0` (647/0x287)

Description:

"Diagnostic Low-rate Science/LIM State Packet" Telemetry Packet

Contains GEM low-rate science counters and LIM state values.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKGLRSSEC GEM livetime read timestamp seconds
0x018	0	32	U1234	LHKGLRSSUB GEM livetime read timestamp subseconds
0x01C	0	32	U1234	LHKGLRSLIVE GEM Low-rate Science Livetime
0x020	0	32	U1234	LHKGLRSPRESC GEM Low-rate Science Prescaled
0x024	0	32	U1234	LHKGLRSDISC GEM Low-rate Science Discarded
0x028	0	32	U1234	LHKGLRSSENT GEM Low-rate Science Sent
0x02C	0	32	U1234	LHKGLRSDEAD GEM Low-rate Science Dead Zoned
0x030	0	32	U1234	LHKEBMSEC EBM Statistics Delta Timestamp seconds
0x034	0	32	U1234	LHKEBMSUB EBM Statistics Delta Timestamp microseconds
0x038	0	16	U12	LHKEBMGEMEVTRX Delta LATp event packets received statistics for the GEM
0x03A	0	16	U12	LHKEBMAEMEVTRX Delta LATp event packets received statistics for the AEM
0x03C	0	16	U12	LHKEBMSIU0EVTRX Delta LATp event packets received statistics for SIU0
0x03E	0	16	U12	LHKEBMSIU1EVTRX Delta LATp event packets received statistics for SIU1
0x040	0	16	U12	LHKEBMEPU0EVTRX Delta LATp event packets received statistics for EPU0
0x042	0	16	U12	LHKEBMEPU1EVTRX Delta LATp event packets received statistics for EPU1
0x044	0	16	U12	LHKEBMEPU2EVTRX Delta LATp event packets received statistics for EPU2
0x046	0	16	U12	LHKEBMSIU0EVTTX Delta LATp event packets transmitted statistics for SIU0
0x048	0	16	U12	LHKEBMSIU1EVTTX Delta LATp event packets transmitted statistics for SIU1
0x04A	0	16	U12	LHKEBMEPU0EVTTX Delta LATp event packets transmitted statistics for EPU0
0x04C	0	16	U12	LHKEBMEPU1EVTTX Delta LATp event packets transmitted statistics for EPU1
0x04E	0	16	U12	LHKEBMEPU2EVTTX Delta LATp event packets transmitted statistics for EPU2
0x050	0	16	U12	LHKEBMSSREVTTX Delta LATp event packets transmitted statistics for the SSR
0x052	0	16	U12	LIMTACTION Most Recent LIM Action
0x054	0	32	U1234	LIMTSTATUS

Offset	S	L	Type	ITOS name, attribute(s), and description
				Most Recent Action Status
0x058	0	8	U1	LIMTOPMODE Operating Mode
0x059	0	8	U1	LIMTVIRTMODE Virtual Mode
0x05A	0	8	U1	LIMTSAATRANSIT SAA Transit Status
0x05B	0	8	U1	LIMTLCISTATE LCI Task State
0x05C	0	8	U1	LIMTLDFSTATE LDF Task State
0x05D	0	8	U1	LIMTLPASTATE LPA Task State
0x05E	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LIMTTOOSTARTED TOO Started Status
	6	1	U1	LIMTTOOACTIVE TOO Started Status
	7	1	U1	LIMTTOOREADY TOO Ready Status
0x05F	0	2	U1	LHKSPARE2U1 Explicit 2 bit pad in unsigned char
	2	1	U1	LIMTARRREPPEND ARR Repoint Request Pending Status
	3	3	U1	LIMTARRGRBSTATE ARR GRB State
	6	1	U1	LIMTARRACTIVE ARR Started Status
	7	1	U1	LIMTARRREADY ARR Ready Status
0x060	0	32	U1234	LIMTTOOREMAINSEC TOO Seconds Remaining
0x064	0	32	U1234	LIMTARRREMAINSEC ARR Seconds Remaining
0x068	0	5	U1	LHKSPARE7U1 Explicit 7 bit pad in unsigned char
	5	1	U1	LIMTPRIINTALLOW GBM Primary Interrupt Allowed Status
	6	1	U1	LIMTREDINTALLOW GBM Redundant Interrupt Allowed Status
	7	1	U1	LIMTGBMREPALLOW GBM Repoint Request Allowed Status
0x069	0	7	U1	LHKSPARE7U1 Explicit 7 bit pad in unsigned char
	7	1	U1	LIMTHVALLOW ACD High-Voltage Allowed Status
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	32	U1234	LIMTDISREMAINSEC GBM Interrupt Disable Seconds Remaining
0x070	0	32	U1234	LHKLATCFILEKEY

Offset	S	L	Type	ITOS name, attribute(s), and description
				LATC File Key

14.3.87 `DiagCmdCnt0` (648/0x288)

Description:

"Diagnostic Command Statistics Packet 0" Telemetry Packet

Contains task level command statistics

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x010`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x012`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x014`	0	32	`U1234`	`LHKLCMCMDSEC` SIU LCM task command counter seconds
`0x018`	0	32	`U1234`	`LHKLCMCMDSUB` SIU LCM task command counter subseconds
`0x01C`	0	32	`U1234`	`LHKLCMCMDSENT` SIU LCM task commands received counter
`0x020`	0	32	`U1234`	`LHKLCMCMDEXEF` SIU LCM task command execution failed counter
`0x024`	0	32	`U1234`	`LHKLFSCMDSEC` SIU LFS task command counter seconds
`0x028`	0	32	`U1234`	`LHKLFSCMDSUB` SIU LFS task command counter subseconds
`0x02C`	0	32	`U1234`	`LHKLFSCMDSENT` SIU LFS task commands received counter
`0x030`	0	32	`U1234`	`LHKLFSCMDEXEF` SIU LFS task command execution failed counter
`0x034`	0	32	`U1234`	`LHKLHKCMDSEC` SIU LHK task command counter seconds
`0x038`	0	32	`U1234`	`LHKLHKCMDSUB` SIU LHK task command counter subseconds
`0x03C`	0	32	`U1234`	`LHKLHKCMDSENT` SIU LHK task commands received counter
`0x040`	0	32	`U1234`	`LHKLHKCMDEXEF` SIU LHK task command execution failed counter
`0x044`	0	32	`U1234`	`LHKLIMCMDSEC` SIU LIM task command counter seconds
`0x048`	0	32	`U1234`	`LHKLIMCMDSUB` SIU LIM task command counter subseconds
`0x04C`	0	32	`U1234`	`LHKLIMCMDSENT` SIU LIM task commands received counter
`0x050`	0	32	`U1234`	`LHKLIMCMDEXEF` SIU LIM task command execution failed counter
`0x054`	0	32	`U1234`	`LHKLSMCMDSEC` SIU LSM task command counter seconds

Offset	S	L	Type	ITOS name, attribute(s), and description
0x058	0	32	U1234	LHKLSMCMDSUB SIU LSM task command counter subseconds
0x05C	0	32	U1234	LHKLSMCMDSENT SIU LSM task commands received counter
0x060	0	32	U1234	LHKLSMCMDEXEF SIU LSM task command execution failed counter
0x064	0	32	U1234	LHKLSWCMDSEC SIU LSW slave task command counter seconds
0x068	0	32	U1234	LHKLSWCMDSUB SIU LSW slave task command counter subseconds
0x06C	0	32	U1234	LHKLSWCMDSENT SIU LSW slave task commands received counter
0x070	0	32	U1234	LHKLSWCMDEXEF SIU LSW slave task command execution failed counter

14.3.88 `DiagCmdCnt1` (649/0x289)

Description:

"Diagnostic Command Statistics Packet 1" Telemetry Packet

Contains task level command statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKLCICMDSEC SIU LCI task command counter seconds
0x018	0	32	U1234	LHKLCICMDSUB SIU LCI task command counter subseconds
0x01C	0	32	U1234	LHKLCICMDSENT SIU LCI task commands received counter
0x020	0	32	U1234	LHKLCICMDEXEF SIU LCI task command execution failed counter
0x024	0	32	U1234	LHKLMCCMDSEC SIU LMC task command counter seconds
0x028	0	32	U1234	LHKLMCCMDSUB SIU LMC task command counter subseconds
0x02C	0	32	U1234	LHKLMCCMDSENT SIU LMC task commands received counter
0x030	0	32	U1234	LHKLMCCMDEXEF SIU LMC task command execution failed counter
0x034	0	32	U1234	LHKLTCCMDSEC SIU LTC task command counter seconds
0x038	0	32	U1234	LHKLTCCMDSUB SIU LTC task command counter subseconds
0x03C	0	32	U1234	LHKLTCCMDSENT

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU LTC task commands received counter
0x040	0	32	U1234	LHKLTCCMDEXEF SIU LTC task command execution failed counter
0x044	0	32	U1234	LHKLPACMDSEC SIU LPA task command counter seconds
0x048	0	32	U1234	LHKLPACMDSUB SIU LPA task command counter subseconds
0x04C	0	32	U1234	LHKLPACMDSENT SIU LPA task commands received counter
0x050	0	32	U1234	LHKLPACMDEXEF SIU LPA task command execution failed counter
0x054	0	32	U1234	LHKLRACMDSEC SIU LRA task command counter seconds
0x058	0	32	U1234	LHKLRACMDSUB SIU LRA task command counter subseconds
0x05C	0	32	U1234	LHKLRACMDSENT SIU LRA task commands received counter
0x060	0	32	U1234	LHKLRACMDEXEF SIU LRA task command execution failed counter
0x064	0	32	U1234	LHKSPARECMDSEC SIU spare task command counter seconds
0x068	0	32	U1234	LHKSPARECMDSUB SIU spare task command counter subseconds
0x06C	0	32	U1234	LHKSPARECMDSENT SIU spare task commands received counter
0x070	0	32	U1234	LHKSPARECMDEXEF SIU spare task command execution failed counter

14.3.89 `DiagSiuStats` (650/0x28A)

Description:

"Diagnostic SIU Statistics" Telemetry Packet

Contains SIU CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x013	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKSIUPIDSCIN2 SIU PID input 2
	6	1	U1	LHKSIUPIDSCIN1 SIU PID input 2
	7	1	U1	LHKSIUPIDSCIN0 SIU PID input 2

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	16	U12	LHKSIUPCIERR SIU LCM RAD750 Counter
0x016	0	16	U12	LHKSIUCMERR SIU LCM RAD750 Counter
0x018	0	16	U12	LHKSIUUMERR SIU LCM RAD750 Counter
0x01A	0	16	U12	LHKSIUCPUJTEMP SIU CPU Junction Temperature
0x01C	0	32	U1234	LHKSIUCPUAVLDS SIU Average CPU Load/Sec
0x020	0	32	U1234	LHKSIUCPUAVLDM SIU Average CPU Load/Min
0x024	0	32	U1234	LHKSIUCPULDMIN SIU Min CPU Load/Min
0x028	0	32	U1234	LHKSIUCPULDMAX SIU Max CPU Load/Min
0x02C	0	32	U1234	LHKSFILSTATE; LHKFILESTATES SIU FILE Upload State
0x030	0	32	U1234	LHKSFILCURSIZE SIU FILE Size Current
0x034	0	32	U1234	LHKSFILPKTCNT SIU FILE Packet Count
0x038	0	32	U1234	LHKSFILERRCODE SIU FILE Error Code
0x03C	0	32	U1234	LHKSFILERRCNT SIU FILE Error Count
0x040	0	32	U1234	LHKSFILCOMID SIU FILE ID Commit
0x044	0	32	U1234	LHKSMEMLDSTAT SIU Status of most recent load action
0x048	0	32	U1234	LHKSMEMLDACT SIU Memory load active flag
0x04C	0	32	U1234	LHKSMEMLDSTART SIU Starting memory load address
0x050	0	32	U1234	LHKSMEMLDBYTES SIU Memory load total bytes
0x054	0	32	U1234	LHKSMEMLDOFST SIU Memory load offset
0x058	0	32	U1234	LHKSMEMDMPSTAT SIU Memory dump status
0x05C	0	32	U1234	LHKSMEMDMPACT SIU Memory dump active
0x060	0	32	U1234	LHKSMEMDMPSTRT SIU Memory dump start address
0x064	0	32	U1234	LHKSMEMDMPBYTES SIU Memory dump bytes
0x068	0	32	U1234	LHKSMEMDMPADDR SIU Memory dump address
0x06C	0	32	U1234	LHKSMEMDMPFCDE SIU Memory dump function code
0x070	0	32	U1234	LHKSMEMDMPTID SIU Memory dump transaction ID

14.3.90 `DiagEpu0Stats` (651/0x28B)

Description:

"Diagnostic EPU 0 Statistics" Telemetry Packet

Contains EPU 0 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x010`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x012`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x014`	0	16	`U12`	`LHKEPU0PCIERR` EPU0 LCM RAD750 Counter
`0x016`	0	16	`U12`	`LHKEPU0CMERR` EPU0 LCM RAD750 Counter
`0x018`	0	16	`U12`	`LHKEPU0UMERR` EPU0 LCM RAD750 Counter
`0x01A`	0	16	`U12`	`LHKEPU0CPUJTEMP` EPU0 CPU Junction Temperature
`0x01C`	0	32	`U1234`	`LHKEPU0CPUAVLDS` EPU0 Average CPU Load/Sec
`0x020`	0	32	`U1234`	`LHKEPU0CPUAVLDM` EPU0 Average CPU Load/Min
`0x024`	0	32	`U1234`	`LHKEPU0CPULDMIN` EPU0 Min CPU Load/Min
`0x028`	0	32	`U1234`	`LHKEPU0CPULDMAX` EPU0 Max CPU Load/Min
`0x02C`	0	32	`U1234`	`LHKE0FILSTATE; LHKFILESTATES` EPU0 FILE Upload State
`0x030`	0	32	`U1234`	`LHKE0FILCURSIZE` EPU0 File Size Current
`0x034`	0	32	`U1234`	`LHKE0FILPKTCNT` EPU0 FILE Packet Count
`0x038`	0	32	`U1234`	`LHKE0FILERRCODE` EPU0 FILE Error Code
`0x03C`	0	32	`U1234`	`LHKE0FILERRCNT` EPU0 FILE Error Count
`0x040`	0	32	`U1234`	`LHKE0FILCOMID` EPU0 FILE ID Commit
`0x044`	0	32	`U1234`	`LHKE0MEMLDSTAT` EPU0 Status of most recent load action
`0x048`	0	32	`U1234`	`LHKE0MEMLDACT` EPU0 Memory load active flag
`0x04C`	0	32	`U1234`	`LHKE0MEMLDSTART` EPU0 Starting memory load address
`0x050`	0	32	`U1234`	`LHKE0MEMLDBYTES` EPU0 Memory load total bytes
`0x054`	0	32	`U1234`	`LHKE0MEMLDOFST`

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU0 Memory load offset
0x058	0	32	U1234	LHKE0MEMDMPSTAT EPU0 Memory dump status
0x05C	0	32	U1234	LHKE0MEMDMPACT EPU0 Memory dump active
0x060	0	32	U1234	LHKE0MEMDMPSTRT EPU0 Memory dump start address
0x064	0	32	U1234	LHKE0MEMDMPBYT EPU0 Memory dump bytes
0x068	0	32	U1234	LHKE0MEMDMPADDR EPU0 Memory dump address
0x06C	0	32	U1234	LHKE0MEMDMPFCDE EPU0 Memory dump function code
0x070	0	32	U1234	LHKE0MEMDMPTID EPU0 Memory dump transaction ID

14.3.91 `DiagEpu1Stats` (652/0x28C)

Description:

"Diagnostic EPU 1 Statistics" Telemetry Packet

Contains EPU 1 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	U12	LHKEPU1PCIERR EPU1 LCM RAD750 Counter
0x016	0	16	U12	LHKEPU1CMERR EPU1 LCM RAD750 Counter
0x018	0	16	U12	LHKEPU1UMERR EPU1 LCM RAD750 Counter
0x01A	0	16	U12	LHKEPU1CPUJTEMP EPU1 CPU Junction Temperature
0x01C	0	32	U1234	LHKEPU1CPUAVLDS EPU1 Average CPU Load/Sec
0x020	0	32	U1234	LHKEPU1CPUAVLDM EPU1 Average CPU Load/Min
0x024	0	32	U1234	LHKEPU1CPULDMIN EPU1 Min CPU Load/Min
0x028	0	32	U1234	LHKEPU1CPULDMAX EPU1 Max CPU Load/Min
0x02C	0	32	U1234	LHKE1FILSTATE; LHKFILESTATES EPU1 FILE Upload State
0x030	0	32	U1234	LHKE1FILCURSIZE EPU1 File Size Current

Offset	S	L	Type	ITOS name, attribute(s), and description
0x034	0	32	U1234	LHKE1FILPKTCNT EPU1 FILE Packet Count
0x038	0	32	U1234	LHKE1FILERRCODE EPU1 FILE Error Code
0x03C	0	32	U1234	LHKE1FILERRCNT EPU1 FILE Error Count
0x040	0	32	U1234	LHKE1FILCOMID EPU1 FILE ID Commit
0x044	0	32	U1234	LHKE1MEMLDSTAT EPU1 Status of most recent load action
0x048	0	32	U1234	LHKE1MEMLDACT EPU1 Memory load active flag
0x04C	0	32	U1234	LHKE1MEMLDSTART EPU1 Starting memory load address
0x050	0	32	U1234	LHKE1MEMLDBYTES EPU1 Memory load total bytes
0x054	0	32	U1234	LHKE1MEMLDOFST EPU1 Memory load offset
0x058	0	32	U1234	LHKE1MEMDMPSTAT EPU1 Memory dump status
0x05C	0	32	U1234	LHKE1MEMDMPACT EPU1 Memory dump active
0x060	0	32	U1234	LHKE1MEMDMPSTRT EPU1 Memory dump start address
0x064	0	32	U1234	LHKE1MEMDMPBYT EPU1 Memory dump bytes
0x068	0	32	U1234	LHKE1MEMDMPADDR EPU1 Memory dump address
0x06C	0	32	U1234	LHKE1MEMDMPFCDE EPU1 Memory dump function code
0x070	0	32	U1234	LHKE1MEMDMPTID EPU1 Memory dump transaction ID

14.3.92 `DiagEpu2Stats` (653/0x28D)

Description:

"Diagnostic EPU 2 Statistics" Telemetry Packet

Contains EPU 2 CPU temperature and loading metrics, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	U12	LHKEPU2PCIERR EPU2 LCM RAD750 Counter
0x016	0	16	U12	LHKEPU2CMERR

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 LCM RAD750 Counter
0x018	0	16	U12	LHKEPU2UMERR EPU2 LCM RAD750 Counter
0x01A	0	16	U12	LHKEPU2CPUJTEMP EPU2 CPU Junction Temperature
0x01C	0	32	U1234	LHKEPU2CPUAVLDS EPU2 Average CPU Load/Sec
0x020	0	32	U1234	LHKEPU2CPUAVLDM EPU2 Average CPU Load/Min
0x024	0	32	U1234	LHKEPU2CPULDMIN EPU2 Min CPU Load/Min
0x028	0	32	U1234	LHKEPU2CPULDMAX EPU2 Max CPU Load/Min
0x02C	0	32	U1234	LHKE2FILSTATE; LHKFILESTATES EPU2 FILE Upload State
0x030	0	32	U1234	LHKE2FILCURSIZE EPU2 File Size Current
0x034	0	32	U1234	LHKE2FILPKTCNT EPU2 FILE Packet Count
0x038	0	32	U1234	LHKE2FILERRCODE EPU2 FILE Error Code
0x03C	0	32	U1234	LHKE2FILERRCNT EPU2 FILE Error Count
0x040	0	32	U1234	LHKE2FILCOMID EPU2 FILE ID Commit
0x044	0	32	U1234	LHKE2MEMLDSTAT EPU2 Status of most recent load action
0x048	0	32	U1234	LHKE2MEMLDACT EPU2 Memory load active flag
0x04C	0	32	U1234	LHKE2MEMLDSTART EPU2 Starting memory load address
0x050	0	32	U1234	LHKE2MEMLDBYTES EPU2 Memory load total bytes
0x054	0	32	U1234	LHKE2MEMLDOFST EPU2 Memory load offset
0x058	0	32	U1234	LHKE2MEMDMPSTAT EPU2 Memory dump status
0x05C	0	32	U1234	LHKE2MEMDMPACT EPU2 Memory dump active
0x060	0	32	U1234	LHKE2MEMDMPSTRT EPU2 Memory dump start address
0x064	0	32	U1234	LHKE2MEMDMPBYT EPU2 Memory dump bytes
0x068	0	32	U1234	LHKE2MEMDMPADDR EPU2 Memory dump address
0x06C	0	32	U1234	LHKE2MEMDMPFCDE EPU2 Memory dump function code
0x070	0	32	U1234	LHKE2MEMDMPTID EPU2 Memory dump transaction ID

14.3.93 `DiagLtcData0` (654/0x28E)

Description:

"Diagnostic Thermal Control Data Packet 0" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x010`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x012`	0	16	`U12`	`LHKSPARE16U12` Spare 16 bit field
`0x014`	0	4	`U1`	`LTC00SELRESHPN` LTC HP00 selected RES input HP#
	4	4	`U1`	`LTC00SELRESTYP` LTC HP00 selected RES input sensor type
	8	4	`U1`	`LTC00SELRITHPN` LTC HP00 selected RIT input HP#
	12	4	`U1`	`LTC00SELRITTYP` LTC HP00 selected RIT input sensor type
`0x016`	0	4	`U1`	`LTC01SELRESHPN` LTC HP01 selected RES input HP#
	4	4	`U1`	`LTC01SELRESTYP` LTC HP01 selected RES input sensor type
	8	4	`U1`	`LTC01SELRITHPN` LTC HP01 selected RIT input HP#
	12	4	`U1`	`LTC01SELRITTYP` LTC HP01 selected RIT input sensor type
`0x018`	0	4	`U1`	`LTC02SELRESHPN` LTC HP02 selected RES input HP#
	4	4	`U1`	`LTC02SELRESTYP` LTC HP02 selected RES input sensor type
	8	4	`U1`	`LTC02SELRITHPN` LTC HP02 selected RIT input HP#
	12	4	`U1`	`LTC02SELRITTYP` LTC HP02 selected RIT input sensor type
`0x01A`	0	4	`U1`	`LTC03SELRESHPN` LTC HP03 selected RES input HP#
	4	4	`U1`	`LTC03SELRESTYP` LTC HP03 selected RES input sensor type
	8	4	`U1`	`LTC03SELRITHPN` LTC HP03 selected RIT input HP#
	12	4	`U1`	`LTC03SELRITTYP` LTC HP03 selected RIT input sensor type
`0x01C`	0	4	`U1`	`LTC04SELRESHPN` LTC HP04 selected RES input HP#
	4	4	`U1`	`LTC04SELRESTYP` LTC HP04 selected RES input sensor type
	8	4	`U1`	`LTC04SELRITHPN` LTC HP04 selected RIT input HP#

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	4	U1	LTC04SELRITTYP LTC HP04 selected RIT input sensor type
0x01E	0	4	U1	LTC05SELRESHPN LTC HP05 selected RES input HP#
	4	4	U1	LTC05SELRESTYP LTC HP05 selected RES input sensor type
	8	4	U1	LTC05SELRITHPN LTC HP05 selected RIT input HP#
	12	4	U1	LTC05SELRITTYP LTC HP05 selected RIT input sensor type
0x020	0	4	U1	LTC06SELRESHPN LTC HP06 selected RES input HP#
	4	4	U1	LTC06SELRESTYP LTC HP06 selected RES input sensor type
	8	4	U1	LTC06SELRITHPN LTC HP06 selected RIT input HP#
	12	4	U1	LTC06SELRITTYP LTC HP06 selected RIT input sensor type
0x022	0	4	U1	LTC07SELRESHPN LTC HP07 selected RES input HP#
	4	4	U1	LTC07SELRESTYP LTC HP07 selected RES input sensor type
	8	4	U1	LTC07SELRITHPN LTC HP07 selected RIT input HP#
	12	4	U1	LTC07SELRITTYP LTC HP07 selected RIT input sensor type
0x024	0	4	U1	LTC08SELRESHPN LTC HP08 selected RES input HP#
	4	4	U1	LTC08SELRESTYP LTC HP08 selected RES input sensor type
	8	4	U1	LTC08SELRITHPN LTC HP08 selected RIT input HP#
	12	4	U1	LTC08SELRITTYP LTC HP08 selected RIT input sensor type
0x026	0	4	U1	LTC09SELRESHPN LTC HP09 selected RES input HP#
	4	4	U1	LTC09SELRESTYP LTC HP09 selected RES input sensor type
	8	4	U1	LTC09SELRITHPN LTC HP09 selected RIT input HP#
	12	4	U1	LTC09SELRITTYP LTC HP09 selected RIT input sensor type
0x028	0	4	U1	LTC10SELRESHPN LTC HP10 selected RES input HP#
	4	4	U1	LTC10SELRESTYP LTC HP10 selected RES input sensor type
	8	4	U1	LTC10SELRITHPN LTC HP10 selected RIT input HP#
	12	4	U1	LTC10SELRITTYP LTC HP10 selected RIT input sensor type
0x02A	0	4	U1	LTC11SELRESHPN LTC HP11 selected RES input HP#

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	U1	LTC11SELRESTYP LTC HP11 selected RES input sensor type
	8	4	U1	LTC11SELRITHPN LTC HP11 selected RIT input HP#
	12	4	U1	LTC11SELRITTYP LTC HP11 selected RIT input sensor type
0x02C	0	4	U1	LTC00RITSTAT LTC HP00 RIT Sensor Status
	4	4	U1	LTC00RESSTAT LTC HP00 Reservoir Sensor Status
0x02D	0	4	U1	LTC01RITSTAT LTC HP01 RIT Sensor Status
	4	4	U1	LTC01RESSTAT LTC HP01 Reservoir Sensor Status
0x02E	0	4	U1	LTC02RITSTAT LTC HP02 RIT Sensor Status
	4	4	U1	LTC02RESSTAT LTC HP02 Reservoir Sensor Status
0x02F	0	4	U1	LTC03RITSTAT LTC HP03 RIT Sensor Status
	4	4	U1	LTC03RESSTAT LTC HP03 Reservoir Sensor Status
0x030	0	4	U1	LTC04RITSTAT LTC HP04 RIT Sensor Status
	4	4	U1	LTC04RESSTAT LTC HP04 Reservoir Sensor Status
0x031	0	4	U1	LTC05RITSTAT LTC HP05 RIT Sensor Status
	4	4	U1	LTC05RESSTAT LTC HP05 Reservoir Sensor Status
0x032	0	4	U1	LTC06RITSTAT LTC HP06 RIT Sensor Status
	4	4	U1	LTC06RESSTAT LTC HP06 Reservoir Sensor Status
0x033	0	4	U1	LTC07RITSTAT LTC HP07 RIT Sensor Status
	4	4	U1	LTC07RESSTAT LTC HP07 Reservoir Sensor Status
0x034	0	4	U1	LTC08RITSTAT LTC HP08 RIT Sensor Status
	4	4	U1	LTC08RESSTAT LTC HP08 Reservoir Sensor Status
0x035	0	4	U1	LTC09RITSTAT LTC HP09 RIT Sensor Status
	4	4	U1	LTC09RESSTAT LTC HP09 Reservoir Sensor Status
0x036	0	4	U1	LTC10RITSTAT LTC HP10 RIT Sensor Status
	4	4	U1	LTC10RESSTAT LTC HP10 Reservoir Sensor Status
0x037	0	4	U1	LTC11RITSTAT LTC HP11 RIT Sensor Status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	U1	LTC11RESSTAT LTC HP11 Reservoir Sensor Status
0x038	0	4	U12	LHKSPARE4U12 Explicit 4 bit pad in unsigned short
	4	1	U12	LTC11HTRMODE Control mode for VCHP heater 11 (0=manual,1=auto)
	5	1	U12	LTC10HTRMODE Control mode for VCHP heater 10 (0=manual,1=auto)
	6	1	U12	LTC09HTRMODE Control mode for VCHP heater 9 (0=manual,1=auto)
	7	1	U12	LTC08HTRMODE Control mode for VCHP heater 8 (0=manual,1=auto)
	8	1	U12	LTC07HTRMODE Control mode for VCHP heater 7 (0=manual,1=auto)
	9	1	U12	LTC06HTRMODE Control mode for VCHP heater 6 (0=manual,1=auto)
	10	1	U12	LTC05HTRMODE Control mode for VCHP heater 5 (0=manual,1=auto)
	11	1	U12	LTC04HTRMODE Control mode for VCHP heater 4 (0=manual,1=auto)
	12	1	U12	LTC03HTRMODE Control mode for VCHP heater 3 (0=manual,1=auto)
	13	1	U12	LTC02HTRMODE Control mode for VCHP heater 2 (0=manual,1=auto)
	14	1	U12	LTC01HTRMODE Control mode for VCHP heater 1 (0=manual,1=auto)
	15	1	U12	LTC00HTRMODE Control mode for VCHP heater 0 (0=manual,1=auto)
0x03A	0	1	U12	LTCCNTLMODE LTC control mode
	1	3	U12	LHKSPARE3U12 Padding bits
	4	1	U12	LTC11HTRCMD Current command for VCHP heater 11 (0=off,1=on)
	5	1	U12	LTC10HTRCMD Current command for VCHP heater 10 (0=off,1=on)
	6	1	U12	LTC09HTRCMD Current command for VCHP heater 9 (0=off,1=on)
	7	1	U12	LTC08HTRCMD Current command for VCHP heater 8 (0=off,1=on)
	8	1	U12	LTC07HTRCMD Current command for VCHP heater 7 (0=off,1=on)
	9	1	U12	LTC06HTRCMD Current command for VCHP heater 6 (0=off,1=on)
	10	1	U12	LTC05HTRCMD Current command for VCHP heater 5 (0=off,1=on)
	11	1	U12	LTC04HTRCMD Current command for VCHP heater 4 (0=off,1=on)
	12	1	U12	LTC03HTRCMD Current command for VCHP heater 3 (0=off,1=on)
	13	1	U12	LTC02HTRCMD Current command for VCHP heater 2 (0=off,1=on)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	1	U12	LTC01HTRCMD Current command for VCHP heater 1 (0=off,1=on)
	15	1	U12	LTC00HTRCMD Current command for VCHP heater 0 (0=off,1=on)
0x03C	0	1	U12	LTCRUNMODE LTC run mode
	1	3	U12	LHKSPARE3U12 Padding bits
	4	1	U12	LTC11HTRSTATE VCHP heater state 11 (0=off,1=on)
	5	1	U12	LTC10HTRSTATE VCHP heater state 10 (0=off,1=on)
	6	1	U12	LTC09HTRSTATE VCHP heater state 9 (0=off,1=on)
	7	1	U12	LTC08HTRSTATE VCHP heater state 8 (0=off,1=on)
	8	1	U12	LTC07HTRSTATE VCHP heater state 7 (0=off,1=on)
	9	1	U12	LTC06HTRSTATE VCHP heater state 6 (0=off,1=on)
	10	1	U12	LTC05HTRSTATE VCHP heater state 5 (0=off,1=on)
	11	1	U12	LTC04HTRSTATE VCHP heater state 4 (0=off,1=on)
	12	1	U12	LTC03HTRSTATE VCHP heater state 3 (0=off,1=on)
	13	1	U12	LTC02HTRSTATE VCHP heater state 2 (0=off,1=on)
	14	1	U12	LTC01HTRSTATE VCHP heater state 1 (0=off,1=on)
	15	1	U12	LTC00HTRSTATE VCHP heater state 0 (0=off,1=on)
0x03E	0	16	I12	LTC00RITTEMP LTC HP00 RIT temperature in degress celsius
0x040	0	16	I12	LTC01RITTEMP LTC HP01 RIT temperature in degress celsius
0x042	0	16	I12	LTC02RITTEMP LTC HP02 RIT temperature in degress celsius
0x044	0	16	I12	LTC03RITTEMP LTC HP03 RIT temperature in degress celsius
0x046	0	16	I12	LTC04RITTEMP LTC HP04 RIT temperature in degress celsius
0x048	0	16	I12	LTC05RITTEMP LTC HP05 RIT temperature in degress celsius
0x04A	0	16	I12	LTC06RITTEMP LTC HP06 RIT temperature in degress celsius
0x04C	0	16	I12	LTC07RITTEMP LTC HP07 RIT temperature in degress celsius
0x04E	0	16	I12	LTC08RITTEMP LTC HP08 RIT temperature in degress celsius
0x050	0	16	I12	LTC09RITTEMP LTC HP09 RIT temperature in degress celsius

Offset	S	L	Type	ITOS name, attribute(s), and description
0x052	0	16	I12	LTC10RITTEMP LTC HP10 RIT temperature in degress celsius
0x054	0	16	I12	LTC11RITTEMP LTC HP11 RIT temperature in degress celsius
0x056	0	16	I12	LTC00RESTEMP LTC HP00 reservoir temperature in degress celsius
0x058	0	16	I12	LTC01RESTEMP LTC HP01 reservoir temperature in degress celsius
0x05A	0	16	I12	LTC02RESTEMP LTC HP02 reservoir temperature in degress celsius
0x05C	0	16	I12	LTC03RESTEMP LTC HP03 reservoir temperature in degress celsius
0x05E	0	16	I12	LTC04RESTEMP LTC HP04 reservoir temperature in degress celsius
0x060	0	16	I12	LTC05RESTEMP LTC HP05 reservoir temperature in degress celsius
0x062	0	16	I12	LTC06RESTEMP LTC HP06 reservoir temperature in degress celsius
0x064	0	16	I12	LTC07RESTEMP LTC HP07 reservoir temperature in degress celsius
0x066	0	16	I12	LTC08RESTEMP LTC HP08 reservoir temperature in degress celsius
0x068	0	16	I12	LTC09RESTEMP LTC HP09 reservoir temperature in degress celsius
0x06A	0	16	I12	LTC10RESTEMP LTC HP10 reservoir temperature in degress celsius
0x06C	0	16	I12	LTC11RESTEMP LTC HP11 reservoir temperature in degress celsius
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.94 `DiagLtcData1` (655/0x28F)

Description:

"Diagnostic Thermal Control Data Packet 1" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	I12	LTCRITLO0 LTC HP 00 Low limit for RIT sensor in degress celsius

Offset	S	L	Type	ITOS name, attribute(s), and description
0x016	0	16	I12	LTCRITLO1 LTC HP 01 Low limit for RIT sensor in degress celsius
0x018	0	16	I12	LTCRITLO2 LTC HP 02 Low limit for RIT sensor in degress celsius
0x01A	0	16	I12	LTCRITLO3 LTC HP 03 Low limit for RIT sensor in degress celsius
0x01C	0	16	I12	LTCRITLO4 LTC HP 04 Low limit for RIT sensor in degress celsius
0x01E	0	16	I12	LTCRITLO5 LTC HP 05 Low limit for RIT sensor in degress celsius
0x020	0	16	I12	LTCRITLO6 LTC HP 06 Low limit for RIT sensor in degress celsius
0x022	0	16	I12	LTCRITLO7 LTC HP 07 Low limit for RIT sensor in degress celsius
0x024	0	16	I12	LTCRITLO8 LTC HP 08 Low limit for RIT sensor in degress celsius
0x026	0	16	I12	LTCRITLO9 LTC HP 09 Low limit for RIT sensor in degress celsius
0x028	0	16	I12	LTCRITLO10 LTC HP 10 Low limit for RIT sensor in degress celsius
0x02A	0	16	I12	LTCRITLO11 LTC HP 11 Low limit for RIT sensor in degress celsius
0x02C	0	16	I12	LTCRITHI0 LTC HP 00 High limit for RIT sensor in degress celsius
0x02E	0	16	I12	LTCRITHI1 LTC HP 01 High limit for RIT sensor in degress celsius
0x030	0	16	I12	LTCRITHI2 LTC HP 02 High limit for RIT sensor in degress celsius
0x032	0	16	I12	LTCRITHI3 LTC HP 03 High limit for RIT sensor in degress celsius
0x034	0	16	I12	LTCRITHI4 LTC HP 04 High limit for RIT sensor in degress celsius
0x036	0	16	I12	LTCRITHI5 LTC HP 05 High limit for RIT sensor in degress celsius
0x038	0	16	I12	LTCRITHI6 LTC HP 06 High limit for RIT sensor in degress celsius
0x03A	0	16	I12	LTCRITHI7 LTC HP 07 High limit for RIT sensor in degress celsius
0x03C	0	16	I12	LTCRITHI8 LTC HP 08 High limit for RIT sensor in degress celsius
0x03E	0	16	I12	LTCRITHI9 LTC HP 09 High limit for RIT sensor in degress celsius
0x040	0	16	I12	LTCRITHI10 LTC HP 10 High limit for RIT sensor in degress celsius
0x042	0	16	I12	LTCRITHI11 LTC HP 11 High limit for RIT sensor in degress celsius
0x044	0	16	I12	LTCRESLO0 LTC HP 00 Low limit for reservoir sensor in degress celsius
0x046	0	16	I12	LTCRESLO1 LTC HP 01 Low limit for reservoir sensor in degress celsius
0x048	0	16	I12	LTCRESLO2 LTC HP 02 Low limit for reservoir sensor in degress celsius

Offset	S	L	Type	ITOS name, attribute(s), and description
0x04A	0	16	I12	LTCRESLO3 LTC HP 03 Low limit for reservoir sensor in degress celsius
0x04C	0	16	I12	LTCRESLO4 LTC HP 04 Low limit for reservoir sensor in degress celsius
0x04E	0	16	I12	LTCRESLO5 LTC HP 05 Low limit for reservoir sensor in degress celsius
0x050	0	16	I12	LTCRESLO6 LTC HP 06 Low limit for reservoir sensor in degress celsius
0x052	0	16	I12	LTCRESLO7 LTC HP 07 Low limit for reservoir sensor in degress celsius
0x054	0	16	I12	LTCRESLO8 LTC HP 08 Low limit for reservoir sensor in degress celsius
0x056	0	16	I12	LTCRESLO9 LTC HP 09 Low limit for reservoir sensor in degress celsius
0x058	0	16	I12	LTCRESLO10 LTC HP 10 Low limit for reservoir sensor in degress celsius
0x05A	0	16	I12	LTCRESLO11 LTC HP 11 Low limit for reservoir sensor in degress celsius
0x05C	0	16	I12	LTCRESHI0 LTC HP 00 High limit for reservoir sensor in degress celsius
0x05E	0	16	I12	LTCRESHI1 LTC HP 01 High limit for reservoir sensor in degress celsius
0x060	0	16	I12	LTCRESHI2 LTC HP 02 High limit for reservoir sensor in degress celsius
0x062	0	16	I12	LTCRESHI3 LTC HP 03 High limit for reservoir sensor in degress celsius
0x064	0	16	I12	LTCRESHI4 LTC HP 04 High limit for reservoir sensor in degress celsius
0x066	0	16	I12	LTCRESHI5 LTC HP 05 High limit for reservoir sensor in degress celsius
0x068	0	16	I12	LTCRESHI6 LTC HP 06 High limit for reservoir sensor in degress celsius
0x06A	0	16	I12	LTCRESHI7 LTC HP 07 High limit for reservoir sensor in degress celsius
0x06C	0	16	I12	LTCRESHI8 LTC HP 08 High limit for reservoir sensor in degress celsius
0x06E	0	16	I12	LTCRESHI9 LTC HP 09 High limit for reservoir sensor in degress celsius
0x070	0	16	I12	LTCRESHI10 LTC HP 10 High limit for reservoir sensor in degress celsius
0x072	0	16	I12	LTCRESHI11 LTC HP 11 High limit for reservoir sensor in degress celsius

14.3.95 `DiagLtcData2` (656/0x290)

Description:

"Diagnostic Thermal Control Data Packet 2" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	16	I12	LTCDBDELTA0 LTC HP 00 deadband delta limit in degress celsius
0x016	0	16	I12	LTCDBDELTA1 LTC HP 01 deadband delta limit in degress celsius
0x018	0	16	I12	LTCDBDELTA2 LTC HP 02 deadband delta limit in degress celsius
0x01A	0	16	I12	LTCDBDELTA3 LTC HP 03 deadband delta limit in degress celsius
0x01C	0	16	I12	LTCDBDELTA4 LTC HP 04 deadband delta limit in degress celsius
0x01E	0	16	I12	LTCDBDELTA5 LTC HP 05 deadband delta limit in degress celsius
0x020	0	16	I12	LTCDBDELTA6 LTC HP 06 deadband delta limit in degress celsius
0x022	0	16	I12	LTCDBDELTA7 LTC HP 07 deadband delta limit in degress celsius
0x024	0	16	I12	LTCDBDELTA8 LTC HP 08 deadband delta limit in degress celsius
0x026	0	16	I12	LTCDBDELTA9 LTC HP 09 deadband delta limit in degress celsius
0x028	0	16	I12	LTCDBDELTA10 LTC HP 10 deadband delta limit in degress celsius
0x02A	0	16	I12	LTCDBDELTA11 LTC HP 11 deadband delta limit in degress celsius
0x02C	0	4	U12	LTC00STATDSHPPRI Raw Sensor Status DSHP Pri 0
	4	12	U12	LTC00ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 0
0x02E	0	4	U12	LTC00STATDSHPRED Raw Sensor Status DSHP Red 0
	4	12	U12	LTC00ADCDSHPRED Raw Sensor ADC Counts DSHP Red 0
0x030	0	4	U12	LTC00STATXLHPPRI Raw Sensor Status XLHP Pri 0
	4	12	U12	LTC00ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 0
0x032	0	4	U12	LTC00STATXLHPRED Raw Sensor Status XLHP Red 0
	4	12	U12	LTC00ADCXLHPRED Raw Sensor ADC Counts XLHP Red 0
0x034	0	4	U12	LTC00STATRSVRPRI Raw Sensor Status RES Pri 0
	4	12	U12	LTC00ADCRSVRPRI Raw Sensor ADC Counts RES Pri 0
0x036	0	4	U12	LTC00STATRSVRRED Raw Sensor Status RES Red 0

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC00ADCRSVRRED Raw Sensor ADC Counts RES Red 0
0x038	0	4	U12	LTC01STATDSHPPRI Raw Sensor Status DSHP Pri 1
	4	12	U12	LTC01ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 1
0x03A	0	4	U12	LTC01STATDSHPRED Raw Sensor Status DSHP Red 1
	4	12	U12	LTC01ADCDSHPRED Raw Sensor ADC Counts DSHP Red 1
0x03C	0	4	U12	LTC01STATXLHPPRI Raw Sensor Status XLHP Pri 1
	4	12	U12	LTC01ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 1
0x03E	0	4	U12	LTC01STATXLHPRED Raw Sensor Status XLHP Red 1
	4	12	U12	LTC01ADCXLHPRED Raw Sensor ADC Counts XLHP Red 1
0x040	0	4	U12	LTC01STATRSVRPRI Raw Sensor Status RES Pri 1
	4	12	U12	LTC01ADCRSVRPRI Raw Sensor ADC Counts RES Pri 1
0x042	0	4	U12	LTC01STATRSVRRED Raw Sensor Status RES Red 1
	4	12	U12	LTC01ADCRSVRRED Raw Sensor ADC Counts RES Red 1
0x044	0	4	U12	LTC02STATDSHPPRI Raw Sensor Status DSHP Pri 2
	4	12	U12	LTC02ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 2
0x046	0	4	U12	LTC02STATDSHPRED Raw Sensor Status DSHP Red 2
	4	12	U12	LTC02ADCDSHPRED Raw Sensor ADC Counts DSHP Red 2
0x048	0	4	U12	LTC02STATXLHPPRI Raw Sensor Status XLHP Pri 2
	4	12	U12	LTC02ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 2
0x04A	0	4	U12	LTC02STATXLHPRED Raw Sensor Status XLHP Red 2
	4	12	U12	LTC02ADCXLHPRED Raw Sensor ADC Counts XLHP Red 2
0x04C	0	4	U12	LTC02STATRSVRPRI Raw Sensor Status RES Pri 2
	4	12	U12	LTC02ADCRSVRPRI Raw Sensor ADC Counts RES Pri 2
0x04E	0	4	U12	LTC02STATRSVRRED Raw Sensor Status RES Red 2
	4	12	U12	LTC02ADCRSVRRED Raw Sensor ADC Counts RES Red 2
0x050	0	4	U12	LTC03STATDSHPPRI Raw Sensor Status DSHP Pri 3

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC03ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 3
0x052	0	4	U12	LTC03STATDSHPRED Raw Sensor Status DSHP Red 3
	4	12	U12	LTC03ADCDSHPRED Raw Sensor ADC Counts DSHP Red 3
0x054	0	4	U12	LTC03STATXLHPPRI Raw Sensor Status XLHP Pri 3
	4	12	U12	LTC03ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 3
0x056	0	4	U12	LTC03STATXLHPRED Raw Sensor Status XLHP Red 3
	4	12	U12	LTC03ADCXLHPRED Raw Sensor ADC Counts XLHP Red 3
0x058	0	4	U12	LTC03STATRSVRPRI Raw Sensor Status RES Pri 3
	4	12	U12	LTC03ADCRSVRPRI Raw Sensor ADC Counts RES Pri 3
0x05A	0	4	U12	LTC03STATRSVRRED Raw Sensor Status RES Red 3
	4	12	U12	LTC03ADCRSVRRED Raw Sensor ADC Counts RES Red 3
0x05C	0	4	U12	LTC04STATDSHPPRI Raw Sensor Status DSHP Pri 4
	4	12	U12	LTC04ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 4
0x05E	0	4	U12	LTC04STATDSHPRED Raw Sensor Status DSHP Red 4
	4	12	U12	LTC04ADCDSHPRED Raw Sensor ADC Counts DSHP Red 4
0x060	0	4	U12	LTC04STATXLHPPRI Raw Sensor Status XLHP Pri 4
	4	12	U12	LTC04ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 4
0x062	0	4	U12	LTC04STATXLHPRED Raw Sensor Status XLHP Red 4
	4	12	U12	LTC04ADCXLHPRED Raw Sensor ADC Counts XLHP Red 4
0x064	0	4	U12	LTC04STATRSVRPRI Raw Sensor Status RES Pri 4
	4	12	U12	LTC04ADCRSVRPRI Raw Sensor ADC Counts RES Pri 4
0x066	0	4	U12	LTC04STATRSVRRED Raw Sensor Status RES Red 4
	4	12	U12	LTC04ADCRSVRRED Raw Sensor ADC Counts RES Red 4
0x068	0	4	U12	LTC05STATDSHPPRI Raw Sensor Status DSHP Pri 5
	4	12	U12	LTC05ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 5
0x06A	0	4	U12	LTC05STATDSHPRED Raw Sensor Status DSHP Red 5

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC05ADCDSHPRED Raw Sensor ADC Counts DSHP Red 5
0x06C	0	4	U12	LTC05STATXLHPPRI Raw Sensor Status XLHP Pri 5
	4	12	U12	LTC05ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 5
0x06E	0	4	U12	LTC05STATXLHPRED Raw Sensor Status XLHP Red 5
	4	12	U12	LTC05ADCXLHPRED Raw Sensor ADC Counts XLHP Red 5
0x070	0	4	U12	LTC05STATRSVRPRI Raw Sensor Status RES Pri 5
	4	12	U12	LTC05ADCRSVRPRI Raw Sensor ADC Counts RES Pri 5
0x072	0	4	U12	LTC05STATRSVRRED Raw Sensor Status RES Red 5
	4	12	U12	LTC05ADCRSVRRED Raw Sensor ADC Counts RES Red 5

14.3.96 `DiagLtcData3` (657/0x291)

Description:

"Diagnostic Thermal Control Data Packet 3" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	4	U12	LTC06STATDSHPPRI Raw Sensor Status DSHP Pri 6
	4	12	U12	LTC06ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 6
0x016	0	4	U12	LTC06STATDSHPRED Raw Sensor Status DSHP Red 6
	4	12	U12	LTC06ADCDSHPRED Raw Sensor ADC Counts DSHP Red 6
0x018	0	4	U12	LTC06STATXLHPPRI Raw Sensor Status XLHP Pri 6
	4	12	U12	LTC06ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 6
0x01A	0	4	U12	LTC06STATXLHPRED Raw Sensor Status XLHP Red 6
	4	12	U12	LTC06ADCXLHPRED Raw Sensor ADC Counts XLHP Red 6
0x01C	0	4	U12	LTC06STATRSVRPRI Raw Sensor Status RES Pri 6

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC06ADCRSVRPRI Raw Sensor ADC Counts RES Pri 6
0x01E	0	4	U12	LTC06STATRSVRRED Raw Sensor Status RES Red 6
	4	12	U12	LTC06ADCRSVRRED Raw Sensor ADC Counts RES Red 6
0x020	0	4	U12	LTC07STATDSHPPRI Raw Sensor Status DSHP Pri 7
	4	12	U12	LTC07ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 7
0x022	0	4	U12	LTC07STATDSHPRED Raw Sensor Status DSHP Red 7
	4	12	U12	LTC07ADCDSHPRED Raw Sensor ADC Counts DSHP Red 7
0x024	0	4	U12	LTC07STATXLHPPRI Raw Sensor Status XLHP Pri 7
	4	12	U12	LTC07ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 7
0x026	0	4	U12	LTC07STATXLHPRED Raw Sensor Status XLHP Red 7
	4	12	U12	LTC07ADCXLHPRED Raw Sensor ADC Counts XLHP Red 7
0x028	0	4	U12	LTC07STATRSVRPRI Raw Sensor Status RES Pri 7
	4	12	U12	LTC07ADCRSVRPRI Raw Sensor ADC Counts RES Pri 7
0x02A	0	4	U12	LTC07STATRSVRRED Raw Sensor Status RES Red 7
	4	12	U12	LTC07ADCRSVRRED Raw Sensor ADC Counts RES Red 7
0x02C	0	4	U12	LTC08STATDSHPPRI Raw Sensor Status DSHP Pri 8
	4	12	U12	LTC08ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 8
0x02E	0	4	U12	LTC08STATDSHPRED Raw Sensor Status DSHP Red 8
	4	12	U12	LTC08ADCDSHPRED Raw Sensor ADC Counts DSHP Red 8
0x030	0	4	U12	LTC08STATXLHPPRI Raw Sensor Status XLHP Pri 8
	4	12	U12	LTC08ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 8
0x032	0	4	U12	LTC08STATXLHPRED Raw Sensor Status XLHP Red 8
	4	12	U12	LTC08ADCXLHPRED Raw Sensor ADC Counts XLHP Red 8
0x034	0	4	U12	LTC08STATRSVRPRI Raw Sensor Status RES Pri 8
	4	12	U12	LTC08ADCRSVRPRI Raw Sensor ADC Counts RES Pri 8
0x036	0	4	U12	LTC08STATRSVRRED Raw Sensor Status RES Red 8

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC08ADCRSVRRED Raw Sensor ADC Counts RES Red 8
0x038	0	4	U12	LTC09STATDSHPPRI Raw Sensor Status DSHP Pri 9
	4	12	U12	LTC09ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 9
0x03A	0	4	U12	LTC09STATDSHPRED Raw Sensor Status DSHP Red 9
	4	12	U12	LTC09ADCDSHPRED Raw Sensor ADC Counts DSHP Red 9
0x03C	0	4	U12	LTC09STATXLHPPRI Raw Sensor Status XLHP Pri 9
	4	12	U12	LTC09ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 9
0x03E	0	4	U12	LTC09STATXLHPRED Raw Sensor Status XLHP Red 9
	4	12	U12	LTC09ADCXLHPRED Raw Sensor ADC Counts XLHP Red 9
0x040	0	4	U12	LTC09STATRSVRPRI Raw Sensor Status RES Pri 9
	4	12	U12	LTC09ADCRSVRPRI Raw Sensor ADC Counts RES Pri 9
0x042	0	4	U12	LTC09STATRSVRRED Raw Sensor Status RES Red 9
	4	12	U12	LTC09ADCRSVRRED Raw Sensor ADC Counts RES Red 9
0x044	0	4	U12	LTC10STATDSHPPRI Raw Sensor Status DSHP Pri 10
	4	12	U12	LTC10ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 10
0x046	0	4	U12	LTC10STATDSHPRED Raw Sensor Status DSHP Red 10
	4	12	U12	LTC10ADCDSHPRED Raw Sensor ADC Counts DSHP Red 10
0x048	0	4	U12	LTC10STATXLHPPRI Raw Sensor Status XLHP Pri 10
	4	12	U12	LTC10ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 10
0x04A	0	4	U12	LTC10STATXLHPRED Raw Sensor Status XLHP Red 10
	4	12	U12	LTC10ADCXLHPRED Raw Sensor ADC Counts XLHP Red 10
0x04C	0	4	U12	LTC10STATRSVRPRI Raw Sensor Status RES Pri 10
	4	12	U12	LTC10ADCRSVRPRI Raw Sensor ADC Counts RES Pri 10
0x04E	0	4	U12	LTC10STATRSVRRED Raw Sensor Status RES Red 10
	4	12	U12	LTC10ADCRSVRRED Raw Sensor ADC Counts RES Red 10
0x050	0	4	U12	LTC11STATDSHPPRI Raw Sensor Status DSHP Pri 11

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LTC11ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 11
0x052	0	4	U12	LTC11STATDSHPRED Raw Sensor Status DSHP Red 11
	4	12	U12	LTC11ADCDSHPRED Raw Sensor ADC Counts DSHP Red 11
0x054	0	4	U12	LTC11STATXLHPPRI Raw Sensor Status XLHP Pri 11
	4	12	U12	LTC11ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 11
0x056	0	4	U12	LTC11STATXLHPRED Raw Sensor Status XLHP Red 11
	4	12	U12	LTC11ADCXLHPRED Raw Sensor ADC Counts XLHP Red 11
0x058	0	4	U12	LTC11STATRSVRPRI Raw Sensor Status RES Pri 11
	4	12	U12	LTC11ADCRSVRPRI Raw Sensor ADC Counts RES Pri 11
0x05A	0	4	U12	LTC11STATRSVRRED Raw Sensor Status RES Red 11
	4	12	U12	LTC11ADCRSVRRED Raw Sensor ADC Counts RES Red 11
0x05C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x05E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x060	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x062	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x064	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x066	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x068	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06A	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.97 `DiagItcCfg` (658/0x292)

Description:

"Diagnostic ITC Configuration" Telemetry Packet

Contains the configuration for ITC task message and command confirmation levels.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	1	U1	LHKSIULCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKSIULCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKSIULCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKSIULCMCBE Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKSIULCMCBF Computer manager Command Confirm Broadcast Forward
0x016	0	1	U1	LHKSIULFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULFSMLV File system ITC Task Message Level
	8	2	U1	LHKSIULFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKSIULFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKSIULFSCBE File system Command Confirm Broadcast Execute
	14	2	U1	LHKSIULFSCBF File system Command Confirm Broadcast Forward
0x018	0	1	U1	LHKSIULHKMDEF Housekeeping master ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULHKMMLV Housekeeping master ITC Task Message Level
	8	2	U1	LHKSIULHKMCNE Housekeeping master Command Confirm Normal Execute
	10	2	U1	LHKSIULHKMCNF

Offset	S	L	Type	ITOS name, attribute(s), and description
				Housekeeping master Command Confirm Normal Forward
	12	2	U1	LHKSIULHKMCBE
				Housekeeping master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULHKMCBF
				Housekeeping master Command Confirm Broadcast Forward
0x01A	0	1	U1	LHKSIULIMDEF
				Instrument manager ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULIMMLV
				Instrument manager ITC Task Message Level
	8	2	U1	LHKSIULIMCNE
				Instrument manager Command Confirm Normal Execute
	10	2	U1	LHKSIULIMCNF
				Instrument manager Command Confirm Normal Forward
	12	2	U1	LHKSIULIMCBE
				Instrument manager Command Confirm Broadcast Execute
	14	2	U1	LHKSIULIMCBF
				Instrument manager Command Confirm Broadcast Forward
0x01C	0	1	U1	LHKSIULSMMDEF
				Spacecraft messages master ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULSMMMLV
				Spacecraft messages master ITC Task Message Level
	8	2	U1	LHKSIULSMMCNE
				Spacecraft messages master Command Confirm Normal Execute
	10	2	U1	LHKSIULSMMCNF
				Spacecraft messages master Command Confirm Normal Forward
	12	2	U1	LHKSIULSMMCBE
				Spacecraft messages master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULSMMCBF
				Spacecraft messages master Command Confirm Broadcast Forward
0x01E	0	1	U1	LHKSIULSWDEF
				Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULSWMLV
				Software watchdog ITC Task Message Level
	8	2	U1	LHKSIULSWCNE
				Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKSIULSWCNF
				Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKSIULSWCBE
				Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKSIULSWCBF
				Software watchdog Command Confirm Broadcast Forward
0x020	0	1	U1	LHKSIULCIDEF
				Charge injection ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULCIMLV

Offset	S	L	Type	ITOS name, attribute(s), and description
				Charge injection ITC Task Message Level
	8	2	U1	LHKSIULCICNE Charge injection Command Confirm Normal Execute
	10	2	U1	LHKSIULCICNF Charge injection Command Confirm Normal Forward
	12	2	U1	LHKSIULCICBE Charge injection Command Confirm Broadcast Execute
	14	2	U1	LHKSIULCICBF Charge injection Command Confirm Broadcast Forward
0x022	0	1	U1	LHKSIULMCDEF Multiplex counters ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULMCMLV Multiplex counters ITC Task Message Level
	8	2	U1	LHKSIULMCCNE Multiplex counters Command Confirm Normal Execute
	10	2	U1	LHKSIULMCCNF Multiplex counters Command Confirm Normal Forward
	12	2	U1	LHKSIULMCCBE Multiplex counters Command Confirm Broadcast Execute
	14	2	U1	LHKSIULMCCBF Multiplex counters Command Confirm Broadcast Forward
0x024	0	1	U1	LHKSIULPAMDEF Physics analysis master ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULPAMMLV Physics analysis master ITC Task Message Level
	8	2	U1	LHKSIULPAMCNE Physics analysis master Command Confirm Normal Execute
	10	2	U1	LHKSIULPAMCNF Physics analysis master Command Confirm Normal Forward
	12	2	U1	LHKSIULPAMCBE Physics analysis master Command Confirm Broadcast Execute
	14	2	U1	LHKSIULPAMCBF Physics analysis master Command Confirm Broadcast Forward
0x026	0	1	U1	LHKSIULRADEF Register access ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRAMLV Register access ITC Task Message Level
	8	2	U1	LHKSIULRACNE Register access Command Confirm Normal Execute
	10	2	U1	LHKSIULRACNF Register access Command Confirm Normal Forward
	12	2	U1	LHKSIULRACBE Register access Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRACBF Register access Command Confirm Broadcast Forward
0x028	0	1	U1	LHKSIULTCDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				Thermal control ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULTCMLV Thermal control ITC Task Message Level
	8	2	U1	LHKSIULTCCNE Thermal control Command Confirm Normal Execute
	10	2	U1	LHKSIULTCCNF Thermal control Command Confirm Normal Forward
	12	2	U1	LHKSIULTCCBE Thermal control Command Confirm Broadcast Execute
	14	2	U1	LHKSIULTCCBF Thermal control Command Confirm Broadcast Forward
0x02A	0	1	U1	LHKSIUGRBDEF GRB analaysis ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUGRBMLV GRB analaysis ITC Task Message Level
	8	2	U1	LHKSIUGRBCNE GRB analaysis Command Confirm Normal Execute
	10	2	U1	LHKSIUGRBCNF GRB analaysis Command Confirm Normal Forward
	12	2	U1	LHKSIUGRBCBE GRB analaysis Command Confirm Broadcast Execute
	14	2	U1	LHKSIUGRBCBF GRB analaysis Command Confirm Broadcast Forward
0x02C	0	1	U1	LHKSIUCRXCDEF CTDB Rx task (telecommand ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUCRXCMLV CTDB Rx task (telecommand ITC Task Message Level
	8	2	U1	LHKSIUCRXCCNE CTDB Rx task (telecommand Command Confirm Normal Execute
	10	2	U1	LHKSIUCRXCCNF CTDB Rx task (telecommand Command Confirm Normal Forward
	12	2	U1	LHKSIUCRXCCBE CTDB Rx task (telecommand Command Confirm Broadcast Execute
	14	2	U1	LHKSIUCRXCCBF CTDB Rx task (telecommand Command Confirm Broadcast Forward
0x02E	0	1	U1	LHKSIULTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKSIULTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKSIULTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKSIULTX0CBE

Offset	S	L	Type	ITOS name, attribute(s), and description
				LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULTX0CBF
				LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x030	0	1	U1	LHKSIULRXRDEF
				LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRXRMLV
				LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKSIULRXRCNE
				LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKSIULRXRCNF
				LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKSIULRXRCBE
				LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRXRCBF
				LCB Rx task (result) Command Confirm Broadcast Forward
0x032	0	1	U1	LHKSIULRXEDEF
				LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIULRXEMLV
				LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKSIULRXECNE
				LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKSIULRXECNF
				LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKSIULRXECBE
				LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKSIULRXECBF
				LCB Tx task (event) Command Confirm Broadcast Forward
0x034	0	1	U1	LHKSIUCTXDEF
				CTDB Tx task ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUCTXMLV
				CTDB Tx task ITC Task Message Level
	8	2	U1	LHKSIUCTXCNE
				CTDB Tx task Command Confirm Normal Execute
	10	2	U1	LHKSIUCTXCNF
				CTDB Tx task Command Confirm Normal Forward
	12	2	U1	LHKSIUCTXCBE
				CTDB Tx task Command Confirm Broadcast Execute
	14	2	U1	LHKSIUCTXCBF
				CTDB Tx task Command Confirm Broadcast Forward
0x036	0	1	U1	LHKSIUSTXDEF
				LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSIUSTXMLV
				LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKSIUSTXCNE

Offset	S	L	Type	ITOS name, attribute(s), and description
				LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKSIUSTXCNF
				LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKSIUSTXCBE
				LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKSIUSTXCBF
				LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x038	0	1	U1	LHKEPU0LCMDEF
				Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LCMMLV
				Computer manager ITC Task Message Level
	8	2	U1	LHKEPU0LCMCNE
				Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU0LCMCNF
				Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU0LCMCBE
				Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LCMCBF
				Computer manager Command Confirm Broadcast Forward
0x03A	0	1	U1	LHKEPU0LFSDEF
				File system ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LFSMLV
				File system ITC Task Message Level
	8	2	U1	LHKEPU0LFSCNE
				File system Command Confirm Normal Execute
	10	2	U1	LHKEPU0LFSCNF
				File system Command Confirm Normal Forward
	12	2	U1	LHKEPU0LFSCBE
				File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LFSCBF
				File system Command Confirm Broadcast Forward
0x03C	0	1	U1	LHKEPU0LHKSDEF
				Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LHKSMLV
				Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU0LHKSCNE
				Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LHKSCNF
				Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LHKSCBE
				Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LHKSCBF
				Housekeeping slave Command Confirm Broadcast Forward
0x03E	0	1	U1	LHKEPU0LSMSDEF
				Spacecraft messages slave ITC Task Defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LSMSMLV Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU0LSMSCNE Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LSMSCNF Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LSMSCBE Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LSMSCBF Spacecraft messages slave Command Confirm Broadcast Forward
0x040	0	1	U1	LHKEPU0LSWDEF Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LSWMLV Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU0LSWCNE Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKEPU0LSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU0LSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LSWCBF Software watchdog Command Confirm Broadcast Forward
0x042	0	1	U1	LHKEPU0LPASDEF Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LPASMLV Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU0LPASCNE Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU0LPASCNF Physics analysis slave Command Confirm Normal Forward
	12	2	U1	LHKEPU0LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x044	0	1	U1	LHKEPU0LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU0LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LTX0CBF

Offset	S	L	Type	ITOS name, attribute(s), and description
				LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x046	0	1	U1	LHKEPU0LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU0LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x048	0	1	U1	LHKEPU0LRXEDEF LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU0LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU0LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU0LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x04A	0	1	U1	LHKEPU0STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU0STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKEPU0STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU0STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU0STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU0STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x04C	0	1	U1	LHKEPU1LCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKEPU1LCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU1LCMCNF

Offset	S	L	Type	ITOS name, attribute(s), and description
				Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU1LCMCBE
				Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LCMCBF
				Computer manager Command Confirm Broadcast Forward
0x04E	0	1	U1	LHKEPU1LFSDEF
				File system ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LFSMLV
				File system ITC Task Message Level
	8	2	U1	LHKEPU1LFSCNE
				File system Command Confirm Normal Execute
	10	2	U1	LHKEPU1LFSCNF
				File system Command Confirm Normal Forward
	12	2	U1	LHKEPU1LFSCBE
				File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LFSCBF
				File system Command Confirm Broadcast Forward
0x050	0	1	U1	LHKEPU1LHKSDEF
				Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LHKSMLV
				Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU1LHKSCNE
				Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LHKSCNF
				Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU1LHKSCBE
				Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LHKSCBF
				Housekeeping slave Command Confirm Broadcast Forward
0x052	0	1	U1	LHKEPU1LSMSDEF
				Spacecraft messages slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LSMSMLV
				Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU1LSMSCNE
				Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LSMSCNF
				Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU1LSMSCBE
				Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LSMSCBF
				Spacecraft messages slave Command Confirm Broadcast Forward
0x054	0	1	U1	LHKEPU1LSWDEF
				Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LSWMLV

Offset	S	L	Type	ITOS name, attribute(s), and description
				Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU1LSWCNE Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKEPU1LSWCNF Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU1LSWCBE Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LSWCBF Software watchdog Command Confirm Broadcast Forward
0x056	0	1	U1	LHKEPU1LPASDEF Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LPASMLV Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU1LPASCNE Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU1LPASCNF Physics analysis slave Command Confirm Normal Forward
	12	2	U1	LHKEPU1LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x058	0	1	U1	LHKEPU1LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU1LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x05A	0	1	U1	LHKEPU1LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU1LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x05C	0	1	U1	LHKEPU1LRXEDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU1LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU1LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU1LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x05E	0	1	U1	LHKEPU1STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU1STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKEPU1STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU1STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU1STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU1STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward
0x060	0	1	U1	LHKEPU2LCMDEF Computer manager ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LCMMLV Computer manager ITC Task Message Level
	8	2	U1	LHKEPU2LCMCNE Computer manager Command Confirm Normal Execute
	10	2	U1	LHKEPU2LCMCNF Computer manager Command Confirm Normal Forward
	12	2	U1	LHKEPU2LCMCBE Computer manager Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LCMCBF Computer manager Command Confirm Broadcast Forward
0x062	0	1	U1	LHKEPU2LFSDEF File system ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LFSMLV File system ITC Task Message Level
	8	2	U1	LHKEPU2LFSCNE File system Command Confirm Normal Execute
	10	2	U1	LHKEPU2LFSCNF File system Command Confirm Normal Forward
	12	2	U1	LHKEPU2LFSCBE

Offset	S	L	Type	ITOS name, attribute(s), and description
				File system Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LFSCBF
				File system Command Confirm Broadcast Forward
0x064	0	1	U1	LHKEPU2LHKSDEF
				Housekeeping slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LHKSMLV
				Housekeeping slave ITC Task Message Level
	8	2	U1	LHKEPU2LHKSCNE
				Housekeeping slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LHKSCNF
				Housekeeping slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LHKSCBE
				Housekeeping slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LHKSCBF
				Housekeeping slave Command Confirm Broadcast Forward
0x066	0	1	U1	LHKEPU2LSMSDEF
				Spacecraft messages slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LSMSMLV
				Spacecraft messages slave ITC Task Message Level
	8	2	U1	LHKEPU2LSMSCNE
				Spacecraft messages slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LSMSCNF
				Spacecraft messages slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LSMSCBE
				Spacecraft messages slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LSMSCBF
				Spacecraft messages slave Command Confirm Broadcast Forward
0x068	0	1	U1	LHKEPU2LSWDEF
				Software watchdog ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LSWMLV
				Software watchdog ITC Task Message Level
	8	2	U1	LHKEPU2LSWCNE
				Software watchdog Command Confirm Normal Execute
	10	2	U1	LHKEPU2LSWCNF
				Software watchdog Command Confirm Normal Forward
	12	2	U1	LHKEPU2LSWCBE
				Software watchdog Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LSWCBF
				Software watchdog Command Confirm Broadcast Forward
0x06A	0	1	U1	LHKEPU2LPASDEF
				Physics analysis slave ITC Task Defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LPASMLV
				Physics analysis slave ITC Task Message Level
	8	2	U1	LHKEPU2LPASCNE

Offset	S	L	Type	ITOS name, attribute(s), and description
				Physics analysis slave Command Confirm Normal Execute
	10	2	U1	LHKEPU2LPASCNF Physics analysis slave Command Confirm Normal Forward
	12	2	U1	LHKEPU2LPASCBE Physics analysis slave Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LPASCBF Physics analysis slave Command Confirm Broadcast Forward
0x06C	0	1	U1	LHKEPU2LTX0DEF LCB Tx task (CPU-CPU) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LTX0MLV LCB Tx task (CPU-CPU) ITC Task Message Level
	8	2	U1	LHKEPU2LTX0CNE LCB Tx task (CPU-CPU) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LTX0CNF LCB Tx task (CPU-CPU) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LTX0CBE LCB Tx task (CPU-CPU) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LTX0CBF LCB Tx task (CPU-CPU) Command Confirm Broadcast Forward
0x06E	0	1	U1	LHKEPU2LRXRDEF LCB Rx task (result) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LRXRMLV LCB Rx task (result) ITC Task Message Level
	8	2	U1	LHKEPU2LRXRCNE LCB Rx task (result) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LRXRCNF LCB Rx task (result) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LRXRCBE LCB Rx task (result) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LRXRCBF LCB Rx task (result) Command Confirm Broadcast Forward
0x070	0	1	U1	LHKEPU2LRXEDEF LCB Tx task (event) ITC Task Defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2LRXEMLV LCB Tx task (event) ITC Task Message Level
	8	2	U1	LHKEPU2LRXECNE LCB Tx task (event) Command Confirm Normal Execute
	10	2	U1	LHKEPU2LRXECNF LCB Tx task (event) Command Confirm Normal Forward
	12	2	U1	LHKEPU2LRXECBE LCB Tx task (event) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2LRXECBF LCB Tx task (event) Command Confirm Broadcast Forward
0x072	0	1	U1	LHKEPU2STXDEF LCB Tx task (CPU-SDI) ITC Task Defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKEPU2STXMLV LCB Tx task (CPU-SDI) ITC Task Message Level
	8	2	U1	LHKEPU2STXCNE LCB Tx task (CPU-SDI) Command Confirm Normal Execute
	10	2	U1	LHKEPU2STXCNF LCB Tx task (CPU-SDI) Command Confirm Normal Forward
	12	2	U1	LHKEPU2STXCBE LCB Tx task (CPU-SDI) Command Confirm Broadcast Execute
	14	2	U1	LHKEPU2STXCBF LCB Tx task (CPU-SDI) Command Confirm Broadcast Forward

14.3.98 `DiagTopSiu` (659/0x293)

Description:

"Diagnostic TRC Top SIU Monitor Packet" Telemetry Packet

Contains TRC/LSW SIU cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKSIUCPUFREQ Processor Frequency
0x018	0	32	U1234	LHKSIUCPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKSIUTOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKSIUTOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKSIUTOPDUR TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKSIUTOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKSIUTOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKSIUANONTOP TRC Top SIU ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKSIULCMTOP TRC Top SIU LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKSIULFSTOP TRC Top SIU LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKSIULFSSTOP TRC Top SIU LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKSIULHKMTOP TRC Top SIU LHK_M Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x031	0	8	U1	LHKSIULHKSTOP TRC Top SIU LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKSIULIMTOP TRC Top SIU LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKSIUTID7TOP TRC Top SIU TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKSIULSMMTOP TRC Top SIU LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKSIULSMSTOP TRC Top SIU LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKSIULSWTOP TRC Top SIU LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKSIUTID11TOP TRC Top SIU TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKSIULCITOP TRC Top SIU LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKSIUTID13TOP TRC Top SIU TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKSIULMCTOP TRC Top SIU LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKSIULPAMTOP TRC Top SIU LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKSIULPASTOP TRC Top SIU LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKSIULRATOP TRC Top SIU LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKSIULTCTOP TRC Top SIU LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKSIUGRBTOP TRC Top SIU GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKSIULIHTOP TRC Top SIU LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKSIUTID21TOP TRC Top SIU TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKSIUCRXCTOP TRC Top SIU CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKSIUTID23TOP TRC Top SIU TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKSIULTX1TOP TRC Top SIU LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKSIULTX0TOP TRC Top SIU LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKSIULRXRTOP TRC Top SIU LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKSIULRXETOP TRC Top SIU LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKSIULRXNTOP TRC Top SIU LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKSIUCTXTOP TRC Top SIU CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKSIUSTXTOP TRC Top SIU STX Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x04B	0	8	U1	LHKSIUTID31TOP TRC Top SIU TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKSIUTID32TOP TRC Top SIU TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKSIUMSGTOP TRC Top SIU MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKSIUPOLLTOP TRC Top SIU POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKSIUIDLETOP TRC Top SIU IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKSIULHKCTOP TRC Top SIU LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKSIUEFCTOP TRC Top SIU EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKSIUEMPTOP TRC Top SIU EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKSIULCMSTOP TRC Top SIU LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKSIUCTDBTOP TRC Top SIU CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKSIULCBTOP TRC Top SIU LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKSIUTID42TOP TRC Top SIU TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKSIUTID43TOP TRC Top SIU TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKSIUTID44TOP TRC Top SIU TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKSIUROOTTTOP TRC Top SIU ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKSIULOGTTOP TRC Top SIU LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKSIUEXCTTOP TRC Top SIU EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKSIUUNDFTOP TRC Top SIU UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKSIUEXC5TOP TRC Top SIU EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKSIUEXC9TOP TRC Top SIU EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKSIUTID51TOP TRC Top SIU TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKSIUTID52TOP TRC Top SIU TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKSIUTID53TOP TRC Top SIU TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKSIUTID54TOP TRC Top SIU TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKSIUTID55TOP TRC Top SIU TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKSIUTID56TOP TRC Top SIU TID56 Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x065	0	8	U1	LHKSIUTID57TOP TRC Top SIU TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKSIUTID58TOP TRC Top SIU TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKSIUTID59TOP TRC Top SIU TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKSIUTID60TOP TRC Top SIU TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKSIUTID61TOP TRC Top SIU TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKSIUTID62TOP TRC Top SIU TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKSIUTID63TOP TRC Top SIU TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.99 `DiagTopEpu0` (660/0x294)

Description:

"Diagnostic TRC Top EPU 0 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU0 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU0CPUFREQ Processor Frequency
0x018	0	32	U1234	LHKEPU0CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU0TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU0TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU0TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU0TOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKEPU0TOPEX9IR

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU0ANONTOP
				TRC Top EPU0 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU0LCMTOP
				TRC Top EPU0 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU0LFSTOP
				TRC Top EPU0 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU0LFSSTOP
				TRC Top EPU0 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU0LHKMTOP
				TRC Top EPU0 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU0LHKSTOP
				TRC Top EPU0 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU0LIMTOP
				TRC Top EPU0 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU0TID7TOP
				TRC Top EPU0 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU0LSMMTOP
				TRC Top EPU0 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU0LSMSTOP
				TRC Top EPU0 LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKEPU0LSWTOP
				TRC Top EPU0 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU0TID11TOP
				TRC Top EPU0 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU0LCITOP
				TRC Top EPU0 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU0TID13TOP
				TRC Top EPU0 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU0LMCTOP
				TRC Top EPU0 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU0LPAMTOP
				TRC Top EPU0 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU0LPASTOP
				TRC Top EPU0 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU0LRATOP
				TRC Top EPU0 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU0LTCTOP
				TRC Top EPU0 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU0GRBTOP
				TRC Top EPU0 GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKEPU0LIHTOP
				TRC Top EPU0 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU0TID21TOP
				TRC Top EPU0 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU0CRXCTOP
				TRC Top EPU0 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU0TID23TOP
				TRC Top EPU0 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU0LTX1TOP
				TRC Top EPU0 LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKEPU0LTX0TOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU0 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU0LRXRTOP
				TRC Top EPU0 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU0LRXETOP
				TRC Top EPU0 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU0LRXNTOP
				TRC Top EPU0 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU0CTXTOP
				TRC Top EPU0 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU0STXTOP
				TRC Top EPU0 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU0TID31TOP
				TRC Top EPU0 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU0TID32TOP
				TRC Top EPU0 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU0MSGTOP
				TRC Top EPU0 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU0POLLTOP
				TRC Top EPU0 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU0IDLETOP
				TRC Top EPU0 IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKEPU0LHKCTOP
				TRC Top EPU0 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU0EFCTOP
				TRC Top EPU0 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU0EMPTOP
				TRC Top EPU0 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU0LCMSTOP
				TRC Top EPU0 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU0CTDBTOP
				TRC Top EPU0 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU0LCBTOP
				TRC Top EPU0 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU0TID42TOP
				TRC Top EPU0 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU0TID43TOP
				TRC Top EPU0 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU0TID44TOP
				TRC Top EPU0 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU0ROOTTTOP
				TRC Top EPU0 ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKEPU0LOGTTOP
				TRC Top EPU0 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU0EXCTTOP
				TRC Top EPU0 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU0UNDFTOP
				TRC Top EPU0 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU0EXC5TOP
				TRC Top EPU0 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU0EXC9TOP
				TRC Top EPU0 EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKEPU0TID51TOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU0 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU0TID52TOP TRC Top EPU0 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU0TID53TOP TRC Top EPU0 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU0TID54TOP TRC Top EPU0 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU0TID55TOP TRC Top EPU0 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU0TID56TOP TRC Top EPU0 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU0TID57TOP TRC Top EPU0 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU0TID58TOP TRC Top EPU0 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU0TID59TOP TRC Top EPU0 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU0TID60TOP TRC Top EPU0 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU0TID61TOP TRC Top EPU0 TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKEPU0TID62TOP TRC Top EPU0 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU0TID63TOP TRC Top EPU0 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.100 `DiagTopEpu1` (661/0x295)

Description:

"Diagnostic TRC Top EPU 1 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU 1 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU1CPUFREQ Processor Frequency

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	32	U1234	LHKEPU1CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU1TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU1TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU1TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU1TOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKEPU1TOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU1ANONTOP TRC Top EPU1 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU1LCMTOP TRC Top EPU1 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU1LFSTOP TRC Top EPU1 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU1LFSSTOP TRC Top EPU1 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU1LHKMTOP TRC Top EPU1 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU1LHKSTOP TRC Top EPU1 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU1LIMTOP TRC Top EPU1 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU1TID7TOP TRC Top EPU1 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU1LSMMTOP TRC Top EPU1 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU1LSMSTOP TRC Top EPU1 LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKEPU1LSWTOP TRC Top EPU1 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU1TID11TOP TRC Top EPU1 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU1LCITOP TRC Top EPU1 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU1TID13TOP TRC Top EPU1 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU1LMCTOP TRC Top EPU1 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU1LPAMTOP TRC Top EPU1 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU1LPASTOP TRC Top EPU1 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU1LRATOP TRC Top EPU1 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU1LTCTOP TRC Top EPU1 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU1GRBTOP TRC Top EPU1 GRB Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x040	0	8	U1	LHKEPU1LIHTOP TRC Top EPU1 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU1TID21TOP TRC Top EPU1 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU1CRXCTOP TRC Top EPU1 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU1TID23TOP TRC Top EPU1 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU1LTX1TOP TRC Top EPU1 LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKEPU1LTX0TOP TRC Top EPU1 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU1LRXRTOP TRC Top EPU1 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU1LRXETOP TRC Top EPU1 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU1LRXNTOP TRC Top EPU1 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU1CTXTOP TRC Top EPU1 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU1STXTOP TRC Top EPU1 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU1TID31TOP TRC Top EPU1 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU1TID32TOP TRC Top EPU1 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU1MSGTOP TRC Top EPU1 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU1POLLTOP TRC Top EPU1 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU1IDLETOP TRC Top EPU1 IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKEPU1LHKCTOP TRC Top EPU1 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU1EFCTOP TRC Top EPU1 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU1EMPTOP TRC Top EPU1 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU1LCMSTOP TRC Top EPU1 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU1CTDBTOP TRC Top EPU1 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU1LCBTOP TRC Top EPU1 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU1TID42TOP TRC Top EPU1 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU1TID43TOP TRC Top EPU1 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU1TID44TOP TRC Top EPU1 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU1ROOTTTOP TRC Top EPU1 ROOT_T Task CPU Fraction per Task/Exception

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05A	0	8	U1	LHKEPU1LOGTTOP TRC Top EPU1 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU1EXCTTOP TRC Top EPU1 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU1UNDFTOP TRC Top EPU1 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU1EXC5TOP TRC Top EPU1 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU1EXC9TOP TRC Top EPU1 EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKEPU1TID51TOP TRC Top EPU1 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU1TID52TOP TRC Top EPU1 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU1TID53TOP TRC Top EPU1 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU1TID54TOP TRC Top EPU1 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU1TID55TOP TRC Top EPU1 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU1TID56TOP TRC Top EPU1 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU1TID57TOP TRC Top EPU1 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU1TID58TOP TRC Top EPU1 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU1TID59TOP TRC Top EPU1 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU1TID60TOP TRC Top EPU1 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU1TID61TOP TRC Top EPU1 TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKEPU1TID62TOP TRC Top EPU1 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU1TID63TOP TRC Top EPU1 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12 Spare 16 bit field

14.3.101 `DiagTopEpu2` (662/0x296)

Description:

"Diagnostic TRC Top EPU 2 Monitor Packet" Telemetry Packet

Contains TRC/LSW EPU2 cpu monitor metrics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x010	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x012	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x014	0	32	U1234	LHKEPU2CPUFREQ Processor Frequency
0x018	0	32	U1234	LHKEPU2CPUSERIAL CPU Serial Number
0x01C	0	32	U1234	LHKEPU2TOPENDMSW TRC Top Sampling Period End Time MSW
0x020	0	32	U1234	LHKEPU2TOPENDLSW TRC Top Sampling Period End Time LSW
0x024	0	32	U1234	LHKEPU2TOPDTIME TRC Top Sampling Period Duration in usec
0x028	0	16	U12	LHKEPU2TOPEX5IR TRC Top Exception 5 Interrupt Rate
0x02A	0	16	U12	LHKEPU2TOPEX9IR TRC Top Exception 9 Interrupt Rate
0x02C	0	8	U1	LHKEPU2ANONTOP TRC Top EPU2 ANON Task CPU Fraction per Task/Exception
0x02D	0	8	U1	LHKEPU2LCMTOP TRC Top EPU2 LCM Task CPU Fraction per Task/Exception
0x02E	0	8	U1	LHKEPU2LFSTOP TRC Top EPU2 LFS Task CPU Fraction per Task/Exception
0x02F	0	8	U1	LHKEPU2LFSSTOP TRC Top EPU2 LFS_S Task CPU Fraction per Task/Exception
0x030	0	8	U1	LHKEPU2LHKMTOP TRC Top EPU2 LHK_M Task CPU Fraction per Task/Exception
0x031	0	8	U1	LHKEPU2LHKSTOP TRC Top EPU2 LHK_S Task CPU Fraction per Task/Exception
0x032	0	8	U1	LHKEPU2LIMTOP TRC Top EPU2 LIM Task CPU Fraction per Task/Exception
0x033	0	8	U1	LHKEPU2TID7TOP TRC Top EPU2 TID7 Task CPU Fraction per Task/Exception
0x034	0	8	U1	LHKEPU2LSMMTOP TRC Top EPU2 LSM_M Task CPU Fraction per Task/Exception
0x035	0	8	U1	LHKEPU2LSMSTOP TRC Top EPU2 LSM_S Task CPU Fraction per Task/Exception
0x036	0	8	U1	LHKEPU2LSWTOP TRC Top EPU2 LSW Task CPU Fraction per Task/Exception
0x037	0	8	U1	LHKEPU2TID11TOP TRC Top EPU2 TID11 Task CPU Fraction per Task/Exception
0x038	0	8	U1	LHKEPU2LCITOP TRC Top EPU2 LCI Task CPU Fraction per Task/Exception
0x039	0	8	U1	LHKEPU2TID13TOP TRC Top EPU2 TID13 Task CPU Fraction per Task/Exception
0x03A	0	8	U1	LHKEPU2LMCTOP TRC Top EPU2 LMC Task CPU Fraction per Task/Exception
0x03B	0	8	U1	LHKEPU2LPAMTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU2 LPA_M Task CPU Fraction per Task/Exception
0x03C	0	8	U1	LHKEPU2LPASTOP
				TRC Top EPU2 LPA_S Task CPU Fraction per Task/Exception
0x03D	0	8	U1	LHKEPU2LRATOP
				TRC Top EPU2 LRA Task CPU Fraction per Task/Exception
0x03E	0	8	U1	LHKEPU2LTCTOP
				TRC Top EPU2 LTC Task CPU Fraction per Task/Exception
0x03F	0	8	U1	LHKEPU2GRBTOP
				TRC Top EPU2 GRB Task CPU Fraction per Task/Exception
0x040	0	8	U1	LHKEPU2LIHTOP
				TRC Top EPU2 LIH Task CPU Fraction per Task/Exception
0x041	0	8	U1	LHKEPU2TID21TOP
				TRC Top EPU2 TID21 Task CPU Fraction per Task/Exception
0x042	0	8	U1	LHKEPU2CRXCTOP
				TRC Top EPU2 CRXC Task CPU Fraction per Task/Exception
0x043	0	8	U1	LHKEPU2TID23TOP
				TRC Top EPU2 TID23 Task CPU Fraction per Task/Exception
0x044	0	8	U1	LHKEPU2LTX1TOP
				TRC Top EPU2 LTX1 Task CPU Fraction per Task/Exception
0x045	0	8	U1	LHKEPU2LTX0TOP
				TRC Top EPU2 LTX0 Task CPU Fraction per Task/Exception
0x046	0	8	U1	LHKEPU2LRXRTOP
				TRC Top EPU2 LRXR Task CPU Fraction per Task/Exception
0x047	0	8	U1	LHKEPU2LRXETOP
				TRC Top EPU2 LRXE Task CPU Fraction per Task/Exception
0x048	0	8	U1	LHKEPU2LRXNTOP
				TRC Top EPU2 LRXN Task CPU Fraction per Task/Exception
0x049	0	8	U1	LHKEPU2CTXTOP
				TRC Top EPU2 CTX Task CPU Fraction per Task/Exception
0x04A	0	8	U1	LHKEPU2STXTOP
				TRC Top EPU2 STX Task CPU Fraction per Task/Exception
0x04B	0	8	U1	LHKEPU2TID31TOP
				TRC Top EPU2 TID31 Task CPU Fraction per Task/Exception
0x04C	0	8	U1	LHKEPU2TID32TOP
				TRC Top EPU2 TID32 Task CPU Fraction per Task/Exception
0x04D	0	8	U1	LHKEPU2MSGTOP
				TRC Top EPU2 MSG Task CPU Fraction per Task/Exception
0x04E	0	8	U1	LHKEPU2POLLTOP
				TRC Top EPU2 POLL Task CPU Fraction per Task/Exception
0x04F	0	8	U1	LHKEPU2IDLETOP
				TRC Top EPU2 IDLE Task CPU Fraction per Task/Exception
0x050	0	8	U1	LHKEPU2LHKCTOP
				TRC Top EPU2 LHKC Task CPU Fraction per Task/Exception
0x051	0	8	U1	LHKEPU2EFCTOP
				TRC Top EPU2 EFC Task CPU Fraction per Task/Exception
0x052	0	8	U1	LHKEPU2EMPTOP
				TRC Top EPU2 EMP Task CPU Fraction per Task/Exception
0x053	0	8	U1	LHKEPU2LCMSTOP
				TRC Top EPU2 LCM_S Task CPU Fraction per Task/Exception
0x054	0	8	U1	LHKEPU2CTDBTOP
				TRC Top EPU2 CTDB Task CPU Fraction per Task/Exception
0x055	0	8	U1	LHKEPU2LCBTOP

Offset	S	L	Type	ITOS name, attribute(s), and description
				TRC Top EPU2 LCB Task CPU Fraction per Task/Exception
0x056	0	8	U1	LHKEPU2TID42TOP TRC Top EPU2 TID42 Task CPU Fraction per Task/Exception
0x057	0	8	U1	LHKEPU2TID43TOP TRC Top EPU2 TID43 Task CPU Fraction per Task/Exception
0x058	0	8	U1	LHKEPU2TID44TOP TRC Top EPU2 TID44 Task CPU Fraction per Task/Exception
0x059	0	8	U1	LHKEPU2ROOTTTOP TRC Top EPU2 ROOT_T Task CPU Fraction per Task/Exception
0x05A	0	8	U1	LHKEPU2LOGTTOP TRC Top EPU2 LOG_T Task CPU Fraction per Task/Exception
0x05B	0	8	U1	LHKEPU2EXCTTOP TRC Top EPU2 EXCT Task CPU Fraction per Task/Exception
0x05C	0	8	U1	LHKEPU2UNDFTOP TRC Top EPU2 UNDF Task CPU Fraction per Task/Exception
0x05D	0	8	U1	LHKEPU2EXC5TOP TRC Top EPU2 EXC5 Task CPU Fraction per Task/Exception
0x05E	0	8	U1	LHKEPU2EXC9TOP TRC Top EPU2 EXC9 Task CPU Fraction per Task/Exception
0x05F	0	8	U1	LHKEPU2TID51TOP TRC Top EPU2 TID51 Task CPU Fraction per Task/Exception
0x060	0	8	U1	LHKEPU2TID52TOP TRC Top EPU2 TID52 Task CPU Fraction per Task/Exception
0x061	0	8	U1	LHKEPU2TID53TOP TRC Top EPU2 TID53 Task CPU Fraction per Task/Exception
0x062	0	8	U1	LHKEPU2TID54TOP TRC Top EPU2 TID54 Task CPU Fraction per Task/Exception
0x063	0	8	U1	LHKEPU2TID55TOP TRC Top EPU2 TID55 Task CPU Fraction per Task/Exception
0x064	0	8	U1	LHKEPU2TID56TOP TRC Top EPU2 TID56 Task CPU Fraction per Task/Exception
0x065	0	8	U1	LHKEPU2TID57TOP TRC Top EPU2 TID57 Task CPU Fraction per Task/Exception
0x066	0	8	U1	LHKEPU2TID58TOP TRC Top EPU2 TID58 Task CPU Fraction per Task/Exception
0x067	0	8	U1	LHKEPU2TID59TOP TRC Top EPU2 TID59 Task CPU Fraction per Task/Exception
0x068	0	8	U1	LHKEPU2TID60TOP TRC Top EPU2 TID60 Task CPU Fraction per Task/Exception
0x069	0	8	U1	LHKEPU2TID61TOP TRC Top EPU2 TID61 Task CPU Fraction per Task/Exception
0x06A	0	8	U1	LHKEPU2TID62TOP TRC Top EPU2 TID62 Task CPU Fraction per Task/Exception
0x06B	0	8	U1	LHKEPU2TID63TOP TRC Top EPU2 TID63 Task CPU Fraction per Task/Exception
0x06C	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x06E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x070	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x072	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 16 bit field

14.3.102 `DiagTemEnvPwr00` (664/0x298)

Description:

"Diagnostic TEM power ADCs for TEMs 0-3" Telemetry Packet

Diagnostic TEM power ADCs for TEMs 0-3

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR00 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT0TKR25VDLM; LHKADCLMTSTATES TEM 0 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VDST TEM 0 TKR digital 2.5 V - read out status
	4	12	U12	LHKT0TKR25VD TEM 0 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT0TKR15VAALM; LHKADCLMTSTATES TEM 0 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT0TKR15VAAST TEM 0 TKR analog 1.5 V - read out status
	4	12	U12	LHKT0TKR15VAA TEM 0 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT0TKR25VABLM; LHKADCLMTSTATES TEM 0 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT0TKR25VABST TEM 0 TKR analog 2.5 V - read out status
	4	12	U12	LHKT0TKR25VAB TEM 0 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT0TKRBV0LM; LHKADCLMTSTATES TEM 0 TKR bias V0 - limit evaluation
	3	1	U12	LHKT0TKRBV0ST TEM 0 TKR bias V0 - read out status
	4	12	U12	LHKT0TKRBV0 TEM 0 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT0CAL33VDLM; LHKADCLMTSTATES TEM 0 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VDST TEM 0 CAL digital 3.3 V - read out status
	4	12	U12	LHKT0CAL33VD TEM 0 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT0TKRBV1LM; LHKADCLMTSTATES TEM 0 TKR bias V1 - limit evaluation
	3	1	U12	LHKT0TKRBV1ST TEM 0 TKR bias V1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT0TKRBV1 TEM 0 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT0CAL33VALM; LHKADCLMTSTATES TEM 0 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT0CAL33VAST TEM 0 CAL analog 3.3 V - read out status
	4	12	U12	LHKT0CAL33VA TEM 0 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT0CALBSV1LM; LHKADCLMTSTATES TEM 0 CAL bias V1 - limit evaluation
	3	1	U12	LHKT0CALBSV1ST TEM 0 CAL bias V1 - read out status
	4	12	U12	LHKT0CALBSV1 TEM 0 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT0CALBSV0LM; LHKADCLMTSTATES TEM 0 CAL bias V0 - limit evaluation
	3	1	U12	LHKT0CALBSV0ST TEM 0 CAL bias V0 - read out status
	4	12	U12	LHKT0CALBSV0 TEM 0 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT0TEM28V0LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT0TEM28V0ST TEM 0 TEM 28 V (V0) - read out status
	4	12	U12	LHKT0TEM28V0 TEM 0 TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKT0TEM33VLM; LHKADCLMTSTATES TEM 0 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT0TEM33VST TEM 0 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT0TEM33V TEM 0 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT0TEM28V1LM; LHKADCLMTSTATES TEM 0 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT0TEM28V1ST TEM 0 TEM 28 V (V1) - read out status
	4	12	U12	LHKT0TEM28V1 TEM 0 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT1TKR25VDLM; LHKADCLMTSTATES TEM 1 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT1TKR25VDST TEM 1 TKR digital 2.5 V - read out status
	4	12	U12	LHKT1TKR25VD TEM 1 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT1TKR15VAALM; LHKADCLMTSTATES TEM 1 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT1TKR15VAAST TEM 1 TKR analog 1.5 V - read out status
	4	12	U12	LHKT1TKR15VAA TEM 1 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT1TKR25VABLM; LHKADCLMTSTATES TEM 1 TKR analog 2.5 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT1TKR25VABST TEM 1 TKR analog 2.5 V - read out status
	4	12	U12	LHKT1TKR25VAB TEM 1 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT1TKRBV0LM; LHKADCLMTSTATES TEM 1 TKR bias V0 - limit evaluation
	3	1	U12	LHKT1TKRBV0ST TEM 1 TKR bias V0 - read out status
	4	12	U12	LHKT1TKRBV0 TEM 1 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT1CAL33VDLM; LHKADCLMTSTATES TEM 1 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VDST TEM 1 CAL digital 3.3 V - read out status
	4	12	U12	LHKT1CAL33VD TEM 1 CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKT1TKRBV1LM; LHKADCLMTSTATES TEM 1 TKR bias V1 - limit evaluation
	3	1	U12	LHKT1TKRBV1ST TEM 1 TKR bias V1 - read out status
	4	12	U12	LHKT1TKRBV1 TEM 1 TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKT1CAL33VALM; LHKADCLMTSTATES TEM 1 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT1CAL33VAST TEM 1 CAL analog 3.3 V - read out status
	4	12	U12	LHKT1CAL33VA TEM 1 CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKT1CALBSV1LM TEM 1 CAL bias V1 - limit evaluation
	3	1	U12	LHKT1CALBSV1ST TEM 1 CAL bias V1 - read out status
	4	12	U12	LHKT1CALBSV1 TEM 1 CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKT1CALBSV0LM TEM 1 CAL bias V0 - limit evaluation
	3	1	U12	LHKT1CALBSV0ST TEM 1 CAL bias V0 - read out status
	4	12	U12	LHKT1CALBSV0 TEM 1 CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKT1TEM28V0LM TEM 1 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT1TEM28V0ST TEM 1 TEM 28 V (V0) - read out status
	4	12	U12	LHKT1TEM28V0 TEM 1 TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKT1TEM33VLM; LHKADCLMTSTATES TEM 1 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT1TEM33VST TEM 1 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT1TEM33V TEM 1 TEM digitial 3.3 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x042	0	3	U12	LHKT1TEM28V1LM; LHKADCLMTSTATES TEM 1 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT1TEM28V1ST TEM 1 TEM 28 V (V1) - read out status
	4	12	U12	LHKT1TEM28V1 TEM 1 TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKT2TKR25VDLM; LHKADCLMTSTATES TEM 2 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VDST TEM 2 TKR digital 2.5 V - read out status
	4	12	U12	LHKT2TKR25VD TEM 2 TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKT2TKR15VAALM; LHKADCLMTSTATES TEM 2 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT2TKR15VAAST TEM 2 TKR analog 1.5 V - read out status
	4	12	U12	LHKT2TKR15VAA TEM 2 TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKT2TKR25VABLM; LHKADCLMTSTATES TEM 2 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT2TKR25VABST TEM 2 TKR analog 2.5 V - read out status
	4	12	U12	LHKT2TKR25VAB TEM 2 TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKT2TKRBV0LM; LHKADCLMTSTATES TEM 2 TKR bias V0 - limit evaluation
	3	1	U12	LHKT2TKRBV0ST TEM 2 TKR bias V0 - read out status
	4	12	U12	LHKT2TKRBV0 TEM 2 TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKT2CAL33VDLM; LHKADCLMTSTATES TEM 2 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VDST TEM 2 CAL digital 3.3 V - read out status
	4	12	U12	LHKT2CAL33VD TEM 2 CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKT2TKRBV1LM; LHKADCLMTSTATES TEM 2 TKR bias V1 - limit evaluation
	3	1	U12	LHKT2TKRBV1ST TEM 2 TKR bias V1 - read out status
	4	12	U12	LHKT2TKRBV1 TEM 2 TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKT2CAL33VALM; LHKADCLMTSTATES TEM 2 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT2CAL33VAST TEM 2 CAL analog 3.3 V - read out status
	4	12	U12	LHKT2CAL33VA TEM 2 CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKT2CALBSV1LM; LHKADCLMTSTATES TEM 2 CAL bias V1 - limit evaluation
	3	1	U12	LHKT2CALBSV1ST TEM 2 CAL bias V1 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKT2CALBSV1 TEM 2 CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKT2CALBSV0LM; LHKADCLMTSTATES TEM 2 CAL bias V0 - limit evaluation
	3	1	U12	LHKT2CALBSV0ST TEM 2 CAL bias V0 - read out status
	4	12	U12	LHKT2CALBSV0 TEM 2 CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKT2TEM28V0LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT2TEM28V0ST TEM 2 TEM 28 V (V0) - read out status
	4	12	U12	LHKT2TEM28V0 TEM 2 TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKT2TEM33VLM; LHKADCLMTSTATES TEM 2 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT2TEM33VST TEM 2 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT2TEM33V TEM 2 TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKT2TEM28V1LM; LHKADCLMTSTATES TEM 2 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT2TEM28V1ST TEM 2 TEM 28 V (V1) - read out status
	4	12	U12	LHKT2TEM28V1 TEM 2 TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKT3TKR25VDLM TEM 3 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VDST TEM 3 TKR digital 2.5 V - read out status
	4	12	U12	LHKT3TKR25VD TEM 3 TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKT3TKR15VAALM TEM 3 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT3TKR15VAAST TEM 3 TKR analog 1.5 V - read out status
	4	12	U12	LHKT3TKR15VAA TEM 3 TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKT3TKR25VABLM; LHKADCLMTSTATES TEM 3 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT3TKR25VABST TEM 3 TKR analog 2.5 V - read out status
	4	12	U12	LHKT3TKR25VAB TEM 3 TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKT3TKRBV0LM; LHKADCLMTSTATES TEM 3 TKR bias V0 - limit evaluation
	3	1	U12	LHKT3TKRBV0ST TEM 3 TKR bias V0 - read out status
	4	12	U12	LHKT3TKRBV0 TEM 3 TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKT3CAL33VDLM; LHKADCLMTSTATES TEM 3 CAL digital 3.3 V - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKT3CAL33VDST TEM 3 CAL digital 3.3 V - read out status
	4	12	U12	LHKT3CAL33VD TEM 3 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT3TKRBV1LM; LHKADCLMTSTATES TEM 3 TKR bias V1 - limit evaluation
	3	1	U12	LHKT3TKRBV1ST TEM 3 TKR bias V1 - read out status
	4	12	U12	LHKT3TKRBV1 TEM 3 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT3CAL33VALM; LHKADCLMTSTATES TEM 3 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT3CAL33VAST TEM 3 CAL analog 3.3 V - read out status
	4	12	U12	LHKT3CAL33VA TEM 3 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT3CALBSV1LM TEM 3 CAL bias V1 - limit evaluation
	3	1	U12	LHKT3CALBSV1ST TEM 3 CAL bias V1 - read out status
	4	12	U12	LHKT3CALBSV1 TEM 3 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT3CALBSV0LM TEM 3 CAL bias V0 - limit evaluation
	3	1	U12	LHKT3CALBSV0ST TEM 3 CAL bias V0 - read out status
	4	12	U12	LHKT3CALBSV0 TEM 3 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT3TEM28V0LM TEM 3 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT3TEM28V0ST TEM 3 TEM 28 V (V0) - read out status
	4	12	U12	LHKT3TEM28V0 TEM 3 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT3TEM33VLM; LHKADCLMTSTATES TEM 3 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT3TEM33VST TEM 3 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT3TEM33V TEM 3 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT3TEM28V1LM; LHKADCLMTSTATES TEM 3 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT3TEM28V1ST TEM 3 TEM 28 V (V1) - read out status
	4	12	U12	LHKT3TEM28V1 TEM 3 TEM 28 V (V1) - raw ADC value

14.3.103 `DiagTemEnvPwr01` (665/0x299)

Description:

"Diagnostic TEM power ADCs for TEMs 4-7" Telemetry Packet

Diagnostic TEM power ADCs for TEMs 4-7

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR01 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT4TKR25VDLM; LHKADCLMTSTATES TEM 4 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VDST TEM 4 TKR digital 2.5 V - read out status
	4	12	U12	LHKT4TKR25VD TEM 4 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT4TKR15VAALM; LHKADCLMTSTATES TEM 4 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT4TKR15VAAST TEM 4 TKR analog 1.5 V - read out status
	4	12	U12	LHKT4TKR15VAA TEM 4 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT4TKR25VABLM; LHKADCLMTSTATES TEM 4 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT4TKR25VABST TEM 4 TKR analog 2.5 V - read out status
	4	12	U12	LHKT4TKR25VAB TEM 4 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT4TKRBV0LM TEM 4 TKR bias V0 - limit evaluation
	3	1	U12	LHKT4TKRBV0ST TEM 4 TKR bias V0 - read out status
	4	12	U12	LHKT4TKRBV0 TEM 4 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT4CAL33VDLM TEM 4 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VDST TEM 4 CAL digital 3.3 V - read out status
	4	12	U12	LHKT4CAL33VD TEM 4 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT4TKRBV1LM TEM 4 TKR bias V1 - limit evaluation
	3	1	U12	LHKT4TKRBV1ST TEM 4 TKR bias V1 - read out status
	4	12	U12	LHKT4TKRBV1 TEM 4 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT4CAL33VALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 4 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT4CAL33VAST
				TEM 4 CAL analog 3.3 V - read out status
	4	12	U12	LHKT4CAL33VA
				TEM 4 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT4CALBSV1LM; LHKADCLMTSTATES
				TEM 4 CAL bias V1 - limit evaluation
	3	1	U12	LHKT4CALBSV1ST
				TEM 4 CAL bias V1 - read out status
	4	12	U12	LHKT4CALBSV1
				TEM 4 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT4CALBSV0LM; LHKADCLMTSTATES
				TEM 4 CAL bias V0 - limit evaluation
	3	1	U12	LHKT4CALBSV0ST
				TEM 4 CAL bias V0 - read out status
	4	12	U12	LHKT4CALBSV0
				TEM 4 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT4TEM28V0LM; LHKADCLMTSTATES
				TEM 4 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT4TEM28V0ST
				TEM 4 TEM 28 V (V0) - read out status
	4	12	U12	LHKT4TEM28V0
				TEM 4 TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKT4TEM33VLM; LHKADCLMTSTATES
				TEM 4 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT4TEM33VST
				TEM 4 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT4TEM33V
				TEM 4 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT4TEM28V1LM
				TEM 4 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT4TEM28V1ST
				TEM 4 TEM 28 V (V1) - read out status
	4	12	U12	LHKT4TEM28V1
				TEM 4 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT5TKR25VDLM
				TEM 5 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VDST
				TEM 5 TKR digital 2.5 V - read out status
	4	12	U12	LHKT5TKR25VD
				TEM 5 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT5TKR15VAALM
				TEM 5 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT5TKR15VAAST
				TEM 5 TKR analog 1.5 V - read out status
	4	12	U12	LHKT5TKR15VAA
				TEM 5 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT5TKR25VABLM; LHKADCLMTSTATES
				TEM 5 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT5TKR25VABST
				TEM 5 TKR analog 2.5 V - read out status
	4	12	U12	LHKT5TKR25VAB

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 5 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT5TKRBV0LM; LHKADCLMTSTATES TEM 5 TKR bias V0 - limit evaluation
	3	1	U12	LHKT5TKRBV0ST TEM 5 TKR bias V0 - read out status
	4	12	U12	LHKT5TKRBV0 TEM 5 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT5CAL33VDLM; LHKADCLMTSTATES TEM 5 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VDST TEM 5 CAL digital 3.3 V - read out status
	4	12	U12	LHKT5CAL33VD TEM 5 CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKT5TKRBV1LM; LHKADCLMTSTATES TEM 5 TKR bias V1 - limit evaluation
	3	1	U12	LHKT5TKRBV1ST TEM 5 TKR bias V1 - read out status
	4	12	U12	LHKT5TKRBV1 TEM 5 TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKT5CAL33VALM; LHKADCLMTSTATES TEM 5 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT5CAL33VAST TEM 5 CAL analog 3.3 V - read out status
	4	12	U12	LHKT5CAL33VA TEM 5 CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKT5CALBSV1LM TEM 5 CAL bias V1 - limit evaluation
	3	1	U12	LHKT5CALBSV1ST TEM 5 CAL bias V1 - read out status
	4	12	U12	LHKT5CALBSV1 TEM 5 CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKT5CALBSV0LM TEM 5 CAL bias V0 - limit evaluation
	3	1	U12	LHKT5CALBSV0ST TEM 5 CAL bias V0 - read out status
	4	12	U12	LHKT5CALBSV0 TEM 5 CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKT5TEM28V0LM TEM 5 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT5TEM28V0ST TEM 5 TEM 28 V (V0) - read out status
	4	12	U12	LHKT5TEM28V0 TEM 5 TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKT5TEM33VLM; LHKADCLMTSTATES TEM 5 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT5TEM33VST TEM 5 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT5TEM33V TEM 5 TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKT5TEM28V1LM; LHKADCLMTSTATES TEM 5 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT5TEM28V1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 5 TEM 28 V (V1) - read out status
	4	12	U12	LHKT5TEM28V1
				TEM 5 TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKT6TKR25VDLM; LHKADCLMTSTATES
				TEM 6 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VDST
				TEM 6 TKR digital 2.5 V - read out status
	4	12	U12	LHKT6TKR25VD
				TEM 6 TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKT6TKR15VAALM; LHKADCLMTSTATES
				TEM 6 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT6TKR15VAAST
				TEM 6 TKR analog 1.5 V - read out status
	4	12	U12	LHKT6TKR15VAA
				TEM 6 TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKT6TKR25VABLM; LHKADCLMTSTATES
				TEM 6 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT6TKR25VABST
				TEM 6 TKR analog 2.5 V - read out status
	4	12	U12	LHKT6TKR25VAB
				TEM 6 TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKT6TKRBV0LM
				TEM 6 TKR bias V0 - limit evaluation
	3	1	U12	LHKT6TKRBV0ST
				TEM 6 TKR bias V0 - read out status
	4	12	U12	LHKT6TKRBV0
				TEM 6 TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKT6CAL33VDLM
				TEM 6 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VDST
				TEM 6 CAL digital 3.3 V - read out status
	4	12	U12	LHKT6CAL33VD
				TEM 6 CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKT6TKRBV1LM
				TEM 6 TKR bias V1 - limit evaluation
	3	1	U12	LHKT6TKRBV1ST
				TEM 6 TKR bias V1 - read out status
	4	12	U12	LHKT6TKRBV1
				TEM 6 TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKT6CAL33VALM; LHKADCLMTSTATES
				TEM 6 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT6CAL33VAST
				TEM 6 CAL analog 3.3 V - read out status
	4	12	U12	LHKT6CAL33VA
				TEM 6 CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKT6CALBSV1LM; LHKADCLMTSTATES
				TEM 6 CAL bias V1 - limit evaluation
	3	1	U12	LHKT6CALBSV1ST
				TEM 6 CAL bias V1 - read out status
	4	12	U12	LHKT6CALBSV1
				TEM 6 CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKT6CALBSV0LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 6 CAL bias V0 - limit evaluation
	3	1	U12	LHKT6CALBSV0ST
				TEM 6 CAL bias V0 - read out status
	4	12	U12	LHKT6CALBSV0
				TEM 6 CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKT6TEM28V0LM; LHKADCLMTSTATES
				TEM 6 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT6TEM28V0ST
				TEM 6 TEM 28 V (V0) - read out status
	4	12	U12	LHKT6TEM28V0
				TEM 6 TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKT6TEM33VLM; LHKADCLMTSTATES
				TEM 6 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT6TEM33VST
				TEM 6 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT6TEM33V
				TEM 6 TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKT6TEM28V1LM
				TEM 6 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT6TEM28V1ST
				TEM 6 TEM 28 V (V1) - read out status
	4	12	U12	LHKT6TEM28V1
				TEM 6 TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKT7TKR25VDLM
				TEM 7 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VDST
				TEM 7 TKR digital 2.5 V - read out status
	4	12	U12	LHKT7TKR25VD
				TEM 7 TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKT7TKR15VAALM
				TEM 7 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT7TKR15VAAST
				TEM 7 TKR analog 1.5 V - read out status
	4	12	U12	LHKT7TKR15VAA
				TEM 7 TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKT7TKR25VABLM; LHKADCLMTSTATES
				TEM 7 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT7TKR25VABST
				TEM 7 TKR analog 2.5 V - read out status
	4	12	U12	LHKT7TKR25VAB
				TEM 7 TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKT7TKRBV0LM; LHKADCLMTSTATES
				TEM 7 TKR bias V0 - limit evaluation
	3	1	U12	LHKT7TKRBV0ST
				TEM 7 TKR bias V0 - read out status
	4	12	U12	LHKT7TKRBV0
				TEM 7 TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKT7CAL33VDLM; LHKADCLMTSTATES
				TEM 7 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VDST
				TEM 7 CAL digital 3.3 V - read out status
	4	12	U12	LHKT7CAL33VD

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 7 CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKT7TKRBV1LM; LHKADCLMTSTATES TEM 7 TKR bias V1 - limit evaluation
	3	1	U12	LHKT7TKRBV1ST TEM 7 TKR bias V1 - read out status
	4	12	U12	LHKT7TKRBV1 TEM 7 TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKT7CAL33VALM; LHKADCLMTSTATES TEM 7 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT7CAL33VAST TEM 7 CAL analog 3.3 V - read out status
	4	12	U12	LHKT7CAL33VA TEM 7 CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKT7CALBSV1LM TEM 7 CAL bias V1 - limit evaluation
	3	1	U12	LHKT7CALBSV1ST TEM 7 CAL bias V1 - read out status
	4	12	U12	LHKT7CALBSV1 TEM 7 CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKT7CALBSV0LM TEM 7 CAL bias V0 - limit evaluation
	3	1	U12	LHKT7CALBSV0ST TEM 7 CAL bias V0 - read out status
	4	12	U12	LHKT7CALBSV0 TEM 7 CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKT7TEM28V0LM TEM 7 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT7TEM28V0ST TEM 7 TEM 28 V (V0) - read out status
	4	12	U12	LHKT7TEM28V0 TEM 7 TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKT7TEM33VLM; LHKADCLMTSTATES TEM 7 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT7TEM33VST TEM 7 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT7TEM33V TEM 7 TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKT7TEM28V1LM; LHKADCLMTSTATES TEM 7 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT7TEM28V1ST TEM 7 TEM 28 V (V1) - read out status
	4	12	U12	LHKT7TEM28V1 TEM 7 TEM 28 V (V1) - raw ADC value

14.3.104 `DiagTemEnvPwr02` (666/0x29A)

Description:

"Diagnostic TEM power ADCs for TEMs 8-11" Telemetry Packet

Diagnostic TEM power ADCs for TEMs 8-11

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR02 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x014	0	3	U12	LHKT8TKR25VDLM; LHKADCLMTSTATES TEM 8 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VDST TEM 8 TKR digital 2.5 V - read out status
	4	12	U12	LHKT8TKR25VD TEM 8 TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKT8TKR15VAALM; LHKADCLMTSTATES TEM 8 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT8TKR15VAAST TEM 8 TKR analog 1.5 V - read out status
	4	12	U12	LHKT8TKR15VAA TEM 8 TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKT8TKR25VABLM; LHKADCLMTSTATES TEM 8 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT8TKR25VABST TEM 8 TKR analog 2.5 V - read out status
	4	12	U12	LHKT8TKR25VAB TEM 8 TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKT8TKRBV0LM TEM 8 TKR bias V0 - limit evaluation
	3	1	U12	LHKT8TKRBV0ST TEM 8 TKR bias V0 - read out status
	4	12	U12	LHKT8TKRBV0 TEM 8 TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKT8CAL33VDLM TEM 8 CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VDST TEM 8 CAL digital 3.3 V - read out status
	4	12	U12	LHKT8CAL33VD TEM 8 CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKT8TKRBV1LM TEM 8 TKR bias V1 - limit evaluation
	3	1	U12	LHKT8TKRBV1ST TEM 8 TKR bias V1 - read out status
	4	12	U12	LHKT8TKRBV1 TEM 8 TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKT8CAL33VALM; LHKADCLMTSTATES TEM 8 CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKT8CAL33VAST TEM 8 CAL analog 3.3 V - read out status
	4	12	U12	LHKT8CAL33VA TEM 8 CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKT8CALBSV1LM; LHKADCLMTSTATES TEM 8 CAL bias V1 - limit evaluation
	3	1	U12	LHKT8CALBSV1ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 8 CAL bias V1 - read out status
	4	12	U12	LHKT8CALBSV1
				TEM 8 CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKT8CALBSV0LM; LHKADCLMTSTATES
				TEM 8 CAL bias V0 - limit evaluation
	3	1	U12	LHKT8CALBSV0ST
				TEM 8 CAL bias V0 - read out status
	4	12	U12	LHKT8CALBSV0
				TEM 8 CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKT8TEM28V0LM; LHKADCLMTSTATES
				TEM 8 TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKT8TEM28V0ST
				TEM 8 TEM 28 V (V0) - read out status
	4	12	U12	LHKT8TEM28V0
				TEM 8 TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKT8TEM33VLM; LHKADCLMTSTATES
				TEM 8 TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKT8TEM33VST
				TEM 8 TEM digitial 3.3 V - read out status
	4	12	U12	LHKT8TEM33V
				TEM 8 TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKT8TEM28V1LM
				TEM 8 TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKT8TEM28V1ST
				TEM 8 TEM 28 V (V1) - read out status
	4	12	U12	LHKT8TEM28V1
				TEM 8 TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKT9TKR25VDLM
				TEM 9 TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VDST
				TEM 9 TKR digital 2.5 V - read out status
	4	12	U12	LHKT9TKR25VD
				TEM 9 TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKT9TKR15VAALM
				TEM 9 TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKT9TKR15VAAST
				TEM 9 TKR analog 1.5 V - read out status
	4	12	U12	LHKT9TKR15VAA
				TEM 9 TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKT9TKR25VABLM; LHKADCLMTSTATES
				TEM 9 TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKT9TKR25VABST
				TEM 9 TKR analog 2.5 V - read out status
	4	12	U12	LHKT9TKR25VAB
				TEM 9 TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKT9TKRBV0LM; LHKADCLMTSTATES
				TEM 9 TKR bias V0 - limit evaluation
	3	1	U12	LHKT9TKRBV0ST
				TEM 9 TKR bias V0 - read out status
	4	12	U12	LHKT9TKRBV0
				TEM 9 TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKT9CAL33VDLM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM 9 CAL digital 3.3 V - limit evaluation
	3	1	`U12`	`LHKT9CAL33VDST`
				TEM 9 CAL digital 3.3 V - read out status
	4	12	`U12`	`LHKT9CAL33VD`
				TEM 9 CAL digital 3.3 V - raw ADC value
`0x036`	0	3	`U12`	`LHKT9TKRBV1LM; LHKADCLMTSTATES`
				TEM 9 TKR bias V1 - limit evaluation
	3	1	`U12`	`LHKT9TKRBV1ST`
				TEM 9 TKR bias V1 - read out status
	4	12	`U12`	`LHKT9TKRBV1`
				TEM 9 TKR bias V1 - raw ADC value
`0x038`	0	3	`U12`	`LHKT9CAL33VALM; LHKADCLMTSTATES`
				TEM 9 CAL analog 3.3 V - limit evaluation
	3	1	`U12`	`LHKT9CAL33VAST`
				TEM 9 CAL analog 3.3 V - read out status
	4	12	`U12`	`LHKT9CAL33VA`
				TEM 9 CAL analog 3.3 - raw ADC value
`0x03A`	0	3	`U12`	`LHKT9CALBSV1LM`
				TEM 9 CAL bias V1 - limit evaluation
	3	1	`U12`	`LHKT9CALBSV1ST`
				TEM 9 CAL bias V1 - read out status
	4	12	`U12`	`LHKT9CALBSV1`
				TEM 9 CAL bias V1 - raw ADC value
`0x03C`	0	3	`U12`	`LHKT9CALBSV0LM`
				TEM 9 CAL bias V0 - limit evaluation
	3	1	`U12`	`LHKT9CALBSV0ST`
				TEM 9 CAL bias V0 - read out status
	4	12	`U12`	`LHKT9CALBSV0`
				TEM 9 CAL bias V0 - raw ADC value
`0x03E`	0	3	`U12`	`LHKT9TEM28V0LM`
				TEM 9 TEM 28 V (V0) - limit evaluation
	3	1	`U12`	`LHKT9TEM28V0ST`
				TEM 9 TEM 28 V (V0) - read out status
	4	12	`U12`	`LHKT9TEM28V0`
				TEM 9 TEM 28 V (V0) - raw ADC value
`0x040`	0	3	`U12`	`LHKT9TEM33VLM; LHKADCLMTSTATES`
				TEM 9 TEM digitial 3.3 V - limit evaluation
	3	1	`U12`	`LHKT9TEM33VST`
				TEM 9 TEM digitial 3.3 V - read out status
	4	12	`U12`	`LHKT9TEM33V`
				TEM 9 TEM digitial 3.3 V - raw ADC value
`0x042`	0	3	`U12`	`LHKT9TEM28V1LM; LHKADCLMTSTATES`
				TEM 9 TEM 28 V (V1) - limit evaluation
	3	1	`U12`	`LHKT9TEM28V1ST`
				TEM 9 TEM 28 V (V1) - read out status
	4	12	`U12`	`LHKT9TEM28V1`
				TEM 9 TEM 28 V (V1) - raw ADC value
`0x044`	0	3	`U12`	`LHKTATKR25VDLM; LHKADCLMTSTATES`
				TEM A TKR digital 2.5 V - limit evaluation
	3	1	`U12`	`LHKTATKR25VDST`
				TEM A TKR digital 2.5 V - read out status
	4	12	`U12`	`LHKTATKR25VD`

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKTATKR15VAALM; LHKADCLMTSTATES TEM A TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTATKR15VAAST TEM A TKR analog 1.5 V - read out status
	4	12	U12	LHKTATKR15VAA TEM A TKR analog 1.5 V - raw ADC value
0x048	0	3	U12	LHKTATKR25VABLM; LHKADCLMTSTATES TEM A TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTATKR25VABST TEM A TKR analog 2.5 V - read out status
	4	12	U12	LHKTATKR25VAB TEM A TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKTATKRBV0LM TEM A TKR bias V0 - limit evaluation
	3	1	U12	LHKTATKRBV0ST TEM A TKR bias V0 - read out status
	4	12	U12	LHKTATKRBV0 TEM A TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKTACAL33VDLM TEM A CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VDST TEM A CAL digital 3.3 V - read out status
	4	12	U12	LHKTACAL33VD TEM A CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKTATKRBV1LM TEM A TKR bias V1 - limit evaluation
	3	1	U12	LHKTATKRBV1ST TEM A TKR bias V1 - read out status
	4	12	U12	LHKTATKRBV1 TEM A TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKTACAL33VALM; LHKADCLMTSTATES TEM A CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTACAL33VAST TEM A CAL analog 3.3 V - read out status
	4	12	U12	LHKTACAL33VA TEM A CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKTACALBSV1LM; LHKADCLMTSTATES TEM A CAL bias V1 - limit evaluation
	3	1	U12	LHKTACALBSV1ST TEM A CAL bias V1 - read out status
	4	12	U12	LHKTACALBSV1 TEM A CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKTACALBSV0LM; LHKADCLMTSTATES TEM A CAL bias V0 - limit evaluation
	3	1	U12	LHKTACALBSV0ST TEM A CAL bias V0 - read out status
	4	12	U12	LHKTACALBSV0 TEM A CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKTATEM28V0LM; LHKADCLMTSTATES TEM A TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTATEM28V0ST

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM A TEM 28 V (V0) - read out status
	4	12	U12	LHKTATEM28V0
				TEM A TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKTATEM33VLM; LHKADCLMTSTATES
				TEM A TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTATEM33VST
				TEM A TEM digitial 3.3 V - read out status
	4	12	U12	LHKTATEM33V
				TEM A TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKTATEM28V1LM
				TEM A TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTATEM28V1ST
				TEM A TEM 28 V (V1) - read out status
	4	12	U12	LHKTATEM28V1
				TEM A TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKTBTKR25VDLM
				TEM B TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VDST
				TEM B TKR digital 2.5 V - read out status
	4	12	U12	LHKTBTKR25VD
				TEM B TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKTBTKR15VAALM
				TEM B TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTBTKR15VAAST
				TEM B TKR analog 1.5 V - read out status
	4	12	U12	LHKTBTKR15VAA
				TEM B TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKTBTKR25VABLM; LHKADCLMTSTATES
				TEM B TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTBTKR25VABST
				TEM B TKR analog 2.5 V - read out status
	4	12	U12	LHKTBTKR25VAB
				TEM B TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKTBTKRBV0LM; LHKADCLMTSTATES
				TEM B TKR bias V0 - limit evaluation
	3	1	U12	LHKTBTKRBV0ST
				TEM B TKR bias V0 - read out status
	4	12	U12	LHKTBTKRBV0
				TEM B TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKTBCAL33VDLM; LHKADCLMTSTATES
				TEM B CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VDST
				TEM B CAL digital 3.3 V - read out status
	4	12	U12	LHKTBCAL33VD
				TEM B CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTBTKRBV1LM; LHKADCLMTSTATES
				TEM B TKR bias V1 - limit evaluation
	3	1	U12	LHKTBTKRBV1ST
				TEM B TKR bias V1 - read out status
	4	12	U12	LHKTBTKRBV1
				TEM B TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTBCAL33VALM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				TEM B CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTBCAL33VAST TEM B CAL analog 3.3 V - read out status
	4	12	U12	LHKTBCAL33VA TEM B CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTBCALBSV1LM TEM B CAL bias V1 - limit evaluation
	3	1	U12	LHKTBCALBSV1ST TEM B CAL bias V1 - read out status
	4	12	U12	LHKTBCALBSV1 TEM B CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTBCALBSV0LM TEM B CAL bias V0 - limit evaluation
	3	1	U12	LHKTBCALBSV0ST TEM B CAL bias V0 - read out status
	4	12	U12	LHKTBCALBSV0 TEM B CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTBTEM28V0LM TEM B TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTBTEM28V0ST TEM B TEM 28 V (V0) - read out status
	4	12	U12	LHKTBTEM28V0 TEM B TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTBTEM33VLM; LHKADCLMTSTATES TEM B TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTBTEM33VST TEM B TEM digitial 3.3 V - read out status
	4	12	U12	LHKTBTEM33V TEM B TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTBTEM28V1LM; LHKADCLMTSTATES TEM B TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTBTEM28V1ST TEM B TEM 28 V (V1) - read out status
	4	12	U12	LHKTBTEM28V1 TEM B TEM 28 V (V1) - raw ADC value

14.3.105 `DiagTemEnvPwr03` (667/0x29B)

Description:

"Diagnostic TEM power ADCs for TEMs 12-15" Telemetry Packet

Diagnostic TEM power ADCs for TEMs 12-15

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTWRPWR03 LHK reserved field
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	3	U12	LHKTCTKR25VDLM; LHKADCLMTSTATES TEM C TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VDST TEM C TKR digital 2.5 V - read out status
	4	12	U12	LHKTCTKR25VD TEM C TKR digital 2.5 V - raw ADC value
0x016	0	3	U12	LHKTCTKR15VAALM; LHKADCLMTSTATES TEM C TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTCTKR15VAAST TEM C TKR analog 1.5 V - read out status
	4	12	U12	LHKTCTKR15VAA TEM C TKR analog 1.5 V - raw ADC value
0x018	0	3	U12	LHKTCTKR25VABLM; LHKADCLMTSTATES TEM C TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTCTKR25VABST TEM C TKR analog 2.5 V - read out status
	4	12	U12	LHKTCTKR25VAB TEM C TKR analog 2.5 V - raw ADC value
0x01A	0	3	U12	LHKTCTKRBV0LM TEM C TKR bias V0 - limit evaluation
	3	1	U12	LHKTCTKRBV0ST TEM C TKR bias V0 - read out status
	4	12	U12	LHKTCTKRBV0 TEM C TKR bias V0 - raw ADC value
0x01C	0	3	U12	LHKTCCAL33VDLM TEM C CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VDST TEM C CAL digital 3.3 V - read out status
	4	12	U12	LHKTCCAL33VD TEM C CAL digital 3.3 V - raw ADC value
0x01E	0	3	U12	LHKTCTKRBV1LM TEM C TKR bias V1 - limit evaluation
	3	1	U12	LHKTCTKRBV1ST TEM C TKR bias V1 - read out status
	4	12	U12	LHKTCTKRBV1 TEM C TKR bias V1 - raw ADC value
0x020	0	3	U12	LHKTCCAL33VALM; LHKADCLMTSTATES TEM C CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTCCAL33VAST TEM C CAL analog 3.3 V - read out status
	4	12	U12	LHKTCCAL33VA TEM C CAL analog 3.3 - raw ADC value
0x022	0	3	U12	LHKTCCALBSV1LM; LHKADCLMTSTATES TEM C CAL bias V1 - limit evaluation
	3	1	U12	LHKTCCALBSV1ST TEM C CAL bias V1 - read out status
	4	12	U12	LHKTCCALBSV1 TEM C CAL bias V1 - raw ADC value
0x024	0	3	U12	LHKTCCALBSV0LM; LHKADCLMTSTATES TEM C CAL bias V0 - limit evaluation
	3	1	U12	LHKTCCALBSV0ST TEM C CAL bias V0 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTCCALBSV0 TEM C CAL bias V0 - raw ADC value
0x026	0	3	U12	LHKTCTEM28V0LM; LHKADCLMTSTATES TEM C TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTCTEM28V0ST TEM C TEM 28 V (V0) - read out status
	4	12	U12	LHKTCTEM28V0 TEM C TEM 28 V (V0) - raw ADC value
0x028	0	3	U12	LHKTCTEM33VLM; LHKADCLMTSTATES TEM C TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTCTEM33VST TEM C TEM digitial 3.3 V - read out status
	4	12	U12	LHKTCTEM33V TEM C TEM digitial 3.3 V - raw ADC value
0x02A	0	3	U12	LHKTCTEM28V1LM TEM C TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTCTEM28V1ST TEM C TEM 28 V (V1) - read out status
	4	12	U12	LHKTCTEM28V1 TEM C TEM 28 V (V1) - raw ADC value
0x02C	0	3	U12	LHKTDTKR25VDLM TEM D TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VDST TEM D TKR digital 2.5 V - read out status
	4	12	U12	LHKTDTKR25VD TEM D TKR digital 2.5 V - raw ADC value
0x02E	0	3	U12	LHKTDTKR15VAALM TEM D TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTDTKR15VAAST TEM D TKR analog 1.5 V - read out status
	4	12	U12	LHKTDTKR15VAA TEM D TKR analog 1.5 V - raw ADC value
0x030	0	3	U12	LHKTDTKR25VABLM; LHKADCLMTSTATES TEM D TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTDTKR25VABST TEM D TKR analog 2.5 V - read out status
	4	12	U12	LHKTDTKR25VAB TEM D TKR analog 2.5 V - raw ADC value
0x032	0	3	U12	LHKTDTKRBV0LM; LHKADCLMTSTATES TEM D TKR bias V0 - limit evaluation
	3	1	U12	LHKTDTKRBV0ST TEM D TKR bias V0 - read out status
	4	12	U12	LHKTDTKRBV0 TEM D TKR bias V0 - raw ADC value
0x034	0	3	U12	LHKTDCAL33VDLM; LHKADCLMTSTATES TEM D CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VDST TEM D CAL digital 3.3 V - read out status
	4	12	U12	LHKTDCAL33VD TEM D CAL digital 3.3 V - raw ADC value
0x036	0	3	U12	LHKTDTKRBV1LM; LHKADCLMTSTATES TEM D TKR bias V1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTDTKRBV1ST TEM D TKR bias V1 - read out status
	4	12	U12	LHKTDTKRBV1 TEM D TKR bias V1 - raw ADC value
0x038	0	3	U12	LHKTDCAL33VALM; LHKADCLMTSTATES TEM D CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTDCAL33VAST TEM D CAL analog 3.3 V - read out status
	4	12	U12	LHKTDCAL33VA TEM D CAL analog 3.3 - raw ADC value
0x03A	0	3	U12	LHKTDCALBSV1LM TEM D CAL bias V1 - limit evaluation
	3	1	U12	LHKTDCALBSV1ST TEM D CAL bias V1 - read out status
	4	12	U12	LHKTDCALBSV1 TEM D CAL bias V1 - raw ADC value
0x03C	0	3	U12	LHKTDCALBSV0LM TEM D CAL bias V0 - limit evaluation
	3	1	U12	LHKTDCALBSV0ST TEM D CAL bias V0 - read out status
	4	12	U12	LHKTDCALBSV0 TEM D CAL bias V0 - raw ADC value
0x03E	0	3	U12	LHKTDTEM28V0LM TEM D TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTDTEM28V0ST TEM D TEM 28 V (V0) - read out status
	4	12	U12	LHKTDTEM28V0 TEM D TEM 28 V (V0) - raw ADC value
0x040	0	3	U12	LHKTDTEM33VLM; LHKADCLMTSTATES TEM D TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTDTEM33VST TEM D TEM digitial 3.3 V - read out status
	4	12	U12	LHKTDTEM33V TEM D TEM digitial 3.3 V - raw ADC value
0x042	0	3	U12	LHKTDTEM28V1LM; LHKADCLMTSTATES TEM D TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTDTEM28V1ST TEM D TEM 28 V (V1) - read out status
	4	12	U12	LHKTDTEM28V1 TEM D TEM 28 V (V1) - raw ADC value
0x044	0	3	U12	LHKTETKR25VDLM; LHKADCLMTSTATES TEM E TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VDST TEM E TKR digital 2.5 V - read out status
	4	12	U12	LHKTETKR25VD TEM E TKR digital 2.5 V - raw ADC value
0x046	0	3	U12	LHKTETKR15VAALM; LHKADCLMTSTATES TEM E TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTETKR15VAAST TEM E TKR analog 1.5 V - read out status
	4	12	U12	LHKTETKR15VAA TEM E TKR analog 1.5 V - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	3	U12	LHKTETKR25VABLM; LHKADCLMTSTATES TEM E TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTETKR25VABST TEM E TKR analog 2.5 V - read out status
	4	12	U12	LHKTETKR25VAB TEM E TKR analog 2.5 V - raw ADC value
0x04A	0	3	U12	LHKTETKRBV0LM TEM E TKR bias V0 - limit evaluation
	3	1	U12	LHKTETKRBV0ST TEM E TKR bias V0 - read out status
	4	12	U12	LHKTETKRBV0 TEM E TKR bias V0 - raw ADC value
0x04C	0	3	U12	LHKTECAL33VDLM TEM E CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VDST TEM E CAL digital 3.3 V - read out status
	4	12	U12	LHKTECAL33VD TEM E CAL digital 3.3 V - raw ADC value
0x04E	0	3	U12	LHKTETKRBV1LM TEM E TKR bias V1 - limit evaluation
	3	1	U12	LHKTETKRBV1ST TEM E TKR bias V1 - read out status
	4	12	U12	LHKTETKRBV1 TEM E TKR bias V1 - raw ADC value
0x050	0	3	U12	LHKTECAL33VALM; LHKADCLMTSTATES TEM E CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTECAL33VAST TEM E CAL analog 3.3 V - read out status
	4	12	U12	LHKTECAL33VA TEM E CAL analog 3.3 - raw ADC value
0x052	0	3	U12	LHKTECALBSV1LM; LHKADCLMTSTATES TEM E CAL bias V1 - limit evaluation
	3	1	U12	LHKTECALBSV1ST TEM E CAL bias V1 - read out status
	4	12	U12	LHKTECALBSV1 TEM E CAL bias V1 - raw ADC value
0x054	0	3	U12	LHKTECALBSV0LM; LHKADCLMTSTATES TEM E CAL bias V0 - limit evaluation
	3	1	U12	LHKTECALBSV0ST TEM E CAL bias V0 - read out status
	4	12	U12	LHKTECALBSV0 TEM E CAL bias V0 - raw ADC value
0x056	0	3	U12	LHKTETEM28V0LM; LHKADCLMTSTATES TEM E TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTETEM28V0ST TEM E TEM 28 V (V0) - read out status
	4	12	U12	LHKTETEM28V0 TEM E TEM 28 V (V0) - raw ADC value
0x058	0	3	U12	LHKTETEM33VLM; LHKADCLMTSTATES TEM E TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTETEM33VST TEM E TEM digitial 3.3 V - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKTETEM33V TEM E TEM digitial 3.3 V - raw ADC value
0x05A	0	3	U12	LHKTETEM28V1LM TEM E TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTETEM28V1ST TEM E TEM 28 V (V1) - read out status
	4	12	U12	LHKTETEM28V1 TEM E TEM 28 V (V1) - raw ADC value
0x05C	0	3	U12	LHKTFTKR25VDLM TEM F TKR digital 2.5 V - limit evaluation
	3	1	U12	LHKTFTKR25VDST TEM F TKR digital 2.5 V - read out status
	4	12	U12	LHKTFTKR25VD TEM F TKR digital 2.5 V - raw ADC value
0x05E	0	3	U12	LHKTFTKR15VAALM TEM F TKR analog 1.5 V - limit evaluation
	3	1	U12	LHKTFTKR15VAAST TEM F TKR analog 1.5 V - read out status
	4	12	U12	LHKTFTKR15VAA TEM F TKR analog 1.5 V - raw ADC value
0x060	0	3	U12	LHKTFTKR25VABLM; LHKADCLMTSTATES TEM F TKR analog 2.5 V - limit evaluation
	3	1	U12	LHKTFTKR25VABST TEM F TKR analog 2.5 V - read out status
	4	12	U12	LHKTFTKR25VAB TEM F TKR analog 2.5 V - raw ADC value
0x062	0	3	U12	LHKTFTKRBV0LM; LHKADCLMTSTATES TEM F TKR bias V0 - limit evaluation
	3	1	U12	LHKTFTKRBV0ST TEM F TKR bias V0 - read out status
	4	12	U12	LHKTFTKRBV0 TEM F TKR bias V0 - raw ADC value
0x064	0	3	U12	LHKTFCAL33VDLM; LHKADCLMTSTATES TEM F CAL digital 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VDST TEM F CAL digital 3.3 V - read out status
	4	12	U12	LHKTFCAL33VD TEM F CAL digital 3.3 V - raw ADC value
0x066	0	3	U12	LHKTFTKRBV1LM; LHKADCLMTSTATES TEM F TKR bias V1 - limit evaluation
	3	1	U12	LHKTFTKRBV1ST TEM F TKR bias V1 - read out status
	4	12	U12	LHKTFTKRBV1 TEM F TKR bias V1 - raw ADC value
0x068	0	3	U12	LHKTFCAL33VALM; LHKADCLMTSTATES TEM F CAL analog 3.3 V - limit evaluation
	3	1	U12	LHKTFCAL33VAST TEM F CAL analog 3.3 V - read out status
	4	12	U12	LHKTFCAL33VA TEM F CAL analog 3.3 - raw ADC value
0x06A	0	3	U12	LHKTFCALBSV1LM TEM F CAL bias V1 - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKTFCALBSV1ST TEM F CAL bias V1 - read out status
	4	12	U12	LHKTFCALBSV1 TEM F CAL bias V1 - raw ADC value
0x06C	0	3	U12	LHKTFCALBSV0LM TEM F CAL bias V0 - limit evaluation
	3	1	U12	LHKTFCALBSV0ST TEM F CAL bias V0 - read out status
	4	12	U12	LHKTFCALBSV0 TEM F CAL bias V0 - raw ADC value
0x06E	0	3	U12	LHKTFTEM28V0LM TEM F TEM 28 V (V0) - limit evaluation
	3	1	U12	LHKTFTEM28V0ST TEM F TEM 28 V (V0) - read out status
	4	12	U12	LHKTFTEM28V0 TEM F TEM 28 V (V0) - raw ADC value
0x070	0	3	U12	LHKTFTEM33VLM; LHKADCLMTSTATES TEM F TEM digitial 3.3 V - limit evaluation
	3	1	U12	LHKTFTEM33VST TEM F TEM digitial 3.3 V - read out status
	4	12	U12	LHKTFTEM33V TEM F TEM digitial 3.3 V - raw ADC value
0x072	0	3	U12	LHKTFTEM28V1LM; LHKADCLMTSTATES TEM F TEM 28 V (V1) - limit evaluation
	3	1	U12	LHKTFTEM28V1ST TEM F TEM 28 V (V1) - read out status
	4	12	U12	LHKTFTEM28V1 TEM F TEM 28 V (V1) - raw ADC value

14.3.106 `DiagAemEnv00` (668/0x29C)

Description:

"Diagnostic AEM environmental quantities for FREE boards 0-5 an" Telemetry Packet

Diagnostic AEM environmental quantities for FREE boards 0-5 and the DAB

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDAEMPWR00 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	?

Offset	S	L	Type	ITOS name, attribute(s), and description
				?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?
	10	1	U12	? ?
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAFR33ISUMLM; LHKADCLMTSTATES AEM DAB FREE digital current sum - limit evaluation
	3	1	U12	LHKAFR33ISUMST AEM DAB FREE digital current sum - read out status
	4	12	U12	LHKAFR33ISUM AEM DAB FREE digital current sum - raw ADC value
0x016	0	3	U12	LHKADABTEMPLM; LHKADCLMTSTATES AEM DAB board temperature - limit evaluation
	3	1	U12	LHKADABTEMPSTAT AEM DAB board temperature - read out status
	4	12	U12	LHKADABTEMP AEM DAB board temperature - raw ADC value
0x018	0	3	U12	LHKAFR28ISUMLM; LHKADCLMTSTATES AEM DAB FREE HV current sum - limit evaluation
	3	1	U12	LHKAFR28ISUMST AEM DAB FREE HV current sum - read out status
	4	12	U12	LHKAFR28ISUM AEM DAB FREE HV current sum - raw ADC value
0x01A	0	3	U12	LHKADAB33VLM AEM DAB digital 3.3 V - limit evaluation
	3	1	U12	LHKADAB33VSTAT AEM DAB digital 3.3 V - read out status
	4	12	U12	LHKADAB33V AEM DAB digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKAEMFR0VDLM; LHKADCLMTSTATES AEM FREE board 0 VDD - limit evaluation
	3	1	U12	LHKAEMFR0VDST AEM FREE board 0 VDD - read out status
	4	12	U12	LHKAEMFR0VD AEM FREE board 0 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR0TLM; LHKADCLMTSTATES AEM FREE board 0 temperature - limit evaluation
	3	1	U12	LHKAEMFR0TST

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 0 temperature - read out status
	4	12	U12	LHKAEMFR0T
				AEM FREE board 0 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR0V1LM; LHKADCLMTSTATES
				AEM FREE board 0 HV1 - limit evaluation
	3	1	U12	LHKAEMFR0V1ST
				AEM FREE board 0 HV1 - read out status
	4	12	U12	LHKAEMFR0V1
				AEM FREE board 0 HV1 - raw ADC value
0x022	0	3	U12	LHKAEMFR0V2LM; LHKADCLMTSTATES
				AEM FREE board 0 HV2 - limit evaluation
	3	1	U12	LHKAEMFR0V2ST
				AEM FREE board 0 HV2 - read out status
	4	12	U12	LHKAEMFR0V2
				AEM FREE board 0 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR1VDLM; LHKADCLMTSTATES
				AEM FREE board 1 VDD - limit evaluation
	3	1	U12	LHKAEMFR1VDST
				AEM FREE board 1 VDD - read out status
	4	12	U12	LHKAEMFR1VD
				AEM FREE board 1 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR1TLM; LHKADCLMTSTATES
				AEM FREE board 1 temperature - limit evaluation
	3	1	U12	LHKAEMFR1TST
				AEM FREE board 1 temperature - read out status
	4	12	U12	LHKAEMFR1T
				AEM FREE board 1 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR1V1LM; LHKADCLMTSTATES
				AEM FREE board 1 HV1 - limit evaluation
	3	1	U12	LHKAEMFR1V1ST
				AEM FREE board 1 HV1 - read out status
	4	12	U12	LHKAEMFR1V1
				AEM FREE board 1 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR1V2LM; LHKADCLMTSTATES
				AEM FREE board 1 HV2 - limit evaluation
	3	1	U12	LHKAEMFR1V2ST
				AEM FREE board 1 HV2 - read out status
	4	12	U12	LHKAEMFR1V2
				AEM FREE board 1 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR2VDLM; LHKADCLMTSTATES
				AEM FREE board 2 VDD - limit evaluation
	3	1	U12	LHKAEMFR2VDST
				AEM FREE board 2 VDD - read out status
	4	12	U12	LHKAEMFR2VD
				AEM FREE board 2 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR2TLM; LHKADCLMTSTATES
				AEM FREE board 2 temperature - limit evaluation
	3	1	U12	LHKAEMFR2TST
				AEM FREE board 2 temperature - read out status
	4	12	U12	LHKAEMFR2T
				AEM FREE board 2 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR2V1LM; LHKADCLMTSTATES

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 2 HV1 - limit evaluation
	3	1	U12	LHKAEMFR2V1ST
				AEM FREE board 2 HV1 - read out status
	4	12	U12	LHKAEMFR2V1
				AEM FREE board 2 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR2V2LM; LHKADCLMTSTATES
				AEM FREE board 2 HV2 - limit evaluation
	3	1	U12	LHKAEMFR2V2ST
				AEM FREE board 2 HV2 - read out status
	4	12	U12	LHKAEMFR2V2
				AEM FREE board 2 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR3VDLM; LHKADCLMTSTATES
				AEM FREE board 3 VDD - limit evaluation
	3	1	U12	LHKAEMFR3VDST
				AEM FREE board 3 VDD - read out status
	4	12	U12	LHKAEMFR3VD
				AEM FREE board 3 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR3TLM; LHKADCLMTSTATES
				AEM FREE board 3 temperature - limit evaluation
	3	1	U12	LHKAEMFR3TST
				AEM FREE board 3 temperature - read out status
	4	12	U12	LHKAEMFR3T
				AEM FREE board 3 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR3V1LM; LHKADCLMTSTATES
				AEM FREE board 3 HV1 - limit evaluation
	3	1	U12	LHKAEMFR3V1ST
				AEM FREE board 3 HV1 - read out status
	4	12	U12	LHKAEMFR3V1
				AEM FREE board 3 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR3V2LM; LHKADCLMTSTATES
				AEM FREE board 3 HV2 - limit evaluation
	3	1	U12	LHKAEMFR3V2ST
				AEM FREE board 3 HV2 - read out status
	4	12	U12	LHKAEMFR3V2
				AEM FREE board 3 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR4VDLM; LHKADCLMTSTATES
				AEM FREE board 4 VDD - limit evaluation
	3	1	U12	LHKAEMFR4VDST
				AEM FREE board 4 VDD - read out status
	4	12	U12	LHKAEMFR4VD
				AEM FREE board 4 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR4TLM; LHKADCLMTSTATES
				AEM FREE board 4 temperature - limit evaluation
	3	1	U12	LHKAEMFR4TST
				AEM FREE board 4 temperature - read out status
	4	12	U12	LHKAEMFR4T
				AEM FREE board 4 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR4V1LM; LHKADCLMTSTATES
				AEM FREE board 4 HV1 - limit evaluation
	3	1	U12	LHKAEMFR4V1ST
				AEM FREE board 4 HV1 - read out status
	4	12	U12	LHKAEMFR4V1

Offset	S	L	Type	ITOS name, attribute(s), and description
				AEM FREE board 4 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR4V2LM; LHKADCLMTSTATES AEM FREE board 4 HV2 - limit evaluation
	3	1	U12	LHKAEMFR4V2ST AEM FREE board 4 HV2 - read out status
	4	12	U12	LHKAEMFR4V2 AEM FREE board 4 HV2 - raw ADC value
0x044	0	3	U12	LHKAEMFR5VDLM; LHKADCLMTSTATES AEM FREE board 5 VDD - limit evaluation
	3	1	U12	LHKAEMFR5VDST AEM FREE board 5 VDD - read out status
	4	12	U12	LHKAEMFR5VD AEM FREE board 5 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR5TLM; LHKADCLMTSTATES AEM FREE board 5 temperature - limit evaluation
	3	1	U12	LHKAEMFR5TST AEM FREE board 5 temperature - read out status
	4	12	U12	LHKAEMFR5T AEM FREE board 5 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR5V1LM; LHKADCLMTSTATES AEM FREE board 5 HV1 - limit evaluation
	3	1	U12	LHKAEMFR5V1ST AEM FREE board 5 HV1 - read out status
	4	12	U12	LHKAEMFR5V1 AEM FREE board 5 HV1 - raw ADC value
0x04A	0	3	U12	LHKAEMFR5V2LM; LHKADCLMTSTATES AEM FREE board 5 HV2 - limit evaluation
	3	1	U12	LHKAEMFR5V2ST AEM FREE board 5 HV2 - read out status
	4	12	U12	LHKAEMFR5V2 AEM FREE board 5 HV2 - raw ADC value
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.107 `DiagAemEnv01` (669/0x29D)

Description:

"Diagnostic AEM environmental quantities for FREE boards 6-11 a" Telemetry Packet

Diagnostic AEM environmental quantities for FREE boards 6-11 and the DAB

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDAEMPWR01 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	3	U1	? ?
	3	1	U12	? ?
	4	1	U12	? ?
	5	1	U12	? ?
	6	1	U12	? ?
	7	1	U12	? ?
	8	1	U12	? ?
	9	1	U12	? ?
	10	1	U12	? ?

Offset	S	L	Type	ITOS name, attribute(s), and description
	11	1	U12	? ?
	12	1	U12	? ?
	13	1	U12	? ?
	14	1	U12	? ?
	15	1	U12	? ?
0x014	0	3	U12	LHKAFR33ISUMLM; LHKADCLMTSTATES AEM DAB FREE digital current sum - limit evaluation
	3	1	U12	LHKAFR33ISUMST AEM DAB FREE digital current sum - read out status
	4	12	U12	LHKAFR33ISUM AEM DAB FREE digital current sum - raw ADC value
0x016	0	3	U12	LHKADABTEMPLM; LHKADCLMTSTATES AEM DAB board temperature - limit evaluation
	3	1	U12	LHKADABTEMPSTAT AEM DAB board temperature - read out status
	4	12	U12	LHKADABTEMP AEM DAB board temperature - raw ADC value
0x018	0	3	U12	LHKAFR28ISUMLM; LHKADCLMTSTATES AEM DAB FREE HV current sum - limit evaluation
	3	1	U12	LHKAFR28ISUMST AEM DAB FREE HV current sum - read out status
	4	12	U12	LHKAFR28ISUM AEM DAB FREE HV current sum - raw ADC value
0x01A	0	3	U12	LHKADAB33VLM AEM DAB digital 3.3 V - limit evaluation
	3	1	U12	LHKADAB33VSTAT AEM DAB digital 3.3 V - read out status
	4	12	U12	LHKADAB33V AEM DAB digital 3.3 V - raw ADC value
0x01C	0	3	U12	LHKAEMFR6VDLM; LHKADCLMTSTATES AEM FREE board 6 VDD - limit evaluation
	3	1	U12	LHKAEMFR6VDST AEM FREE board 6 VDD - read out status
	4	12	U12	LHKAEMFR6VD AEM FREE board 6 VDD - raw ADC value
0x01E	0	3	U12	LHKAEMFR6TLM; LHKADCLMTSTATES AEM FREE board 6 temperature - limit evaluation
	3	1	U12	LHKAEMFR6TST AEM FREE board 6 temperature - read out status
	4	12	U12	LHKAEMFR6T AEM FREE board 6 temperature - raw ADC value
0x020	0	3	U12	LHKAEMFR6V1LM; LHKADCLMTSTATES AEM FREE board 6 HV1 - limit evaluation
	3	1	U12	LHKAEMFR6V1ST AEM FREE board 6 HV1 - read out status
	4	12	U12	LHKAEMFR6V1 AEM FREE board 6 HV1 - raw ADC value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x022	0	3	U12	LHKAEMFR6V2LM; LHKADCLMTSTATES AEM FREE board 6 HV2 - limit evaluation
	3	1	U12	LHKAEMFR6V2ST AEM FREE board 6 HV2 - read out status
	4	12	U12	LHKAEMFR6V2 AEM FREE board 6 HV2 - raw ADC value
0x024	0	3	U12	LHKAEMFR7VDLM; LHKADCLMTSTATES AEM FREE board 7 VDD - limit evaluation
	3	1	U12	LHKAEMFR7VDST AEM FREE board 7 VDD - read out status
	4	12	U12	LHKAEMFR7VD AEM FREE board 7 VDD - raw ADC value
0x026	0	3	U12	LHKAEMFR7TLM; LHKADCLMTSTATES AEM FREE board 7 temperature - limit evaluation
	3	1	U12	LHKAEMFR7TST AEM FREE board 7 temperature - read out status
	4	12	U12	LHKAEMFR7T AEM FREE board 7 temperature - raw ADC value
0x028	0	3	U12	LHKAEMFR7V1LM; LHKADCLMTSTATES AEM FREE board 7 HV1 - limit evaluation
	3	1	U12	LHKAEMFR7V1ST AEM FREE board 7 HV1 - read out status
	4	12	U12	LHKAEMFR7V1 AEM FREE board 7 HV1 - raw ADC value
0x02A	0	3	U12	LHKAEMFR7V2LM; LHKADCLMTSTATES AEM FREE board 7 HV2 - limit evaluation
	3	1	U12	LHKAEMFR7V2ST AEM FREE board 7 HV2 - read out status
	4	12	U12	LHKAEMFR7V2 AEM FREE board 7 HV2 - raw ADC value
0x02C	0	3	U12	LHKAEMFR8VDLM; LHKADCLMTSTATES AEM FREE board 8 VDD - limit evaluation
	3	1	U12	LHKAEMFR8VDST AEM FREE board 8 VDD - read out status
	4	12	U12	LHKAEMFR8VD AEM FREE board 8 VDD - raw ADC value
0x02E	0	3	U12	LHKAEMFR8TLM; LHKADCLMTSTATES AEM FREE board 8 temperature - limit evaluation
	3	1	U12	LHKAEMFR8TST AEM FREE board 8 temperature - read out status
	4	12	U12	LHKAEMFR8T AEM FREE board 8 temperature - raw ADC value
0x030	0	3	U12	LHKAEMFR8V1LM; LHKADCLMTSTATES AEM FREE board 8 HV1 - limit evaluation
	3	1	U12	LHKAEMFR8V1ST AEM FREE board 8 HV1 - read out status
	4	12	U12	LHKAEMFR8V1 AEM FREE board 8 HV1 - raw ADC value
0x032	0	3	U12	LHKAEMFR8V2LM; LHKADCLMTSTATES AEM FREE board 8 HV2 - limit evaluation
	3	1	U12	LHKAEMFR8V2ST AEM FREE board 8 HV2 - read out status

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LHKAEMFR8V2 AEM FREE board 8 HV2 - raw ADC value
0x034	0	3	U12	LHKAEMFR9VDLM; LHKADCLMTSTATES AEM FREE board 9 VDD - limit evaluation
	3	1	U12	LHKAEMFR9VDST AEM FREE board 9 VDD - read out status
	4	12	U12	LHKAEMFR9VD AEM FREE board 9 VDD - raw ADC value
0x036	0	3	U12	LHKAEMFR9TLM; LHKADCLMTSTATES AEM FREE board 9 temperature - limit evaluation
	3	1	U12	LHKAEMFR9TST AEM FREE board 9 temperature - read out status
	4	12	U12	LHKAEMFR9T AEM FREE board 9 temperature - raw ADC value
0x038	0	3	U12	LHKAEMFR9V1LM; LHKADCLMTSTATES AEM FREE board 9 HV1 - limit evaluation
	3	1	U12	LHKAEMFR9V1ST AEM FREE board 9 HV1 - read out status
	4	12	U12	LHKAEMFR9V1 AEM FREE board 9 HV1 - raw ADC value
0x03A	0	3	U12	LHKAEMFR9V2LM; LHKADCLMTSTATES AEM FREE board 9 HV2 - limit evaluation
	3	1	U12	LHKAEMFR9V2ST AEM FREE board 9 HV2 - read out status
	4	12	U12	LHKAEMFR9V2 AEM FREE board 9 HV2 - raw ADC value
0x03C	0	3	U12	LHKAEMFR10VDLM; LHKADCLMTSTATES AEM FREE board 10 VDD - limit evaluation
	3	1	U12	LHKAEMFR10VDST AEM FREE board 10 VDD - read out status
	4	12	U12	LHKAEMFR10VD AEM FREE board 10 VDD - raw ADC value
0x03E	0	3	U12	LHKAEMFR10TLM; LHKADCLMTSTATES AEM FREE board 10 temperature - limit evaluation
	3	1	U12	LHKAEMFR10TST AEM FREE board 10 temperature - read out status
	4	12	U12	LHKAEMFR10T AEM FREE board 10 temperature - raw ADC value
0x040	0	3	U12	LHKAEMFR10V1LM; LHKADCLMTSTATES AEM FREE board 10 HV1 - limit evaluation
	3	1	U12	LHKAEMFR10V1ST AEM FREE board 10 HV1 - read out status
	4	12	U12	LHKAEMFR10V1 AEM FREE board 10 HV1 - raw ADC value
0x042	0	3	U12	LHKAEMFR10V2LM; LHKADCLMTSTATES AEM FREE board 10 HV2 - limit evaluation
	3	1	U12	LHKAEMFR10V2ST AEM FREE board 10 HV2 - read out status
	4	12	U12	LHKAEMFR10V2 AEM FREE board 10 HV2 - raw ADC value
0x044	0	3	U12	LHKAEMFR11VDLM; LHKADCLMTSTATES AEM FREE board 11 VDD - limit evaluation

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	1	U12	LHKAEMFR11VDST AEM FREE board 11 VDD - read out status
	4	12	U12	LHKAEMFR11VD AEM FREE board 11 VDD - raw ADC value
0x046	0	3	U12	LHKAEMFR11TLM; LHKADCLMTSTATES AEM FREE board 11 temperature - limit evaluation
	3	1	U12	LHKAEMFR11TST AEM FREE board 11 temperature - read out status
	4	12	U12	LHKAEMFR11T AEM FREE board 11 temperature - raw ADC value
0x048	0	3	U12	LHKAEMFR11V1LM; LHKADCLMTSTATES AEM FREE board 11 HV1 - limit evaluation
	3	1	U12	LHKAEMFR11V1ST AEM FREE board 11 HV1 - read out status
	4	12	U12	LHKAEMFR11V1 AEM FREE board 11 HV1 - raw ADC value
0x04A	0	3	U12	LHKAEMFR11V2LM; LHKADCLMTSTATES AEM FREE board 11 HV2 - limit evaluation
	3	1	U12	LHKAEMFR11V2ST AEM FREE board 11 HV2 - read out status
	4	12	U12	LHKAEMFR11V2 AEM FREE board 11 HV2 - raw ADC value
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.108 `DiagStatusSiu` (672/0x2A0)

Description:

"Diagnostic SIU status packet" Telemetry Packet

Contains: SIU CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDSTATSIU Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKSIUUPTIME SIU time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKSIUPCIERR SIU count of PCI errors
0x016	0	16	U12	LHKSIUCMERR SIU count of correctable memory errors
0x018	0	16	U12	LHKSIUUMERR SIU count of uncorrectable memory errors
0x01A	0	16	U12	LHKSIUCPUJTEMP SIU CPU junction temperature
0x01C	0	32	U1234	LHKSIUSCRSTART SIU memory scrub - most recent start
0x020	0	32	U1234	LHKSIUSCREND SIU memory scrub - most recent end
0x024	0	32	U1234	LHKSIUSCRPERIOD SIU memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKSIUPIDSCIN2 SIU PID input 2 (from spacecraft)
	6	1	U1	LHKSIUPIDSCIN1 SIU PID input 1 (from spacecraft)
	7	1	U1	LHKSIUPIDSCIN0 SIU PID input 0 (from spacecraft)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKSIUTHSPPS SIU status of time-hack services simulation of pulse-per-second

Offset	S	L	Type	ITOS name, attribute(s), and description
	7	1	U1	LHKSIUTHSTT SIU status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKSFILSTATE; LHKFILESTATES SIU file upload state
0x030	0	32	U1234	LHKSFILCURSIZE SIU file size current
0x034	0	32	U1234	LHKSFILPKTCNT SIU file packet count
0x038	0	32	U1234	LHKSFILERRCODE SIU file error code
0x03C	0	32	U1234	LHKSFILERRCNT SIU file error count
0x040	0	32	U1234	LHKSFILCOMID SIU file ID Commit
0x044	0	32	U1234	LHKSMEMLDSTAT SIU status of most recent load action
0x048	0	32	U1234	LHKSMEMLDACT SIU memory load active flag
0x04C	0	32	U1234	LHKSMEMLDSTART SIU starting memory load address
0x050	0	32	U1234	LHKSMEMLDBYTES SIU memory load total bytes
0x054	0	32	U1234	LHKSMEMLDOFST SIU memory load offset
0x058	0	32	U1234	LHKSMEMDMPSTAT SIU memory dump status
0x05C	0	32	U1234	LHKSMEMDMPACT SIU memory dump active
0x060	0	32	U1234	LHKSMEMDMPSTRT SIU memory dump start address
0x064	0	32	U1234	LHKSMEMDMPBYTES SIU memory dump bytes
0x068	0	32	U1234	LHKSMEMDMPADDR SIU memory dump address
0x06C	0	32	U1234	LHKSMEMDMPFCDE SIU memory dump function code
0x070	0	32	U1234	LHKSMEMDMPTID SIU memory dump transaction ID

14.3.109 `DiagStatusEpu0` (673/0x2A1)

Description:

"Diagnostic EPU0 status packet" Telemetry Packet

Contains: EPU0 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDSTATEPU0 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKEPU0UPTIME EPU0 time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKEPU0PCIERR EPU0 count of PCI errors
0x016	0	16	U12	LHKEPU0CMERR EPU0 count of correctable memory errors
0x018	0	16	U12	LHKEPU0UMERR EPU0 count of uncorrectable memory errors
0x01A	0	16	U12	LHKEPU0CPUJTEMP EPU0 CPU junction temperature
0x01C	0	32	U1234	LHKEPU0SCRSTART EPU0 memory scrub - most recent start
0x020	0	32	U1234	LHKEPU0SCREND EPU0 memory scrub - most recent end
0x024	0	32	U1234	LHKEPU0SCRPERIOD EPU0 memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKEPU0PIDSCIN2 EPU0 PID input 2 (unused)
	6	1	U1	LHKEPU0PIDSCIN1 EPU0 PID input 1 (unused)
	7	1	U1	LHKEPU0PIDSCIN0 EPU0 PID input 0 (unused)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKEPU0THSPPS EPU0 status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKEPU0THSTT EPU0 status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKE0FILSTATE; LHKFILESTATES EPU0 file upload state
0x030	0	32	U1234	LHKE0FILCURSIZE EPU0 file size current
0x034	0	32	U1234	LHKE0FILPKTCNT EPU0 file packet count
0x038	0	32	U1234	LHKE0FILERRCODE EPU0 file error code
0x03C	0	32	U1234	LHKE0FILERRCNT EPU0 file error count
0x040	0	32	U1234	LHKE0FILCOMID EPU0 file ID Commit
0x044	0	32	U1234	LHKE0MEMLDSTAT EPU0 status of most recent load action
0x048	0	32	U1234	LHKE0MEMLDACT EPU0 memory load active flag
0x04C	0	32	U1234	LHKE0MEMLDSTART EPU0 starting memory load address

Offset	S	L	Type	ITOS name, attribute(s), and description
0x050	0	32	U1234	LHKE0MEMLDBYTES EPU0 memory load total bytes
0x054	0	32	U1234	LHKE0MEMLDOFST EPU0 memory load offset
0x058	0	32	U1234	LHKE0MEMDMPSTAT EPU0 memory dump status
0x05C	0	32	U1234	LHKE0MEMDMPACT EPU0 memory dump active
0x060	0	32	U1234	LHKE0MEMDMPSTRT EPU0 memory dump start address
0x064	0	32	U1234	LHKE0MEMDMPBYTES EPU0 memory dump bytes
0x068	0	32	U1234	LHKE0MEMDMPADDR EPU0 memory dump address
0x06C	0	32	U1234	LHKE0MEMDMPFCDE EPU0 memory dump function code
0x070	0	32	U1234	LHKE0MEMDMPTID EPU0 memory dump transaction ID

14.3.110 `DiagStatusEpu1` (674/0x2A2)

Description:

"Diagnostic EPU1 status packet" Telemetry Packet

Contains: EPU1 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDSTATEPU1 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKEPU1UPTIME EPU1 time elapsed in applications mode (seconds)
0x014	0	16	U12	LHKEPU1PCIERR EPU1 count of PCI errors
0x016	0	16	U12	LHKEPU1CMERR EPU1 count of correctable memory errors
0x018	0	16	U12	LHKEPU1UMERR EPU1 count of uncorrectable memory errors
0x01A	0	16	U12	LHKEPU1CPUJTEMP EPU1 CPU junction temperature
0x01C	0	32	U1234	LHKEPU1SCRSTART EPU1 memory scrub - most recent start
0x020	0	32	U1234	LHKEPU1SCREND EPU1 memory scrub - most recent end
0x024	0	32	U1234	LHKEPU1SCRPERIOD EPU1 memory scrub - cycle period (seconds)
0x028	0	5	U1	LHKSPARE5U1 Explicit 5 bit pad in unsigned char
	5	1	U1	LHKEPU1PIDSCIN2 EPU1 PID input 2 (unused)

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	1	U1	LHKEPU1PIDSCIN1 EPU1 PID input 1 (unused)
	7	1	U1	LHKEPU1PIDSCIN0 EPU1 PID input 0 (unused)
0x029	0	6	U1	LHKSPARE6U1 Explicit 6 bit pad in unsigned char
	6	1	U1	LHKEPU1THSPPS EPU1 status of time-hack services simulation of pulse-per-second
	7	1	U1	LHKEPU1THSTT EPU1 status of time-hack services simulation of time-tone
0x02A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x02C	0	32	U1234	LHKE1FILSTATE; LHKFILESTATES EPU1 file upload state
0x030	0	32	U1234	LHKE1FILCURSIZE EPU1 file size current
0x034	0	32	U1234	LHKE1FILPKTCNT EPU1 file packet count
0x038	0	32	U1234	LHKE1FILERRCODE EPU1 file error code
0x03C	0	32	U1234	LHKE1FILERRCNT EPU1 file error count
0x040	0	32	U1234	LHKE1FILCOMID EPU1 file ID Commit
0x044	0	32	U1234	LHKE1MEMLDSTAT EPU1 status of most recent load action
0x048	0	32	U1234	LHKE1MEMLDACT EPU1 memory load active flag
0x04C	0	32	U1234	LHKE1MEMLDSTART EPU1 starting memory load address
0x050	0	32	U1234	LHKE1MEMLDBYTES EPU1 memory load total bytes
0x054	0	32	U1234	LHKE1MEMLDOFST EPU1 memory load offset
0x058	0	32	U1234	LHKE1MEMDMPSTAT EPU1 memory dump status
0x05C	0	32	U1234	LHKE1MEMDMPACT EPU1 memory dump active
0x060	0	32	U1234	LHKE1MEMDMPSTRT EPU1 memory dump start address
0x064	0	32	U1234	LHKE1MEMDMPBYTES EPU1 memory dump bytes
0x068	0	32	U1234	LHKE1MEMDMPADDR EPU1 memory dump address
0x06C	0	32	U1234	LHKE1MEMDMPFCDE EPU1 memory dump function code
0x070	0	32	U1234	LHKE1MEMDMPTID EPU1 memory dump transaction ID

14.3.111 `DiagStatusEpu2` (675/0x2A3)

Description:

"Diagnostic EPU2 status packet" Telemetry Packet

Contains: EPU2 CPU hardware error statistics (PCI errors, correctable and uncorrectable memory errors), CPU junction temperature, memory scrubbing status, file statistics, and memory statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LHKRSVDSTATEPU2` Explicit 16 bit pad in unsigned short
`0x010`	0	32	`U1234`	`LHKEPU2UPTIME` EPU2 time elapsed in applications mode (seconds)
`0x014`	0	16	`U12`	`LHKEPU2PCIERR` EPU2 count of PCI errors
`0x016`	0	16	`U12`	`LHKEPU2CMERR` EPU2 count of correctable memory errors
`0x018`	0	16	`U12`	`LHKEPU2UMERR` EPU2 count of uncorrectable memory errors
`0x01A`	0	16	`U12`	`LHKEPU2CPUJTEMP` EPU2 CPU junction temperature
`0x01C`	0	32	`U1234`	`LHKEPU2SCRSTART` EPU2 memory scrub - most recent start
`0x020`	0	32	`U1234`	`LHKEPU2SCREND` EPU2 memory scrub - most recent end
`0x024`	0	32	`U1234`	`LHKEPU2SCRPERIOD` EPU2 memory scrub - cycle period (seconds)
`0x028`	0	5	`U1`	`LHKSPARE5U1` Explicit 5 bit pad in unsigned char
	5	1	`U1`	`LHKEPU2PIDSCIN2` EPU2 PID input 2 (unused)
	6	1	`U1`	`LHKEPU2PIDSCIN1` EPU2 PID input 1 (unused)
	7	1	`U1`	`LHKEPU2PIDSCIN0` EPU2 PID input 0 (unused)
`0x029`	0	6	`U1`	`LHKSPARE6U1` Explicit 6 bit pad in unsigned char
	6	1	`U1`	`LHKEPU2THSPPS` EPU2 status of time-hack services simulation of pulse-per-second
	7	1	`U1`	`LHKEPU2THSTT` EPU2 status of time-hack services simulation of time-tone
`0x02A`	0	16	`U12`	`LHKSPARE16U12` Explicit 16 bit pad in unsigned short
`0x02C`	0	32	`U1234`	`LHKE2FILSTATE; LHKFILESTATES` EPU2 file upload state
`0x030`	0	32	`U1234`	`LHKE2FILCURSIZE` EPU2 file size current
`0x034`	0	32	`U1234`	`LHKE2FILPKTCNT` EPU2 file packet count
`0x038`	0	32	`U1234`	`LHKE2FILERRCODE` EPU2 file error code

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03C	0	32	U1234	LHKE2FILERRCNT EPU2 file error count
0x040	0	32	U1234	LHKE2FILCOMID EPU2 file ID Commit
0x044	0	32	U1234	LHKE2MEMLDSTAT EPU2 status of most recent load action
0x048	0	32	U1234	LHKE2MEMLDACT EPU2 memory load active flag
0x04C	0	32	U1234	LHKE2MEMLDSTART EPU2 starting memory load address
0x050	0	32	U1234	LHKE2MEMLDBYTES EPU2 memory load total bytes
0x054	0	32	U1234	LHKE2MEMLDOFST EPU2 memory load offset
0x058	0	32	U1234	LHKE2MEMDMPSTAT EPU2 memory dump status
0x05C	0	32	U1234	LHKE2MEMDMPACT EPU2 memory dump active
0x060	0	32	U1234	LHKE2MEMDMPSTRT EPU2 memory dump start address
0x064	0	32	U1234	LHKE2MEMDMPBYTES EPU2 memory dump bytes
0x068	0	32	U1234	LHKE2MEMDMPADDR EPU2 memory dump address
0x06C	0	32	U1234	LHKE2MEMDMPFCDE EPU2 memory dump function code
0x070	0	32	U1234	LHKE2MEMDMPTID EPU2 memory dump transaction ID

14.3.112 `DiagTaskCfgSiu` (677/0x2A5)

Description:

"Diagnostic ITC/MSG configuration of tasks on SIU" Telemetry Packet

Diagnostic ITC/MSG configuration of tasks on SIU

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTASKSIU Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKSMSGCTDB SIU message reporting level on CTDB (1553)
0x013	0	8	U1	LHKSMSGSSR SIU message reporting level on SSR
0x014	0	1	U1	LHKSANONDEF SIU task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSANONMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task ANON messaging level
	8	2	U1	LHKSANONCN_AE SIU task ANON command confirmation (normal,execute)
	10	2	U1	LHKSANONCN_AF SIU task ANON command confirmation (normal,forward)
	12	2	U1	LHKSANONCB_AE SIU task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKSANONCB_AF SIU task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKSLCMDEF SIU task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCMMSG SIU task LCM messaging level
	8	2	U1	LHKSLCMCN_AE SIU task LCM command confirmation (normal,execute)
	10	2	U1	LHKSLCMCN_AF SIU task LCM command confirmation (normal,forward)
	12	2	U1	LHKSLCMCB_AE SIU task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKSLCMCB_AF SIU task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKSLFS_MDEF SIU task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLFS_MMSG SIU task LFS_M messaging level
	8	2	U1	LHKSLFS_MCN_AE SIU task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKSLFS_MCN_AF SIU task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKSLFS_MCB_AE SIU task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLFS_MCB_AF SIU task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKSLFS_SDEF SIU task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLFS_SMSG SIU task LFS_S messaging level
	8	2	U1	LHKSLFS_SCN_AE SIU task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKSLFS_SCN_AF SIU task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKSLFS_SCB_AE SIU task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLFS_SCB_AF SIU task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKSLHK_MDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LHK_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLHK_MMSG
				SIU task LHK_M messaging level
	8	2	U1	LHKSLHK_MCN_AE
				SIU task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKSLHK_MCN_AF
				SIU task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKSLHK_MCB_AE
				SIU task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLHK_MCB_AF
				SIU task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKSLHK_SDEF
				SIU task LHK_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLHK_SMSG
				SIU task LHK_S messaging level
	8	2	U1	LHKSLHK_SCN_AE
				SIU task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKSLHK_SCN_AF
				SIU task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKSLHK_SCB_AE
				SIU task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLHK_SCB_AF
				SIU task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKSLIM_MDEF
				SIU task LIM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIM_MMSG
				SIU task LIM_M messaging level
	8	2	U1	LHKSLIM_MCN_AE
				SIU task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKSLIM_MCN_AF
				SIU task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKSLIM_MCB_AE
				SIU task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLIM_MCB_AF
				SIU task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKSLIM_SDEF
				SIU task LIM_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIM_SMSG
				SIU task LIM_S messaging level
	8	2	U1	LHKSLIM_SCN_AE
				SIU task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKSLIM_SCN_AF
				SIU task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKSLIM_SCB_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLIM_SCB_AF
				SIU task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKSLSM_MDEF
				SIU task LSM_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSM_MMSG
				SIU task LSM_M messaging level
	8	2	U1	LHKSLSM_MCN_AE
				SIU task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKSLSM_MCN_AF
				SIU task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKSLSM_MCB_AE
				SIU task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLSM_MCB_AF
				SIU task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKSLSM_SDEF
				SIU task LSM_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSM_SMSG
				SIU task LSM_S messaging level
	8	2	U1	LHKSLSM_SCN_AE
				SIU task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKSLSM_SCN_AF
				SIU task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKSLSM_SCB_AE
				SIU task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLSM_SCB_AF
				SIU task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKSLSWDEF
				SIU task LSW defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLSWMSG
				SIU task LSW messaging level
	8	2	U1	LHKSLSWCN_AE
				SIU task LSW command confirmation (normal,execute)
	10	2	U1	LHKSLSWCN_AF
				SIU task LSW command confirmation (normal,forward)
	12	2	U1	LHKSLSWCB_AE
				SIU task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKSLSWCB_AF
				SIU task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKSTID11DEF
				SIU task TID11 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID11MSG
				SIU task TID11 messaging level
	8	2	U1	LHKSTID11CN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task TID11 command confirmation (normal,execute)
	10	2	U1	LHKSTID11CN_AF
				SIU task TID11 command confirmation (normal,forward)
	12	2	U1	LHKSTID11CB_AE
				SIU task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID11CB_AF
				SIU task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKSLCI_MDEF
				SIU task LCI_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCI_MMSG
				SIU task LCI_M messaging level
	8	2	U1	LHKSLCI_MCN_AE
				SIU task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKSLCI_MCN_AF
				SIU task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKSLCI_MCB_AE
				SIU task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLCI_MCB_AF
				SIU task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKSLCI_SDEF
				SIU task LCI_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLCI_SMSG
				SIU task LCI_S messaging level
	8	2	U1	LHKSLCI_SCN_AE
				SIU task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKSLCI_SCN_AF
				SIU task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKSLCI_SCB_AE
				SIU task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLCI_SCB_AF
				SIU task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKSLMCDEF
				SIU task LMC defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLMCMSG
				SIU task LMC messaging level
	8	2	U1	LHKSLMCCN_AE
				SIU task LMC command confirmation (normal,execute)
	10	2	U1	LHKSLMCCN_AF
				SIU task LMC command confirmation (normal,forward)
	12	2	U1	LHKSLMCCB_AE
				SIU task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKSLMCCB_AF
				SIU task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKSLPA_MDEF
				SIU task LPA_M defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLPA_MMSG SIU task LPA_M messaging level
	8	2	U1	LHKSLPA_MCN_AE SIU task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKSLPA_MCN_AF SIU task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKSLPA_MCB_AE SIU task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKSLPA_MCB_AF SIU task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKSLPA_SDEF SIU task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLPA_SMSG SIU task LPA_S messaging level
	8	2	U1	LHKSLPA_SCN_AE SIU task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKSLPA_SCN_AF SIU task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKSLPA_SCB_AE SIU task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKSLPA_SCB_AF SIU task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKSLRADEF SIU task LRA defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRAMSG SIU task LRA messaging level
	8	2	U1	LHKSLRACN_AE SIU task LRA command confirmation (normal,execute)
	10	2	U1	LHKSLRACN_AF SIU task LRA command confirmation (normal,forward)
	12	2	U1	LHKSLRACB_AE SIU task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKSLRACB_AF SIU task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKSLTCDEF SIU task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTCMSG SIU task LTC messaging level
	8	2	U1	LHKSLTCCN_AE SIU task LTC command confirmation (normal,execute)
	10	2	U1	LHKSLTCCN_AF SIU task LTC command confirmation (normal,forward)
	12	2	U1	LHKSLTCCB_AE SIU task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKSLTCCB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKSGRBDEF SIU task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSGRBMSG SIU task GRB messaging level
	8	2	U1	LHKSGRBCN_AE SIU task GRB command confirmation (normal,execute)
	10	2	U1	LHKSGRBCN_AF SIU task GRB command confirmation (normal,forward)
	12	2	U1	LHKSGRBCB_AE SIU task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKSGRBCB_AF SIU task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKSLIHDEF SIU task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLIHMSG SIU task LIH messaging level
	8	2	U1	LHKSLIHCN_AE SIU task LIH command confirmation (normal,execute)
	10	2	U1	LHKSLIHCN_AF SIU task LIH command confirmation (normal,forward)
	12	2	U1	LHKSLIHCB_AE SIU task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKSLIHCB_AF SIU task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKSTID21DEF SIU task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID21MSG SIU task TID21 messaging level
	8	2	U1	LHKSTID21CN_AE SIU task TID21 command confirmation (normal,execute)
	10	2	U1	LHKSTID21CN_AF SIU task TID21 command confirmation (normal,forward)
	12	2	U1	LHKSTID21CB_AE SIU task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID21CB_AF SIU task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKSCRXCDEF SIU task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCRXCMSG SIU task CRXC messaging level
	8	2	U1	LHKSCRXCCN_AE SIU task CRXC command confirmation (normal,execute)
	10	2	U1	LHKSCRXCCN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task CRXC command confirmation (normal,forward)
	12	2	U1	LHKSCRXCCB_AE SIU task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKSCRXCCB_AF SIU task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKSCRXTDEF SIU task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCRXTMSG SIU task CRXT messaging level
	8	2	U1	LHKSCRXTCN_AE SIU task CRXT command confirmation (normal,execute)
	10	2	U1	LHKSCRXTCN_AF SIU task CRXT command confirmation (normal,forward)
	12	2	U1	LHKSCRXTCB_AE SIU task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKSCRXTCB_AF SIU task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKSLTX1DEF SIU task LTX1 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTX1MSG SIU task LTX1 messaging level
	8	2	U1	LHKSLTX1CN_AE SIU task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKSLTX1CN_AF SIU task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKSLTX1CB_AE SIU task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKSLTX1CB_AF SIU task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKSLTX0DEF SIU task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLTX0MSG SIU task LTX0 messaging level
	8	2	U1	LHKSLTX0CN_AE SIU task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKSLTX0CN_AF SIU task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKSLTX0CB_AE SIU task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKSLTX0CB_AF SIU task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKSLRXRDEF SIU task LRXR defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXRMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task LRXR messaging level
	8	2	U1	LHKSLRXRCN_AE SIU task LRXR command confirmation (normal,execute)
	10	2	U1	LHKSLRXRCN_AF SIU task LRXR command confirmation (normal,forward)
	12	2	U1	LHKSLRXRCB_AE SIU task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXRCB_AF SIU task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKSLRXEDEF SIU task LRXE defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXEMSG SIU task LRXE messaging level
	8	2	U1	LHKSLRXECN_AE SIU task LRXE command confirmation (normal,execute)
	10	2	U1	LHKSLRXECN_AF SIU task LRXE command confirmation (normal,forward)
	12	2	U1	LHKSLRXECB_AE SIU task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXECB_AF SIU task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKSLRXNDEF SIU task LRXN defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSLRXNMSG SIU task LRXN messaging level
	8	2	U1	LHKSLRXNCN_AE SIU task LRXN command confirmation (normal,execute)
	10	2	U1	LHKSLRXNCN_AF SIU task LRXN command confirmation (normal,forward)
	12	2	U1	LHKSLRXNCB_AE SIU task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKSLRXNCB_AF SIU task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKSCTXDEF SIU task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSCTXMSG SIU task CTX messaging level
	8	2	U1	LHKSCTXCN_AE SIU task CTX command confirmation (normal,execute)
	10	2	U1	LHKSCTXCN_AF SIU task CTX command confirmation (normal,forward)
	12	2	U1	LHKSCTXCB_AE SIU task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKSCTXCB_AF SIU task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKSSTXDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				SIU task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSSTXMSG SIU task STX messaging level
	8	2	U1	LHKSSTXCN_AE SIU task STX command confirmation (normal,execute)
	10	2	U1	LHKSSTXCN_AF SIU task STX command confirmation (normal,forward)
	12	2	U1	LHKSSTXCB_AE SIU task STX command confirmation (broadcast,execute)
	14	2	U1	LHKSSTXCB_AF SIU task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKSTID31DEF SIU task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKSTID31MSG SIU task TID31 messaging level
	8	2	U1	LHKSTID31CN_AE SIU task TID31 command confirmation (normal,execute)
	10	2	U1	LHKSTID31CN_AF SIU task TID31 command confirmation (normal,forward)
	12	2	U1	LHKSTID31CB_AE SIU task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKSTID31CB_AF SIU task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.113 `DiagTaskCfgEpu0` (678/0x2A6)

Description:

"Diagnostic ITC/MSG configuration of tasks on EPU0" Telemetry Packet

Diagnostic ITC/MSG configuration of tasks on EPU0

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTASKEPU0 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKE0MSGCTDB EPU0 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE0MSGSSR EPU0 message reporting level on SSR
0x014	0	1	U1	LHKE0ANONDEF EPU0 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0ANONMSG EPU0 task ANON messaging level
	8	2	U1	LHKE0ANONCN_AE EPU0 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE0ANONCN_AF EPU0 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE0ANONCB_AE EPU0 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE0ANONCB_AF EPU0 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE0LCMDEF EPU0 task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCMMSG EPU0 task LCM messaging level
	8	2	U1	LHKE0LCMCN_AE EPU0 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE0LCMCN_AF EPU0 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE0LCMCB_AE EPU0 task LCM command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKE0LCMCB_AF EPU0 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE0LFS_MDEF EPU0 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LFS_MMSG EPU0 task LFS_M messaging level
	8	2	U1	LHKE0LFS_MCN_AE EPU0 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE0LFS_MCN_AF EPU0 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE0LFS_MCB_AE EPU0 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LFS_MCB_AF EPU0 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE0LFS_SDEF EPU0 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LFS_SMSG EPU0 task LFS_S messaging level
	8	2	U1	LHKE0LFS_SCN_AE EPU0 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE0LFS_SCN_AF EPU0 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE0LFS_SCB_AE EPU0 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LFS_SCB_AF EPU0 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE0LHK_MDEF EPU0 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LHK_MMSG EPU0 task LHK_M messaging level
	8	2	U1	LHKE0LHK_MCN_AE EPU0 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE0LHK_MCN_AF EPU0 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE0LHK_MCB_AE EPU0 task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LHK_MCB_AF EPU0 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE0LHK_SDEF EPU0 task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LHK_SMSG EPU0 task LHK_S messaging level
	8	2	U1	LHKE0LHK_SCN_AE EPU0 task LHK_S command confirmation (normal,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	2	U1	LHKE0LHK_SCN_AF EPU0 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE0LHK_SCB_AE EPU0 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LHK_SCB_AF EPU0 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE0LIM_MDEF EPU0 task LIM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIM_MMSG EPU0 task LIM_M messaging level
	8	2	U1	LHKE0LIM_MCN_AE EPU0 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE0LIM_MCN_AF EPU0 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE0LIM_MCB_AE EPU0 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIM_MCB_AF EPU0 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE0LIM_SDEF EPU0 task LIM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIM_SMSG EPU0 task LIM_S messaging level
	8	2	U1	LHKE0LIM_SCN_AE EPU0 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE0LIM_SCN_AF EPU0 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE0LIM_SCB_AE EPU0 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIM_SCB_AF EPU0 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE0LSM_MDEF EPU0 task LSM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LSM_MMSG EPU0 task LSM_M messaging level
	8	2	U1	LHKE0LSM_MCN_AE EPU0 task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKE0LSM_MCN_AF EPU0 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE0LSM_MCB_AE EPU0 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LSM_MCB_AF EPU0 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE0LSM_SDEF EPU0 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	2	U1	LHKE0LSM_SMSG EPU0 task LSM_S messaging level
	8	2	U1	LHKE0LSM_SCN_AE EPU0 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE0LSM_SCN_AF EPU0 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE0LSM_SCB_AE EPU0 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LSM_SCB_AF EPU0 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE0LSWDEF EPU0 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LSWMSG EPU0 task LSW messaging level
	8	2	U1	LHKE0LSWCN_AE EPU0 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE0LSWCN_AF EPU0 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE0LSWCB_AE EPU0 task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKE0LSWCB_AF EPU0 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE0TID11DEF EPU0 task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID11MSG EPU0 task TID11 messaging level
	8	2	U1	LHKE0TID11CN_AE EPU0 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE0TID11CN_AF EPU0 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE0TID11CB_AE EPU0 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID11CB_AF EPU0 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE0LCI_MDEF EPU0 task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCI_MMSG EPU0 task LCI_M messaging level
	8	2	U1	LHKE0LCI_MCN_AE EPU0 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE0LCI_MCN_AF EPU0 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE0LCI_MCB_AE EPU0 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LCI_MCB_AF EPU0 task LCI_M command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02E	0	1	U1	LHKE0LCI_SDEF EPU0 task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LCI_SMSG EPU0 task LCI_S messaging level
	8	2	U1	LHKE0LCI_SCN_AE EPU0 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE0LCI_SCN_AF EPU0 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE0LCI_SCB_AE EPU0 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LCI_SCB_AF EPU0 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE0LMCDEF EPU0 task LMC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LMCMSG EPU0 task LMC messaging level
	8	2	U1	LHKE0LMCCN_AE EPU0 task LMC command confirmation (normal,execute)
	10	2	U1	LHKE0LMCCN_AF EPU0 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE0LMCCB_AE EPU0 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE0LMCCB_AF EPU0 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE0LPA_MDEF EPU0 task LPA_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LPA_MMSG EPU0 task LPA_M messaging level
	8	2	U1	LHKE0LPA_MCN_AE EPU0 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE0LPA_MCN_AF EPU0 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE0LPA_MCB_AE EPU0 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE0LPA_MCB_AF EPU0 task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKE0LPA_SDEF EPU0 task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LPA_SMSG EPU0 task LPA_S messaging level
	8	2	U1	LHKE0LPA_SCN_AE EPU0 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE0LPA_SCN_AF EPU0 task LPA_S command confirmation (normal,forward)

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	2	U1	LHKE0LPA_SCB_AE EPU0 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE0LPA_SCB_AF EPU0 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE0LRADEF EPU0 task LRA defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRAMSG EPU0 task LRA messaging level
	8	2	U1	LHKE0LRACN_AE EPU0 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE0LRACN_AF EPU0 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE0LRACB_AE EPU0 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRACB_AF EPU0 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE0LTCDEF EPU0 task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LTCMSG EPU0 task LTC messaging level
	8	2	U1	LHKE0LTCCN_AE EPU0 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE0LTCCN_AF EPU0 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE0LTCCB_AE EPU0 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTCCB_AF EPU0 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE0GRBDEF EPU0 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0GRBMSG EPU0 task GRB messaging level
	8	2	U1	LHKE0GRBCN_AE EPU0 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE0GRBCN_AF EPU0 task GRB command confirmation (normal,forward)
	12	2	U1	LHKE0GRBCB_AE EPU0 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE0GRBCB_AF EPU0 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE0LIHDEF EPU0 task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LIHMSG EPU0 task LIH messaging level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKE0LIHCN_AE EPU0 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE0LIHCN_AF EPU0 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE0LIHCB_AE EPU0 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE0LIHCB_AF EPU0 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE0TID21DEF EPU0 task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID21MSG EPU0 task TID21 messaging level
	8	2	U1	LHKE0TID21CN_AE EPU0 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE0TID21CN_AF EPU0 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE0TID21CB_AE EPU0 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID21CB_AF EPU0 task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKE0CRXCDEF EPU0 task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CRXCMSG EPU0 task CRXC messaging level
	8	2	U1	LHKE0CRXCCN_AE EPU0 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE0CRXCCN_AF EPU0 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE0CRXCCB_AE EPU0 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE0CRXCCB_AF EPU0 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE0CRXTDEF EPU0 task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CRXTMSG EPU0 task CRXT messaging level
	8	2	U1	LHKE0CRXTCN_AE EPU0 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE0CRXTCN_AF EPU0 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE0CRXTCB_AE EPU0 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE0CRXTCB_AF EPU0 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE0LTX1DEF EPU0 task LTX1 defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LTX1MSG EPU0 task LTX1 messaging level
	8	2	U1	LHKE0LTX1CN_AE EPU0 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE0LTX1CN_AF EPU0 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE0LTX1CB_AE EPU0 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTX1CB_AF EPU0 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE0LTX0DEF EPU0 task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LTX0MSG EPU0 task LTX0 messaging level
	8	2	U1	LHKE0LTX0CN_AE EPU0 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE0LTX0CN_AF EPU0 task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKE0LTX0CB_AE EPU0 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE0LTX0CB_AF EPU0 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE0LRXRDEF EPU0 task LRXR defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXRMSG EPU0 task LRXR messaging level
	8	2	U1	LHKE0LRXRCN_AE EPU0 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE0LRXRCN_AF EPU0 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE0LRXRCB_AE EPU0 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRXRCB_AF EPU0 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE0LRXEDEF EPU0 task LRXE defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXEMSG EPU0 task LRXE messaging level
	8	2	U1	LHKE0LRXECN_AE EPU0 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE0LRXECN_AF EPU0 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE0LRXECB_AE EPU0 task LRXE command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKE0LRXECB_AF EPU0 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE0LRXNDEF EPU0 task LRXN defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0LRXNMSG EPU0 task LRXN messaging level
	8	2	U1	LHKE0LRXNCN_AE EPU0 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE0LRXNCN_AF EPU0 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE0LRXNCB_AE EPU0 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE0LRXNCB_AF EPU0 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE0CTXDEF EPU0 task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0CTXMSG EPU0 task CTX messaging level
	8	2	U1	LHKE0CTXCN_AE EPU0 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE0CTXCN_AF EPU0 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE0CTXCB_AE EPU0 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE0CTXCB_AF EPU0 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE0STXDEF EPU0 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0STXMSG EPU0 task STX messaging level
	8	2	U1	LHKE0STXCN_AE EPU0 task STX command confirmation (normal,execute)
	10	2	U1	LHKE0STXCN_AF EPU0 task STX command confirmation (normal,forward)
	12	2	U1	LHKE0STXCB_AE EPU0 task STX command confirmation (broadcast,execute)
	14	2	U1	LHKE0STXCB_AF EPU0 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE0TID31DEF EPU0 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE0TID31MSG EPU0 task TID31 messaging level
	8	2	U1	LHKE0TID31CN_AE EPU0 task TID31 command confirmation (normal,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	2	U1	LHKE0TID31CN_AF EPU0 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE0TID31CB_AE EPU0 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE0TID31CB_AF EPU0 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.114 DiagTaskCfgEpu1 (679/0x2A7)

Description:

"Diagnostic ITC/MSG configuration of tasks on EPU1" Telemetry Packet

Diagnostic ITC/MSG configuration of tasks on EPU1

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTASKEPU1 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKE1MSGCTDB EPU1 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE1MSGSSR EPU1 message reporting level on SSR
0x014	0	1	U1	LHKE1ANONDEF EPU1 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1ANONMSG EPU1 task ANON messaging level
	8	2	U1	LHKE1ANONCN_AE EPU1 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE1ANONCN_AF EPU1 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE1ANONCB_AE EPU1 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE1ANONCB_AF EPU1 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE1LCMDEF EPU1 task LCM defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCMMSG EPU1 task LCM messaging level
	8	2	U1	LHKE1LCMCN_AE EPU1 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE1LCMCN_AF EPU1 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE1LCMCB_AE EPU1 task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCMCB_AF EPU1 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE1LFS_MDEF EPU1 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LFS_MMSG EPU1 task LFS_M messaging level
	8	2	U1	LHKE1LFS_MCN_AE EPU1 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE1LFS_MCN_AF EPU1 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE1LFS_MCB_AE EPU1 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LFS_MCB_AF EPU1 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE1LFS_SDEF EPU1 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LFS_SMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LFS_S messaging level
	8	2	U1	LHKE1LFS_SCN_AE EPU1 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE1LFS_SCN_AF EPU1 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE1LFS_SCB_AE EPU1 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LFS_SCB_AF EPU1 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE1LHK_MDEF EPU1 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LHK_MMSG EPU1 task LHK_M messaging level
	8	2	U1	LHKE1LHK_MCN_AE EPU1 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE1LHK_MCN_AF EPU1 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE1LHK_MCB_AE EPU1 task LHK_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LHK_MCB_AF EPU1 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE1LHK_SDEF EPU1 task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LHK_SMSG EPU1 task LHK_S messaging level
	8	2	U1	LHKE1LHK_SCN_AE EPU1 task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKE1LHK_SCN_AF EPU1 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE1LHK_SCB_AE EPU1 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LHK_SCB_AF EPU1 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE1LIM_MDEF EPU1 task LIM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIM_MMSG EPU1 task LIM_M messaging level
	8	2	U1	LHKE1LIM_MCN_AE EPU1 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE1LIM_MCN_AF EPU1 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE1LIM_MCB_AE EPU1 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIM_MCB_AF EPU1 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE1LIM_SDEF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LIM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIM_SMSG EPU1 task LIM_S messaging level
	8	2	U1	LHKE1LIM_SCN_AE EPU1 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE1LIM_SCN_AF EPU1 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE1LIM_SCB_AE EPU1 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIM_SCB_AF EPU1 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE1LSM_MDEF EPU1 task LSM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSM_MMSG EPU1 task LSM_M messaging level
	8	2	U1	LHKE1LSM_MCN_AE EPU1 task LSM_M command confirmation (normal,execute)
	10	2	U1	LHKE1LSM_MCN_AF EPU1 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE1LSM_MCB_AE EPU1 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSM_MCB_AF EPU1 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE1LSM_SDEF EPU1 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSM_SMSG EPU1 task LSM_S messaging level
	8	2	U1	LHKE1LSM_SCN_AE EPU1 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE1LSM_SCN_AF EPU1 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE1LSM_SCB_AE EPU1 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSM_SCB_AF EPU1 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE1LSWDEF EPU1 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LSWMSG EPU1 task LSW messaging level
	8	2	U1	LHKE1LSWCN_AE EPU1 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE1LSWCN_AF EPU1 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE1LSWCB_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKE1LSWCB_AF
				EPU1 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE1TID11DEF
				EPU1 task TID11 defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID11MSG
				EPU1 task TID11 messaging level
	8	2	U1	LHKE1TID11CN_AE
				EPU1 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE1TID11CN_AF
				EPU1 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE1TID11CB_AE
				EPU1 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID11CB_AF
				EPU1 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE1LCI_MDEF
				EPU1 task LCI_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCI_MMSG
				EPU1 task LCI_M messaging level
	8	2	U1	LHKE1LCI_MCN_AE
				EPU1 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE1LCI_MCN_AF
				EPU1 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE1LCI_MCB_AE
				EPU1 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCI_MCB_AF
				EPU1 task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKE1LCI_SDEF
				EPU1 task LCI_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LCI_SMSG
				EPU1 task LCI_S messaging level
	8	2	U1	LHKE1LCI_SCN_AE
				EPU1 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE1LCI_SCN_AF
				EPU1 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE1LCI_SCB_AE
				EPU1 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LCI_SCB_AF
				EPU1 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE1LMCDEF
				EPU1 task LMC defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LMCMSG
				EPU1 task LMC messaging level
	8	2	U1	LHKE1LMCCN_AE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LMC command confirmation (normal,execute)
	10	2	U1	LHKE1LMCCN_AF
				EPU1 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE1LMCCB_AE
				EPU1 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE1LMCCB_AF
				EPU1 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE1LPA_MDEF
				EPU1 task LPA_M defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LPA_MMSG
				EPU1 task LPA_M messaging level
	8	2	U1	LHKE1LPA_MCN_AE
				EPU1 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE1LPA_MCN_AF
				EPU1 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE1LPA_MCB_AE
				EPU1 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE1LPA_MCB_AF
				EPU1 task LPA_M command confirmation (broadcast,execute)
0x034	0	1	U1	LHKE1LPA_SDEF
				EPU1 task LPA_S defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LPA_SMSG
				EPU1 task LPA_S messaging level
	8	2	U1	LHKE1LPA_SCN_AE
				EPU1 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE1LPA_SCN_AF
				EPU1 task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKE1LPA_SCB_AE
				EPU1 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE1LPA_SCB_AF
				EPU1 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE1LRADEF
				EPU1 task LRA defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRAMSG
				EPU1 task LRA messaging level
	8	2	U1	LHKE1LRACN_AE
				EPU1 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE1LRACN_AF
				EPU1 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE1LRACB_AE
				EPU1 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRACB_AF
				EPU1 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE1LTCDEF
				EPU1 task LTC defined
	1	5	U12	LHKSPARE5U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTCMSG EPU1 task LTC messaging level
	8	2	U1	LHKE1LTCCN_AE EPU1 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE1LTCCN_AF EPU1 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE1LTCCB_AE EPU1 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTCCB_AF EPU1 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE1GRBDEF EPU1 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1GRBMSG EPU1 task GRB messaging level
	8	2	U1	LHKE1GRBCN_AE EPU1 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE1GRBCN_AF EPU1 task GRB command confirmation (normal,forward)
	12	2	U1	LHKE1GRBCB_AE EPU1 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE1GRBCB_AF EPU1 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE1LIHDEF EPU1 task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LIHMSG EPU1 task LIH messaging level
	8	2	U1	LHKE1LIHCN_AE EPU1 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE1LIHCN_AF EPU1 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE1LIHCB_AE EPU1 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE1LIHCB_AF EPU1 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE1TID21DEF EPU1 task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID21MSG EPU1 task TID21 messaging level
	8	2	U1	LHKE1TID21CN_AE EPU1 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE1TID21CN_AF EPU1 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE1TID21CB_AE EPU1 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID21CB_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKE1CRXCDEF EPU1 task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CRXCMSG EPU1 task CRXC messaging level
	8	2	U1	LHKE1CRXCCN_AE EPU1 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE1CRXCCN_AF EPU1 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE1CRXCCB_AE EPU1 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE1CRXCCB_AF EPU1 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE1CRXTDEF EPU1 task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CRXTMSG EPU1 task CRXT messaging level
	8	2	U1	LHKE1CRXTCN_AE EPU1 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE1CRXTCN_AF EPU1 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE1CRXTCB_AE EPU1 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE1CRXTCB_AF EPU1 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE1LTX1DEF EPU1 task LTX1 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTX1MSG EPU1 task LTX1 messaging level
	8	2	U1	LHKE1LTX1CN_AE EPU1 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE1LTX1CN_AF EPU1 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE1LTX1CB_AE EPU1 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTX1CB_AF EPU1 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE1LTX0DEF EPU1 task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LTX0MSG EPU1 task LTX0 messaging level
	8	2	U1	LHKE1LTX0CN_AE EPU1 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE1LTX0CN_AF

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKE1LTX0CB_AE
				EPU1 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE1LTX0CB_AF
				EPU1 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE1LRXRDEF
				EPU1 task LRXR defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXRMSG
				EPU1 task LRXR messaging level
	8	2	U1	LHKE1LRXRCN_AE
				EPU1 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE1LRXRCN_AF
				EPU1 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE1LRXRCB_AE
				EPU1 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXRCB_AF
				EPU1 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE1LRXEDEF
				EPU1 task LRXE defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXEMSG
				EPU1 task LRXE messaging level
	8	2	U1	LHKE1LRXECN_AE
				EPU1 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE1LRXECN_AF
				EPU1 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE1LRXECB_AE
				EPU1 task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXECB_AF
				EPU1 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE1LRXNDEF
				EPU1 task LRXN defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1LRXNMSG
				EPU1 task LRXN messaging level
	8	2	U1	LHKE1LRXNCN_AE
				EPU1 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE1LRXNCN_AF
				EPU1 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE1LRXNCB_AE
				EPU1 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE1LRXNCB_AF
				EPU1 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE1CTXDEF
				EPU1 task CTX defined
	1	5	U12	LHKSPARE5U12
				Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1CTXMSG

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 task CTX messaging level
	8	2	U1	LHKE1CTXCN_AE EPU1 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE1CTXCN_AF EPU1 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE1CTXCB_AE EPU1 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE1CTXCB_AF EPU1 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE1STXDEF EPU1 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1STXMSG EPU1 task STX messaging level
	8	2	U1	LHKE1STXCN_AE EPU1 task STX command confirmation (normal,execute)
	10	2	U1	LHKE1STXCN_AF EPU1 task STX command confirmation (normal,forward)
	12	2	U1	LHKE1STXCB_AE EPU1 task STX command confirmation (broadcast,execute)
	14	2	U1	LHKE1STXCB_AF EPU1 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE1TID31DEF EPU1 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE1TID31MSG EPU1 task TID31 messaging level
	8	2	U1	LHKE1TID31CN_AE EPU1 task TID31 command confirmation (normal,execute)
	10	2	U1	LHKE1TID31CN_AF EPU1 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE1TID31CB_AE EPU1 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE1TID31CB_AF EPU1 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.115 `DiagTaskCfgEpu2` (680/0x2A8)

Description:

"Diagnostic ITC/MSG configuration of tasks on EPU2" Telemetry Packet

Diagnostic ITC/MSG configuration of tasks on EPU2

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDTASKEPU2 Explicit 16 bit pad in unsigned short
0x010	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x012	0	8	U1	LHKE2MSGCTDB EPU2 message reporting level on CTDB (1553)
0x013	0	8	U1	LHKE2MSGSSR EPU2 message reporting level on SSR
0x014	0	1	U1	LHKE2ANONDEF EPU2 task ANON defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2ANONMSG EPU2 task ANON messaging level
	8	2	U1	LHKE2ANONCN_AE EPU2 task ANON command confirmation (normal,execute)
	10	2	U1	LHKE2ANONCN_AF EPU2 task ANON command confirmation (normal,forward)
	12	2	U1	LHKE2ANONCB_AE EPU2 task ANON command confirmation (broadcast,execute)
	14	2	U1	LHKE2ANONCB_AF EPU2 task ANON command confirmation (broadcast,execute)
0x016	0	1	U1	LHKE2LCMDEF EPU2 task LCM defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LCMMSG EPU2 task LCM messaging level
	8	2	U1	LHKE2LCMCN_AE EPU2 task LCM command confirmation (normal,execute)
	10	2	U1	LHKE2LCMCN_AF EPU2 task LCM command confirmation (normal,forward)
	12	2	U1	LHKE2LCMCB_AE EPU2 task LCM command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCMCB_AF EPU2 task LCM command confirmation (broadcast,execute)
0x018	0	1	U1	LHKE2LFS_MDEF EPU2 task LFS_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LFS_MMSG EPU2 task LFS_M messaging level
	8	2	U1	LHKE2LFS_MCN_AE EPU2 task LFS_M command confirmation (normal,execute)
	10	2	U1	LHKE2LFS_MCN_AF EPU2 task LFS_M command confirmation (normal,forward)
	12	2	U1	LHKE2LFS_MCB_AE EPU2 task LFS_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LFS_MCB_AF EPU2 task LFS_M command confirmation (broadcast,execute)
0x01A	0	1	U1	LHKE2LFS_SDEF EPU2 task LFS_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LFS_SMSG EPU2 task LFS_S messaging level
	8	2	U1	LHKE2LFS_SCN_AE EPU2 task LFS_S command confirmation (normal,execute)
	10	2	U1	LHKE2LFS_SCN_AF EPU2 task LFS_S command confirmation (normal,forward)
	12	2	U1	LHKE2LFS_SCB_AE EPU2 task LFS_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LFS_SCB_AF EPU2 task LFS_S command confirmation (broadcast,execute)
0x01C	0	1	U1	LHKE2LHK_MDEF EPU2 task LHK_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LHK_MMSG EPU2 task LHK_M messaging level
	8	2	U1	LHKE2LHK_MCN_AE EPU2 task LHK_M command confirmation (normal,execute)
	10	2	U1	LHKE2LHK_MCN_AF EPU2 task LHK_M command confirmation (normal,forward)
	12	2	U1	LHKE2LHK_MCB_AE EPU2 task LHK_M command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKE2LHK_MCB_AF EPU2 task LHK_M command confirmation (broadcast,execute)
0x01E	0	1	U1	LHKE2LHK_SDEF EPU2 task LHK_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LHK_SMSG EPU2 task LHK_S messaging level
	8	2	U1	LHKE2LHK_SCN_AE EPU2 task LHK_S command confirmation (normal,execute)
	10	2	U1	LHKE2LHK_SCN_AF EPU2 task LHK_S command confirmation (normal,forward)
	12	2	U1	LHKE2LHK_SCB_AE EPU2 task LHK_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LHK_SCB_AF EPU2 task LHK_S command confirmation (broadcast,execute)
0x020	0	1	U1	LHKE2LIM_MDEF EPU2 task LIM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIM_MMSG EPU2 task LIM_M messaging level
	8	2	U1	LHKE2LIM_MCN_AE EPU2 task LIM_M command confirmation (normal,execute)
	10	2	U1	LHKE2LIM_MCN_AF EPU2 task LIM_M command confirmation (normal,forward)
	12	2	U1	LHKE2LIM_MCB_AE EPU2 task LIM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIM_MCB_AF EPU2 task LIM_M command confirmation (broadcast,execute)
0x022	0	1	U1	LHKE2LIM_SDEF EPU2 task LIM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIM_SMSG EPU2 task LIM_S messaging level
	8	2	U1	LHKE2LIM_SCN_AE EPU2 task LIM_S command confirmation (normal,execute)
	10	2	U1	LHKE2LIM_SCN_AF EPU2 task LIM_S command confirmation (normal,forward)
	12	2	U1	LHKE2LIM_SCB_AE EPU2 task LIM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIM_SCB_AF EPU2 task LIM_S command confirmation (broadcast,execute)
0x024	0	1	U1	LHKE2LSM_MDEF EPU2 task LSM_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSM_MMSG EPU2 task LSM_M messaging level
	8	2	U1	LHKE2LSM_MCN_AE EPU2 task LSM_M command confirmation (normal,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	10	2	U1	LHKE2LSM_MCN_AF EPU2 task LSM_M command confirmation (normal,forward)
	12	2	U1	LHKE2LSM_MCB_AE EPU2 task LSM_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSM_MCB_AF EPU2 task LSM_M command confirmation (broadcast,execute)
0x026	0	1	U1	LHKE2LSM_SDEF EPU2 task LSM_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSM_SMSG EPU2 task LSM_S messaging level
	8	2	U1	LHKE2LSM_SCN_AE EPU2 task LSM_S command confirmation (normal,execute)
	10	2	U1	LHKE2LSM_SCN_AF EPU2 task LSM_S command confirmation (normal,forward)
	12	2	U1	LHKE2LSM_SCB_AE EPU2 task LSM_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSM_SCB_AF EPU2 task LSM_S command confirmation (broadcast,execute)
0x028	0	1	U1	LHKE2LSWDEF EPU2 task LSW defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LSWMSG EPU2 task LSW messaging level
	8	2	U1	LHKE2LSWCN_AE EPU2 task LSW command confirmation (normal,execute)
	10	2	U1	LHKE2LSWCN_AF EPU2 task LSW command confirmation (normal,forward)
	12	2	U1	LHKE2LSWCB_AE EPU2 task LSW command confirmation (broadcast,execute)
	14	2	U1	LHKE2LSWCB_AF EPU2 task LSW command confirmation (broadcast,execute)
0x02A	0	1	U1	LHKE2TID11DEF EPU2 task TID11 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID11MSG EPU2 task TID11 messaging level
	8	2	U1	LHKE2TID11CN_AE EPU2 task TID11 command confirmation (normal,execute)
	10	2	U1	LHKE2TID11CN_AF EPU2 task TID11 command confirmation (normal,forward)
	12	2	U1	LHKE2TID11CB_AE EPU2 task TID11 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID11CB_AF EPU2 task TID11 command confirmation (broadcast,execute)
0x02C	0	1	U1	LHKE2LCI_MDEF EPU2 task LCI_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	2	U1	LHKE2LCI_MMSG EPU2 task LCI_M messaging level
	8	2	U1	LHKE2LCI_MCN_AE EPU2 task LCI_M command confirmation (normal,execute)
	10	2	U1	LHKE2LCI_MCN_AF EPU2 task LCI_M command confirmation (normal,forward)
	12	2	U1	LHKE2LCI_MCB_AE EPU2 task LCI_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCI_MCB_AF EPU2 task LCI_M command confirmation (broadcast,execute)
0x02E	0	1	U1	LHKE2LCI_SDEF EPU2 task LCI_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LCI_SMSG EPU2 task LCI_S messaging level
	8	2	U1	LHKE2LCI_SCN_AE EPU2 task LCI_S command confirmation (normal,execute)
	10	2	U1	LHKE2LCI_SCN_AF EPU2 task LCI_S command confirmation (normal,forward)
	12	2	U1	LHKE2LCI_SCB_AE EPU2 task LCI_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LCI_SCB_AF EPU2 task LCI_S command confirmation (broadcast,execute)
0x030	0	1	U1	LHKE2LMCDEF EPU2 task LMC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LMCMSG EPU2 task LMC messaging level
	8	2	U1	LHKE2LMCCN_AE EPU2 task LMC command confirmation (normal,execute)
	10	2	U1	LHKE2LMCCN_AF EPU2 task LMC command confirmation (normal,forward)
	12	2	U1	LHKE2LMCCB_AE EPU2 task LMC command confirmation (broadcast,execute)
	14	2	U1	LHKE2LMCCB_AF EPU2 task LMC command confirmation (broadcast,execute)
0x032	0	1	U1	LHKE2LPA_MDEF EPU2 task LPA_M defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LPA_MMSG EPU2 task LPA_M messaging level
	8	2	U1	LHKE2LPA_MCN_AE EPU2 task LPA_M command confirmation (normal,execute)
	10	2	U1	LHKE2LPA_MCN_AF EPU2 task LPA_M command confirmation (normal,forward)
	12	2	U1	LHKE2LPA_MCB_AE EPU2 task LPA_M command confirmation (broadcast,execute)
	14	2	U1	LHKE2LPA_MCB_AF EPU2 task LPA_M command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x034	0	1	U1	LHKE2LPA_SDEF EPU2 task LPA_S defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LPA_SMSG EPU2 task LPA_S messaging level
	8	2	U1	LHKE2LPA_SCN_AE EPU2 task LPA_S command confirmation (normal,execute)
	10	2	U1	LHKE2LPA_SCN_AF EPU2 task LPA_S command confirmation (normal,forward)
	12	2	U1	LHKE2LPA_SCB_AE EPU2 task LPA_S command confirmation (broadcast,execute)
	14	2	U1	LHKE2LPA_SCB_AF EPU2 task LPA_S command confirmation (broadcast,execute)
0x036	0	1	U1	LHKE2LRADEF EPU2 task LRA defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRAMSG EPU2 task LRA messaging level
	8	2	U1	LHKE2LRACN_AE EPU2 task LRA command confirmation (normal,execute)
	10	2	U1	LHKE2LRACN_AF EPU2 task LRA command confirmation (normal,forward)
	12	2	U1	LHKE2LRACB_AE EPU2 task LRA command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRACB_AF EPU2 task LRA command confirmation (broadcast,execute)
0x038	0	1	U1	LHKE2LTCDEF EPU2 task LTC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTCMSG EPU2 task LTC messaging level
	8	2	U1	LHKE2LTCCN_AE EPU2 task LTC command confirmation (normal,execute)
	10	2	U1	LHKE2LTCCN_AF EPU2 task LTC command confirmation (normal,forward)
	12	2	U1	LHKE2LTCCB_AE EPU2 task LTC command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTCCB_AF EPU2 task LTC command confirmation (broadcast,execute)
0x03A	0	1	U1	LHKE2GRBDEF EPU2 task GRB defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2GRBMSG EPU2 task GRB messaging level
	8	2	U1	LHKE2GRBCN_AE EPU2 task GRB command confirmation (normal,execute)
	10	2	U1	LHKE2GRBCN_AF EPU2 task GRB command confirmation (normal,forward)

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	2	U1	LHKE2GRBCB_AE EPU2 task GRB command confirmation (broadcast,execute)
	14	2	U1	LHKE2GRBCB_AF EPU2 task GRB command confirmation (broadcast,execute)
0x03C	0	1	U1	LHKE2LIHDEF EPU2 task LIH defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LIHMSG EPU2 task LIH messaging level
	8	2	U1	LHKE2LIHCN_AE EPU2 task LIH command confirmation (normal,execute)
	10	2	U1	LHKE2LIHCN_AF EPU2 task LIH command confirmation (normal,forward)
	12	2	U1	LHKE2LIHCB_AE EPU2 task LIH command confirmation (broadcast,execute)
	14	2	U1	LHKE2LIHCB_AF EPU2 task LIH command confirmation (broadcast,execute)
0x03E	0	1	U1	LHKE2TID21DEF EPU2 task TID21 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID21MSG EPU2 task TID21 messaging level
	8	2	U1	LHKE2TID21CN_AE EPU2 task TID21 command confirmation (normal,execute)
	10	2	U1	LHKE2TID21CN_AF EPU2 task TID21 command confirmation (normal,forward)
	12	2	U1	LHKE2TID21CB_AE EPU2 task TID21 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID21CB_AF EPU2 task TID21 command confirmation (broadcast,execute)
0x040	0	1	U1	LHKE2CRXCDEF EPU2 task CRXC defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CRXCMSG EPU2 task CRXC messaging level
	8	2	U1	LHKE2CRXCCN_AE EPU2 task CRXC command confirmation (normal,execute)
	10	2	U1	LHKE2CRXCCN_AF EPU2 task CRXC command confirmation (normal,forward)
	12	2	U1	LHKE2CRXCCB_AE EPU2 task CRXC command confirmation (broadcast,execute)
	14	2	U1	LHKE2CRXCCB_AF EPU2 task CRXC command confirmation (broadcast,execute)
0x042	0	1	U1	LHKE2CRXTDEF EPU2 task CRXT defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CRXTMSG EPU2 task CRXT messaging level

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	2	U1	LHKE2CRXTCN_AE EPU2 task CRXT command confirmation (normal,execute)
	10	2	U1	LHKE2CRXTCN_AF EPU2 task CRXT command confirmation (normal,forward)
	12	2	U1	LHKE2CRXTCB_AE EPU2 task CRXT command confirmation (broadcast,execute)
	14	2	U1	LHKE2CRXTCB_AF EPU2 task CRXT command confirmation (broadcast,execute)
0x044	0	1	U1	LHKE2LTX1DEF EPU2 task LTX1 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTX1MSG EPU2 task LTX1 messaging level
	8	2	U1	LHKE2LTX1CN_AE EPU2 task LTX1 command confirmation (normal,execute)
	10	2	U1	LHKE2LTX1CN_AF EPU2 task LTX1 command confirmation (normal,forward)
	12	2	U1	LHKE2LTX1CB_AE EPU2 task LTX1 command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTX1CB_AF EPU2 task LTX1 command confirmation (broadcast,execute)
0x046	0	1	U1	LHKE2LTX0DEF EPU2 task LTX0 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LTX0MSG EPU2 task LTX0 messaging level
	8	2	U1	LHKE2LTX0CN_AE EPU2 task LTX0 command confirmation (normal,execute)
	10	2	U1	LHKE2LTX0CN_AF EPU2 task LTX0 command confirmation (normal,forward)
	12	2	U1	LHKE2LTX0CB_AE EPU2 task LTX0 command confirmation (broadcast,execute)
	14	2	U1	LHKE2LTX0CB_AF EPU2 task LTX0 command confirmation (broadcast,execute)
0x048	0	1	U1	LHKE2LRXRDEF EPU2 task LRXR defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXRMSG EPU2 task LRXR messaging level
	8	2	U1	LHKE2LRXRCN_AE EPU2 task LRXR command confirmation (normal,execute)
	10	2	U1	LHKE2LRXRCN_AF EPU2 task LRXR command confirmation (normal,forward)
	12	2	U1	LHKE2LRXRCB_AE EPU2 task LRXR command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXRCB_AF EPU2 task LRXR command confirmation (broadcast,execute)
0x04A	0	1	U1	LHKE2LRXEDEF EPU2 task LRXE defined

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXEMSG EPU2 task LRXE messaging level
	8	2	U1	LHKE2LRXECN_AE EPU2 task LRXE command confirmation (normal,execute)
	10	2	U1	LHKE2LRXECN_AF EPU2 task LRXE command confirmation (normal,forward)
	12	2	U1	LHKE2LRXECB_AE EPU2 task LRXE command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXECB_AF EPU2 task LRXE command confirmation (broadcast,execute)
0x04C	0	1	U1	LHKE2LRXNDEF EPU2 task LRXN defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2LRXNMSG EPU2 task LRXN messaging level
	8	2	U1	LHKE2LRXNCN_AE EPU2 task LRXN command confirmation (normal,execute)
	10	2	U1	LHKE2LRXNCN_AF EPU2 task LRXN command confirmation (normal,forward)
	12	2	U1	LHKE2LRXNCB_AE EPU2 task LRXN command confirmation (broadcast,execute)
	14	2	U1	LHKE2LRXNCB_AF EPU2 task LRXN command confirmation (broadcast,execute)
0x04E	0	1	U1	LHKE2CTXDEF EPU2 task CTX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2CTXMSG EPU2 task CTX messaging level
	8	2	U1	LHKE2CTXCN_AE EPU2 task CTX command confirmation (normal,execute)
	10	2	U1	LHKE2CTXCN_AF EPU2 task CTX command confirmation (normal,forward)
	12	2	U1	LHKE2CTXCB_AE EPU2 task CTX command confirmation (broadcast,execute)
	14	2	U1	LHKE2CTXCB_AF EPU2 task CTX command confirmation (broadcast,execute)
0x050	0	1	U1	LHKE2STXDEF EPU2 task STX defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2STXMSG EPU2 task STX messaging level
	8	2	U1	LHKE2STXCN_AE EPU2 task STX command confirmation (normal,execute)
	10	2	U1	LHKE2STXCN_AF EPU2 task STX command confirmation (normal,forward)
	12	2	U1	LHKE2STXCB_AE EPU2 task STX command confirmation (broadcast,execute)

Offset	S	L	Type	ITOS name, attribute(s), and description
	14	2	U1	LHKE2STXCB_AF EPU2 task STX command confirmation (broadcast,execute)
0x052	0	1	U1	LHKE2TID31DEF EPU2 task TID31 defined
	1	5	U12	LHKSPARE5U12 Explicit 5 bit pad in unsigned short
	6	2	U1	LHKE2TID31MSG EPU2 task TID31 messaging level
	8	2	U1	LHKE2TID31CN_AE EPU2 task TID31 command confirmation (normal,execute)
	10	2	U1	LHKE2TID31CN_AF EPU2 task TID31 command confirmation (normal,forward)
	12	2	U1	LHKE2TID31CB_AE EPU2 task TID31 command confirmation (broadcast,execute)
	14	2	U1	LHKE2TID31CB_AF EPU2 task TID31 command confirmation (broadcast,execute)
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.116 `DiagLpaDb0Siu` (682/0x2AA)

Description:

"Diagnostic LPA filter configuration (based on first LPA_DB ins" Telemetry Packet

Diagnostic LPA filter configuration (based on first LPA_DB instance) (SIU)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDLPADB0S Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0ST440 LPA (DB 0) configuration timestamp (SIU) (seconds)
0x014	0	32	U1234	LHKLPA0ST441 LPA (DB 0) configuration timestamp (SIU) (microseconds)
0x018	0	16	U12	LHKLPA0SHNDLRS LPA (DB 0) mask of available (filter) handlers (SIU)
0x01A	0	8	U1	LHKLPA0SOUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (SIU)
0x01B	0	8	U1	LHKLPA0SPSTMSK LPA (DB 0) mask of handlers enabled to post (SIU)
0x01C	0	8	U1	LHKLPA0SCOMP LPA (DB 0) compression level (SIU)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0SHNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (SIU)
0x026	0	16	U12	LHKLPA0SHNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (SIU)
0x028	0	16	U12	LHKLPA0SHNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (SIU)
0x02A	0	16	U12	LHKLPA0SHNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (SIU)
0x02C	0	16	U12	LHKLPA0SHNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (SIU)
0x02E	0	16	U12	LHKLPA0SHNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (SIU)
0x030	0	16	U12	LHKLPA0SHNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (SIU)
0x032	0	16	U12	LHKLPA0SHNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (SIU)
0x034	0	4	I1	LHKLPA0SH00M0P LPA (DB 0) parameter set for handler 0 mode 0 (SIU)
	4	4	I1	LHKLPA0SH00M1P LPA (DB 0) parameter set for handler 0 mode 1 (SIU)
	8	4	I1	LHKLPA0SH00M2P LPA (DB 0) parameter set for handler 0 mode 2 (SIU)
	12	4	I1	LHKLPA0SH00M3P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 0 mode 3 (SIU)
	16	4	I1	LHKLPA0SH00M4P LPA (DB 0) parameter set for handler 0 mode 4 (SIU)
	20	4	I1	LHKLPA0SH00M5P LPA (DB 0) parameter set for handler 0 mode 5 (SIU)
	24	4	I1	LHKLPA0SH00M6P LPA (DB 0) parameter set for handler 0 mode 6 (SIU)
	28	4	I1	LHKLPA0SH00M7P LPA (DB 0) parameter set for handler 0 mode 7 (SIU)
0x038	0	4	I1	LHKLPA0SH01M0P LPA (DB 0) parameter set for handler 1 mode 0 (SIU)
	4	4	I1	LHKLPA0SH01M1P LPA (DB 0) parameter set for handler 1 mode 1 (SIU)
	8	4	I1	LHKLPA0SH01M2P LPA (DB 0) parameter set for handler 1 mode 2 (SIU)
	12	4	I1	LHKLPA0SH01M3P LPA (DB 0) parameter set for handler 1 mode 3 (SIU)
	16	4	I1	LHKLPA0SH01M4P LPA (DB 0) parameter set for handler 1 mode 4 (SIU)
	20	4	I1	LHKLPA0SH01M5P LPA (DB 0) parameter set for handler 1 mode 5 (SIU)
	24	4	I1	LHKLPA0SH01M6P LPA (DB 0) parameter set for handler 1 mode 6 (SIU)
	28	4	I1	LHKLPA0SH01M7P LPA (DB 0) parameter set for handler 1 mode 7 (SIU)
0x03C	0	4	I1	LHKLPA0SH02M0P LPA (DB 0) parameter set for handler 2 mode 0 (SIU)
	4	4	I1	LHKLPA0SH02M1P LPA (DB 0) parameter set for handler 2 mode 1 (SIU)
	8	4	I1	LHKLPA0SH02M2P LPA (DB 0) parameter set for handler 2 mode 2 (SIU)
	12	4	I1	LHKLPA0SH02M3P LPA (DB 0) parameter set for handler 2 mode 3 (SIU)
	16	4	I1	LHKLPA0SH02M4P LPA (DB 0) parameter set for handler 2 mode 4 (SIU)
	20	4	I1	LHKLPA0SH02M5P LPA (DB 0) parameter set for handler 2 mode 5 (SIU)
	24	4	I1	LHKLPA0SH02M6P LPA (DB 0) parameter set for handler 2 mode 6 (SIU)
	28	4	I1	LHKLPA0SH02M7P LPA (DB 0) parameter set for handler 2 mode 7 (SIU)
0x040	0	4	I1	LHKLPA0SH03M0P LPA (DB 0) parameter set for handler 3 mode 0 (SIU)
	4	4	I1	LHKLPA0SH03M1P LPA (DB 0) parameter set for handler 3 mode 1 (SIU)
	8	4	I1	LHKLPA0SH03M2P LPA (DB 0) parameter set for handler 3 mode 2 (SIU)
	12	4	I1	LHKLPA0SH03M3P LPA (DB 0) parameter set for handler 3 mode 3 (SIU)
	16	4	I1	LHKLPA0SH03M4P LPA (DB 0) parameter set for handler 3 mode 4 (SIU)
	20	4	I1	LHKLPA0SH03M5P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 3 mode 5 (SIU)
	24	4	I1	LHKLPA0SH03M6P LPA (DB 0) parameter set for handler 3 mode 6 (SIU)
	28	4	I1	LHKLPA0SH03M7P LPA (DB 0) parameter set for handler 3 mode 7 (SIU)
0x044	0	4	I1	LHKLPA0SH04M0P LPA (DB 0) parameter set for handler 4 mode 0 (SIU)
	4	4	I1	LHKLPA0SH04M1P LPA (DB 0) parameter set for handler 4 mode 1 (SIU)
	8	4	I1	LHKLPA0SH04M2P LPA (DB 0) parameter set for handler 4 mode 2 (SIU)
	12	4	I1	LHKLPA0SH04M3P LPA (DB 0) parameter set for handler 4 mode 3 (SIU)
	16	4	I1	LHKLPA0SH04M4P LPA (DB 0) parameter set for handler 4 mode 4 (SIU)
	20	4	I1	LHKLPA0SH04M5P LPA (DB 0) parameter set for handler 4 mode 5 (SIU)
	24	4	I1	LHKLPA0SH04M6P LPA (DB 0) parameter set for handler 4 mode 6 (SIU)
	28	4	I1	LHKLPA0SH04M7P LPA (DB 0) parameter set for handler 4 mode 7 (SIU)
0x048	0	4	I1	LHKLPA0SH05M0P LPA (DB 0) parameter set for handler 5 mode 0 (SIU)
	4	4	I1	LHKLPA0SH05M1P LPA (DB 0) parameter set for handler 5 mode 1 (SIU)
	8	4	I1	LHKLPA0SH05M2P LPA (DB 0) parameter set for handler 5 mode 2 (SIU)
	12	4	I1	LHKLPA0SH05M3P LPA (DB 0) parameter set for handler 5 mode 3 (SIU)
	16	4	I1	LHKLPA0SH05M4P LPA (DB 0) parameter set for handler 5 mode 4 (SIU)
	20	4	I1	LHKLPA0SH05M5P LPA (DB 0) parameter set for handler 5 mode 5 (SIU)
	24	4	I1	LHKLPA0SH05M6P LPA (DB 0) parameter set for handler 5 mode 6 (SIU)
	28	4	I1	LHKLPA0SH05M7P LPA (DB 0) parameter set for handler 5 mode 7 (SIU)
0x04C	0	4	I1	LHKLPA0SH06M0P LPA (DB 0) parameter set for handler 6 mode 0 (SIU)
	4	4	I1	LHKLPA0SH06M1P LPA (DB 0) parameter set for handler 6 mode 1 (SIU)
	8	4	I1	LHKLPA0SH06M2P LPA (DB 0) parameter set for handler 6 mode 2 (SIU)
	12	4	I1	LHKLPA0SH06M3P LPA (DB 0) parameter set for handler 6 mode 3 (SIU)
	16	4	I1	LHKLPA0SH06M4P LPA (DB 0) parameter set for handler 6 mode 4 (SIU)
	20	4	I1	LHKLPA0SH06M5P LPA (DB 0) parameter set for handler 6 mode 5 (SIU)
	24	4	I1	LHKLPA0SH06M6P LPA (DB 0) parameter set for handler 6 mode 6 (SIU)
	28	4	I1	LHKLPA0SH06M7P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 6 mode 7 (SIU)
0x050	0	4	I1	LHKLPA0SH07M1P
				LPA (DB 0) parameter set for handler 7 mode 0 (SIU)
	4	4	I1	LHKLPA0SH07M2P
				LPA (DB 0) parameter set for handler 7 mode 1 (SIU)
	8	4	I1	LHKLPA0SH07M3P
				LPA (DB 0) parameter set for handler 7 mode 2 (SIU)
	12	4	I1	LHKLPA0SH07M4P
				LPA (DB 0) parameter set for handler 7 mode 3 (SIU)
	16	4	I1	LHKLPA0SH07M5P
				LPA (DB 0) parameter set for handler 7 mode 4 (SIU)
	20	4	I1	LHKLPA0SH07M6P
				LPA (DB 0) parameter set for handler 7 mode 5 (SIU)
	24	4	I1	LHKLPA0SH07M7P
				LPA (DB 0) parameter set for handler 7 mode 6 (SIU)
	28	4	I1	LHKLPA0SH07M0P
				LPA (DB 0) parameter set for handler 7 mode 7 (SIU)
0x054	0	4	I1	LHKLPA0SH08M1P
				LPA (DB 0) parameter set for handler 8 mode 0 (SIU)
	4	4	I1	LHKLPA0SH08M2P
				LPA (DB 0) parameter set for handler 8 mode 1 (SIU)
	8	4	I1	LHKLPA0SH08M3P
				LPA (DB 0) parameter set for handler 8 mode 2 (SIU)
	12	4	I1	LHKLPA0SH08M4P
				LPA (DB 0) parameter set for handler 8 mode 3 (SIU)
	16	4	I1	LHKLPA0SH08M5P
				LPA (DB 0) parameter set for handler 8 mode 4 (SIU)
	20	4	I1	LHKLPA0SH08M6P
				LPA (DB 0) parameter set for handler 8 mode 5 (SIU)
	24	4	I1	LHKLPA0SH08M7P
				LPA (DB 0) parameter set for handler 8 mode 6 (SIU)
	28	4	I1	LHKLPA0SH08M0P
				LPA (DB 0) parameter set for handler 8 mode 7 (SIU)
0x058	0	4	I1	LHKLPA0SH09M1P
				LPA (DB 0) parameter set for handler 9 mode 0 (SIU)
	4	4	I1	LHKLPA0SH09M2P
				LPA (DB 0) parameter set for handler 9 mode 1 (SIU)
	8	4	I1	LHKLPA0SH09M3P
				LPA (DB 0) parameter set for handler 9 mode 2 (SIU)
	12	4	I1	LHKLPA0SH09M4P
				LPA (DB 0) parameter set for handler 9 mode 3 (SIU)
	16	4	I1	LHKLPA0SH09M5P
				LPA (DB 0) parameter set for handler 9 mode 4 (SIU)
	20	4	I1	LHKLPA0SH09M6P
				LPA (DB 0) parameter set for handler 9 mode 5 (SIU)
	24	4	I1	LHKLPA0SH09M7P
				LPA (DB 0) parameter set for handler 9 mode 6 (SIU)
	28	4	I1	LHKLPA0SH09M0P
				LPA (DB 0) parameter set for handler 9 mode 7 (SIU)
0x05C	0	4	I1	LHKLPA0SH10M0P
				LPA (DB 0) parameter set for handler 10 mode 0 (SIU)
	4	4	I1	LHKLPA0SH10M1P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 10 mode 1 (SIU)
	8	4	I1	LHKLPA0SH10M2P LPA (DB 0) parameter set for handler 10 mode 2 (SIU)
	12	4	I1	LHKLPA0SH10M3P LPA (DB 0) parameter set for handler 10 mode 3 (SIU)
	16	4	I1	LHKLPA0SH10M4P LPA (DB 0) parameter set for handler 10 mode 4 (SIU)
	20	4	I1	LHKLPA0SH10M5P LPA (DB 0) parameter set for handler 10 mode 5 (SIU)
	24	4	I1	LHKLPA0SH10M6P LPA (DB 0) parameter set for handler 10 mode 6 (SIU)
	28	4	I1	LHKLPA0SH10M7P LPA (DB 0) parameter set for handler 10 mode 7 (SIU)
0x060	0	4	I1	LHKLPA0SH11M0P LPA (DB 0) parameter set for handler 11 mode 0 (SIU)
	4	4	I1	LHKLPA0SH11M1P LPA (DB 0) parameter set for handler 11 mode 1 (SIU)
	8	4	I1	LHKLPA0SH11M2P LPA (DB 0) parameter set for handler 11 mode 2 (SIU)
	12	4	I1	LHKLPA0SH11M3P LPA (DB 0) parameter set for handler 11 mode 3 (SIU)
	16	4	I1	LHKLPA0SH11M4P LPA (DB 0) parameter set for handler 11 mode 4 (SIU)
	20	4	I1	LHKLPA0SH11M5P LPA (DB 0) parameter set for handler 11 mode 5 (SIU)
	24	4	I1	LHKLPA0SH11M6P LPA (DB 0) parameter set for handler 11 mode 6 (SIU)
	28	4	I1	LHKLPA0SH11M7P LPA (DB 0) parameter set for handler 11 mode 7 (SIU)
0x064	0	4	I1	LHKLPA0SH12M0P LPA (DB 0) parameter set for handler 12 mode 0 (SIU)
	4	4	I1	LHKLPA0SH12M1P LPA (DB 0) parameter set for handler 12 mode 1 (SIU)
	8	4	I1	LHKLPA0SH12M2P LPA (DB 0) parameter set for handler 12 mode 2 (SIU)
	12	4	I1	LHKLPA0SH12M3P LPA (DB 0) parameter set for handler 12 mode 3 (SIU)
	16	4	I1	LHKLPA0SH12M4P LPA (DB 0) parameter set for handler 12 mode 4 (SIU)
	20	4	I1	LHKLPA0SH12M5P LPA (DB 0) parameter set for handler 12 mode 5 (SIU)
	24	4	I1	LHKLPA0SH12M6P LPA (DB 0) parameter set for handler 12 mode 6 (SIU)
	28	4	I1	LHKLPA0SH12M7P LPA (DB 0) parameter set for handler 12 mode 7 (SIU)
0x068	0	4	I1	LHKLPA0SH13M0P LPA (DB 0) parameter set for handler 13 mode 0 (SIU)
	4	4	I1	LHKLPA0SH13M1P LPA (DB 0) parameter set for handler 13 mode 1 (SIU)
	8	4	I1	LHKLPA0SH13M2P LPA (DB 0) parameter set for handler 13 mode 2 (SIU)
	12	4	I1	LHKLPA0SH13M3P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 13 mode 3 (SIU)
	16	4	I1	LHKLPA0SH13M4P LPA (DB 0) parameter set for handler 13 mode 4 (SIU)
	20	4	I1	LHKLPA0SH13M5P LPA (DB 0) parameter set for handler 13 mode 5 (SIU)
	24	4	I1	LHKLPA0SH13M6P LPA (DB 0) parameter set for handler 13 mode 6 (SIU)
	28	4	I1	LHKLPA0SH13M7P LPA (DB 0) parameter set for handler 13 mode 7 (SIU)
0x06C	0	4	I1	LHKLPA0SH14M0P LPA (DB 0) parameter set for handler 14 mode 0 (SIU)
	4	4	I1	LHKLPA0SH14M1P LPA (DB 0) parameter set for handler 14 mode 1 (SIU)
	8	4	I1	LHKLPA0SH14M2P LPA (DB 0) parameter set for handler 14 mode 2 (SIU)
	12	4	I1	LHKLPA0SH14M3P LPA (DB 0) parameter set for handler 14 mode 3 (SIU)
	16	4	I1	LHKLPA0SH14M4P LPA (DB 0) parameter set for handler 14 mode 4 (SIU)
	20	4	I1	LHKLPA0SH14M5P LPA (DB 0) parameter set for handler 14 mode 5 (SIU)
	24	4	I1	LHKLPA0SH14M6P LPA (DB 0) parameter set for handler 14 mode 6 (SIU)
	28	4	I1	LHKLPA0SH14M7P LPA (DB 0) parameter set for handler 14 mode 7 (SIU)
0x070	0	4	I1	LHKLPA0SH15M0P LPA (DB 0) parameter set for handler 15 mode 0 (SIU)
	4	4	I1	LHKLPA0SH15M1P LPA (DB 0) parameter set for handler 15 mode 1 (SIU)
	8	4	I1	LHKLPA0SH15M2P LPA (DB 0) parameter set for handler 15 mode 2 (SIU)
	12	4	I1	LHKLPA0SH15M3P LPA (DB 0) parameter set for handler 15 mode 3 (SIU)
	16	4	I1	LHKLPA0SH15M4P LPA (DB 0) parameter set for handler 15 mode 4 (SIU)
	20	4	I1	LHKLPA0SH15M5P LPA (DB 0) parameter set for handler 15 mode 5 (SIU)
	24	4	I1	LHKLPA0SH15M6P LPA (DB 0) parameter set for handler 15 mode 6 (SIU)
	28	4	I1	LHKLPA0SH15M7P LPA (DB 0) parameter set for handler 15 mode 7 (SIU)

14.3.117 `DiagLpaDb0Epu0` (683/0x2AB)

Description:

"Diagnostic LPA filter configuration (based on first LPA_DB ins" Telemetry Packet

Diagnostic LPA filter configuration (based on first LPA_DB instance) (EPU0)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDLPADB0E0 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E0T440 LPA (DB 0) configuration timestamp (EPU0) (seconds)
0x014	0	32	U1234	LHKLPA0E0T441 LPA (DB 0) configuration timestamp (EPU0) (microseconds)
0x018	0	16	U12	LHKLPA0E0HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU0)
0x01A	0	8	U1	LHKLPA0E0OUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU0)
0x01B	0	8	U1	LHKLPA0E0PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU0)
0x01C	0	8	U1	LHKLPA0E0COMP LPA (DB 0) compression level (EPU0)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E0HNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (EPU0)
0x026	0	16	U12	LHKLPA0E0HNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (EPU0)
0x028	0	16	U12	LHKLPA0E0HNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (EPU0)
0x02A	0	16	U12	LHKLPA0E0HNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (EPU0)
0x02C	0	16	U12	LHKLPA0E0HNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (EPU0)
0x02E	0	16	U12	LHKLPA0E0HNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (EPU0)
0x030	0	16	U12	LHKLPA0E0HNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (EPU0)
0x032	0	16	U12	LHKLPA0E0HNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (EPU0)
0x034	0	4	I1	LHKLPA0E0H00M0P LPA (DB 0) parameter set for handler 0 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H00M1P LPA (DB 0) parameter set for handler 0 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H00M2P LPA (DB 0) parameter set for handler 0 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H00M3P LPA (DB 0) parameter set for handler 0 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H00M4P LPA (DB 0) parameter set for handler 0 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H00M5P LPA (DB 0) parameter set for handler 0 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H00M6P LPA (DB 0) parameter set for handler 0 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H00M7P LPA (DB 0) parameter set for handler 0 mode 7 (EPU0)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x038	0	4	I1	LHKLPA0E0H01M0P LPA (DB 0) parameter set for handler 1 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H01M1P LPA (DB 0) parameter set for handler 1 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H01M2P LPA (DB 0) parameter set for handler 1 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H01M3P LPA (DB 0) parameter set for handler 1 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H01M4P LPA (DB 0) parameter set for handler 1 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H01M5P LPA (DB 0) parameter set for handler 1 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H01M6P LPA (DB 0) parameter set for handler 1 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H01M7P LPA (DB 0) parameter set for handler 1 mode 7 (EPU0)
0x03C	0	4	I1	LHKLPA0E0H02M0P LPA (DB 0) parameter set for handler 2 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H02M1P LPA (DB 0) parameter set for handler 2 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H02M2P LPA (DB 0) parameter set for handler 2 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H02M3P LPA (DB 0) parameter set for handler 2 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H02M4P LPA (DB 0) parameter set for handler 2 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H02M5P LPA (DB 0) parameter set for handler 2 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H02M6P LPA (DB 0) parameter set for handler 2 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H02M7P LPA (DB 0) parameter set for handler 2 mode 7 (EPU0)
0x040	0	4	I1	LHKLPA0E0H03M0P LPA (DB 0) parameter set for handler 3 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H03M1P LPA (DB 0) parameter set for handler 3 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H03M2P LPA (DB 0) parameter set for handler 3 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H03M3P LPA (DB 0) parameter set for handler 3 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H03M4P LPA (DB 0) parameter set for handler 3 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H03M5P LPA (DB 0) parameter set for handler 3 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H03M6P LPA (DB 0) parameter set for handler 3 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H03M7P LPA (DB 0) parameter set for handler 3 mode 7 (EPU0)
0x044	0	4	I1	LHKLPA0E0H04M0P LPA (DB 0) parameter set for handler 4 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H04M1P LPA (DB 0) parameter set for handler 4 mode 1 (EPU0)

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	4	I1	LHKLPA0E0H04M2P LPA (DB 0) parameter set for handler 4 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H04M3P LPA (DB 0) parameter set for handler 4 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H04M4P LPA (DB 0) parameter set for handler 4 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H04M5P LPA (DB 0) parameter set for handler 4 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H04M6P LPA (DB 0) parameter set for handler 4 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H04M7P LPA (DB 0) parameter set for handler 4 mode 7 (EPU0)
0x048	0	4	I1	LHKLPA0E0H05M0P LPA (DB 0) parameter set for handler 5 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H05M1P LPA (DB 0) parameter set for handler 5 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H05M2P LPA (DB 0) parameter set for handler 5 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H05M3P LPA (DB 0) parameter set for handler 5 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H05M4P LPA (DB 0) parameter set for handler 5 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H05M5P LPA (DB 0) parameter set for handler 5 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H05M6P LPA (DB 0) parameter set for handler 5 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H05M7P LPA (DB 0) parameter set for handler 5 mode 7 (EPU0)
0x04C	0	4	I1	LHKLPA0E0H06M0P LPA (DB 0) parameter set for handler 6 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H06M1P LPA (DB 0) parameter set for handler 6 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H06M2P LPA (DB 0) parameter set for handler 6 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H06M3P LPA (DB 0) parameter set for handler 6 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H06M4P LPA (DB 0) parameter set for handler 6 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H06M5P LPA (DB 0) parameter set for handler 6 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H06M6P LPA (DB 0) parameter set for handler 6 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H06M7P LPA (DB 0) parameter set for handler 6 mode 7 (EPU0)
0x050	0	4	I1	LHKLPA0E0H07M1P LPA (DB 0) parameter set for handler 7 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H07M2P LPA (DB 0) parameter set for handler 7 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H07M3P LPA (DB 0) parameter set for handler 7 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H07M4P LPA (DB 0) parameter set for handler 7 mode 3 (EPU0)

Offset	S	L	Type	ITOS name, attribute(s), and description
	16	4	I1	LHKLPA0E0H07M5P LPA (DB 0) parameter set for handler 7 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H07M6P LPA (DB 0) parameter set for handler 7 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H07M7P LPA (DB 0) parameter set for handler 7 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H07M0P LPA (DB 0) parameter set for handler 7 mode 7 (EPU0)
0x054	0	4	I1	LHKLPA0E0H08M1P LPA (DB 0) parameter set for handler 8 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H08M2P LPA (DB 0) parameter set for handler 8 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H08M3P LPA (DB 0) parameter set for handler 8 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H08M4P LPA (DB 0) parameter set for handler 8 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H08M5P LPA (DB 0) parameter set for handler 8 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H08M6P LPA (DB 0) parameter set for handler 8 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H08M7P LPA (DB 0) parameter set for handler 8 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H08M0P LPA (DB 0) parameter set for handler 8 mode 7 (EPU0)
0x058	0	4	I1	LHKLPA0E0H09M1P LPA (DB 0) parameter set for handler 9 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H09M2P LPA (DB 0) parameter set for handler 9 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H09M3P LPA (DB 0) parameter set for handler 9 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H09M4P LPA (DB 0) parameter set for handler 9 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H09M5P LPA (DB 0) parameter set for handler 9 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H09M6P LPA (DB 0) parameter set for handler 9 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H09M7P LPA (DB 0) parameter set for handler 9 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H09M0P LPA (DB 0) parameter set for handler 9 mode 7 (EPU0)
0x05C	0	4	I1	LHKLPA0E0H10M0P LPA (DB 0) parameter set for handler 10 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H10M1P LPA (DB 0) parameter set for handler 10 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H10M2P LPA (DB 0) parameter set for handler 10 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H10M3P LPA (DB 0) parameter set for handler 10 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H10M4P LPA (DB 0) parameter set for handler 10 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H10M5P LPA (DB 0) parameter set for handler 10 mode 5 (EPU0)

Offset	S	L	Type	ITOS name, attribute(s), and description
	24	4	I1	LHKLPA0E0H10M6P LPA (DB 0) parameter set for handler 10 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H10M7P LPA (DB 0) parameter set for handler 10 mode 7 (EPU0)
0x060	0	4	I1	LHKLPA0E0H11M0P LPA (DB 0) parameter set for handler 11 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H11M1P LPA (DB 0) parameter set for handler 11 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H11M2P LPA (DB 0) parameter set for handler 11 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H11M3P LPA (DB 0) parameter set for handler 11 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H11M4P LPA (DB 0) parameter set for handler 11 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H11M5P LPA (DB 0) parameter set for handler 11 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H11M6P LPA (DB 0) parameter set for handler 11 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H11M7P LPA (DB 0) parameter set for handler 11 mode 7 (EPU0)
0x064	0	4	I1	LHKLPA0E0H12M0P LPA (DB 0) parameter set for handler 12 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H12M1P LPA (DB 0) parameter set for handler 12 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H12M2P LPA (DB 0) parameter set for handler 12 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H12M3P LPA (DB 0) parameter set for handler 12 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H12M4P LPA (DB 0) parameter set for handler 12 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H12M5P LPA (DB 0) parameter set for handler 12 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H12M6P LPA (DB 0) parameter set for handler 12 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H12M7P LPA (DB 0) parameter set for handler 12 mode 7 (EPU0)
0x068	0	4	I1	LHKLPA0E0H13M0P LPA (DB 0) parameter set for handler 13 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H13M1P LPA (DB 0) parameter set for handler 13 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H13M2P LPA (DB 0) parameter set for handler 13 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H13M3P LPA (DB 0) parameter set for handler 13 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H13M4P LPA (DB 0) parameter set for handler 13 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H13M5P LPA (DB 0) parameter set for handler 13 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H13M6P LPA (DB 0) parameter set for handler 13 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H13M7P LPA (DB 0) parameter set for handler 13 mode 7 (EPU0)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06C	0	4	I1	LHKLPA0E0H14M0P LPA (DB 0) parameter set for handler 14 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H14M1P LPA (DB 0) parameter set for handler 14 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H14M2P LPA (DB 0) parameter set for handler 14 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H14M3P LPA (DB 0) parameter set for handler 14 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H14M4P LPA (DB 0) parameter set for handler 14 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU0)
0x070	0	4	I1	LHKLPA0E0H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU0)
	4	4	I1	LHKLPA0E0H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU0)
	8	4	I1	LHKLPA0E0H15M2P LPA (DB 0) parameter set for handler 15 mode 2 (EPU0)
	12	4	I1	LHKLPA0E0H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU0)
	16	4	I1	LHKLPA0E0H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU0)
	20	4	I1	LHKLPA0E0H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU0)
	24	4	I1	LHKLPA0E0H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU0)
	28	4	I1	LHKLPA0E0H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU0)

14.3.118 `DiagLpaDb0Epu1` (684/0x2AC)

Description:

"Diagnostic LPA filter configuration (based on first LPA_DB ins" Telemetry Packet

Diagnostic LPA filter configuration (based on first LPA_DB instance) (EPU1)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0E1 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E1T440 LPA (DB 0) configuration timestamp (EPU1) (seconds)
0x014	0	32	U1234	LHKLPA0E1T441 LPA (DB 0) configuration timestamp (EPU1) (microseconds)
0x018	0	16	U12	LHKLPA0E1HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU1)
0x01A	0	8	U1	LHKLPA0E1OUTMSK

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU1)
0x01B	0	8	U1	LHKLPA0E1PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU1)
0x01C	0	8	U1	LHKLPA0E1COMP LPA (DB 0) compression level (EPU1)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E1HNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (EPU1)
0x026	0	16	U12	LHKLPA0E1HNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (EPU1)
0x028	0	16	U12	LHKLPA0E1HNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (EPU1)
0x02A	0	16	U12	LHKLPA0E1HNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (EPU1)
0x02C	0	16	U12	LHKLPA0E1HNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (EPU1)
0x02E	0	16	U12	LHKLPA0E1HNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (EPU1)
0x030	0	16	U12	LHKLPA0E1HNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (EPU1)
0x032	0	16	U12	LHKLPA0E1HNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (EPU1)
0x034	0	4	I1	LHKLPA0E1H00M0P LPA (DB 0) parameter set for handler 0 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H00M1P LPA (DB 0) parameter set for handler 0 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H00M2P LPA (DB 0) parameter set for handler 0 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H00M3P LPA (DB 0) parameter set for handler 0 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H00M4P LPA (DB 0) parameter set for handler 0 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H00M5P LPA (DB 0) parameter set for handler 0 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H00M6P LPA (DB 0) parameter set for handler 0 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H00M7P LPA (DB 0) parameter set for handler 0 mode 7 (EPU1)
0x038	0	4	I1	LHKLPA0E1H01M0P LPA (DB 0) parameter set for handler 1 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H01M1P LPA (DB 0) parameter set for handler 1 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H01M2P LPA (DB 0) parameter set for handler 1 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H01M3P LPA (DB 0) parameter set for handler 1 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H01M4P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 1 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H01M5P
				LPA (DB 0) parameter set for handler 1 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H01M6P
				LPA (DB 0) parameter set for handler 1 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H01M7P
				LPA (DB 0) parameter set for handler 1 mode 7 (EPU1)
0x03C	0	4	I1	LHKLPA0E1H02M0P
				LPA (DB 0) parameter set for handler 2 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H02M1P
				LPA (DB 0) parameter set for handler 2 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H02M2P
				LPA (DB 0) parameter set for handler 2 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H02M3P
				LPA (DB 0) parameter set for handler 2 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H02M4P
				LPA (DB 0) parameter set for handler 2 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H02M5P
				LPA (DB 0) parameter set for handler 2 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H02M6P
				LPA (DB 0) parameter set for handler 2 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H02M7P
				LPA (DB 0) parameter set for handler 2 mode 7 (EPU1)
0x040	0	4	I1	LHKLPA0E1H03M0P
				LPA (DB 0) parameter set for handler 3 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H03M1P
				LPA (DB 0) parameter set for handler 3 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H03M2P
				LPA (DB 0) parameter set for handler 3 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H03M3P
				LPA (DB 0) parameter set for handler 3 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H03M4P
				LPA (DB 0) parameter set for handler 3 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H03M5P
				LPA (DB 0) parameter set for handler 3 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H03M6P
				LPA (DB 0) parameter set for handler 3 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H03M7P
				LPA (DB 0) parameter set for handler 3 mode 7 (EPU1)
0x044	0	4	I1	LHKLPA0E1H04M0P
				LPA (DB 0) parameter set for handler 4 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H04M1P
				LPA (DB 0) parameter set for handler 4 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H04M2P
				LPA (DB 0) parameter set for handler 4 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H04M3P
				LPA (DB 0) parameter set for handler 4 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H04M4P
				LPA (DB 0) parameter set for handler 4 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H04M5P
				LPA (DB 0) parameter set for handler 4 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H04M6P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 4 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H04M7P
				LPA (DB 0) parameter set for handler 4 mode 7 (EPU1)
0x048	0	4	I1	LHKLPA0E1H05M0P
				LPA (DB 0) parameter set for handler 5 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H05M1P
				LPA (DB 0) parameter set for handler 5 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H05M2P
				LPA (DB 0) parameter set for handler 5 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H05M3P
				LPA (DB 0) parameter set for handler 5 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H05M4P
				LPA (DB 0) parameter set for handler 5 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H05M5P
				LPA (DB 0) parameter set for handler 5 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H05M6P
				LPA (DB 0) parameter set for handler 5 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H05M7P
				LPA (DB 0) parameter set for handler 5 mode 7 (EPU1)
0x04C	0	4	I1	LHKLPA0E1H06M0P
				LPA (DB 0) parameter set for handler 6 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H06M1P
				LPA (DB 0) parameter set for handler 6 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H06M2P
				LPA (DB 0) parameter set for handler 6 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H06M3P
				LPA (DB 0) parameter set for handler 6 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H06M4P
				LPA (DB 0) parameter set for handler 6 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H06M5P
				LPA (DB 0) parameter set for handler 6 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H06M6P
				LPA (DB 0) parameter set for handler 6 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H06M7P
				LPA (DB 0) parameter set for handler 6 mode 7 (EPU1)
0x050	0	4	I1	LHKLPA0E1H07M1P
				LPA (DB 0) parameter set for handler 7 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H07M2P
				LPA (DB 0) parameter set for handler 7 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H07M3P
				LPA (DB 0) parameter set for handler 7 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H07M4P
				LPA (DB 0) parameter set for handler 7 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H07M5P
				LPA (DB 0) parameter set for handler 7 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H07M6P
				LPA (DB 0) parameter set for handler 7 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H07M7P
				LPA (DB 0) parameter set for handler 7 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H07M0P
				LPA (DB 0) parameter set for handler 7 mode 7 (EPU1)
0x054	0	4	I1	LHKLPA0E1H08M1P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 8 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H08M2P
				LPA (DB 0) parameter set for handler 8 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H08M3P
				LPA (DB 0) parameter set for handler 8 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H08M4P
				LPA (DB 0) parameter set for handler 8 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H08M5P
				LPA (DB 0) parameter set for handler 8 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H08M6P
				LPA (DB 0) parameter set for handler 8 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H08M7P
				LPA (DB 0) parameter set for handler 8 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H08M0P
				LPA (DB 0) parameter set for handler 8 mode 7 (EPU1)
0x058	0	4	I1	LHKLPA0E1H09M1P
				LPA (DB 0) parameter set for handler 9 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H09M2P
				LPA (DB 0) parameter set for handler 9 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H09M3P
				LPA (DB 0) parameter set for handler 9 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H09M4P
				LPA (DB 0) parameter set for handler 9 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H09M5P
				LPA (DB 0) parameter set for handler 9 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H09M6P
				LPA (DB 0) parameter set for handler 9 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H09M7P
				LPA (DB 0) parameter set for handler 9 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H09M0P
				LPA (DB 0) parameter set for handler 9 mode 7 (EPU1)
0x05C	0	4	I1	LHKLPA0E1H10M0P
				LPA (DB 0) parameter set for handler 10 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H10M1P
				LPA (DB 0) parameter set for handler 10 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H10M2P
				LPA (DB 0) parameter set for handler 10 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H10M3P
				LPA (DB 0) parameter set for handler 10 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H10M4P
				LPA (DB 0) parameter set for handler 10 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H10M5P
				LPA (DB 0) parameter set for handler 10 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H10M6P
				LPA (DB 0) parameter set for handler 10 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H10M7P
				LPA (DB 0) parameter set for handler 10 mode 7 (EPU1)
0x060	0	4	I1	LHKLPA0E1H11M0P
				LPA (DB 0) parameter set for handler 11 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H11M1P
				LPA (DB 0) parameter set for handler 11 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H11M2P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 11 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H11M3P
				LPA (DB 0) parameter set for handler 11 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H11M4P
				LPA (DB 0) parameter set for handler 11 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H11M5P
				LPA (DB 0) parameter set for handler 11 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H11M6P
				LPA (DB 0) parameter set for handler 11 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H11M7P
				LPA (DB 0) parameter set for handler 11 mode 7 (EPU1)
0x064	0	4	I1	LHKLPA0E1H12M0P
				LPA (DB 0) parameter set for handler 12 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H12M1P
				LPA (DB 0) parameter set for handler 12 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H12M2P
				LPA (DB 0) parameter set for handler 12 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H12M3P
				LPA (DB 0) parameter set for handler 12 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H12M4P
				LPA (DB 0) parameter set for handler 12 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H12M5P
				LPA (DB 0) parameter set for handler 12 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H12M6P
				LPA (DB 0) parameter set for handler 12 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H12M7P
				LPA (DB 0) parameter set for handler 12 mode 7 (EPU1)
0x068	0	4	I1	LHKLPA0E1H13M0P
				LPA (DB 0) parameter set for handler 13 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H13M1P
				LPA (DB 0) parameter set for handler 13 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H13M2P
				LPA (DB 0) parameter set for handler 13 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H13M3P
				LPA (DB 0) parameter set for handler 13 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H13M4P
				LPA (DB 0) parameter set for handler 13 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H13M5P
				LPA (DB 0) parameter set for handler 13 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H13M6P
				LPA (DB 0) parameter set for handler 13 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H13M7P
				LPA (DB 0) parameter set for handler 13 mode 7 (EPU1)
0x06C	0	4	I1	LHKLPA0E1H14M0P
				LPA (DB 0) parameter set for handler 14 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H14M1P
				LPA (DB 0) parameter set for handler 14 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H14M2P
				LPA (DB 0) parameter set for handler 14 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H14M3P
				LPA (DB 0) parameter set for handler 14 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H14M4P

Offset	S	L	Type	ITOS name, attribute(s), and description
				LPA (DB 0) parameter set for handler 14 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU1)
0x070	0	4	I1	LHKLPA0E1H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU1)
	4	4	I1	LHKLPA0E1H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU1)
	8	4	I1	LHKLPA0E1H15M2P LPA (DB 0) parameter set for handler 15 mode 2 (EPU1)
	12	4	I1	LHKLPA0E1H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU1)
	16	4	I1	LHKLPA0E1H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU1)
	20	4	I1	LHKLPA0E1H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU1)
	24	4	I1	LHKLPA0E1H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU1)
	28	4	I1	LHKLPA0E1H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU1)

14.3.119 `DiagLpaDb0Epu2` (685/0x2AD)

Description:

"Diagnostic LPA filter configuration (based on first LPA_DB ins" Telemetry Packet

Diagnostic LPA filter configuration (based on first LPA_DB instance) (EPU2)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVLPADB0E2 Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPA0E2T440 LPA (DB 0) configuration timestamp (EPU2) (seconds)
0x014	0	32	U1234	LHKLPA0E2T441 LPA (DB 0) configuration timestamp (EPU2) (microseconds)
0x018	0	16	U12	LHKLPA0E2HNDLRS LPA (DB 0) mask of available (filter) handlers (EPU2)
0x01A	0	8	U1	LHKLPA0E2OUTMSK LPA (DB 0) mask of outputs (SSR and GRB) enabled (EPU2)
0x01B	0	8	U1	LHKLPA0E2PSTMSK LPA (DB 0) mask of handlers enabled to post (EPU2)
0x01C	0	8	U1	LHKLPA0E2COMP LPA (DB 0) compression level (EPU2)
0x01D	0	8	U1	LHKSPARE8U1 Spare 8 bit field
0x01E	0	16	U12	LHKSPARE16U12 Spare 16 bit field

Offset	S	L	Type	ITOS name, attribute(s), and description
0x020	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x024	0	16	U12	LHKLPA0E2HNDLRM0 LPA (DB 0) mask of handlers enabled for mode 0 (EPU2)
0x026	0	16	U12	LHKLPA0E2HNDLRM1 LPA (DB 0) mask of handlers enabled for mode 1 (EPU2)
0x028	0	16	U12	LHKLPA0E2HNDLRM2 LPA (DB 0) mask of handlers enabled for mode 2 (EPU2)
0x02A	0	16	U12	LHKLPA0E2HNDLRM3 LPA (DB 0) mask of handlers enabled for mode 3 (EPU2)
0x02C	0	16	U12	LHKLPA0E2HNDLRM4 LPA (DB 0) mask of handlers enabled for mode 4 (EPU2)
0x02E	0	16	U12	LHKLPA0E2HNDLRM5 LPA (DB 0) mask of handlers enabled for mode 5 (EPU2)
0x030	0	16	U12	LHKLPA0E2HNDLRM6 LPA (DB 0) mask of handlers enabled for mode 6 (EPU2)
0x032	0	16	U12	LHKLPA0E2HNDLRM7 LPA (DB 0) mask of handlers enabled for mode 7 (EPU2)
0x034	0	4	I1	LHKLPA0E2H00M0P LPA (DB 0) parameter set for handler 0 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H00M1P LPA (DB 0) parameter set for handler 0 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H00M2P LPA (DB 0) parameter set for handler 0 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H00M3P LPA (DB 0) parameter set for handler 0 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H00M4P LPA (DB 0) parameter set for handler 0 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H00M5P LPA (DB 0) parameter set for handler 0 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H00M6P LPA (DB 0) parameter set for handler 0 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H00M7P LPA (DB 0) parameter set for handler 0 mode 7 (EPU2)
0x038	0	4	I1	LHKLPA0E2H01M0P LPA (DB 0) parameter set for handler 1 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H01M1P LPA (DB 0) parameter set for handler 1 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H01M2P LPA (DB 0) parameter set for handler 1 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H01M3P LPA (DB 0) parameter set for handler 1 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H01M4P LPA (DB 0) parameter set for handler 1 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H01M5P LPA (DB 0) parameter set for handler 1 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H01M6P LPA (DB 0) parameter set for handler 1 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H01M7P LPA (DB 0) parameter set for handler 1 mode 7 (EPU2)
0x03C	0	4	I1	LHKLPA0E2H02M0P LPA (DB 0) parameter set for handler 2 mode 0 (EPU2)

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	I1	LHKLPA0E2H02M1P LPA (DB 0) parameter set for handler 2 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H02M2P LPA (DB 0) parameter set for handler 2 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H02M3P LPA (DB 0) parameter set for handler 2 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H02M4P LPA (DB 0) parameter set for handler 2 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H02M5P LPA (DB 0) parameter set for handler 2 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H02M6P LPA (DB 0) parameter set for handler 2 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H02M7P LPA (DB 0) parameter set for handler 2 mode 7 (EPU2)
0x040	0	4	I1	LHKLPA0E2H03M0P LPA (DB 0) parameter set for handler 3 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H03M1P LPA (DB 0) parameter set for handler 3 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H03M2P LPA (DB 0) parameter set for handler 3 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H03M3P LPA (DB 0) parameter set for handler 3 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H03M4P LPA (DB 0) parameter set for handler 3 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H03M5P LPA (DB 0) parameter set for handler 3 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H03M6P LPA (DB 0) parameter set for handler 3 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H03M7P LPA (DB 0) parameter set for handler 3 mode 7 (EPU2)
0x044	0	4	I1	LHKLPA0E2H04M0P LPA (DB 0) parameter set for handler 4 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H04M1P LPA (DB 0) parameter set for handler 4 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H04M2P LPA (DB 0) parameter set for handler 4 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H04M3P LPA (DB 0) parameter set for handler 4 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H04M4P LPA (DB 0) parameter set for handler 4 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H04M5P LPA (DB 0) parameter set for handler 4 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H04M6P LPA (DB 0) parameter set for handler 4 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H04M7P LPA (DB 0) parameter set for handler 4 mode 7 (EPU2)
0x048	0	4	I1	LHKLPA0E2H05M0P LPA (DB 0) parameter set for handler 5 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H05M1P LPA (DB 0) parameter set for handler 5 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H05M2P LPA (DB 0) parameter set for handler 5 mode 2 (EPU2)

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	4	I1	LHKLPA0E2H05M3P LPA (DB 0) parameter set for handler 5 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H05M4P LPA (DB 0) parameter set for handler 5 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H05M5P LPA (DB 0) parameter set for handler 5 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H05M6P LPA (DB 0) parameter set for handler 5 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H05M7P LPA (DB 0) parameter set for handler 5 mode 7 (EPU2)
0x04C	0	4	I1	LHKLPA0E2H06M0P LPA (DB 0) parameter set for handler 6 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H06M1P LPA (DB 0) parameter set for handler 6 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H06M2P LPA (DB 0) parameter set for handler 6 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H06M3P LPA (DB 0) parameter set for handler 6 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H06M4P LPA (DB 0) parameter set for handler 6 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H06M5P LPA (DB 0) parameter set for handler 6 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H06M6P LPA (DB 0) parameter set for handler 6 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H06M7P LPA (DB 0) parameter set for handler 6 mode 7 (EPU2)
0x050	0	4	I1	LHKLPA0E2H07M1P LPA (DB 0) parameter set for handler 7 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H07M2P LPA (DB 0) parameter set for handler 7 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H07M3P LPA (DB 0) parameter set for handler 7 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H07M4P LPA (DB 0) parameter set for handler 7 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H07M5P LPA (DB 0) parameter set for handler 7 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H07M6P LPA (DB 0) parameter set for handler 7 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H07M7P LPA (DB 0) parameter set for handler 7 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H07M0P LPA (DB 0) parameter set for handler 7 mode 7 (EPU2)
0x054	0	4	I1	LHKLPA0E2H08M1P LPA (DB 0) parameter set for handler 8 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H08M2P LPA (DB 0) parameter set for handler 8 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H08M3P LPA (DB 0) parameter set for handler 8 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H08M4P LPA (DB 0) parameter set for handler 8 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H08M5P LPA (DB 0) parameter set for handler 8 mode 4 (EPU2)

Offset	S	L	Type	ITOS name, attribute(s), and description
	20	4	I1	LHKLPA0E2H08M6P LPA (DB 0) parameter set for handler 8 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H08M7P LPA (DB 0) parameter set for handler 8 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H08M0P LPA (DB 0) parameter set for handler 8 mode 7 (EPU2)
0x058	0	4	I1	LHKLPA0E2H09M1P LPA (DB 0) parameter set for handler 9 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H09M2P LPA (DB 0) parameter set for handler 9 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H09M3P LPA (DB 0) parameter set for handler 9 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H09M4P LPA (DB 0) parameter set for handler 9 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H09M5P LPA (DB 0) parameter set for handler 9 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H09M6P LPA (DB 0) parameter set for handler 9 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H09M7P LPA (DB 0) parameter set for handler 9 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H09M0P LPA (DB 0) parameter set for handler 9 mode 7 (EPU2)
0x05C	0	4	I1	LHKLPA0E2H10M0P LPA (DB 0) parameter set for handler 10 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H10M1P LPA (DB 0) parameter set for handler 10 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H10M2P LPA (DB 0) parameter set for handler 10 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H10M3P LPA (DB 0) parameter set for handler 10 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H10M4P LPA (DB 0) parameter set for handler 10 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H10M5P LPA (DB 0) parameter set for handler 10 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H10M6P LPA (DB 0) parameter set for handler 10 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H10M7P LPA (DB 0) parameter set for handler 10 mode 7 (EPU2)
0x060	0	4	I1	LHKLPA0E2H11M0P LPA (DB 0) parameter set for handler 11 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H11M1P LPA (DB 0) parameter set for handler 11 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H11M2P LPA (DB 0) parameter set for handler 11 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H11M3P LPA (DB 0) parameter set for handler 11 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H11M4P LPA (DB 0) parameter set for handler 11 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H11M5P LPA (DB 0) parameter set for handler 11 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H11M6P LPA (DB 0) parameter set for handler 11 mode 6 (EPU2)

Offset	S	L	Type	ITOS name, attribute(s), and description
	28	4	I1	LHKLPA0E2H11M7P LPA (DB 0) parameter set for handler 11 mode 7 (EPU2)
0x064	0	4	I1	LHKLPA0E2H12M0P LPA (DB 0) parameter set for handler 12 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H12M1P LPA (DB 0) parameter set for handler 12 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H12M2P LPA (DB 0) parameter set for handler 12 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H12M3P LPA (DB 0) parameter set for handler 12 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H12M4P LPA (DB 0) parameter set for handler 12 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H12M5P LPA (DB 0) parameter set for handler 12 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H12M6P LPA (DB 0) parameter set for handler 12 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H12M7P LPA (DB 0) parameter set for handler 12 mode 7 (EPU2)
0x068	0	4	I1	LHKLPA0E2H13M0P LPA (DB 0) parameter set for handler 13 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H13M1P LPA (DB 0) parameter set for handler 13 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H13M2P LPA (DB 0) parameter set for handler 13 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H13M3P LPA (DB 0) parameter set for handler 13 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H13M4P LPA (DB 0) parameter set for handler 13 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H13M5P LPA (DB 0) parameter set for handler 13 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H13M6P LPA (DB 0) parameter set for handler 13 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H13M7P LPA (DB 0) parameter set for handler 13 mode 7 (EPU2)
0x06C	0	4	I1	LHKLPA0E2H14M0P LPA (DB 0) parameter set for handler 14 mode 0 (EPU2)
	4	4	I1	LHKLPA0E2H14M1P LPA (DB 0) parameter set for handler 14 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H14M2P LPA (DB 0) parameter set for handler 14 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H14M3P LPA (DB 0) parameter set for handler 14 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H14M4P LPA (DB 0) parameter set for handler 14 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H14M5P LPA (DB 0) parameter set for handler 14 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H14M6P LPA (DB 0) parameter set for handler 14 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H14M7P LPA (DB 0) parameter set for handler 14 mode 7 (EPU2)
0x070	0	4	I1	LHKLPA0E2H15M0P LPA (DB 0) parameter set for handler 15 mode 0 (EPU2)

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	I1	LHKLPA0E2H15M1P LPA (DB 0) parameter set for handler 15 mode 1 (EPU2)
	8	4	I1	LHKLPA0E2H15M2P LPA (DB 0) parameter set for handler 15 mode 2 (EPU2)
	12	4	I1	LHKLPA0E2H15M3P LPA (DB 0) parameter set for handler 15 mode 3 (EPU2)
	16	4	I1	LHKLPA0E2H15M4P LPA (DB 0) parameter set for handler 15 mode 4 (EPU2)
	20	4	I1	LHKLPA0E2H15M5P LPA (DB 0) parameter set for handler 15 mode 5 (EPU2)
	24	4	I1	LHKLPA0E2H15M6P LPA (DB 0) parameter set for handler 15 mode 6 (EPU2)
	28	4	I1	LHKLPA0E2H15M7P LPA (DB 0) parameter set for handler 15 mode 7 (EPU2)

14.3.120 `DiagGasuCounts` (687/0x2AF)

Description:

"Diagnostic GASU counter packet (both GEM and EBM)" Telemetry Packet

Diagnostic GASU counter packet (both GEM and EBM)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDGASUCNT Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKGEMT440 Timestamp for most recent GEM acquisition (seconds)
0x014	0	32	U1234	LHKGEMT441 Timestamp for most recent GEM acquisition (microseconds)
0x018	0	32	U1234	LHKGEMTIMEBASE GEM timebase counter (extended)
0x01C	0	32	U1234	LHKGEMLIVETIME GEM livetime counter (extended)
0x020	0	32	U1234	LHKGEMPRESCALE GEM prescale counter (extended)
0x024	0	32	U1234	LHKGEMDISCARD GEM discard counter (extended)
0x028	0	32	U1234	LHKGEMSENT GEM sent counter (extended)
0x02C	0	32	U1234	LHKGEMDEADZONE GEM dead zone counter (extended)
0x030	0	32	U1234	LHKEBMT440 Timestamp for most recent EBM acquisition (seconds)
0x034	0	32	U1234	LHKEBMT441 Timestamp for most recent EBM acquisition (microseconds)
0x038	0	32	U1234	LHKEBMGEMR EBM packet counter - received from GEM (extended)
0x03C	0	32	U1234	LHKEBMAEMR EBM packet counter - received from AEM (extended)
0x040	0	32	U1234	LHKEBMSIU0R

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM packet counter - received from SIU0 (extended)
0x044	0	32	U1234	LHKEBMSIU1R EBM packet counter - received from SIU1 (extended)
0x048	0	32	U1234	LHKEBMSIUER EBM packet counter - received from SIUE (extended)
0x04C	0	32	U1234	LHKEBMEPU0R EBM packet counter - received from EPU0 (extended)
0x050	0	32	U1234	LHKEBMEPU1R EBM packet counter - received from EPU1 (extended)
0x054	0	32	U1234	LHKEBMEPU2R EBM packet counter - received from EPU2 (extended)
0x058	0	32	U1234	LHKEBMSIU0S EBM packet counter - sent to SIU0 (extended)
0x05C	0	32	U1234	LHKEBMSIU1S EBM packet counter - sent to SIU1 (extended)
0x060	0	32	U1234	LHKEBMSIUES EBM packet counter - sent to SIUE (extended)
0x064	0	32	U1234	LHKEBMEPU0S EBM packet counter - sent to EPU0 (extended)
0x068	0	32	U1234	LHKEBMEPU1S EBM packet counter - sent to EPU1 (extended)
0x06C	0	32	U1234	LHKEBMEPU2S EBM packet counter - sent to EPU2 (extended)
0x070	0	32	U1234	LHKEBMSSRS EBM packet counter - sent to SSR (extended)

14.3.121 DiagLatcStatus (688/0x2B0)

Description:

"Diagnostic LATC status packet" Telemetry Packet

Current LATC status, with separate entries for the most recent LATC application and the most recent LATC verification.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDLATC Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x014	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x018	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x01C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x020	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x021	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x022	0	8	U1	LHKSPARE8U1

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 8 bit pad in unsigned char
0x023	0	8	U1	LHKLATCDIRTY Dirty configuration - registers have been changed since configuration applied
0x024	0	8	U1	LHKLATCAPPSOURCE Source of most recect LATC application request (Command, LPA, LCI)
0x025	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x026	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x027	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x028	0	32	U1234	LHKLATCAPPRUNID Run ID associated with most recent LATC application
0x02C	0	32	U1234	LHKLATCAPPT440 Timestamp for most recent LATC application (seconds)
0x030	0	32	U1234	LHKLATCAPPT441 Timestamp for most recent LATC application (microseconds)
0x034	0	32	U1234	LHKLATCAPPSTATUS Completion status for most recent LATC application
0x038	0	32	U1234	LHKLATCAPPCONFIG Configuration file ID for most recent LATC application
0x03C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x040	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x044	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x048	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x04C	0	8	U1	LHKLATCVERSOURCE Source of most recect LATC verification request (Command, LPA, LCI)
0x04D	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x04E	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x04F	0	8	U1	LHKSPARE8U1 Explicit 8 bit pad in unsigned char
0x050	0	32	U1234	LHKLATCVERRUNID Run ID associated with most recent LATC verification
0x054	0	32	U1234	LHKLATCVERT440 Timestamp for most recent LATC verification (seconds)
0x058	0	32	U1234	LHKLATCVERT441 Timestamp for most recent LATC verification (microseconds)
0x05C	0	32	U1234	LHKLATCVERSTATUS Completion status for most recent LATC verification
0x060	0	32	U1234	LHKLATCVERCONFIG Configuration file ID for most recent LATC verification
0x064	0	32	U1234	LHKLATCVERIGNORE Ignore file ID for most recent LATC verification
0x068	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x06C	0	32	U1234	LHKSPARE32U1234

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 32 bit pad in unsigned int
0x070	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int

14.3.122 DiagLimStatus (689/0x2B1)

Description:

"Diagnostic LIM status/summary packet (including LPA and LCI status)" Telemetry Packet

Diagnostic LIM status/summary packet (including LPA and LCI status)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDLIMSTATUS Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LIMTSTATUS LIM most recent action status
0x014	0	16	U12	LIMTACTION LIM most recent action
0x016	0	8	U1	LIMTOPMODE LIM current operating mode
0x017	0	8	U1	LIMTVIRTMODE LIM virtual mode
0x018	0	8	U1	LIMTSAATRANSIT LIM SAA transit status
0x019	0	8	U1	LIMTLCISTATE LIM state of task LCI
0x01A	0	8	U1	LIMTLDFSTATE LIM state of task LDF
0x01B	0	8	U1	LIMTLPASTATE LIM state of task LPA
0x01C	0	32	U1234	LIMTTOOREMAINSEC LIM TOO, seconds remaining
0x020	0	32	U1234	LIMTARRREMAINSEC LIM ARR, seconds remaining
0x024	0	32	U1234	LIMTDISREMAINSEC LIM GBM interrupt disable, seconds remaining
0x028	0	5	U1	LIMTTOOPAD LIM (spare 5 bits)
	5	1	U1	LIMTTOOSTARTED LIM TOO started status
	6	1	U1	LIMTTOOACTIVE LIM TOO active status
	7	1	U1	LIMTTOOREADY LIM TOO ready status
0x029	0	2	U1	LIMTARRPAD LIM (spare 2 bits)
	2	1	U1	LIMTARRREPPEND LIM ARR repoint request pending
	3	3	U1	LIMTARRGRBSTATE LIM ARR GRB state

Offset	S	L	Type	ITOS name, attribute(s), and description
	6	1	U1	LIMTARRACTIVE LIM ARR active status
	7	1	U1	LIMTARRREADY LIM ARR ready status
0x02A	0	5	U1	LIMTGBMPAD LIM (spare 5 bits)
	5	1	U1	LIMTPRIINTALLOW LIM GBM primary interrupt allowed
	6	1	U1	LIMTREDINTALLOW LIM GBM redundant interrupt allowed
	7	1	U1	LIMTGBMREPALLOW LIM GBM repoint request allowed
0x02B	0	7	U1	LIMTHVPAD LIM (spare 7 bits)
	7	1	U1	LIMTHVALLOW LIM ACD high voltage allowed status
0x02C	0	32	U1234	LHKLPARUNID LPA run ID
0x030	0	32	U1234	LHKLPASTARTT440 LPA run started (seconds)
0x034	0	32	U1234	LHKLPASTARTT441 LPA run started (microseconds)
0x038	0	32	U1234	LHKLPAENDT440 LPA run ended (seconds)
0x03C	0	32	U1234	LHKLPAENDT441 LPA run ended (microseconds)
0x040	0	32	U1234	LHKLPASTATUS LPA run completion status
0x044	0	32	U1234	LHKLPALATCUSEFID LPA apply LATC configuration file ID
0x048	0	32	U1234	LHKLPALATCIGNFID LPA ignore LATC configuration file ID
0x04C	0	8	U1	LHKLPADBID LPA LPA_DB instance for this run
0x04D	0	8	U1	LHKLPAMODE LPA run mode
0x04E	0	16	U12	LHKLPASPARE LPA reserved
0x050	0	32	U1234	LHKLCIRUNID LCI run ID
0x054	0	32	U1234	LHKLCISTARTT440 LCI run started (seconds)
0x058	0	32	U1234	LHKLCISTARTT441 LCI run started (microseconds)
0x05C	0	32	U1234	LHKLCIENDT440 LCI run ended (seconds)
0x060	0	32	U1234	LHKLCIENDT441 LCI run ended (microseconds)
0x064	0	32	U1234	LHKLCISTATUS LCI run completion status
0x068	0	32	U1234	LHKLCILATCFID LCI apply LATC configuration file ID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06C	0	32	U1234	LHKLCICFGFID LCI script file ID
0x070	0	32	U1234	LHKLCISPARE LCI reserved

14.3.123 DiagCtdbCounts (690/0x2B2)

Description:

"Diagnostic CTDB (1553) counters" Telemetry Packet

Diagnostic CTDB (1553) counters

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDCTDB Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKRTERRCNT 1553 error count
0x014	0	32	U1234	LHKRTINTRCNT 1553 interrupts
0x018	0	32	U1234	LHKRTCXPCNT 1553 command Rx packet count
0x01C	0	32	U1234	LHKRTCXBCNT 1553 command Rx byte count
0x020	0	32	U1234	LHKRTTXPCNT 1553 command Tx packet count
0x024	0	32	U1234	LHKRTTXBCNT 1553 command Tx byte count
0x028	0	32	U1234	LHKRTHKPCNT 1553 housekeeping packet count
0x02C	0	32	U1234	LHKRTHKBCNT 1553 housekeeping byte count
0x030	0	32	U1234	LHKRTTLMPCNT 1553 telemetry packet count
0x034	0	32	U1234	LHKRTTLMBCNT 1553 telemetry byte count
0x038	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x03E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x040	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x042	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x044	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x046	0	16	U12	LHKSPARE16U12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Explicit 16 bit pad in unsigned short
0x048	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x04E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x050	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x052	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x054	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x056	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x058	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x05E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x060	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x062	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x064	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x066	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x068	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06A	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06C	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x06E	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x070	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short
0x072	0	16	U12	LHKSPARE16U12 Explicit 16 bit pad in unsigned short

14.3.124 `DiagMiscSlow` (691/0x2B3)

Description:

"Diagnostic Miscellaneous nearly static information" Telemetry Packet

Diagnostic Miscellaneous nearly static information

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDMISCSLOW Explicit 16 bit pad in unsigned short
0x010	0	32	U1234	LHKLPALATCUSE Default LATC configuration file if none specified
0x014	0	32	U1234	LHKLPALATCIGN Default LATC ignore file if none specified
0x018	0	32	U1234	LHKLPADBFILE Default LPA_DB file if none specified (quoi)
0x01C	0	16	U12	LHKLPADBINST Default LPA_DB instance if none specified (quoi)
0x01E	0	8	U1	LHKLPAEPUENABLE LPA EPU enable mask
0x01F	0	8	U1	LHKLPAGBMENABLE LPA GBM enable (quoi)
0x020	0	32	U1234	LHKSKEDFILE Unsigned int
0x024	0	32	U1234	LHKSKEDINST Unsigned int
0x028	0	32	U1234	LHKLIHLIMITFILE Unsigned int
0x02C	0	32	U1234	LHKLIHLIMITINST Unsigned int
0x030	0	32	U1234	LHKLTCCONFIG LTC configuration file ID
0x034	0	32	U1234	LHKGRBCONFIG GRB configuration file ID
0x038	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x03C	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x040	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x044	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x048	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x04C	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x050	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x054	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x058	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x05C	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x060	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x064	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x068	0	32	U1234	LHKSPARE32U1234

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 32 bit field
0x06C	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field
0x070	0	32	U1234	LHKSPARE32U1234 Spare 32 bit field

14.3.125 DiagPigStatus (692/0x2B4)

Description:

"Diagnostic PIG configuration information" Telemetry Packet

Diagnostic PIG configuration information, derived from the SIB power control register, three CRU registers (including PPS and GBM selectors), and 8 EBM registers (including SSR selector)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LHKRSVDPIGSTAT LHK reserved field
0x010	0	16	U1234	LHKSPARE16U1234 Explicit 16 bit pad in unsigned short
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	27	1	U12	LHKSIBMAINFEED Mainfeed primary/redundant selector
	28	1	U12	LHKSIBPDUPRIM SIB PDU primary power switch
	29	1	U12	LHKSIBPDURED SIB PDU redundant power switch
	30	1	U12	LHKSIBGASUPRIM SIB GASU primary power switch
	31	1	U12	LHKSIBGASURED SIB GASU redundant power switch
0x014	0	1	U12	LHKCRUCONFIGST; LHKSETTLESTATES CRU configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKCRUVERSIONID CRU hardware version ID
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	27	1	U1	LHKCRUEVENCELL CRU configuration enable even parity (cell)
	28	1	U1	LHKCRUEVENHDR CRU configuration enable even parity (header)
	29	1	U12	LHKCRUGBMSELECT CRU configuration GBM signal path selector
	30	1	U12	LHKCRUPPSSELECT

Offset	S	L	Type	ITOS name, attribute(s), and description
				CRU configuration PPS signal path selector
	31	1	U1	LHKCRUPPSGEN
				CRU configuration enable internal PPS generator
0x018	0	1	U12	LHKCRUCOMMANDST; LHKSETTLESTATES
				CRU command enable register read status
	1	1	U1234	LHKSPARE1U1234
				PID status
	2	1	U1	LHKCRUCMDEPU2
				CRU command enable EPU2
	3	1	U1	LHKCRUCMDEPU1
				CRU command enable EPU1
	4	1	U1	LHKCRUCMDEPU0
				CRU command enable EPU0
	5	1	U1	LHKCRUCMDSIU1
				CRU command enable SIU1
	6	1	U1	LHKCRUCMDSIU0
				CRU command enable SIU0
	7	1	U1	LHKCRUCMDSIUE
				CRU command enable SIUE
	8	3	U1234	LHKSPARE3U1234
				Explicit 3 bit pad in unsigned char
	11	1	U1	LHKCRUCMDPDU1
				CRU command enable PDU1
	12	1	U1	LHKCRUCMDPDU0
				CRU command enable PDU0
	13	1	U1	LHKCRUCMDEBM
				CRU command enable EBM
	14	1	U1	LHKCRUCMDAEM
				CRU command enable AEM
	15	1	U1	LHKCRUCMDGEM
				CRU command enable GEM
	16	1	U1	LHKCRUCMDTEMF
				CRU command enable TEM F
	17	1	U1	LHKCRUCMDTEME
				CRU command enable TEM E
	18	1	U1	LHKCRUCMDTEMD
				CRU command enable TEM D
	19	1	U1	LHKCRUCMDTEMC
				CRU command enable TEM C
	20	1	U1	LHKCRUCMDTEMB
				CRU command enable TEM B
	21	1	U1	LHKCRUCMDTEMA
				CRU command enable TEM A
	22	1	U1	LHKCRUCMDTEM9
				CRU command enable TEM 9
	23	1	U1	LHKCRUCMDTEM8
				CRU command enable TEM 8
	24	1	U1	LHKCRUCMDTEM7
				CRU command enable TEM 7
	25	1	U1	LHKCRUCMDTEM6
				CRU command enable TEM 6
	26	1	U1	LHKCRUCMDTEM5

Offset	S	L	Type	ITOS name, attribute(s), and description
				CRU command enable TEM 5
	27	1	U1	LHKCRUCMDTEM4 CRU command enable TEM 4
	28	1	U1	LHKCRUCMDTEM3 CRU command enable TEM 3
	29	1	U1	LHKCRUCMDTEM2 CRU command enable TEM 2
	30	1	U1	LHKCRUCMDTEM1 CRU command enable TEM 1
	31	1	U1	LHKCRUCMDTEM0 CRU command enable TEM 0
0x01C	0	1	U12	LHKCRURSPST CRU response enable register read status
	1	1	U1234	LHKSPARE1U1234 Explicit 1 bit pad in unsigned char
	2	1	U1	LHKCRURSPEPU2 CRU response enable EPU2
	3	1	U1	LHKCRURSPEPU1 CRU response enable EPU1
	4	1	U1	LHKCRURSPEPU0 CRU response enable EPU0
	5	1	U1	LHKCRURSPSIU1 CRU response enable SIU1
	6	1	U1	LHKCRURSPSIU0 CRU response enable SIU0
	7	1	U1	LHKCRURSPSIUE CRU response enable SIUE
	8	3	U1234	LHKSPARE3U1234 Explicit 3 bit pad in unsigned char
	11	1	U1	LHKCRURSPPDU1 CRU response enable PDU1
	12	1	U1	LHKCRURSPPDU0 CRU response enable PDU0
	13	1	U1	LHKCRURSPEBM CRU response enable EBM
	14	1	U1	LHKCRURSPAEM CRU response enable AEM
	15	1	U1	LHKCRURSPGEM CRU response enable GEM
	16	1	U1	LHKCRURSPTEMF CRU response enable TEM F
	17	1	U1	LHKCRURSPTEME CRU response enable TEM E
	18	1	U1	LHKCRURSPTEMD CRU response enable TEM D
	19	1	U1	LHKCRURSPTEMC CRU response enable TEM C
	20	1	U1	LHKCRURSPTEMB CRU response enable TEM B
	21	1	U1	LHKCRURSPTEMA CRU response enable TEM A
	22	1	U1	LHKCRURSPTEM9

Offset	S	L	Type	ITOS name, attribute(s), and description
				CRU response enable TEM 9
	23	1	U1	LHKCRURSPTEM8 CRU response enable TEM 8
	24	1	U1	LHKCRURSPTEM7 CRU response enable TEM 7
	25	1	U1	LHKCRURSPTEM6 CRU response enable TEM 6
	26	1	U1	LHKCRURSPTEM5 CRU response enable TEM 5
	27	1	U1	LHKCRURSPTEM4 CRU response enable TEM 4
	28	1	U1	LHKCRURSPTEM3 CRU response enable TEM 3
	29	1	U1	LHKCRURSPTEM2 CRU response enable TEM 2
	30	1	U1	LHKCRURSPTEM1 CRU response enable TEM 1
	31	1	U1	LHKCRURSPTEM0 CRU response enable TEM 0
0x020	0	1	U12	LHKEBMBECFGST; LHKSETTLESTATES EBM back-end configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKEBMBEVID EBM back-end hardware version ID
	16	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	1	U1	LHKEBMBESSRSEND EBM back-end configuration output SSR header word
	25	1	U1	LHKEBMBEEVENDC EBM back-end configuration send even parity (data, cell)
	26	1	U1	LHKEBMBEEVENDH EBM back-end configuration send even parity (data, header)
	27	1	U1	LHKEBMBEEVENEC EBM back-end configuration send even parity (event, cell)
	28	1	U1	LHKEBMBEEVENEH EBM back-end configuration send even parity (event, header)
	29	1	U1	LHKEBMBEEVENRC EBM back-end configuration send even parity (response, cell)
	30	1	U1	LHKEBMBEEVENRH EBM back-end configuration send even parity (response, header)
	31	1	U1	LHKEBMBESSRPATH EBM back-end configuration SSR path selector
0x024	0	1	U12	LHKEBMFEACFGST; LHKSETTLESTATES EBM front-end A configuration register read status
	1	7	U1234	LHKSPARE7U1234 Explicit 7 bit pad in unsigned char
	8	8	U1	LHKEBMFEAVID EBM front-end A-end hardware version ID
	16	8	U1	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	24	8	U1	LHKEBMFEARELOC

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM front-end A relocation control
`0x028`	0	1	`U12`	`LHKEBMFEBCFGST; LHKSETTLESTATES`
				EBM front-end B configuration register read status
	1	7	`U1234`	`LHKSPARE7U1234`
				Explicit 7 bit pad in unsigned char
	8	8	`U1`	`LHKEBMFEBVID`
				EBM front-end B hardware version ID
	16	8	`U1234`	`LHKSPARE8U1234`
				Explicit 8 bit pad in unsigned char
	24	8	`U1`	`LHKEBMFEBRELOC`
				EBM front-end B relocation control
`0x02C`	0	1	`U12`	`LHKEBMADDRESSST`
				EBM address register read status
	1	7	`U1234`	`LHKSPARE7U1234`
				Explicit 7 bit pad in unsigned char
	8	8	`U1234`	`LHKSPARE8U1234`
				Explicit 8 bit pad in unsigned char
	16	8	`U1234`	`LHKSPARE8U1234`
				Explicit 8 bit pad in unsigned char
	24	8	`U1`	`LHKEBMADDRESS`
				EBM node address on command/response fabric
`0x030`	0	1	`U12`	`LHKEBMINPUTST; LHKSETTLESTATES`
				EBM input enables register read status
	1	7	`U1`	`LHKSPARE7U1234`
				Explicit 7 bit pad in unsigned char
	8	1	`U1`	`LHKEBMINPUTEPU2`
				EBM input enable EPU2
	9	1	`U1`	`LHKEBMINPUTEPU1`
				EBM input enable EPU1
	10	1	`U1`	`LHKEBMINPUTEPU0`
				EBM input enable EPU0
	11	1	`U1`	`LHKEBMINPUTSIU1`
				EBM input enable SIU1
	12	1	`U1`	`LHKEBMINPUTSIU0`
				EBM input enable SIU0
	13	1	`U1`	`LHKEBMINPUTSIUE`
				EBM input enable SIUE
	14	1	`U1`	`LHKEBMINPUTAEM`
				EBM input enable AEM
	15	1	`U1`	`LHKEBMINPUTTEMF`
				EBM input enable TEM F
	16	1	`U1`	`LHKEBMINPUTTEME`
				EBM input enable TEM E
	17	1	`U1`	`LHKEBMINPUTTEMD`
				EBM input enable TEM D
	18	1	`U1`	`LHKEBMINPUTTEMC`
				EBM input enable TEM C
	19	1	`U1`	`LHKEBMINPUTTEMB`
				EBM input enable TEM B
	20	1	`U1`	`LHKEBMINPUTTEMA`
				EBM input enable TEM A
	21	1	`U1`	`LHKEBMINPUTTEM9`

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM input enable TEM 9
	22	1	U1	LHKEBMINPUTTEM8
				EBM input enable TEM 8
	23	1	U1	LHKEBMINPUTTEM7
				EBM input enable TEM 7
	24	1	U1	LHKEBMINPUTTEM6
				EBM input enable TEM 6
	25	1	U1	LHKEBMINPUTTEM5
				EBM input enable TEM 5
	26	1	U1	LHKEBMINPUTTEM4
				EBM input enable TEM 4
	27	1	U1	LHKEBMINPUTTEM3
				EBM input enable TEM 3
	28	1	U1	LHKEBMINPUTTEM2
				EBM input enable TEM 2
	29	1	U1	LHKEBMINPUTTEM1
				EBM input enable TEM 1
	30	1	U1	LHKEBMINPUTTEM0
				EBM input enable TEM 0
	31	1	U1	LHKEBMINPUTGEM
				EBM input enable GEM
0x034	0	1	U12	LHKEBMCTRBST; LHKSETTLESTATES
				EBM contributor enables register read status
	1	7	U1	LHKSPARE7U1234
				Explicit 7 bit pad in unsigned char
	8	1	U1	LHKEBMCTRBEPU2
				EBM contributor enable EPU2
	9	1	U1	LHKEBMCTRBEPU1
				EBM contributor enable EPU1
	10	1	U1	LHKEBMCTRBEPU0
				EBM contributor enable EPU0
	11	1	U1	LHKEBMCTRBSIU1
				EBM contributor enable SIU1
	12	1	U1	LHKEBMCTRBSIU0
				EBM contributor enable SIU0
	13	1	U1	LHKEBMCTRBSIUE
				EBM contributor enable SIUE
	14	1	U1	LHKEBMCTRBAEM
				EBM contributor enable AEM
	15	1	U1	LHKEBMCTRBTEMF
				EBM contributor enable TEM F
	16	1	U1	LHKEBMCTRBTEME
				EBM contributor enable TEM E
	17	1	U1	LHKEBMCTRBTEMD
				EBM contributor enable TEM D
	18	1	U1	LHKEBMCTRBTEMC
				EBM contributor enable TEM C
	19	1	U1	LHKEBMCTRBTEMB
				EBM contributor enable TEM B
	20	1	U1	LHKEBMCTRBTEMA
				EBM contributor enable TEM A
	21	1	U1	LHKEBMCTRBTEM9

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM contributor enable TEM 9
	22	1	U1	LHKEBMCTRBTEM8 EBM contributor enable TEM 8
	23	1	U1	LHKEBMCTRBTEM7 EBM contributor enable TEM 7
	24	1	U1	LHKEBMCTRBTEM6 EBM contributor enable TEM 6
	25	1	U1	LHKEBMCTRBTEM5 EBM contributor enable TEM 5
	26	1	U1	LHKEBMCTRBTEM4 EBM contributor enable TEM 4
	27	1	U1	LHKEBMCTRBTEM3 EBM contributor enable TEM 3
	28	1	U1	LHKEBMCTRBTEM2 EBM contributor enable TEM 2
	29	1	U1	LHKEBMCTRBTEM1 EBM contributor enable TEM 1
	30	1	U1	LHKEBMCTRBTEM0 EBM contributor enable TEM 0
	31	1	U1	LHKEBMCTRBGEM EBM contributor enable GEM
0x038	0	1	U12	LHKEBMDESTST; LHKSETTLESTATES EBM destination enables register read status
	1	1	U1234	LHKSPARE1U1234 Explicit 1 bit pad in unsigned char
	2	1	U1	LHKEBMDSTDBEPU2 EBM destination enable EPU2 (data,broadcast)
	3	1	U1	LHKEBMDSTDBEPU1 EBM destination enable EPU1 (data,broadcast)
	4	1	U1	LHKEBMDSTDBEPU0 EBM destination enable EPU0 (data,broadcast)
	5	1	U1	LHKEBMDSTDBSIU1 EBM destination enable SIU1 (data,broadcast)
	6	1	U1	LHKEBMDSTDBSIU0 EBM destination enable SIU0 (data,broadcast)
	7	1	U1	LHKEBMDSTDBSIUE EBM destination enable SIUE (data,broadcast)
	8	8	U1234	LHKSPARE8U1234 Explicit 8 bit pad in unsigned char
	16	2	U1234	LHKSPARE2U1234 Explicit 2 bit pad in unsigned char
	18	1	U1	LHKEBMDSTEBEPU2 EBM destination enable EPU2 (events,broadcast)
	19	1	U1	LHKEBMDSTEBEPU1 EBM destination enable EPU1 (events,broadcast)
	20	1	U1	LHKEBMDSTEBEPU0 EBM destination enable EPU0 (events,broadcast)
	21	1	U1	LHKEBMDSTEBSIU1 EBM destination enable SIU1 (events,broadcast)
	22	1	U1	LHKEBMDSTEBSIU0 EBM destination enable SIU0 (events,broadcast)
	23	1	U1	LHKEBMDSTEBSIUE

Offset	S	L	Type	ITOS name, attribute(s), and description
				EBM destination enable SIUE (events,broadcast)
	24	2	U1234	LHKSPARE2U1234 Explicit 2 bit pad in unsigned char
	26	1	U1	LHKEBMDSTRREPU2 EBM destination enable EPU2 (events,round-robin)
	27	1	U1	LHKEBMDSTRREPU1 EBM destination enable EPU1 (events,round-robin)
	28	1	U1	LHKEBMDSTRREPU0 EBM destination enable EPU0 (events,round-robin)
	29	1	U1	LHKEBMDSTRRSIU1 EBM destination enable SIU1 (events,round-robin)
	30	1	U1	LHKEBMDSTRRSIU0 EBM destination enable SIU0 (events,round-robin)
	31	1	U1	LHKEBMDSTRRSIUE EBM destination enable SIUE (events,round-robin)
0x03C	0	1	U12	LHKEBMTIMEOUTST EBM timeout register read status
	1	14	U1234	LHKSPARE14U1234 Explicit 14 bit pad in unsigned int
	15	17	U1234	LHKEBMTIMEOUT EBM timeout (17 bits)
0x040	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x044	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x048	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x04C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x050	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x054	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x058	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x05C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x060	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x064	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x068	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x06C	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int
0x070	0	32	U1234	LHKSPARE32U1234 Explicit 32 bit pad in unsigned int

14.4 Discretes

14.4.0 `LHKADCLMTSTATES` (Enumeration of ADC limit evaluation states) Discrete

Description:

Enumeration of ADC limit evaluation states

Definition:

0 ADC read failed (`Unread`)
ADC read failed

1 ADC evaluated below low red limit (`Redlow`)
ADC evaluated below low red limit

2 ADC evaluated below low yellow limit (`Yellowlow`)
ADC evaluated below low yellow limit

3 ADC evaluted within green limits (`Green`)
ADC evaluted within green limits

4 ADC evaluated above high yellow limit (`Yellowhigh`)
ADC evaluated above high yellow limit

5 ADC evaluated above high red limit (`Redhigh`)
ADC evaluated above high red limit

6 ADC reading is unphysical (`Unphysical`)
ADC reading is unphysical (either ridiculously low or ridiculously high)

7 ADC limit status is unstable (`Unstable`)
Based on a series of ADC readings, the ADC limit status continues to change after the allowed settling period.

Used by:

???

14.4.1 `LHKENABLESTATES` (A disabled/enabled enumeration) Discrete

Description:

A disabled/enabled enumeration

Definition:

0 Disabled (`Disabled`)
Disabled

1 Enabled (`Enabled`)
Enabled

Used by:

???

14.4.2 `LHKFILESTATES` (FILE States) Discrete

Description:

Definition:

0 FILE Start State (`Start`)

1 FILE Load State (`Load`)

2 FILE Commit State (`Commit`)

3 FILE Error State (`Error`)

Used by:
???

14.4.3 `LHKSELECTSTATES` (Enumeration of primary/redundant selections) Discrete

Description:
Enumeration of primary/redundant selections

Definition:

0 Primary system selected (`Primary`)
Primary system selected

1 Redundant system selected (`Redundant`)
Redundant system selected

Used by:
???

14.4.4 `LHKSETTLESTATES` (ADC settling state) Discrete

Description:
ADC limit evaluation is varying, but within the allowed settling period

Definition:

0 Limit status evaluation is stable (`Stable`)
Limit status evaluation is stable (the same value has been obtained for the required persistence time).

1 Limit status evaluation is still settling (`Settling`)
Limit status evaluation is currently unstable, but the maximum settling period has not yet been reached.

Used by:
???

14.4.5 `LHKSWITCHSTATES` (Enumeration of allowed switch states) Discrete

Description:

A simple on/off enumeration (zero is off)

Definition:

0 Power is off (`Off`)
Power is off

1 Power is on (`On`)
Power is on

Used by:

???

15 LIH Package

15.0 Overview

The LIH package contains routines that are specific to LAT Instrument Housekeeping.

15.1 Command Packets

15.1.0 `LIHNOOP` (1620/0x654:0)

Description:

"No operation" Telecommand Packet

No operation

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

15.1.1 `LIHLOADLIMITS` (1620/0x654:1)

Description:

"Load ADC limit sets from CDM database" Telecommand Packet

Load ADC limit sets from CDM database

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIHLIMITFILE` File ID containing limits

15.1.2 `LIHENABACTION` (1620/0x654:2)

Description:

"Enable/disable actions on ADC state changes" Telecommand Packet

Enable/disable actions on ADC state changes

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LIHACTSTATE` Requested enable/disable state (non-zero for enabled)

15.1.3 `LIHSETLIMITSADC` (1620/0x654:3)

Description:

"Set limits boundaries for an ADC" Telecommand Packet

Set limit boundaries for an ADC. A value of -1 will leave the corresponding limit at its existing value. Limits must obey the condition that a given value must be less than or equal to the next higher value. This is enforced by FSW after the -1 values have been substituted with their existing values.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LIHADX ADC index on which to change limits
0x00A	0	16	I12	LIHADCLIMIT0 Boundary from purple low to red low
0x00C	0	16	I12	LIHADCLIMIT1 Boundary from red low to yellow low
0x00E	0	16	I12	LIHADCLIMIT2 Boundary from yellow low to green
0x010	0	16	I12	LIHADCLIMIT3 Boundary from green to yellow high
0x012	0	16	I12	LIHADCLIMIT4 Boundary from yellow high to red high
0x014	0	16	I12	LIHADCLIMIT5 Boundary from red high to purple high

15.1.4 `LIHSETACTIONSADC` (1620/0x654:4)

Description:

"Set actions for a limit transition on an ADC" Telecommand Packet

Set actions for a limit transition on an ADC. In all cases, a value of -1 results in the action being left unchanged. The alert and diagnostic flags are simple enable/disable. The value of the message flag can be used to set the severity level of the message.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LIHADX ADC index on which to alter actions
0x00A	0	8	U1	LIHFROMSTATE State transitioning from
0x00B	0	8	U1	LIHTOSTATE State transitioning to
0x00C	0	16	I12	LIHACTALERT Specify alert packet action
0x00E	0	16	I12	LIHACTDIAG Specify diagnostic packet action
0x010	0	16	I12	LIHACTMSG Specify message action and severity

15.1.5 `LIHSETNAGADC` (1620/0x654:5)

Description:

"Set the nag periods for an ADC" Telecommand Packet

Set the nag periods for an ADC. A value of zero suppresses nags. A value of -1 will leave the nag period at its existing value. Nag periods are expressed in milliseconds.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LIHSPARE0` Spare
`0x00A`	0	16	`U12`	`LIHADX` ADC index on which to set nag times
`0x00C`	0	32	`I1234`	`LIHNAGTIME0` Nag period (msec) when in state unread
`0x010`	0	32	`I1234`	`LIHNAGTIME1` Nag period (msec) when in state red low
`0x014`	0	32	`I1234`	`LIHNAGTIME2` Nag period (msec) when in state yellow low
`0x018`	0	32	`I1234`	`LIHNAGTIME3` Nag period (msec) when in state green
`0x01C`	0	32	`I1234`	`LIHNAGTIME4` Nag period (msec) when in state yellow high
`0x020`	0	32	`I1234`	`LIHNAGTIME5` Nag period (msec) when in state red high
`0x024`	0	32	`I1234`	`LIHNAGTIME6` Nag period (msec) when in state unphysical
`0x028`	0	32	`I1234`	`LIHNAGTIME7` Nag period (msec) when in state unstable

15.1.6 `LIHSETPERSISTADC` (1620/0x654:6)

Description:

"Set persistence time (msec) on an ADC" Telecommand Packet

Sets the period for which new ADC state must be stable before declaring that the ADC has changed state (milliseconds).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LIHSPARE0` Unused
`0x00A`	0	16	`U12`	`LIHADX` ADC index on which to set the persistence time
`0x00C`	0	32	`U1234`	`LIHPERSIST` Persistence time (msec)

15.1.7 `LIHSETSETTLEADC` (1620/0x654:7)

Description:

"Set the maximum settling period (msec) for an ADC" Telecommand Packet

Set the maximum settling period for an ADC (milliseconds).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LIHSPARE0` Unused
`0x00A`	0	16	`U12`	`LIHADX` ADC index on which to set maximum instability time
`0x00C`	0	32	`U1234`	`LIHSETTLE` Maximum allowed settling period

15.1.8 `LIHDUMPLIMITSADC` (1620/0x654:8)

Description:

"Dump the limits table for a single ADC" Telecommand Packet

Dump the limits table for a single ADC. The response is sent in telemetry as a diagnostic packet (APID 710 (0x2c6)) to the CTDB (1553).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LIHADX` ADC index for which limits are being requested

15.1.9 `LIHDUMPLIMITS` (1620/0x654:9)

Description:

"Dump the complete limits table" Telecommand Packet

Dump the complete limits table. The dump can be very large, so the corresponding telemetry is only sent to the science data interface (on APID 930 (0x3a2)).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIHDMPREASON` User provided reason code (arbitrary)
`0x00C`	0	32	`U1234`	`LIHDMPIDENT` User provided dump identity (to distinguish dumps)

15.2 Enumerations

15.2.0 LIHADCACTENABLES (Enumeration of action enables) Enumeration

Description:

Enumeration of action enables

Definition:

-1 Don't change state of this action (LIHADCACTNOCHNG)
Don't change state of this action

0 Disable this action (LIHADCACTDISABLE)
Disable this action

1 Enable this action (LIHADCACTENABLE)
Enable this action

Used by:

???

15.2.1 LIHADCACTMSG (Enumeration of message severity flags) Enumeration

Description:

Enumeration of message severity flags

Definition:

-1 Don't change the severity (LIHACTNOCHNG)
Don't change the severity

0 Disable sending messages (LIHSEVNONE)
Disable sending messages

1 Set severity level to information (LIHSEVINFO)
Set severity level to information

2 Set severity level warning (LIHSEVWARN)
Set severity level warning

3 Set severity level error (LIHSEVERROR)
Set severity level error

Used by:

???

15.2.2 LIHADCLMTSTATES (Enumeration of ADC limit evaluation states) Enumeration

Description:

Enumeration of ADC limit evaluation states

Definition:

0 ADC was not evaluated against limits (`LIHUNKNOWNST`)
ADC was not evaluated against limits

1 ADC evaluated below low red limit (`LIHREDLOWST`)
ADC evaluated below low red limit

2 ADC evaluated below low yellow limit (`LIHYELLOWLOWST`)
ADC evaluated below low yellow limit

3 ADC evaluted within green limits (`LIHGREENST`)
ADC evaluted within green limits

4 ADC evaluated above high yellow limit (`LIHYELLOWHIGHST`)
ADC evaluated above high yellow limit

5 ADC evaluated above high red limit (`LIHREDHIGHST`)
ADC evaluated above high red limit

6 ADC evaluated to a non-physical value (`LIHPURPLEST`)
ADC evaluated to a non-physical value

7 ADC reading is unstable (`LIHUNSTABLEST`)
ADC reading is unstable

Used by:

???

15.2.3 `LIHENABLESTATES` (A disabled/enabled enumeration) Enumeration

Description:

A disabled/enabled enumeration

Definition:

0 Disable (`LIHDISABLE`)
Disable

1 Enable (`LIHENABLE`)
Enable

Used by:

???

15.3 Telemetry Packets

15.3.0 `LimitAdc` (710/0x2C6)

Description:

"Limits/actions associated with a single ADC" Telemetry Packet

Limits/actions associated with a single ADC

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LIHSPARE16 Unused
0x010	0	32	U1234	LIHADX ADC index
0x014	0	32	U1234	LIHDELTAPRST Unsigned int
0x018	0	32	U1234	LIHDELTASETL Unsigned int
0x01C	0	32	U1234	LIHDELTANAG0 Unsigned int
0x020	0	32	U1234	LIHDELTANAG1 Unsigned int
0x024	0	32	U1234	LIHDELTANAG2 Unsigned int
0x028	0	32	U1234	LIHDELTANAG3 Unsigned int
0x02C	0	32	U1234	LIHDELTANAG4 Unsigned int
0x030	0	32	U1234	LIHDELTANAG5 Unsigned int
0x034	0	32	U1234	LIHDELTANAG6 Unsigned int
0x038	0	32	U1234	LIHDELTANAG7 Unsigned int
0x03C	0	16	U12	LIHADCLIMIT0 Limit boundary purple low to red low
0x03E	0	16	U12	LIHADCLIMIT1 Limit boundary red low to yellow low
0x040	0	16	U12	LIHADCLIMIT2 Limit boundary yellow low to green
0x042	0	16	U12	LIHADCLIMIT3 Limit boundary green to yellow high
0x044	0	16	U12	LIHADCLIMIT4 Limit boundary yellow high to red high
0x046	0	16	U12	LIHADCLIMIT5 Limit boundary red high to purple high
0x048	0	8	U1	LIHACTMSK0TO0 Actions for transitions undefined to undefined
0x049	0	8	U1	LIHACTMSK0TO1 Actions for transitions undefined to red low
0x04A	0	8	U1	LIHACTMSK0TO2

Offset	S	L	Type	ITOS name, attribute(s), and description
				Actions for transitions undefined to yellow low
0x04B	0	8	U1	LIHACTMSK0TO3
				Actions for transitions undefined to green
0x04C	0	8	U1	LIHACTMSK0TO4
				Actions for transitions undefined to yellow high
0x04D	0	8	U1	LIHACTMSK0TO5
				Actions for transitions undefined to red high
0x04E	0	8	U1	LIHACTMSK0TO6
				Actions for transitions undefined to unphysical
0x04F	0	8	U1	LIHACTMSK0TO7
				Actions for transitions undefined to unstable
0x050	0	8	U1	LIHACTMSK1TO0
				Actions for transitions red low to undefined
0x051	0	8	U1	LIHACTMSK1TO1
				Actions for transitions red low to red low
0x052	0	8	U1	LIHACTMSK1TO2
				Actions for transitions red low to yellow low
0x053	0	8	U1	LIHACTMSK1TO3
				Actions for transitions red low to green
0x054	0	8	U1	LIHACTMSK1TO4
				Actions for transitions red low to yellow high
0x055	0	8	U1	LIHACTMSK1TO5
				Actions for transitions red low to red high
0x056	0	8	U1	LIHACTMSK1TO6
				Actions for transitions red low to unphysical
0x057	0	8	U1	LIHACTMSK1TO7
				Actions for transitions red low to unstable
0x058	0	8	U1	LIHACTMSK2TO0
				Actions for transitions yellow low to undefined
0x059	0	8	U1	LIHACTMSK2TO1
				Actions for transitions yellow low to red low
0x05A	0	8	U1	LIHACTMSK2TO2
				Actions for transitions yellow low to yellow low
0x05B	0	8	U1	LIHACTMSK2TO3
				Actions for transitions yellow low to green
0x05C	0	8	U1	LIHACTMSK2TO4
				Actions for transitions yellow low to yellow high
0x05D	0	8	U1	LIHACTMSK2TO5
				Actions for transitions yellow low to red high
0x05E	0	8	U1	LIHACTMSK2TO6
				Actions for transitions yellow low to unphysical
0x05F	0	8	U1	LIHACTMSK2TO7
				Actions for transitions yellow low to unstable
0x060	0	8	U1	LIHACTMSK3TO0
				Actions for transitions green to undefined
0x061	0	8	U1	LIHACTMSK3TO1
				Actions for transitions green to red low
0x062	0	8	U1	LIHACTMSK3TO2
				Actions for transitions green to yellow low
0x063	0	8	U1	LIHACTMSK3TO3
				Actions for transitions green to green
0x064	0	8	U1	LIHACTMSK3TO4

Offset	S	L	Type	ITOS name, attribute(s), and description
				Actions for transitions green to yellow high
0x065	0	8	U1	LIHACTMSK3TO5
				Actions for transitions green to red high
0x066	0	8	U1	LIHACTMSK3TO6
				Actions for transitions green to unphysical
0x067	0	8	U1	LIHACTMSK3TO7
				Actions for transitions green to unstable
0x068	0	8	U1	LIHACTMSK4TO0
				Actions for transitions yellow high to undefined
0x069	0	8	U1	LIHACTMSK4TO1
				Actions for transitions yellow high to red low
0x06A	0	8	U1	LIHACTMSK4TO2
				Actions for transitions yellow high to yellow low
0x06B	0	8	U1	LIHACTMSK4TO3
				Actions for transitions yellow high to green
0x06C	0	8	U1	LIHACTMSK4TO4
				Actions for transitions yellow high to yellow high
0x06D	0	8	U1	LIHACTMSK4TO5
				Actions for transitions yellow high to red high
0x06E	0	8	U1	LIHACTMSK4TO6
				Actions for transitions yellow high to unphysical
0x06F	0	8	U1	LIHACTMSK4TO7
				Actions for transitions yellow high to unstable
0x070	0	8	U1	LIHACTMSK5TO0
				Actions for transitions red high to undefined
0x071	0	8	U1	LIHACTMSK5TO1
				Actions for transitions red high to red low
0x072	0	8	U1	LIHACTMSK5TO2
				Actions for transitions red high to yellow low
0x073	0	8	U1	LIHACTMSK5TO3
				Actions for transitions red high to green
0x074	0	8	U1	LIHACTMSK5TO4
				Actions for transitions red high to yellow high
0x075	0	8	U1	LIHACTMSK5TO5
				Actions for transitions red high to red high
0x076	0	8	U1	LIHACTMSK5TO6
				Actions for transitions red high to unphysical
0x077	0	8	U1	LIHACTMSK5TO7
				Actions for transitions red high to unstable
0x078	0	8	U1	LIHACTMSK6TO0
				Actions for transitions unphysical to undefined
0x079	0	8	U1	LIHACTMSK6TO1
				Actions for transitions unphysical to red low
0x07A	0	8	U1	LIHACTMSK6TO2
				Actions for transitions unphysical to yellow low
0x07B	0	8	U1	LIHACTMSK6TO3
				Actions for transitions unphysical to green
0x07C	0	8	U1	LIHACTMSK6TO4
				Actions for transitions unphysical to yellow high
0x07D	0	8	U1	LIHACTMSK6TO5
				Actions for transitions unphysical to red high
0x07E	0	8	U1	LIHACTMSK6TO6

Offset	S	L	Type	ITOS name, attribute(s), and description
				Actions for transitions unphysical to unphysical
0x07F	0	8	U1	LIHACTMSK6TO7 Actions for transitions unphysical to unstable
0x080	0	8	U1	LIHACTMSK7TO0 Actions for transitions unstable to undefined
0x081	0	8	U1	LIHACTMSK7TO1 Actions for transitions unstable to red low
0x082	0	8	U1	LIHACTMSK7TO2 Actions for transitions unstable to yellow low
0x083	0	8	U1	LIHACTMSK7TO3 Actions for transitions unstable to green
0x084	0	8	U1	LIHACTMSK7TO4 Actions for transitions unstable to yellow high
0x085	0	8	U1	LIHACTMSK7TO5 Actions for transitions unstable to red high
0x086	0	8	U1	LIHACTMSK7TO6 Actions for transitions unstable to unphysical
0x087	0	8	U1	LIHACTMSK7TO7 Actions for transitions unstable to unstable

15.3.1 `LimitAlert` (852/0x354)

Description:

"ADC outside limits alert packet" Telemetry Packet

ADC outside limits alert packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LIHSPARE0 Unused
0x010	0	32	U1234	LIHADX ADC index
0x014	0	16	U12	LIHADCVALUE ADC value
0x016	0	8	U1	? ?
0x017	0	8	U1	? ?
0x018	0	16	U12	LIHPURPLELOW ADC boundary (purple low to red low)
0x01A	0	16	U12	LIHREDLOW ADC boundary (red low to yellow low)
0x01C	0	16	U12	LIHYELLOWLOW ADC boundary (yellow low to green)
0x01E	0	16	U12	LIHYELLOWHIGH ADC boundary (green to yellow high)
0x020	0	16	U12	LIHREDHIGH ADC boundary (yellow high to red high)
0x022	0	16	U12	LIHPURPLEHIGH ADC boundary (red high to purple high)

Offset	S	L	Type	ITOS name, attribute(s), and description
0x024	0	8	I1	LIHADCNAME0 ADC name
0x025	0	8	I1	LIHADCNAME1 ADC name
0x026	0	8	I1	LIHADCNAME2 ADC name
0x027	0	8	I1	LIHADCNAME3 ADC name
0x028	0	8	I1	LIHADCNAME4 ADC name
0x029	0	8	I1	LIHADCNAME5 ADC name
0x02A	0	8	I1	LIHADCNAME6 ADC name
0x02B	0	8	I1	LIHADCNAME7 ADC name
0x02C	0	8	I1	LIHADCNAME8 ADC name
0x02D	0	8	I1	LIHADCNAME9 ADC name
0x02E	0	8	I1	LIHADCNAME10 ADC name
0x02F	0	8	I1	LIHADCNAME11 ADC name
0x030	0	8	I1	LIHADCNAME12 ADC name
0x031	0	8	I1	LIHADCNAME13 ADC name
0x032	0	8	I1	LIHADCNAME14 ADC name
0x033	0	8	I1	LIHADCNAME15 ADC name
0x034	0	8	I1	LIHADCNAME16 ADC name
0x035	0	8	I1	LIHADCNAME17 ADC name
0x036	0	8	I1	LIHADCNAME18 ADC name
0x037	0	8	I1	LIHADCNAME19 ADC name
0x038	0	8	I1	LIHADCNAME20 ADC name
0x039	0	8	I1	LIHADCNAME21 ADC name
0x03A	0	8	I1	LIHADCNAME22 ADC name
0x03B	0	8	I1	LIHADCNAME23 ADC name
0x03C	0	8	I1	LIHADCNAME24 ADC name
0x03D	0	8	I1	LIHADCNAME25 ADC name

Offset	S	L	Type	ITOS name, attribute(s), and description
0x03E	0	8	I1	LIHADCNAME26 ADC name
0x03F	0	8	I1	LIHADCNAME27 ADC name
0x040	0	8	I1	LIHADCNAME28 ADC name
0x041	0	8	I1	LIHADCNAME29 ADC name
0x042	0	8	I1	LIHADCNAME30 ADC name
0x043	0	8	I1	LIHADCNAME31 ADC name

15.3.2 `LimitAll` (930/0x3A2)

Description:

"A complete limit table dump (compressed)" Telemetry Packet

A complete limit table dump (compressed)

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Unsigned short

16 LIM Package

16.0 Overview

The LIM package contains functions and command handlers that manage the operating mode of the LAT flight software. LIM is responsible for transitioning between the operating modes and ensuring that the flight software performs only the actions appropriate for the current mode.

16.1 Command Packets

16.1.0 `LIMARRRESPONSE` (1633/0x661:0)

Description:

"ARR Response" Telecommand Packet

Response from the spacecraft to an Autonomous Repoint Request (ARR) from the LAT instrument.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMTRANID` 32-Bit Transaction ID
`0x00C`	0	32	`U1234`	`LIMACCEPT` Request Acceptance Indication

16.1.1 `LIMARRABORT` (1633/0x661:1)

Description:

"ARR Abort" Telecommand Packet

Abort a physics observation that was initiated by an Autonomous Repoint Request (ARR).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.2 `LIMLOADSHED` (1634/0x662:1)

Description:

"Load Shed" Telecommand Packet

Shed LAT instrument power loads.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.3 `LIMTOOSTART` (1635/0x663:0)

Description:

"TOO Start" Telecommand Packet

Start a Target of Opportunity (TOO) observation.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMSECONDS` Number of Seconds
`0x00C`	0	32	`U1234`	`LIMOBSID` Observation ID
`0x010`	0	32	`U1234`	`LIMLATCID` LATC Configuration File ID
`0x014`	0	32	`U1234`	`LIMIGNOREID` LATC Ignore File ID
`0x018`	0	32	`U1234`	`LIMDBID` LPA_DB Instance ID
`0x01C`	0	32	`U1234`	`LIMCONSIGN` LATC Consign Flag
`0x020`	0	32	`U1234`	`LIMCPUS` CPU Mask

16.1.4 `LIMTOOABORT` (1635/0x663:1)

Description:

"TOO Abort" Telecommand Packet

Abort a Target of Opportunity (TOO) observation.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.5 `LIMHOLDENTER` (1635/0x663:2)

Description:

"Enter HOLD Mode" Telecommand Packet

Enter the HOLD mode.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.6 `LIMHOLDEXIT` (1635/0x663:3)

Description:

"Exit HOLD Mode" Telecommand Packet

Exit the HOLD mode.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.7 `LIMMAINFEEDON` (1635/0x663:4)

Description:

"Enable Main Power Feed" Telecommand Packet

Enable the main power feed to the LAT instrument and configure the SIU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	10	`U12`	`LIMSIUPAD0` 10-Bit Padding
	10	2	`U1`	`LIMSIUID` SIU ID
	12	1	`U1`	`LIMSIUSSRRED` Redundant SSR Selection
	13	1	`U1`	`LIMSIUGBMRED` Redundant GBM Selection
	14	1	`U1`	`LIMSIUPPSRED` Redundant PPS Selection
	15	1	`U1`	`LIMSIUPPSINT` Internal PPS Selection
	16	11	`U12`	`LIMSIUPAD1` 11-Bit Padding
	27	1	`U1`	`LIMSIUMFPRI` Primary Main-Feed Selection
	28	1	`U1`	`LIMSIUPDU0` PDU Power Enable
	29	1	`U1`	`LIMSIUPDU1` PDU Power Enable
	30	1	`U1`	`LIMSIUDABPRI` DAB Power Enable
	31	1	`U1`	`LIMSIUDABRED` DAB Power Enable

16.1.8 `LIMPOWERON` (1635/0x663:6)

Description:

"Enable Instrument Power" Telecommand Packet

Enable power to one or more elements within the LAT instrument.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	1	U12	LIMPWRTEMSEL15 TEM 15 Selection
	1	1	U12	LIMPWRTEMSEL14 Item Selection
	2	1	U12	LIMPWRTEMSEL13 Item Selection
	3	1	U12	LIMPWRTEMSEL12 Item Selection
	4	1	U12	LIMPWRTEMSEL11 Item Selection
	5	1	U12	LIMPWRTEMSEL10 Item Selection
	6	1	U12	LIMPWRTEMSEL09 Item Selection
	7	1	U12	LIMPWRTEMSEL08 Item Selection
	8	1	U12	LIMPWRTEMSEL07 Item Selection
	9	1	U12	LIMPWRTEMSEL06 Item Selection
	10	1	U12	LIMPWRTEMSEL05 Item Selection
	11	1	U12	LIMPWRTEMSEL04 Item Selection
	12	1	U12	LIMPWRTEMSEL03 Item Selection
	13	1	U12	LIMPWRTEMSEL02 Item Selection
	14	1	U12	LIMPWRTEMSEL01 Item Selection
	15	1	U12	LIMPWRTEMSEL00 Item Selection
0x00A	0	1	U12	LIMPWRTEMPDU15 Item Selection
	1	1	U12	LIMPWRTEMPDU14 Item Selection
	2	1	U12	LIMPWRTEMPDU13 Item Selection
	3	1	U12	LIMPWRTEMPDU12 Item Selection
	4	1	U12	LIMPWRTEMPDU11 Item Selection
	5	1	U12	LIMPWRTEMPDU10 Item Selection
	6	1	U12	LIMPWRTEMPDU09 Item Selection
	7	1	U12	LIMPWRTEMPDU08 Item Selection
	8	1	U12	LIMPWRTEMPDU07 Item Selection
	9	1	U12	LIMPWRTEMPDU06

Offset	S	L	Type	ITOS name, attribute(s), and description
				Item Selection
	10	1	U12	LIMPWRTEMPDU05 Item Selection
	11	1	U12	LIMPWRTEMPDU04 Item Selection
	12	1	U12	LIMPWRTEMPDU03 Item Selection
	13	1	U12	LIMPWRTEMPDU02 Item Selection
	14	1	U12	LIMPWRTEMPDU01 Item Selection
	15	1	U12	LIMPWRTEMPDU00 Item Selection
0x00C	0	1	U12	LIMPWRTEMCAL15 Item Selection
	1	1	U12	LIMPWRTEMCAL14 Item Selection
	2	1	U12	LIMPWRTEMCAL13 Item Selection
	3	1	U12	LIMPWRTEMCAL12 Item Selection
	4	1	U12	LIMPWRTEMCAL11 Item Selection
	5	1	U12	LIMPWRTEMCAL10 Item Selection
	6	1	U12	LIMPWRTEMCAL09 Item Selection
	7	1	U12	LIMPWRTEMCAL08 Item Selection
	8	1	U12	LIMPWRTEMCAL07 Item Selection
	9	1	U12	LIMPWRTEMCAL06 Item Selection
	10	1	U12	LIMPWRTEMCAL05 Item Selection
	11	1	U12	LIMPWRTEMCAL04 Item Selection
	12	1	U12	LIMPWRTEMCAL03 Item Selection
	13	1	U12	LIMPWRTEMCAL02 Item Selection
	14	1	U12	LIMPWRTEMCAL01 Item Selection
	15	1	U12	LIMPWRTEMCAL00 Item Selection
0x00E	0	1	U12	LIMPWRTEMTKR15 Item Selection
	1	1	U12	LIMPWRTEMTKR14 Item Selection
	2	1	U12	LIMPWRTEMTKR13 Item Selection
	3	1	U12	LIMPWRTEMTKR12

Offset	S	L	Type	ITOS name, attribute(s), and description
				Item Selection
	4	1	U12	LIMPWRTEMTKR11 Item Selection
	5	1	U12	LIMPWRTEMTKR10 Item Selection
	6	1	U12	LIMPWRTEMTKR09 Item Selection
	7	1	U12	LIMPWRTEMTKR08 Item Selection
	8	1	U12	LIMPWRTEMTKR07 Item Selection
	9	1	U12	LIMPWRTEMTKR06 Item Selection
	10	1	U12	LIMPWRTEMTKR05 Item Selection
	11	1	U12	LIMPWRTEMTKR04 Item Selection
	12	1	U12	LIMPWRTEMTKR03 Item Selection
	13	1	U12	LIMPWRTEMTKR02 Item Selection
	14	1	U12	LIMPWRTEMTKR01 Item Selection
	15	1	U12	LIMPWRTEMTKR00 Item Selection
0x010	0	1	U12	LIMPWREPUSEL02 Item Selection
	1	1	U12	LIMPWREPUSEL01 Item Selection
	2	1	U12	LIMPWREPUSEL00 Item Selection
	3	1	U12	LIMPWREPUPDU02 Item Selection
	4	1	U12	LIMPWREPUPDU01 Item Selection
	5	1	U12	LIMPWREPUPDU00 Item Selection
	6	10	U12	LIMPWRPAD0 10-Bit Padding
0x012	0	1	U12	LIMPWRACDSEL Item Selection
	1	1	U12	LIMPWRACDPDU Item Selection
	2	1	U12	LIMPWRACDSUPRED Item Selection
	3	1	U12	LIMPWRPAD1 Item Selection
	4	1	U12	LIMPWRACDFREE11 Item Selection
	5	1	U12	LIMPWRACDFREE10 Item Selection
	6	1	U12	LIMPWRACDFREE09

Offset	S	L	Type	ITOS name, attribute(s), and description
				Item Selection
	7	1	U12	LIMPWRACDFREE08 Item Selection
	8	1	U12	LIMPWRACDFREE07 Item Selection
	9	1	U12	LIMPWRACDFREE06 Item Selection
	10	1	U12	LIMPWRACDFREE05 Item Selection
	11	1	U12	LIMPWRACDFREE04 Item Selection
	12	1	U12	LIMPWRACDFREE03 Item Selection
	13	1	U12	LIMPWRACDFREE02 Item Selection
	14	1	U12	LIMPWRACDFREE01 Item Selection
	15	1	U12	LIMPWRACDFREE00 Item Selection

16.1.9 LIMPOWEROFF (1635/0x663:7)

Description:

"Disable Instrument Power" Telecommand Packet

Disable power from one or more elements within the LAT instrument.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	1	U12	LIMPWRTEMSEL15 Item Selection
	1	1	U12	LIMPWRTEMSEL14 Item Selection
	2	1	U12	LIMPWRTEMSEL13 Item Selection
	3	1	U12	LIMPWRTEMSEL12 Item Selection
	4	1	U12	LIMPWRTEMSEL11 Item Selection
	5	1	U12	LIMPWRTEMSEL10 Item Selection
	6	1	U12	LIMPWRTEMSEL09 Item Selection
	7	1	U12	LIMPWRTEMSEL08 Item Selection
	8	1	U12	LIMPWRTEMSEL07 Item Selection
	9	1	U12	LIMPWRTEMSEL06 Item Selection
	10	1	U12	LIMPWRTEMSEL05 Item Selection

Offset	S	L	Type	ITOS name, attribute(s), and description
	11	1	U12	LIMPWRTEMSEL04 Item Selection
	12	1	U12	LIMPWRTEMSEL03 Item Selection
	13	1	U12	LIMPWRTEMSEL02 Item Selection
	14	1	U12	LIMPWRTEMSEL01 Item Selection
	15	1	U12	LIMPWRTEMSEL00 Item Selection
0x00A	0	1	U12	LIMPWRTEMPDU15 Item Selection
	1	1	U12	LIMPWRTEMPDU14 Item Selection
	2	1	U12	LIMPWRTEMPDU13 Item Selection
	3	1	U12	LIMPWRTEMPDU12 Item Selection
	4	1	U12	LIMPWRTEMPDU11 Item Selection
	5	1	U12	LIMPWRTEMPDU10 Item Selection
	6	1	U12	LIMPWRTEMPDU09 Item Selection
	7	1	U12	LIMPWRTEMPDU08 Item Selection
	8	1	U12	LIMPWRTEMPDU07 Item Selection
	9	1	U12	LIMPWRTEMPDU06 Item Selection
	10	1	U12	LIMPWRTEMPDU05 Item Selection
	11	1	U12	LIMPWRTEMPDU04 Item Selection
	12	1	U12	LIMPWRTEMPDU03 Item Selection
	13	1	U12	LIMPWRTEMPDU02 Item Selection
	14	1	U12	LIMPWRTEMPDU01 Item Selection
	15	1	U12	LIMPWRTEMPDU00 Item Selection
0x00C	0	1	U12	LIMPWRTEMCAL15 Item Selection
	1	1	U12	LIMPWRTEMCAL14 Item Selection
	2	1	U12	LIMPWRTEMCAL13 Item Selection
	3	1	U12	LIMPWRTEMCAL12 Item Selection
	4	1	U12	LIMPWRTEMCAL11 Item Selection

Offset	S	L	Type	ITOS name, attribute(s), and description
	5	1	U12	LIMPWRTEMCAL10 Item Selection
	6	1	U12	LIMPWRTEMCAL09 Item Selection
	7	1	U12	LIMPWRTEMCAL08 Item Selection
	8	1	U12	LIMPWRTEMCAL07 Item Selection
	9	1	U12	LIMPWRTEMCAL06 Item Selection
	10	1	U12	LIMPWRTEMCAL05 Item Selection
	11	1	U12	LIMPWRTEMCAL04 Item Selection
	12	1	U12	LIMPWRTEMCAL03 Item Selection
	13	1	U12	LIMPWRTEMCAL02 Item Selection
	14	1	U12	LIMPWRTEMCAL01 Item Selection
	15	1	U12	LIMPWRTEMCAL00 Item Selection
0x00E	0	1	U12	LIMPWRTEMTKR15 Item Selection
	1	1	U12	LIMPWRTEMTKR14 Item Selection
	2	1	U12	LIMPWRTEMTKR13 Item Selection
	3	1	U12	LIMPWRTEMTKR12 Item Selection
	4	1	U12	LIMPWRTEMTKR11 Item Selection
	5	1	U12	LIMPWRTEMTKR10 Item Selection
	6	1	U12	LIMPWRTEMTKR09 Item Selection
	7	1	U12	LIMPWRTEMTKR08 Item Selection
	8	1	U12	LIMPWRTEMTKR07 Item Selection
	9	1	U12	LIMPWRTEMTKR06 Item Selection
	10	1	U12	LIMPWRTEMTKR05 Item Selection
	11	1	U12	LIMPWRTEMTKR04 Item Selection
	12	1	U12	LIMPWRTEMTKR03 Item Selection
	13	1	U12	LIMPWRTEMTKR02 Item Selection
	14	1	U12	LIMPWRTEMTKR01 Item Selection

Offset	S	L	Type	ITOS name, attribute(s), and description
	15	1	U12	LIMPWRTEMTKR00 Item Selection
0x010	0	1	U12	LIMPWREPUSEL02 Item Selection
	1	1	U12	LIMPWREPUSEL01 Item Selection
	2	1	U12	LIMPWREPUSEL00 Item Selection
	3	1	U12	LIMPWREPUPDU02 Item Selection
	4	1	U12	LIMPWREPUPDU01 Item Selection
	5	1	U12	LIMPWREPUPDU00 Item Selection
	6	10	U12	LIMPWRPAD0 10-Bit Padding
0x012	0	1	U12	LIMPWRACDSEL Item Selection
	1	1	U12	LIMPWRACDPDU Item Selection
	2	1	U12	LIMPWRACDSUPRED Item Selection
	3	1	U12	LIMPWRPAD1 Item Selection
	4	1	U12	LIMPWRACDFREE11 Item Selection
	5	1	U12	LIMPWRACDFREE10 Item Selection
	6	1	U12	LIMPWRACDFREE09 Item Selection
	7	1	U12	LIMPWRACDFREE08 Item Selection
	8	1	U12	LIMPWRACDFREE07 Item Selection
	9	1	U12	LIMPWRACDFREE06 Item Selection
	10	1	U12	LIMPWRACDFREE05 Item Selection
	11	1	U12	LIMPWRACDFREE04 Item Selection
	12	1	U12	LIMPWRACDFREE03 Item Selection
	13	1	U12	LIMPWRACDFREE02 Item Selection
	14	1	U12	LIMPWRACDFREE01 Item Selection
	15	1	U12	LIMPWRACDFREE00 Item Selection

16.1.10 `LIMSAAENTER` (1635/0x663:8)

Description:

"Enter SAA" Telecommand Packet

Indication that the LAT instrument has entered the South Atlantic Anomaly (SAA).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.11 `LIMSAAEXIT` (1635/0x663:9)

Description:

"Exit SAA" Telecommand Packet

Indication that the LAT instrument has left the South Atlantic Anomaly (SAA).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.12 `LIMBIASACD` (1635/0x663:10)

Description:

"Set ACD Bias Voltages" Telecommand Packet

Set the ACD SAA and HV bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	1	`U12`	`LIMARCSAAVALID00` ARC 0 SAA Bias Valid
	1	1	`U12`	`LIMARCVETOENA00` ARC 0 Veto Enable A
	2	1	`U12`	`LIMARCVETOENB00` ARC 0 Veto Enable B
	3	1	`U1`	`LIMARCSAAPAD00` 1-Bit Padding
	4	12	`U12`	`LIMARCSAABIAS00` ARC 0 SAA Bias Voltage
	16	1	`U12`	`LIMARCHVVALID00` ARC 0 HV Bias Valid
	17	1	`U12`	`LIMARCHV1BS00` ARC 0 HV Bias 1 Enable
	18	1	`U12`	`LIMARCHV2BS00` ARC 0 HV Bias 2 Enable
	19	1	`U1`	`LIMARCHVPAD00` 1-Bit Padding
	20	12	`U12`	`LIMARCHVBIAS00` ARC 0 HV Bias Voltage

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00C	0	1	U12	LIMARCSAAVALID01 ARC 1 SAA Bias Valid
	1	1	U12	LIMARCVETOENA01 ARC 1 Veto Enable A
	2	1	U12	LIMARCVETOENB01 ARC 1 Veto Enable B
	3	1	U1	LIMARCSAAPAD01 1-Bit Padding
	4	12	U12	LIMARCSAABIAS01 ARC 1 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID01 ARC 1 HV Bias Valid
	17	1	U12	LIMARCHV1BS01 ARC 1 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS01 ARC 1 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD01 1-Bit Padding
	20	12	U12	LIMARCHVBIAS01 ARC 1 HV Bias Voltage
0x010	0	1	U12	LIMARCSAAVALID02 ARC 2 SAA Bias Valid
	1	1	U12	LIMARCVETOENA02 ARC 2 Veto Enable A
	2	1	U12	LIMARCVETOENB02 ARC 2 Veto Enable B
	3	1	U1	LIMARCSAAPAD02 1-Bit Padding
	4	12	U12	LIMARCSAABIAS02 ARC 2 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID02 ARC 2 HV Bias Valid
	17	1	U12	LIMARCHV1BS02 ARC 2 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS02 ARC 2 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD02 1-Bit Padding
	20	12	U12	LIMARCHVBIAS02 ARC 2 HV Bias Voltage
0x014	0	1	U12	LIMARCSAAVALID03 ARC 3 SAA Bias Valid
	1	1	U12	LIMARCVETOENA03 ARC 3 Veto Enable A
	2	1	U12	LIMARCVETOENB03 ARC 3 Veto Enable B
	3	1	U1	LIMARCSAAPAD03 1-Bit Padding
	4	12	U12	LIMARCSAABIAS03 ARC 3 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID03 ARC 3 HV Bias Valid

Offset	S	L	Type	ITOS name, attribute(s), and description
	17	1	U12	LIMARCHV1BS03 ARC 3 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS03 ARC 3 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD03 1-Bit Padding
	20	12	U12	LIMARCHVBIAS03 ARC 3 HV Bias Voltage
0x018	0	1	U12	LIMARCSAAVALID04 ARC 4 SAA Bias Valid
	1	1	U12	LIMARCVETOENA04 ARC 4 Veto Enable A
	2	1	U12	LIMARCVETOENB04 ARC 4 Veto Enable B
	3	1	U1	LIMARCSAAPAD04 1-Bit Padding
	4	12	U12	LIMARCSAABIAS04 ARC 4 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID04 ARC 4 HV Bias Valid
	17	1	U12	LIMARCHV1BS04 ARC 4 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS04 ARC 4 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD04 1-Bit Padding
	20	12	U12	LIMARCHVBIAS04 ARC 4 HV Bias Voltage
0x01C	0	1	U12	LIMARCSAAVALID05 ARC 5 SAA Bias Valid
	1	1	U12	LIMARCVETOENA05 ARC 5 Veto Enable A
	2	1	U12	LIMARCVETOENB05 ARC 5 Veto Enable B
	3	1	U1	LIMARCSAAPAD05 1-Bit Padding
	4	12	U12	LIMARCSAABIAS05 ARC 5 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID05 ARC 5 HV Bias Valid
	17	1	U12	LIMARCHV1BS05 ARC 5 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS05 ARC 5 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD05 1-Bit Padding
	20	12	U12	LIMARCHVBIAS05 ARC 5 HV Bias Voltage
0x020	0	1	U12	LIMARCSAAVALID06 ARC 6 SAA Bias Valid
	1	1	U12	LIMARCVETOENA06 ARC 6 Veto Enable A

Offset	S	L	Type	ITOS name, attribute(s), and description
	2	1	U12	LIMARCVETOENB06 ARC 6 Veto Enable B
	3	1	U1	LIMARCSAAPAD06 1-Bit Padding
	4	12	U12	LIMARCSAABIAS06 ARC 6 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID06 ARC 6 HV Bias Valid
	17	1	U12	LIMARCHV1BS06 ARC 6 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS06 ARC 6 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD06 1-Bit Padding
	20	12	U12	LIMARCHVBIAS06 ARC 6 HV Bias Voltage
0x024	0	1	U12	LIMARCSAAVALID07 ARC 7 SAA Bias Valid
	1	1	U12	LIMARCVETOENA07 ARC 7 Veto Enable A
	2	1	U12	LIMARCVETOENB07 ARC 7 Veto Enable B
	3	1	U1	LIMARCSAAPAD07 1-Bit Padding
	4	12	U12	LIMARCSAABIAS07 ARC 7 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID07 ARC 7 HV Bias Valid
	17	1	U12	LIMARCHV1BS07 ARC 7 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS07 ARC 7 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD07 1-Bit Padding
	20	12	U12	LIMARCHVBIAS07 ARC 7 HV Bias Voltage
0x028	0	1	U12	LIMARCSAAVALID08 ARC 8 SAA Bias Valid
	1	1	U12	LIMARCVETOENA08 ARC 8 Veto Enable A
	2	1	U12	LIMARCVETOENB08 ARC 8 Veto Enable B
	3	1	U1	LIMARCSAAPAD08 1-Bit Padding
	4	12	U12	LIMARCSAABIAS08 ARC 8 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID08 ARC 8 HV Bias Valid
	17	1	U12	LIMARCHV1BS08 ARC 8 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS08 ARC 8 HV Bias 2 Enable

Offset	S	L	Type	ITOS name, attribute(s), and description
	19	1	U1	LIMARCHVPAD08 1-Bit Padding
	20	12	U12	LIMARCHVBIAS08 ARC 8 HV Bias Voltage
0x02C	0	1	U12	LIMARCSAAVALID09 ARC 9 SAA Bias Valid
	1	1	U12	LIMARCVETOENA09 ARC 9 Veto Enable A
	2	1	U12	LIMARCVETOENB09 ARC 9 Veto Enable B
	3	1	U1	LIMARCSAAPAD09 1-Bit Padding
	4	12	U12	LIMARCSAABIAS09 ARC 9 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID09 ARC 9 HV Bias Valid
	17	1	U12	LIMARCHV1BS09 ARC 9 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS09 ARC 9 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD09 1-Bit Padding
	20	12	U12	LIMARCHVBIAS09 ARC 9 HV Bias Voltage
0x030	0	1	U12	LIMARCSAAVALID10 ARC 10 SAA Bias Valid
	1	1	U12	LIMARCVETOENA10 ARC 10 Veto Enable A
	2	1	U12	LIMARCVETOENB10 ARC 10 Veto Enable B
	3	1	U1	LIMARCSAAPAD10 1-Bit Padding
	4	12	U12	LIMARCSAABIAS10 ARC 10 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID10 ARC 10 HV Bias Valid
	17	1	U12	LIMARCHV1BS10 ARC 10 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS10 ARC 10 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD10 1-Bit Padding
	20	12	U12	LIMARCHVBIAS10 ARC 10 HV Bias Voltage
0x034	0	1	U12	LIMARCSAAVALID11 ARC 11 SAA Bias Valid
	1	1	U12	LIMARCVETOENA11 ARC 11 Veto Enable A
	2	1	U12	LIMARCVETOENB11 ARC 11 Veto Enable B
	3	1	U1	LIMARCSAAPAD11 1-Bit Padding

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	12	U12	LIMARCSAABIAS11 ARC 11 SAA Bias Voltage
	16	1	U12	LIMARCHVVALID11 ARC 11 HV Bias Valid
	17	1	U12	LIMARCHV1BS11 ARC 11 HV Bias 1 Enable
	18	1	U12	LIMARCHV2BS11 ARC 11 HV Bias 2 Enable
	19	1	U1	LIMARCHVPAD11 1-Bit Padding
	20	12	U12	LIMARCHVBIAS11 ARC 11 HV Bias Voltage

16.1.13 **LIMBIASCAL** (1635/0x663:11)

Description:

"Set CAL Bias Voltages" Telecommand Packet

Set the CAL bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LIMPAD 16-Bit Padding
0x00A	0	1	U12	LIMCALVALID15 CAL 15 Bias Valid
	1	1	U12	LIMCALVALID14 CAL 14 Bias Valid
	2	1	U12	LIMCALVALID13 CAL 13 Bias Valid
	3	1	U12	LIMCALVALID12 CAL 12 Bias Valid
	4	1	U12	LIMCALVALID11 CAL 11 Bias Valid
	5	1	U12	LIMCALVALID10 CAL 10 Bias Valid
	6	1	U12	LIMCALVALID09 CAL 9 Bias Valid
	7	1	U12	LIMCALVALID08 CAL 8 Bias Valid
	8	1	U12	LIMCALVALID07 CAL 7 Bias Valid
	9	1	U12	LIMCALVALID06 CAL 6 Bias Valid
	10	1	U12	LIMCALVALID05 CAL 5 Bias Valid
	11	1	U12	LIMCALVALID04 CAL 4 Bias Valid
	12	1	U12	LIMCALVALID03 CAL 3 Bias Valid
	13	1	U12	LIMCALVALID02

Offset	S	L	Type	ITOS name, attribute(s), and description
				CAL 2 Bias Valid
	14	1	U12	LIMCALVALID01 CAL 1 Bias Valid
	15	1	U12	LIMCALVALID00 CAL 0 Bias Valid
0x00C	0	16	U12	LIMCALBIAS00 CAL 0 Bias Voltage
0x00E	0	16	U12	LIMCALBIAS01 CAL 1 Bias Voltage
0x010	0	16	U12	LIMCALBIAS02 CAL 2 Bias Voltage
0x012	0	16	U12	LIMCALBIAS03 CAL 3 Bias Voltage
0x014	0	16	U12	LIMCALBIAS04 CAL 4 Bias Voltage
0x016	0	16	U12	LIMCALBIAS05 CAL 5 Bias Voltage
0x018	0	16	U12	LIMCALBIAS06 CAL 6 Bias Voltage
0x01A	0	16	U12	LIMCALBIAS07 CAL 7 Bias Voltage
0x01C	0	16	U12	LIMCALBIAS08 CAL 8 Bias Voltage
0x01E	0	16	U12	LIMCALBIAS09 CAL 9 Bias Voltage
0x020	0	16	U12	LIMCALBIAS10 CAL 10 Bias Voltage
0x022	0	16	U12	LIMCALBIAS11 CAL 11 Bias Voltage
0x024	0	16	U12	LIMCALBIAS12 CAL 12 Bias Voltage
0x026	0	16	U12	LIMCALBIAS13 CAL 13 Bias Voltage
0x028	0	16	U12	LIMCALBIAS14 CAL 14 Bias Voltage
0x02A	0	16	U12	LIMCALBIAS15 CAL 15 Bias Voltage

16.1.14 LIMBIASTKR (1635/0x663:12)

Description:

"Set TKR Bias Voltages" Telecommand Packet

Set the TKR bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LIMPAD 16-Bit Padding
0x00A	0	1	U12	LIMTKRVALID15 TKR 15 Bias Valid

Offset	S	L	Type	ITOS name, attribute(s), and description
	1	1	U12	LIMTKRVALID14 TKR 14 Bias Valid
	2	1	U12	LIMTKRVALID13 TKR 13 Bias Valid
	3	1	U12	LIMTKRVALID12 TKR 12 Bias Valid
	4	1	U12	LIMTKRVALID11 TKR 11 Bias Valid
	5	1	U12	LIMTKRVALID10 TKR 10 Bias Valid
	6	1	U12	LIMTKRVALID09 TKR 9 Bias Valid
	7	1	U12	LIMTKRVALID08 TKR 8 Bias Valid
	8	1	U12	LIMTKRVALID07 TKR 7 Bias Valid
	9	1	U12	LIMTKRVALID06 TKR 6 Bias Valid
	10	1	U12	LIMTKRVALID05 TKR 5 Bias Valid
	11	1	U12	LIMTKRVALID04 TKR 4 Bias Valid
	12	1	U12	LIMTKRVALID03 TKR 3 Bias Valid
	13	1	U12	LIMTKRVALID02 TKR 2 Bias Valid
	14	1	U12	LIMTKRVALID01 TKR 1 Bias Valid
	15	1	U12	LIMTKRVALID00 TKR 0 Bias Valid
0x00C	0	16	U12	LIMTKRBIAS00 TKR 0 Bias Voltage
0x00E	0	16	U12	LIMTKRBIAS01 TKR 1 Bias Voltage
0x010	0	16	U12	LIMTKRBIAS02 TKR 2 Bias Voltage
0x012	0	16	U12	LIMTKRBIAS03 TKR 3 Bias Voltage
0x014	0	16	U12	LIMTKRBIAS04 TKR 4 Bias Voltage
0x016	0	16	U12	LIMTKRBIAS05 TKR 5 Bias Voltage
0x018	0	16	U12	LIMTKRBIAS06 TKR 6 Bias Voltage
0x01A	0	16	U12	LIMTKRBIAS07 TKR 7 Bias Voltage
0x01C	0	16	U12	LIMTKRBIAS08 TKR 8 Bias Voltage
0x01E	0	16	U12	LIMTKRBIAS09 TKR 9 Bias Voltage
0x020	0	16	U12	LIMTKRBIAS10 TKR 10 Bias Voltage

Offset	S	L	Type	ITOS name, attribute(s), and description
0x022	0	16	U12	LIMTKRBIAS11 TKR 11 Bias Voltage
0x024	0	16	U12	LIMTKRBIAS12 TKR 12 Bias Voltage
0x026	0	16	U12	LIMTKRBIAS13 TKR 13 Bias Voltage
0x028	0	16	U12	LIMTKRBIAS14 TKR 14 Bias Voltage
0x02A	0	16	U12	LIMTKRBIAS15 TKR 15 Bias Voltage

16.1.15 LIMCONFIGGBM (1635/0x663:13)

Description:

"Configure GBM Interface Handling" Telecommand Packet

Configure the LIM interface to the GBM, including its handling of commands and interrupts signals from the GBM.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	13	U12	LIMGBMPAD1 13-Bit Padding
	13	1	U12	LIMGBMPRIALLOW LIM allowed to enable the primary GBM interrupt.
	14	1	U12	LIMGBMREDALLOW LIM allowed to enable the redundant GBM interrupt.
	15	1	U12	LIMGBMREPALLOW LIM allowed to request repoint on behalf of the GBM.
	16	13	U12	LIMGBMPAD2 13-Bit Padding
	29	1	U12	LIMGBMPRIVALID The LIMGBMPRIALLOW field is valid.
	30	1	U12	LIMGBMREDVALID The LIMGBMREDALLOW field is valid.
	31	1	U12	LIMGBMREPVALID The LIMGBMREPALLOW field is valid.

16.1.16 LIMCONFIGHV (1635/0x663:14)

Description:

"Configure ACD High-Voltage Handling" Telecommand Packet

Configure LIM's handling of the ACD high-voltage.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	15	U12	LIMHVPAD1 15-Bit Padding

Offset	S	L	Type	ITOS name, attribute(s), and description
	15	1	U12	LIMHVALLOW LIM allowed to enable the ACD high-voltage.
	16	15	U12	LIMHVPAD2 15-Bit Padding
	31	1	U12	LIMHVVALID The LIMHVALLOW field is valid.

16.1.17 LIMCONFIGPID (1635/0x663:15)

Description:

"Configure PID Signals" Telecommand Packet

Configure the discrete (PID) signals.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LIMPIDPRI Primary PID Signal Selection

16.1.18 LIMPIGRECORD (1635/0x663:16)

Description:

"Call the PIG_record Function" Telecommand Packet

Call the PIG_record() function, which dumps the contents of the PIG-controlled registers.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LIMDEST Dump data destination (0=SSR)

16.1.19 LIMLATCRECORD (1635/0x663:17)

Description:

"Call the LATC_capture and LATC_consign Functions" Telecommand Packet

Call the LATC_capture() and LAT_consign() functions to dump the LAT instrument registers.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LIMDEST Dump data destination value passed to LATC_consign

16.1.20 LIMNOOP (1635/0x663:18)

Description:

"LIM No-Op" Telecommand Packet

This telecommand does nothing except generate the standard command confirmation reply to verify that the LIM task is running and accepting commands.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.21 LIMLATCCONFIG (1635/0x663:19)

Description:

"Call the LATC_cache, LATC_configure, and LATC_ignore functions" Telecommand Packet

Call the LATC_cache(), LATC_configure(), and LATC_ignore() functions to configure the LAT instrument registers.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LIMLATCID LATC Configuration File ID
0x00C	0	32	U1234	LIMIGNOREID LATC Ignore File ID

16.1.22 LIMLATCVERIFY (1635/0x663:20)

Description:

"Call the LATC_capture, LATC_verify, and LATC_consign functions" Telecommand Packet

Call the LATC_capture(), LATC_verify(), and LATC_consign() functions to verify and dump the LAT instrument registers.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LIMDEST Destination

16.1.23 LIMPIGVERIFY (1635/0x663:21)

Description:

"PIG Verify" Telecommand Packet

Verify the current PIG settings against the cached values by calling PIG_verify.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.1.24 `LIMBIASACDON` (1635/0x663:22)

Description:

"Turn On ACD Bias Voltages" Telecommand Packet

Restore the ACD bias voltages from the cached values after having turned them off.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMACDMASK` ACD Mask

16.1.25 `LIMBIASCALON` (1635/0x663:23)

Description:

"Turn On CAL Bias Voltages" Telecommand Packet

Restore the CAL bias voltages from the cached values after having turned them off.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMTEMMASK` TEM Mask

16.1.26 `LIMBIASTKRON` (1635/0x663:24)

Description:

"Turn On TKR Bias Voltages" Telecommand Packet

Restore the TKR bias voltages from the cached values after having turned them off.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMTEMMASK` TEM Mask

16.1.27 `LIMBIASACDOFF` (1635/0x663:25)

Description:

"Turn Off ACD Bias Voltages" Telecommand Packet

Turn off the ACD bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMACDMASK` ACD Mask

16.1.28 `LIMBIASCALOFF` (1635/0x663:26)

Description:

"Turn Off CAL Bias Voltages" Telecommand Packet

Turn off the CAL bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMTEMMASK` TEM Mask

16.1.29 `LIMBIASTKROFF` (1635/0x663:27)

Description:

"Turn Off TKR Bias Voltages" Telecommand Packet

Turn off the TKR bias voltages.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LIMTEMMASK` TEM Mask

16.1.30 `LIMLOOKATME` (1636/0x664:0)

Description:

"Send The Look-At-Me Command" Telecommand Packet

Send the Look-At-Me command to the CRU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

16.2 Telemetry Packets

16.2.0 `State` (783/0x30F)

Description:

"Current LIM State" Telemetry Packet

Reports the current state of the LIM package, including the operating mode and the most recent action and its status.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LIMTACTION; LIMACTION` Most Recent LIM Action
`0x010`	0	32	`U1234`	`LIMTSTATUS` Most Recent Action Status
`0x014`	0	8	`U1`	`LIMTOPMODE` Operating Mode
`0x015`	0	8	`U1`	`LIMTVIRTMODE` Virtual Mode
`0x016`	0	8	`U1`	`LIMTSAATRANSIT` SAA Transit Status
`0x017`	0	8	`U1`	`LIMTLCISTATE` LCI Task State
`0x018`	0	8	`U1`	`LIMTLDFSTATE` LDF Task State
`0x019`	0	8	`U1`	`LIMTLPASTATE` LPA Task State
`0x01A`	0	5	`U1`	`LIMTTOOPAD` 5-Bit Padding
	5	1	`U1`	`LIMTTOOSTARTED` TOO Started Status
	6	1	`U1`	`LIMTTOOACTIVE` TOO Started Status
	7	1	`U1`	`LIMTTOOREADY` TOO Ready Status
`0x01B`	0	2	`U1`	`LIMTARRPAD` 2-Bit Padding
	2	1	`U1`	`LIMTARRREPPEND` ARR Repoint Request Pending Status
	3	3	`U1`	`LIMTARRGRBSTATE` ARR GRB State
	6	1	`U1`	`LIMTARRACTIVE` ARR Started Status
	7	1	`U1`	`LIMTARRREADY` ARR Ready Status
`0x01C`	0	32	`U1234`	`LIMTTOOREMAINSEC` TOO Seconds Remaining
`0x020`	0	32	`U1234`	`LIMTARRREMAINSEC` ARR Seconds Remaining
`0x024`	0	5	`U1`	`LIMTGBMPAD` 7-Bit Padding

Offset	S	L	Type	ITOS name, attribute(s), and description
	5	1	U1	LIMTPRIINTALLOW GBM Primary Interrupt Allowed Status
	6	1	U1	LIMTREDINTALLOW GBM Redundant Interrupt Allowed Status
	7	1	U1	LIMTGBMREPALLOW GBM Repoint Request Allowed Status
0x025	0	7	U1	LIMTHVPAD 7-Bit Padding
	7	1	U1	LIMTHVALLOW ACD High-Voltage Allowed Status
0x026	0	16	U12	LIMTPAD 16-Bit Padding
0x028	0	32	U1234	LIMTDISREMAINSEC GBM Interrupt Disable Seconds Remaining

16.2.1 `Repoint_Request` (836/0x344)

Description:

"ARR Notification" Telemetry Packet

Notification that the LAT sent a repoint request to the spacecraft.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LIMREQPAD 16-Bit Padding
0x010	0	32	U1234	LIMREQTRANID ARR Transaction ID
0x014	0	32	U1234	LIMREQDWELLTIME ARR Dwell Time
0x018	0	64	F12345678	LIMREQRA ARR Location RA
0x020	0	64	F12345678	LIMREQDEC ARR Location DEC

16.2.2 `Repoint_Response` (837/0x345)

Description:

"ARR Response Notification" Telemetry Packet

Notification that the LAT received a response to an autonomous repoint request.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LIMRESPACCEPT ARR Response Acceptance Indication
0x010	0	32	U1234	LIMRESPTRANID ARR Response Transaction ID
0x014	0	32	U1234	LIMRESPDWELLTIME

Offset	S	L	Type	ITOS name, attribute(s), and description
				ARR Response Dwell Time
0x018	0	64	F12345678	LIMRESPRA ARR Response Location RA
0x020	0	64	F12345678	LIMRESPDEC ARR Response Location DEC

16.2.3 **`Load_Shed_Alert`** (838/0x346)

Description:

"Load Shed Alert" Telemetry Packet

Alert-level notification of LAT instrument load shedding.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LIMSHEDALERTPAD 16-Bit Padding

16.3 Discretes

16.3.0 `LIMACTION` (LIM Action) Discrete

Description:

Valid LIM actions that are reported in the LIMSTATE telemetry packet.

Definition:

0 Unknown Action (`LIMACTUNKNOWN`)
An unrecognized action occurred.

1 LIM Start Action (`LIMACTSTART`)
The LIM task started.

2 Operating Mode Change Action (`LIMACTOPMODECH`)
The operating mode changed.

3 Main Feed On Action (`LIMACTMAINFEED`)
LIM enabled power to the main feed and initialized the SIU.

4 Power On Action (`LIMACTPOWERON`)
LIM enabled power to one or more components of the LAT.

5 Power Off Action (`LIMACTPOWEROFF`)
LIM disabled power from one or more components of the LAT.

7 Event Fabric Insert Action (`LIMACTEVENTINS`)
LIM added one or more components to the event fabric.

8 Event Fabric Remove Action (`LIMACTEVENTREM`)
LIM removed one or more components from the event fabric.

9 Load Shed Start Action (`LIMACTSHEDBEGIN`)
LIM started disabling instrument power in response to a Load-Shed command.

10 Load Shed End Action (`LIMACTSHEDEND`)
LIM finished disabling instrument power in response to a Load-Shed command.

13 LPA Start Action (`LIMACTLPASTART`)
LIM sent the LPASTART command to the LPA task.

14 LPA Set Mode Action (`LIMACTLPASSETMOD`)
LIM called the LPA_set_mode() function to change the observation mode.

15 LPA Stop Action (`LIMACTLPASTOP`)
LIM sent the LPASTOP command to the LPA task.

16 LTC Stop Action (`LIMACTLTCSTOP`)
LIM sent the LTCSTOP command to the LTC task.

17 SIU Reboot Action (`LIMACTSIUREBOOT`)
LIM is about to reboot the SIU.

19 SAA Configure Action (`LIMACTSAACFG`)
LIM configured the LAT instrument for SAA transit.

21 Non-SAA Configure Action (`LIMACTNONSAACFG`)
LIM configured the LAT instrument for non-SAA operation.

22 LCI Calibrate Action (`LIMACTCALSTART`)
LIM sent the LCICALIBRATE command to the LCI task.

23 LCI Abort Action (`LIMACTCALABORT`)
LIM sent the LCIABORT command to the LCI task.

24 LCI Other Command Action (`LIMACTCALOTHER`)
LIM sent some 'other' command to the LCI task.

25 Diagnostic Start Action (`LIMACTDIAGSTART`)
LIM sent the Diagnostic-Start command to the diagnostic task.

26 Diagnostic Abort Action (`LIMACTDIAGABORT`)
LIM sent the Diagnostic-Abort command to the diagnostic task.

27 Diagnostic Other Command Action (`LIMACTDIAGOTHER`)
LIM sent some 'other' command to the diagnostic task.

30 LCI Complete Action (`LIMACTCALCOMP`)
LIM received the LCICOMPLETE message from the LCI task.

31 Diagnostic Complete Action (`LIMACTDIAGCOMP`)
LIM received the Diagnostic-Complete message from the diagnostic task.

32 LPA Complete Action (`LIMACTLPACOMP`)
LIM received the LPACOMPLETE message from the LPA task.

33 LCI Task State Change Action (`LIMACTLCISTATE`)
LIM changed the state of the LCI task.

34 Diagnostic Task State Change Action (`LIMACTLDFSTATE`)
LIM changed the state of the diagnostic task.

35 LPA Task State Change Action (`LIMACTLPASTATE`)
LIM changed the state of the LPA task.

37 ARR Mode State Change Action (`LIMACTARRSTATE`)
The ARR observation mode state changed.

40 TOO Mode State Change Action (`LIMACTTOOSTATE`)
The TOO observation mode state changed.

42 LPA Active Command Action (`LIMACTLPAACTIVE`)
LIM sent an 'active' command to the LPA task.

43 LPA Idle Command Action (`LIMACTLPAIDLE`)
LIM sent an 'idle' command to the LPA task.

44 Virtual Mode Change Action (`LIMACTVIRTMODE`)
The virtual mode changed.

45 SAA State Change Action (`LIMACTSAACHANGE`)
The SAA transit state changed.

46 LPA Restart Action (`LIMACTLPARESTART`)
LIM called the LPA_resume() function to restart an observation.

47 GBM Repoint Recommend Action (`LIMACTREPREC`)
LIM received a Candidate Repoint Recommendation message from the GBM which recommended a repoint.

48 GBM No-Repoint Recommend Action (`LIMACTREPNOREC`)
LIM received a Candidate Repoint Recommendation message from the GBM which did not recommend a repoint.

49 GBM Command Forward Action (`LIMACTGBMCMD`)
LIM forwarded a command from the GBM to the LPA task.

50 Slew Request Action (`LIMACTSLEWREQ`)
LIM sent a Slew-Request command to the spacecraft.

51 Slew Accept Action (`LIMACTSLEWACCEPT`)
LIM received a Slew-Request-Reply from the spacecraft which indicated that the request was accepted.

52 Slew Reject Action (`LIMACTSLEWREJECT`)
LIM received a Slew-Request-Reply from the spacecraft which indicated that the request was rejected.

53 Primary PID Select Action (`LIMACTPIDSELPRI`)
LIM selected the primary PID input signals.

54 Redundant PID Select Action (`LIMACTPIDSELRED`)
LIM selected the redundant PID input signals.

55 LIM Stop Action (`LIMACTSTOP`)
The LIM task was stopped.

56 ACD Bias Configure Action (`LIMACTBIASACD`)
LIM configured the ACD bias voltages.

57 CAL Bias Configure Action (`LIMACTBIASCAL`)
LIM configured the CAL bias voltages.

58 TKR Bias Configure Action (`LIMACTBIASTKR`)
LIM configured the TKR bias voltages.

59 GBM Interface Configure Action (`LIMACTGBMSTATE`)
The configuration of the GBM interface changed.

60 HV Interface Configure Action (`LIMACTHVSTATE`)
The configuration of the high-voltage interface changed.

61 LCI Calibrate Status Action (`LIMACTCALSTRTST`)
LIM received a status code for an LCICALIBRATE command that it sent to the LCI task.

62 Diagnostic Start Status Action (LIMACTDIAGSTRTST)
LIM received a status code for a Diagnostic Start command that it sent to the diagnostic task.

63 LPA Start Status Action (LIMACTLPASTARTST)
LIM received a status code for an LPASTART command that it sent to the LPA task.

64 LCI Abort Status Action (LIMACTCALABRTST)
LIM received a status code for an LCIABORT command that it sent to the LCI task.

65 Diagnostic Abort Status Action (LIMACTDIAGABRTST)
LIM received a status code for a Diagnostic Abort command that it sent to the diagnostic task.

66 LPA Stop Status Action (LIMACTLPASTOPST)
LIM received a status code for an LPASTOP command that it sent to the LPA task.

67 Primary GBM Interrupt Enable Action (LIMACTENGBMPRI)
LIM enabled the primary GBM trigger interrupt signal.

68 Redundant GBM Interrupt Enable Action (LIMACTENGBMRED)
LIM enabled the redundant GBM trigger interrupt signal.

69 Primary GBM Interrupt Action (LIMACTGBMINTPRI)
LIM received an interrupt from the primary GBM trigger interrupt signal.

70 Redundant GBM Interrupt Action (LIMACTGBMINTRED)
LIM received an interrupt from the redundant GBM trigger interrupt signal.

71 Slew Request Pending Status Action (LIMACTREPREQST)
The Slew-Request PENDING status changed.

72 GBM Calculate Information Action (LIMACTCALCINFO)
LIM received a Calculated Information message from the GBM.

73 GBM Closeout Action (LIMACTCLOSEOUT)
LIM received a Closeout message from the GBM.

74 Primary GBM Interrupt Disable Action (LIMACTDISGBMPRI)
LIM disabled the primary GBM trigger interrupt signal.

75 Redundant GBM Interrupt Disable Action (LIMACTDISGBMRED)
LIM disabled the redundant GBM trigger interrupt signal.

76 GRB Suspected Action (LIMACTGRBSUSPECT)
LIM received a GRB-Suspected message from the LPA task.

77 GRB Confirmed Action (LIMACTGRBCONFIRM)
LIM received a GRB-Confirmed message from the LPA task.

78 GRB Finished Action (LIMACTGRBFINISH)
LIM received a GRB-Finished message from the LPA task.

79 LPA GBM Interrupt Action (LIMACTLPAGBMINT)
LIM called the LPA_gbm_int() function to notify LPA of a GBM interrupt.

Used by:

???

16.3.1 `LIMGRBSTATE` (LIM GRB State) Discrete

Description:

Valid GRB states within the LIM ARR operating mode.

Definition:

0 GRB Idle State (`LIMGRBIDLE`)
The idle GRB state. There is no GRB activity in progress.

4 GRB 0 State (`LIMGRB0`)
The GRB 0 state. A GRB is suspected, but the spacecraft has not been repointed.

5 GRB 1 State (`LIMGRB1`)
The GRB 1 state. A GRB has been confirmed and the spacecraft has been repointed.

6 GRB 2 State (`LIMGRB2`)
The GRB 2 state. A GRB has ended, but the spacecraft is still repointed.

Used by:

???

16.3.2 `LIMOPMODE` (LIM Operating Mode) Discrete

Description:

Valid LIM operating modes.

Definition:

0 TERMINAL Operating Mode (`LIMMODETERMINAL`)
The TERMINAL operating mode.

1 QUIESCENT Operating Mode (`LIMMODEQUIESCENT`)
The QUIESCENT operating mode.

2 CALIBRATION Operating Mode (`LIMMODECAL`)
The CALIBRATION operating mode.

4 PHYSICS Operating Mode (`LIMMODEPHYSICS`)
The PHYSICS operating mode.

6 TOO Operating Mode (`LIMMODETOO`)
The TOO operating mode.

8 ARR Operating Mode (`LIMMODEARR`)
The ARR operating mode.

10 HOLD Operating Mode (`LIMMODEHOLD`)
The HOLD operating mode.

Used by:

???

16.3.3 `LIMOTHERSTATE` (LIM Other Task State) Discrete

Description:

Valid states of non-LIM tasks (LCI and LPA) for which LIM intercepts commands.

Definition:

0 IDLE Other Task State (`LIMSTATEIDLE`)
The other task is idle.

1 RUNNING Other Task State (`LIMSTATERUNNING`)
The other task is running. A start command was sent to the other task and there has been no indication that the other task has s

2 STOPPING Other Task State (`LIMSTATESTOPPING`)
The other task is stopping. A stop or abort command was sent to the other task, but a completion response has not been receive

3 UNKNOWN Other Task State (`LIMSTATEUNKNOWN`)
The state of the other task is unknown.

Used by:

???

17 LMC Package

17.0 Overview

The LMC package handles the LAT multiplexed counters.

17.1 Command Packets

17.1.0 `LMCCALLRS` (1692/0x69C:0)

Description:

"CAL Low Rate Science Counters" Telecommand Packet

Start collection of CAL low rate science counter data

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LMCINTERVAL` Sample interval in milliseconds
`0x00A`	0	16	`U12`	`LMCCOUNT` Sample count
`0x00C`	0	32	`U1234`	`LMCCALMASK` CAL LRS Mask
`0x010`	0	16	`U12`	`LMCTEMMASK` TEM device mask
`0x012`	0	16	`U12`	`LMCDEST` Output destination

17.1.1 `LMCTKRLRS` (1692/0x69C:1)

Description:

"TKR Low Rate Science Counters" Telecommand Packet

Starts collection of TKR 3-in-a-row counters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LMCINTERVAL` Sample interval in milliseconds
`0x00A`	0	16	`U12`	`LMCCOUNT` Sample count
`0x00C`	0	16	`U12`	`LMCTKRMASK` TKR LRS Mask
`0x00E`	0	16	`U12`	`LMCTEMMASK` TEM device mask
`0x010`	0	16	`U12`	`LMCDEST` Output destination

17.1.2 **LMCACDTILEPAIR** (1692/0x69C:2)

Description:

"ACD Tile Counter (Pair)" Telecommand Packet

Starts collection of a pair of ACD tile counters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LMCINTERVAL Sample interval in milliseconds
0x00A	0	16	U12	LMCCOUNT Sample count
0x00C	0	16	U12	LMCTILEID0 ACD Tile ID
0x00E	0	16	U12	LMCTILEID1 ACD Tile ID
0x010	0	16	U12	LMCDEST Output destination

17.1.3 **LMCACDTILEALL** (1692/0x69C:3)

Description:

"ACD Tile Counters (All)" Telecommand Packet

Starts collection of all ACD tile counters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LMCINTERVAL Sample interval in milliseconds
0x00A	0	16	U12	LMCCOUNT Sample count
0x00C	0	16	U12	LMCDEST Output destination

17.1.4 **LMCSTOPCOUNT** (1692/0x69C:4)

Description:

"Stop Active Counter" Telecommand Packet

Stop the active counter

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LMCCOUNTOPCODE Counter type opcode

17.1.5 LMCTEMDEADTIME (1692/0x69C:5)

Description:

"TEM Deadtime Low Rate Science Counter" Telecommand Packet

Counts the deadtime incurred by specific trigger primitives.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LMCINTERVAL Sample interval in milliseconds
0x00A	0	16	U12	LMCCOUNT Sample count
0x00C	0	13	U12	LMCSPARE13 Spare 13 bits
	13	1	U12	LMCTOTALDSAB TEM Total Deadtime Mask Bit
	14	1	U12	LMCCALDSAB TEM CAL Deadtime Mask Bit
	15	1	U12	LMCTKRDSAB TEM TKR Deadtime Mask Bit
0x00E	0	16	U12	LMCTEMMASK TEM device mask
0x010	0	16	U12	LMCDEST Output destination

17.1.6 LMCNOOP (1692/0x69C:6)

Description:

"No-op" Telecommand Packet

No-op command always returns LMC_SUCCESS.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

17.2 Telemetry Packets

17.2.0 `lmc_cal` (705/0x2C1)

Description:

"CAL Low Rate Science Counters" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMCPAD0 Spare 16 bits
0x010	0	32	U1234	LMCTSSECS Seconds
0x014	0	32	U1234	LMCTSUSECS Microseconds
0x018	0	16	U12	LMCPAD Spare 16 bits
0x01A	0	16	U12	LMCTEMENABLE TEM Enable Word
0x01C	0	32	U1234	LMCCALLRSMSK Low Rate Science Mask
0x020	0	32	U1234	LMCCALTEM0DT Delta timestamp
0x024	0	16	U12	LMCCALTEM0CNT0 Counter Data Value
0x026	0	16	U12	LMCCALTEM0CNT1 Counter Data Value
0x028	0	32	U1234	LMCCALTEM1DT Delta timestamp
0x02C	0	16	U12	LMCCALTEM1CNT0 Counter Data Value
0x02E	0	16	U12	LMCCALTEM1CNT1 Counter Data Value
0x030	0	32	U1234	LMCCALTEM2DT Delta timestamp
0x034	0	16	U12	LMCCALTEM2CNT0 Counter Data Value
0x036	0	16	U12	LMCCALTEM2CNT1 Counter Data Value
0x038	0	32	U1234	LMCCALTEM3DT Delta timestamp
0x03C	0	16	U12	LMCCALTEM3CNT0 Counter Data Value
0x03E	0	16	U12	LMCCALTEM3CNT1 Counter Data Value
0x040	0	32	U1234	LMCCALTEM4DT Delta timestamp
0x044	0	16	U12	LMCCALTEM4CNT0 Counter Data Value
0x046	0	16	U12	LMCCALTEM4CNT1 Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x048	0	32	U1234	LMCCALTEM5DT Delta timestamp
0x04C	0	16	U12	LMCCALTEM5CNT0 Counter Data Value
0x04E	0	16	U12	LMCCALTEM5CNT1 Counter Data Value
0x050	0	32	U1234	LMCCALTEM6DT Delta timestamp
0x054	0	16	U12	LMCCALTEM6CNT0 Counter Data Value
0x056	0	16	U12	LMCCALTEM6CNT1 Counter Data Value
0x058	0	32	U1234	LMCCALTEM7DT Delta timestamp
0x05C	0	16	U12	LMCCALTEM7CNT0 Counter Data Value
0x05E	0	16	U12	LMCCALTEM7CNT1 Counter Data Value
0x060	0	32	U1234	LMCCALTEM8DT Delta timestamp
0x064	0	16	U12	LMCCALTEM8CNT0 Counter Data Value
0x066	0	16	U12	LMCCALTEM8CNT1 Counter Data Value
0x068	0	32	U1234	LMCCALTEM9DT Delta timestamp
0x06C	0	16	U12	LMCCALTEM9CNT0 Counter Data Value
0x06E	0	16	U12	LMCCALTEM9CNT1 Counter Data Value
0x070	0	32	U1234	LMCCALTEM10DT Delta timestamp
0x074	0	16	U12	LMCCALTEM10CNT0 Counter Data Value
0x076	0	16	U12	LMCCALTEM10CNT1 Counter Data Value
0x078	0	32	U1234	LMCCALTEM11DT Delta timestamp
0x07C	0	16	U12	LMCCALTEM11CNT0 Counter Data Value
0x07E	0	16	U12	LMCCALTEM11CNT1 Counter Data Value
0x080	0	32	U1234	LMCCALTEM12DT Delta timestamp
0x084	0	16	U12	LMCCALTEM12CNT0 Counter Data Value
0x086	0	16	U12	LMCCALTEM12CNT1 Counter Data Value
0x088	0	32	U1234	LMCCALTEM13DT Delta timestamp
0x08C	0	16	U12	LMCCALTEM13CNT0 Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x08E	0	16	U12	LMCCALTEM13CNT1 Counter Data Value
0x090	0	32	U1234	LMCCALTEM14DT Delta timestamp
0x094	0	16	U12	LMCCALTEM14CNT0 Counter Data Value
0x096	0	16	U12	LMCCALTEM14CNT1 Counter Data Value
0x098	0	32	U1234	LMCCALTEM15DT Delta timestamp
0x09C	0	16	U12	LMCCALTEM15CNT0 Counter Data Value
0x09E	0	16	U12	LMCCALTEM15CNT1 Counter Data Value

17.2.1 lmc_tkr (706/0x2C2)

Description:

"TKR Low Rate Science Counters" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMCPAD0 Spare 16 bits
0x010	0	32	U1234	LMCTSSECS Seconds
0x014	0	32	U1234	LMCTSUSECS Microseconds
0x018	0	16	U12	LMCPAD Spare 16 bits
0x01A	0	16	U12	LMCTEMENABLE TEM Enable Word
0x01C	0	32	U1234	LMCTKRLRSMSK Low Rate Science Mask
0x020	0	32	U1234	LMCTKRTEM0CNT0D Delta timestamp
0x024	0	16	U12	LMCTKRTEM0CNT0U Counter Data Value
0x026	0	16	U12	LMCTKRTEM0CNT0L Counter Data Value
0x028	0	32	U1234	LMCTKRTEM0CNT1D Delta timestamp
0x02C	0	16	U12	LMCTKRTEM0CNT1U Counter Data Value
0x02E	0	16	U12	LMCTKRTEM0CNT1L Counter Data Value
0x030	0	32	U1234	LMCTKRTEM1CNT0D Delta timestamp
0x034	0	16	U12	LMCTKRTEM1CNT0U Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x036	0	16	U12	LMCTKRTEM1CNT0L Counter Data Value
0x038	0	32	U1234	LMCTKRTEM1CNT1D Delta timestamp
0x03C	0	16	U12	LMCTKRTEM1CNT1U Counter Data Value
0x03E	0	16	U12	LMCTKRTEM1CNT1L Counter Data Value
0x040	0	32	U1234	LMCTKRTEM2CNT0D Delta timestamp
0x044	0	16	U12	LMCTKRTEM2CNT0U Counter Data Value
0x046	0	16	U12	LMCTKRTEM2CNT0L Counter Data Value
0x048	0	32	U1234	LMCTKRTEM2CNT1D Delta timestamp
0x04C	0	16	U12	LMCTKRTEM2CNT1U Counter Data Value
0x04E	0	16	U12	LMCTKRTEM2CNT1L Counter Data Value
0x050	0	32	U1234	LMCTKRTEM3CNT0D Delta timestamp
0x054	0	16	U12	LMCTKRTEM3CNT0U Counter Data Value
0x056	0	16	U12	LMCTKRTEM3CNT0L Counter Data Value
0x058	0	32	U1234	LMCTKRTEM3CNT1D Delta timestamp
0x05C	0	16	U12	LMCTKRTEM3CNT1U Counter Data Value
0x05E	0	16	U12	LMCTKRTEM3CNT1L Counter Data Value
0x060	0	32	U1234	LMCTKRTEM4CNT0D Delta timestamp
0x064	0	16	U12	LMCTKRTEM4CNT0U Counter Data Value
0x066	0	16	U12	LMCTKRTEM4CNT0L Counter Data Value
0x068	0	32	U1234	LMCTKRTEM4CNT1D Delta timestamp
0x06C	0	16	U12	LMCTKRTEM4CNT1U Counter Data Value
0x06E	0	16	U12	LMCTKRTEM4CNT1L Counter Data Value
0x070	0	32	U1234	LMCTKRTEM5CNT0D Delta timestamp
0x074	0	16	U12	LMCTKRTEM5CNT0U Counter Data Value
0x076	0	16	U12	LMCTKRTEM5CNT0L Counter Data Value
0x078	0	32	U1234	LMCTKRTEM5CNT1D Delta timestamp

Offset	S	L	Type	ITOS name, attribute(s), and description
0x07C	0	16	U12	LMCTKRTEM5CNT1U Counter Data Value
0x07E	0	16	U12	LMCTKRTEM5CNT1L Counter Data Value
0x080	0	32	U1234	LMCTKRTEM6CNT0D Delta timestamp
0x084	0	16	U12	LMCTKRTEM6CNT0U Counter Data Value
0x086	0	16	U12	LMCTKRTEM6CNT0L Counter Data Value
0x088	0	32	U1234	LMCTKRTEM6CNT1D Delta timestamp
0x08C	0	16	U12	LMCTKRTEM6CNT1U Counter Data Value
0x08E	0	16	U12	LMCTKRTEM6CNT1L Counter Data Value
0x090	0	32	U1234	LMCTKRTEM7CNT0D Delta timestamp
0x094	0	16	U12	LMCTKRTEM7CNT0U Counter Data Value
0x096	0	16	U12	LMCTKRTEM7CNT0L Counter Data Value
0x098	0	32	U1234	LMCTKRTEM7CNT1D Delta timestamp
0x09C	0	16	U12	LMCTKRTEM7CNT1U Counter Data Value
0x09E	0	16	U12	LMCTKRTEM7CNT1L Counter Data Value
0x0A0	0	32	U1234	LMCTKRTEM8CNT0D Delta timestamp
0x0A4	0	16	U12	LMCTKRTEM8CNT0U Counter Data Value
0x0A6	0	16	U12	LMCTKRTEM8CNT0L Counter Data Value
0x0A8	0	32	U1234	LMCTKRTEM8CNT1D Delta timestamp
0x0AC	0	16	U12	LMCTKRTEM8CNT1U Counter Data Value
0x0AE	0	16	U12	LMCTKRTEM8CNT1L Counter Data Value
0x0B0	0	32	U1234	LMCTKRTEM9CNT0D Delta timestamp
0x0B4	0	16	U12	LMCTKRTEM9CNT0U Counter Data Value
0x0B6	0	16	U12	LMCTKRTEM9CNT0L Counter Data Value
0x0B8	0	32	U1234	LMCTKRTEM9CNT1D Delta timestamp
0x0BC	0	16	U12	LMCTKRTEM9CNT1U Counter Data Value
0x0BE	0	16	U12	LMCTKRTEM9CNT1L Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0C0	0	32	U1234	LMCTKRTEM10CNT0D Delta timestamp
0x0C4	0	16	U12	LMCTKRTEM10CNT0U Counter Data Value
0x0C6	0	16	U12	LMCTKRTEM10CNT0L Counter Data Value
0x0C8	0	32	U1234	LMCTKRTEM10CNT1D Delta timestamp
0x0CC	0	16	U12	LMCTKRTEM10CNT1U Counter Data Value
0x0CE	0	16	U12	LMCTKRTEM10CNT1L Counter Data Value
0x0D0	0	32	U1234	LMCTKRTEM11CNT0D Delta timestamp
0x0D4	0	16	U12	LMCTKRTEM11CNT0U Counter Data Value
0x0D6	0	16	U12	LMCTKRTEM11CNT0L Counter Data Value
0x0D8	0	32	U1234	LMCTKRTEM11CNT1D Delta timestamp
0x0DC	0	16	U12	LMCTKRTEM11CNT1U Counter Data Value
0x0DE	0	16	U12	LMCTKRTEM11CNT1L Counter Data Value
0x0E0	0	32	U1234	LMCTKRTEM12CNT0D Delta timestamp
0x0E4	0	16	U12	LMCTKRTEM12CNT0U Counter Data Value
0x0E6	0	16	U12	LMCTKRTEM12CNT0L Counter Data Value
0x0E8	0	32	U1234	LMCTKRTEM12CNT1D Delta timestamp
0x0EC	0	16	U12	LMCTKRTEM12CNT1U Counter Data Value
0x0EE	0	16	U12	LMCTKRTEM12CNT1L Counter Data Value
0x0F0	0	32	U1234	LMCTKRTEM13CNT0D Delta timestamp
0x0F4	0	16	U12	LMCTKRTEM13CNT0U Counter Data Value
0x0F6	0	16	U12	LMCTKRTEM13CNT0L Counter Data Value
0x0F8	0	32	U1234	LMCTKRTEM13CNT1D Delta timestamp
0x0FC	0	16	U12	LMCTKRTEM13CNT1U Counter Data Value
0x0FE	0	16	U12	LMCTKRTEM13CNT1L Counter Data Value
0x100	0	32	U1234	LMCTKRTEM14CNT0D Delta timestamp
0x104	0	16	U12	LMCTKRTEM14CNT0U Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x106	0	16	U12	LMCTKRTEM14CNT0L Counter Data Value
0x108	0	32	U1234	LMCTKRTEM14CNT1D Delta timestamp
0x10C	0	16	U12	LMCTKRTEM14CNT1U Counter Data Value
0x10E	0	16	U12	LMCTKRTEM14CNT1L Counter Data Value
0x110	0	32	U1234	LMCTKRTEM15CNT0D Delta timestamp
0x114	0	16	U12	LMCTKRTEM15CNT0U Counter Data Value
0x116	0	16	U12	LMCTKRTEM15CNT0L Counter Data Value
0x118	0	32	U1234	LMCTKRTEM15CNT1D Delta timestamp
0x11C	0	16	U12	LMCTKRTEM15CNT1U Counter Data Value
0x11E	0	16	U12	LMCTKRTEM15CNT1L Counter Data Value

17.2.2 `lmc_acd` (707/0x2C3)

Description:

"ACD Tile Counters" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMCPAD0 Spare 16 bits
0x010	0	32	U1234	LMCTSSECS Seconds
0x014	0	32	U1234	LMCTSUSECS Microseconds
0x018	0	16	U12	LMCACDCNT0T0ID ACD Tile ID
0x01A	0	16	U12	LMCACDCNT0T1ID ACD Tile ID
0x01C	0	32	U1234	LMCACDCNT0DT Delta timestamp
0x020	0	16	U12	LMCACDCNT0T0VAL Counter Data Value
0x022	0	16	U12	LMCACDCNT0T1VAL Counter Data Value
0x024	0	16	U12	LMCACDCNT1T0ID ACD Tile ID
0x026	0	16	U12	LMCACDCNT1T1ID ACD Tile ID
0x028	0	32	U1234	LMCACDCNT1DT Delta timestamp

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02C	0	16	U12	LMCACDCNT1T0VAL Counter Data Value
0x02E	0	16	U12	LMCACDCNT1T1VAL Counter Data Value
0x030	0	16	U12	LMCACDCNT2T0ID ACD Tile ID
0x032	0	16	U12	LMCACDCNT2T1ID ACD Tile ID
0x034	0	32	U1234	LMCACDCNT2DT Delta timestamp
0x038	0	16	U12	LMCACDCNT2T0VAL Counter Data Value
0x03A	0	16	U12	LMCACDCNT2T1VAL Counter Data Value
0x03C	0	16	U12	LMCACDCNT3T0ID ACD Tile ID
0x03E	0	16	U12	LMCACDCNT3T1ID ACD Tile ID
0x040	0	32	U1234	LMCACDCNT3DT Delta timestamp
0x044	0	16	U12	LMCACDCNT3T0VAL Counter Data Value
0x046	0	16	U12	LMCACDCNT3T1VAL Counter Data Value
0x048	0	16	U12	LMCACDCNT4T0ID ACD Tile ID
0x04A	0	16	U12	LMCACDCNT4T1ID ACD Tile ID
0x04C	0	32	U1234	LMCACDCNT4DT Delta timestamp
0x050	0	16	U12	LMCACDCNT4T0VAL Counter Data Value
0x052	0	16	U12	LMCACDCNT4T1VAL Counter Data Value
0x054	0	16	U12	LMCACDCNT5T0ID ACD Tile ID
0x056	0	16	U12	LMCACDCNT5T1ID ACD Tile ID
0x058	0	32	U1234	LMCACDCNT5DT Delta timestamp
0x05C	0	16	U12	LMCACDCNT5T0VAL Counter Data Value
0x05E	0	16	U12	LMCACDCNT5T1VAL Counter Data Value
0x060	0	16	U12	LMCACDCNT6T0ID ACD Tile ID
0x062	0	16	U12	LMCACDCNT6T1ID ACD Tile ID
0x064	0	32	U1234	LMCACDCNT6DT Delta timestamp
0x068	0	16	U12	LMCACDCNT6T0VAL Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x06A	0	16	U12	LMCACDCNT6T1VAL Counter Data Value
0x06C	0	16	U12	LMCACDCNT7T0ID ACD Tile ID
0x06E	0	16	U12	LMCACDCNT7T1ID ACD Tile ID
0x070	0	32	U1234	LMCACDCNT7DT Delta timestamp
0x074	0	16	U12	LMCACDCNT7T0VAL Counter Data Value
0x076	0	16	U12	LMCACDCNT7T1VAL Counter Data Value
0x078	0	16	U12	LMCACDCNT8T0ID ACD Tile ID
0x07A	0	16	U12	LMCACDCNT8T1ID ACD Tile ID
0x07C	0	32	U1234	LMCACDCNT8DT Delta timestamp
0x080	0	16	U12	LMCACDCNT8T0VAL Counter Data Value
0x082	0	16	U12	LMCACDCNT8T1VAL Counter Data Value
0x084	0	16	U12	LMCACDCNT9T0ID ACD Tile ID
0x086	0	16	U12	LMCACDCNT9T1ID ACD Tile ID
0x088	0	32	U1234	LMCACDCNT9DT Delta timestamp
0x08C	0	16	U12	LMCACDCNT9T0VAL Counter Data Value
0x08E	0	16	U12	LMCACDCNT9T1VAL Counter Data Value
0x090	0	16	U12	LMCACDCNT10T0ID ACD Tile ID
0x092	0	16	U12	LMCACDCNT10T1ID ACD Tile ID
0x094	0	32	U1234	LMCACDCNT10DT Delta timestamp
0x098	0	16	U12	LMCACDCNT10T0VAL Counter Data Value
0x09A	0	16	U12	LMCACDCNT10T1VAL Counter Data Value
0x09C	0	16	U12	LMCACDCNT11T0ID ACD Tile ID
0x09E	0	16	U12	LMCACDCNT11T1ID ACD Tile ID
0x0A0	0	32	U1234	LMCACDCNT11DT Delta timestamp
0x0A4	0	16	U12	LMCACDCNT11T0VAL Counter Data Value
0x0A6	0	16	U12	LMCACDCNT11T1VAL Counter Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x0A8`	0	16	`U12`	`LMCACDCNT12T0ID` ACD Tile ID
`0x0AA`	0	16	`U12`	`LMCACDCNT12T1ID` ACD Tile ID
`0x0AC`	0	32	`U1234`	`LMCACDCNT12DT` Delta timestamp
`0x0B0`	0	16	`U12`	`LMCACDCNT12T0VAL` Counter Data Value
`0x0B2`	0	16	`U12`	`LMCACDCNT12T1VAL` Counter Data Value
`0x0B4`	0	16	`U12`	`LMCACDCNT13T0ID` ACD Tile ID
`0x0B6`	0	16	`U12`	`LMCACDCNT13T1ID` ACD Tile ID
`0x0B8`	0	32	`U1234`	`LMCACDCNT13DT` Delta timestamp
`0x0BC`	0	16	`U12`	`LMCACDCNT13T0VAL` Counter Data Value
`0x0BE`	0	16	`U12`	`LMCACDCNT13T1VAL` Counter Data Value
`0x0C0`	0	16	`U12`	`LMCACDCNT14T0ID` ACD Tile ID
`0x0C2`	0	16	`U12`	`LMCACDCNT14T1ID` ACD Tile ID
`0x0C4`	0	32	`U1234`	`LMCACDCNT14DT` Delta timestamp
`0x0C8`	0	16	`U12`	`LMCACDCNT14T0VAL` Counter Data Value
`0x0CA`	0	16	`U12`	`LMCACDCNT14T1VAL` Counter Data Value
`0x0CC`	0	16	`U12`	`LMCACDCNT15T0ID` ACD Tile ID
`0x0CE`	0	16	`U12`	`LMCACDCNT15T1ID` ACD Tile ID
`0x0D0`	0	32	`U1234`	`LMCACDCNT15DT` Delta timestamp
`0x0D4`	0	16	`U12`	`LMCACDCNT15T0VAL` Counter Data Value
`0x0D6`	0	16	`U12`	`LMCACDCNT15T1VAL` Counter Data Value
`0x0D8`	0	16	`U12`	`LMCACDCNT16T0ID` ACD Tile ID
`0x0DA`	0	16	`U12`	`LMCACDCNT16T1ID` ACD Tile ID
`0x0DC`	0	32	`U1234`	`LMCACDCNT16DT` Delta timestamp
`0x0E0`	0	16	`U12`	`LMCACDCNT16T0VAL` Counter Data Value
`0x0E2`	0	16	`U12`	`LMCACDCNT16T1VAL` Counter Data Value
`0x0E4`	0	16	`U12`	`LMCACDCNT17T0ID` ACD Tile ID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0E6	0	16	U12	LMCACDCNT17T1ID ACD Tile ID
0x0E8	0	32	U1234	LMCACDCNT17DT Delta timestamp
0x0EC	0	16	U12	LMCACDCNT17T0VAL Counter Data Value
0x0EE	0	16	U12	LMCACDCNT17T1VAL Counter Data Value
0x0F0	0	16	U12	LMCACDCNT18T0ID ACD Tile ID
0x0F2	0	16	U12	LMCACDCNT18T1ID ACD Tile ID
0x0F4	0	32	U1234	LMCACDCNT18DT Delta timestamp
0x0F8	0	16	U12	LMCACDCNT18T0VAL Counter Data Value
0x0FA	0	16	U12	LMCACDCNT18T1VAL Counter Data Value
0x0FC	0	16	U12	LMCACDCNT19T0ID ACD Tile ID
0x0FE	0	16	U12	LMCACDCNT19T1ID ACD Tile ID
0x100	0	32	U1234	LMCACDCNT19DT Delta timestamp
0x104	0	16	U12	LMCACDCNT19T0VAL Counter Data Value
0x106	0	16	U12	LMCACDCNT19T1VAL Counter Data Value
0x108	0	16	U12	LMCACDCNT20T0ID ACD Tile ID
0x10A	0	16	U12	LMCACDCNT20T1ID ACD Tile ID
0x10C	0	32	U1234	LMCACDCNT20DT Delta timestamp
0x110	0	16	U12	LMCACDCNT20T0VAL Counter Data Value
0x112	0	16	U12	LMCACDCNT20T1VAL Counter Data Value
0x114	0	16	U12	LMCACDCNT21T0ID ACD Tile ID
0x116	0	16	U12	LMCACDCNT21T1ID ACD Tile ID
0x118	0	32	U1234	LMCACDCNT21DT Delta timestamp
0x11C	0	16	U12	LMCACDCNT21T0VAL Counter Data Value
0x11E	0	16	U12	LMCACDCNT21T1VAL Counter Data Value
0x120	0	16	U12	LMCACDCNT22T0ID ACD Tile ID
0x122	0	16	U12	LMCACDCNT22T1ID ACD Tile ID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x124	0	32	U1234	LMCACDCNT22DT Delta timestamp
0x128	0	16	U12	LMCACDCNT22T0VAL Counter Data Value
0x12A	0	16	U12	LMCACDCNT22T1VAL Counter Data Value
0x12C	0	16	U12	LMCACDCNT23T0ID ACD Tile ID
0x12E	0	16	U12	LMCACDCNT23T1ID ACD Tile ID
0x130	0	32	U1234	LMCACDCNT23DT Delta timestamp
0x134	0	16	U12	LMCACDCNT23T0VAL Counter Data Value
0x136	0	16	U12	LMCACDCNT23T1VAL Counter Data Value
0x138	0	16	U12	LMCACDCNT24T0ID ACD Tile ID
0x13A	0	16	U12	LMCACDCNT24T1ID ACD Tile ID
0x13C	0	32	U1234	LMCACDCNT24DT Delta timestamp
0x140	0	16	U12	LMCACDCNT24T0VAL Counter Data Value
0x142	0	16	U12	LMCACDCNT24T1VAL Counter Data Value
0x144	0	16	U12	LMCACDCNT25T0ID ACD Tile ID
0x146	0	16	U12	LMCACDCNT25T1ID ACD Tile ID
0x148	0	32	U1234	LMCACDCNT25DT Delta timestamp
0x14C	0	16	U12	LMCACDCNT25T0VAL Counter Data Value
0x14E	0	16	U12	LMCACDCNT25T1VAL Counter Data Value
0x150	0	16	U12	LMCACDCNT26T0ID ACD Tile ID
0x152	0	16	U12	LMCACDCNT26T1ID ACD Tile ID
0x154	0	32	U1234	LMCACDCNT26DT Delta timestamp
0x158	0	16	U12	LMCACDCNT26T0VAL Counter Data Value
0x15A	0	16	U12	LMCACDCNT26T1VAL Counter Data Value

17.2.3 lmc_dead (708/0x2C4)

Description:

"TEM Deadtime Low Rate Science Counters" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMCPAD0 Spare 16 bits
0x010	0	32	U1234	LMCTSSECS Seconds
0x014	0	32	U1234	LMCTSUSECS Microseconds
0x018	0	16	U12	LMCTEMENABLE TEM Enable Word
0x01A	0	13	U12	LMCSPARE13 Spare 13 bits
	13	3	U1	LMCTEMDEADMASK TEM Deadtime Mask
0x01C	0	32	U1234	LMCDEADTEM0DT Delta Timestamp
0x020	0	8	U1234	LMCDEADTEM0PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM0CNT TEM Deadtime Counter Data Value
0x024	0	32	U1234	LMCDEADTEM1DT Delta Timestamp
0x028	0	8	U1234	LMCDEADTEM1PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM1CNT TEM Deadtime Counter Data Value
0x02C	0	32	U1234	LMCDEADTEM2DT Delta Timestamp
0x030	0	8	U1234	LMCDEADTEM2PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM2CNT TEM Deadtime Counter Data Value
0x034	0	32	U1234	LMCDEADTEM3DT Delta Timestamp
0x038	0	8	U1234	LMCDEADTEM3PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM3CNT TEM Deadtime Counter Data Value
0x03C	0	32	U1234	LMCDEADTEM4DT Delta Timestamp
0x040	0	8	U1234	LMCDEADTEM4PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM4CNT TEM Deadtime Counter Data Value
0x044	0	32	U1234	LMCDEADTEM5DT Delta Timestamp
0x048	0	8	U1234	LMCDEADTEM5PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM5CNT TEM Deadtime Counter Data Value
0x04C	0	32	U1234	LMCDEADTEM6DT Delta Timestamp
0x050	0	8	U1234	LMCDEADTEM6PAD

Offset	S	L	Type	ITOS name, attribute(s), and description
				Spare 8 bits
	8	24	U1234	LMCDEADTEM6CNT
				TEM Deadtime Counter Data Value
0x054	0	32	U1234	LMCDEADTEM7DT
				Delta Timestamp
0x058	0	8	U1234	LMCDEADTEM7PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM7CNT
				TEM Deadtime Counter Data Value
0x05C	0	32	U1234	LMCDEADTEM8DT
				Delta Timestamp
0x060	0	8	U1234	LMCDEADTEM8PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM8CNT
				TEM Deadtime Counter Data Value
0x064	0	32	U1234	LMCDEADTEM9DT
				Delta Timestamp
0x068	0	8	U1234	LMCDEADTEM9PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM9CNT
				TEM Deadtime Counter Data Value
0x06C	0	32	U1234	LMCDEADTEM10DT
				Delta Timestamp
0x070	0	8	U1234	LMCDEADTEM10PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM10CNT
				TEM Deadtime Counter Data Value
0x074	0	32	U1234	LMCDEADTEM11DT
				Delta Timestamp
0x078	0	8	U1234	LMCDEADTEM11PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM11CNT
				TEM Deadtime Counter Data Value
0x07C	0	32	U1234	LMCDEADTEM12DT
				Delta Timestamp
0x080	0	8	U1234	LMCDEADTEM12PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM12CNT
				TEM Deadtime Counter Data Value
0x084	0	32	U1234	LMCDEADTEM13DT
				Delta Timestamp
0x088	0	8	U1234	LMCDEADTEM13PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM13CNT
				TEM Deadtime Counter Data Value
0x08C	0	32	U1234	LMCDEADTEM14DT
				Delta Timestamp
0x090	0	8	U1234	LMCDEADTEM14PAD
				Spare 8 bits
	8	24	U1234	LMCDEADTEM14CNT
				TEM Deadtime Counter Data Value
0x094	0	32	U1234	LMCDEADTEM15DT

Offset	S	L	Type	ITOS name, attribute(s), and description
				Delta Timestamp
0x098	0	8	U1234	LMCDEADTEM15PAD Spare 8 bits
	8	24	U1234	LMCDEADTEM15CNT TEM Deadtime Counter Data Value

17.2.4 `lmc_ssr` (929/0x3A1)

Description:

"Multiplexed counters returned via the SSR" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMCTHDR Tertiary header

18 LPA Package

18.0 Overview

The LPA package is the bread and butter function of the instrument. This package provides the ability to set up and run the instrument

The package supports the following functions:

- Configure by compressed file
- Emulated event delivery (to science data interface)
- Real event delivery (instrument to CPU)

18.1 Command Packets

18.1.0 `LPAGBMCALCINFO` (1632/0x660:1)

Description:

"GBM Calc Info" Telecommand Packet

The GBM shall be capable of issuing this telecommand periodically during a burst sequence to the LAT. It contains the best available calculated location and reliability parameters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPAGTSEC GRB Trigger ID
0x00C	0	16	U12	LPAGUSEC GBM Trigger ID
0x00E	0	8	U1	LPAGSEQ GRB LAT Record Sequence Number
0x00F	0	8	U1	LPAGVER GRB Record Type Version
0x010	0	16	U12	LPAGRA GRB Right Ascension
0x012	0	16	I12	LPAGDEC GRB Declination
0x014	0	16	U12	LPAGERR GRB Total Error
0x016	0	16	U12	LPAGLALG GRB Location Algorithm
0x018	0	8	U1	LPAGCLASS0 GRB Event Class
0x019	0	8	U1	LPAGCLASS1 GRB Event Class
0x01A	0	8	U1	LPAGCLASS2 GRB Event Class
0x01B	0	8	U1	LPAGCLASS3 GRB Event Class
0x01C	0	16	U12	LPAGTALG0 GRB Trigger Algorithm 16 Bit Member
0x01E	0	8	U1	LPAGTALG1 GRB Trigger Algorithm 8 Bit Member

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01F	0	8	U1	LPAGTALG2 GRB Trigger Algorithm 8 Bit Member
0x020	0	8	U1	LPAGTALG3 GRB Trigger Algorithm 8 Bit Member
0x021	0	8	U1	LPAGTALG4 GRB Trigger Algorithm 8 Bit Member
0x022	0	16	U12	LPAGTALG5 GRB Trigger Algorithm 16 Bit Member
0x024	0	16	U12	LPAGTALG6 GRB Trigger Algorithm 16 Bit Member
0x026	0	8	U1	LPAGTALG70 GRB Trigger Algorithm 8 Bit Member
0x027	0	8	U1	LPAGTALG71 GRB Trigger Algorithm 8 Bit Member
0x028	0	8	U1	LPAGTALG72 GRB Trigger Algorithm 8 Bit Member
0x029	0	8	U1	LPAGTALG73 GRB Trigger Algorithm 8 Bit Member
0x02A	0	8	U1	LPAGTALG74 GRB Trigger Algorithm 8 Bit Member
0x02B	0	8	U1	LPAGTALG75 GRB Trigger Algorithm 8 Bit Member

18.1.1 LPAGBMCREPRECOM (1632/0x660:2)

Description:

"GBM Repoint" Telecommand Packet

The Candidate Repoint Recommendation telecommand is sent once per burst trigger.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPAGTSEC GRB Trigger ID
0x00C	0	16	U12	LPAGUSEC GRB Trigger ID
0x00E	0	8	U1	LPAGSEQ GRB LAT Record Sequence Number
0x00F	0	8	U1	LPAGVER GRB Record Type Version
0x010	0	8	U1	LPAGPAD8 Spare 8 Bits
0x011	0	8	U1	LPAGREC GBM Repoint Recommendation
0x012	0	16	U12	LPAGRA GRB Right Ascension
0x014	0	16	I12	LPAGDEC GRB Declination
0x016	0	16	U12	LPAGERR GRB Total Error
0x018	0	16	U12	LPAGLALG

Offset	S	L	Type	ITOS name, attribute(s), and description
				GRB Location Algorithm
0x01A	0	8	U1	LPAGCLASS0 GRB Event Class
0x01B	0	8	U1	LPAGCLASS1 GRB Event Class
0x01C	0	8	U1	LPAGCLASS2 GRB Event Class
0x01D	0	8	U1	LPAGCLASS3 GRB Event Class

18.1.2 LPAGBMCLOSEOUT (1632/0x660:3)

Description:

"GBM Closeout" Telecommand Packet

The GBM shall provide exactly one of these telecommands for each burst trigger. It will be the LAST message sent about any particular burst.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPAGTSEC GRB Trigger ID
0x00C	0	16	U12	LPAGUSEC GRB Trigger ID
0x00E	0	8	U1	LPAGSEQ GRB LAT Record Sequence Number
0x00F	0	8	U1	LPAGVER GRB Record Type Version

18.1.3 LPACONFIGURE (1652/0x674:0)

Description:

"Configures Active Event Handlers For a Mode" Telecommand Packet

Configures LPA to activate a specified set of event handlers for each of 8 possible modes. Each of the 8 handler masks corresponds to a mode. A set bit in any of the 8 masks will configure LPA to activate the handler corresponding to that bit position upon entering the appropriate mode. The cfg parameter is unused.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPADBID LPA_DB Instance ID
0x00C	0	32	U1234	LPACFGID Handler Configuration ID
0x010	0	32	U1234	LPACPUS CPU Mask
0x014	0	32	U1234	LPANORMHANDLERS Event Handler Mask for LAT Physics Normal Mode

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	32	U1234	LPATOOHANDLERS Event Handler Mask for LAT Physics TOO Mode
0x01C	0	32	U1234	LPAGRB0HANDLERS Event Handler Mask for LAT Physics GRB0 Mode
0x020	0	32	U1234	LPAGRB1HANDLERS Event Handler Mask for LAT Physics GRB1 Mode
0x024	0	32	U1234	LPAGRB2HANDLERS Event Handler Mask for LAT Physics GRB2 Mode
0x028	0	32	U1234	LPASOLARHANDLERS Event Handler Mask for LAT Physics Solar Mode
0x02C	0	32	U1234	LPACALIBHANDLERS Event Handler Mask for LAT Physics Calibration Mode
0x030	0	32	U1234	LPADIAGHANDLERS Event Handler Mask for LAT Physics Diagnostic Mode

18.1.4 LPASTART (1652/0x674:1)

Description:

"Starts a Physics Run" Telecommand Packet

Starts a physics run using the specifed LATC instrument configuration file(s), observation run ID, operational mode, and event handler configuration.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPALATCCFGID LATC Configuration File ID
0x00C	0	32	U1234	LPALATCIGNID LATC Ignore File ID
0x010	0	32	U1234	LPARUNID Physics Observation Run ID
0x014	0	32	U1234	LPADBID LPA_DB Instance ID
0x018	0	32	U1234	LPAMODEID Mode ID
0x01C	0	32	U1234	LPALATCCNSFLG LATC Consign Flag
0x020	0	32	U1234	LPACPUS CPU Mask

18.1.5 LPASTOP (1652/0x674:3)

Description:

"Stops a Physics Run" Telecommand Packet

Terminates the active physics observation on all EPUs.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

18.1.6 LPAASSOCIATE (1653/0x675:0)

Description:

"Associates a Handler Configuration ID With A Mode" Telecommand Packet

For each of the 8 available modes, an individual handler can take data using one of its 32 available internal configurations. This command associates one of these 32 configuration IDs with a specific mode. Each of the 8 available handler masks maps to a mode. A set bit in any of these 8 masks will take the handler corresponding to that bit position and create an association between the specified configuration ID and the mode.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPADBID LPA_DB Instance ID
0x00C	0	32	U1234	LPACFGID LPA Configuration ID
0x010	0	32	U1234	LPACPUS CPU Mask
0x014	0	32	U1234	LPANORMHANDLERS Event Handler Mask
0x018	0	32	U1234	LPATOOHANDLERS Event Handler Mask
0x01C	0	32	U1234	LPAGRB0HANDLERS Event Handler Mask
0x020	0	32	U1234	LPAGRB1HANDLERS Event Handler Mask
0x024	0	32	U1234	LPAGRB2HANDLERS Event Handler Mask
0x028	0	32	U1234	LPASOLARHANDLERS Event Handler Mask
0x02C	0	32	U1234	LPACALIBHANDLERS Event Handler Mask
0x030	0	32	U1234	LPADIAGHANDLERS Event Handler Mask

18.1.7 LPASETOUTPUT (1653/0x675:2)

Description:

"Sets the Output Stream States" Telecommand Packet

Enables or disables event output streams. The output streams are SSR and GRB, corresponding to bit positions 0 and 1, respectively. The LPAEVHOUTMASK parameter will enable/disable the posting of events by an event handler to the LPA output posters. The LPAPOSTOUTMASK parameter will enable/disable writing of data to the physical output, SSR for events and SIU for GRB. A set bit in an output mask will ENABLE that output stage. A bit not set will DISABLE that output stage. The GRB_ID parameter sets the active GRB processor for evet posting.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPADBID LPA_DB Instance ID
0x00C	0	32	U1234	LPACPUS CPU Mask
0x010	0	32	U1234	LPAEVHOUTMASK Event Handler Output Enable Mask
0x014	0	32	U1234	LPAPOSTOUTMASK Physical Post Output Enable Mask

18.1.8 **LPASETGRB** (1653/0x675:3)

Description:

"Sets the GRB Processing State" Telecommand Packet

Enables or disables processing of GRB messages from the GBM and/or EPUs. A value of 0 will DISABLE the processing, and a value of 1 will ENABLE the processing. Set the coresponding valid parameter to 1 to allow processing of parameter. GRB detection simulation parameters control: type of simulation to execute, interval between states, and a repoint request time in seconds - 0 = no request. When the simulation mode is zero (disabled) , the emaining simlation parameters are ignored. Changes the active GRB processor software executing on the SIU and EPUs. To set the active GRB ID on a cpu, set the bit in the cpu mask parameter corresponding to the cpu node ID. The GRB_ID corresponds to the ID value set for the GRB processor in the LPA_DB GRB schema instance. Set the corresponding valid parameter to 1 to allow processing of parameter.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPACPUS CPU Mask
0x00C	0	32	U1234	LPAGRBID Active GRB Processor ID
0x010	0	32	U1234	LPAGRBGBMSTATE GRB GBM State
0x014	0	32	U1234	LPAGRBEPUSTATE GRB EPU State
0x018	0	32	U1234	LPAGRBSIMMODE GRB Simulation Mode
0x01C	0	32	U1234	LPAGRBSIMINTV GRB Simulation Interval
0x020	0	32	U1234	LPAGRBSIMRPTSEC GRB Simulation Repoint Seconds
0x024	0	1	U12	LPAGRBIDVALID GRB ID Parameter Valid Flag
	1	1	U12	LPAGRBGBMVALID GBM Enable Parameter Valid Flag
	2	1	U12	LPAGRBEPUVALID RPU Enable Parameter Valid Flag
	3	13	U12	LPASPARE13 Spare 13 Bits

18.1.9 LPANOOP (1653/0x675:4)

Description:

"LPA No-Op Command" Telecommand Packet

No-op command. Execution will always return LPA_SUCESS.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

18.1.10 LPASETCOMPRESS (1653/0x675:5)

Description:

"Sets the Data Compression Level" Telecommand Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPADBID LPA_DB Instance ID
0x00C	0	32	U1234	LPACPUS CPU Mask
0x010	0	32	U1234	LPACOMPLEVEL Compression Level

18.1.11 LPASETDEFAULT (1653/0x675:6)

Description:

"Set Default Parameters" Telecommand Packet

Sets default parameters for LATC files and LPA_DB instance ID. These defaults can be activated for a physics run by using the value 0xffffffff in the corresponding LPASTART parameters. Validity flags allow for setting of individual parameters without altering others. A set valid bit will allow the parameter to be used.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPADBID LPA_DB Instance ID
0x00C	0	32	U1234	LPALATCCFGID LATC Configuration File ID
0x010	0	32	U1234	LPALATCIGNID LATC Ignore Map File ID
0x014	0	1	U12	LPADBVALID LPA_DB Parameter Valid Flag
	1	1	U12	LPALATCCFGVALID LATC Configuration Parameter Valid Flag
	2	1	U12	LPALATCIGNVALID Parameter Valid Flag

Offset	S	L	Type	ITOS name, attribute(s), and description
	3	13	U12	LPASPARE13 Spare 13 Bits

18.1.12 GFSWLATTRIGGER (1777/0x6F1:1)

Description:

"LAT Burst Trigger Telecommand" Telecommand Packet

One GFSWLATTRIGGER telecommand per burst is sent to the GBM (and a corresponding Alert Telemetry Packet is sent to the ground).

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPABURSTSEC LAT Burst Declaration Time Seconds
0x00C	0	32	U1234	LPABURSTUSEC LAT Burst Declaration Time Usec
0x010	0	32	U1234	LPABURSTCLASS LAT Burst Classification

18.1.13 GFSWLATCLOSEOUT (1777/0x6F1:3)

Description:

"LAT Burst Closeout Telecommand" Telecommand Packet

One GFSWLATCLOSEOUT Telecommand per burst is sent to the GBM. Note: A corresponding Alert Telemetry packet is sent to the SC for transmission to the ground.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LPABURSTSEC LAT Burst Declaration Time Seconds
0x00C	0	32	U1234	LPABURSTUSEC LAT Burst Declaration Time Usec
0x010	0	32	U1234	LPABURSTCLASS LAT Burst Classification

18.2 Telemetry Packets

18.2.0 `SIUCFG` (736/0x2E0)

Description:

"LPA SIU Configuration Status Packet" Telemetry Packet

Contains LPA SIU status information for configuration and execution of physics runs.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LPASGRBGBMSTATE SIU GRB GBM State
0x00F	0	8	U1	LPASGRBEPUSTATE SIU GRB EPU State
0x010	0	32	U1234	LPASRUNID SIU Run ID
0x014	0	32	U1234	LPASMODEID SIU Mode ID
0x018	0	32	U1234	LPASSTARTTIMESEC SIU Run Start Time Seconds
0x01C	0	32	U1234	LPASLATCCFGKEY SIU LATC File Key
0x020	0	32	U1234	LPASLATCIGNKEY SIU LATC Ignore Map File Key
0x024	0	32	U1234	LPASDBID SIU LPA_DB Instance ID
0x028	0	32	U1234	LPASLATCCFGID SIU LATC File ID
0x02C	0	32	U1234	LPASLATCIGNID SIU LATC Ignore Map File ID
0x030	0	32	U1234	LPASDEFLATCCFGID SIU Default LATC File ID
0x034	0	32	U1234	LPASDEFLATCIGNID SIU Default LATC Ignore Map File ID
0x038	0	32	U1234	LPASDEFDBID SIU Default LPA_DB Instance ID
0x03C	0	32	U1234	LPASGRBID SIU GRB Processor ID
0x040	0	32	U1234	LPASGRBSIMMODE SIU GRB Simulation Mode
0x044	0	32	U1234	LPASGRBSIMINTV SIU GRB Simulation Interval
0x048	0	32	U1234	LPASGRBSIMRPTSEC SIU GRB Simulation Repoint Time

18.2.1 `EPU0CFG` (737/0x2E1)

Description:

"LPA EPU0 Configuration Status Packet" Telemetry Packet

Contains LPA EPU status information for configuration and execution of physics runs.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LPAE0EVHOUTMASK EPU0 Event Handler Output Enable Mask
0x00F	0	8	U1	LPAE0POSTOUTMASK EPU0 Physical Post Output Enable Mask
0x010	0	32	U1234	LPAE0RUNID EPU0 Run ID
0x014	0	32	U1234	LPAE0MODEID EPU0 LPA Mode ID
0x018	0	32	U1234	LPAE0STARTTIMSEC EPU0 Run Start Time
0x01C	0	32	U1234	LPAE0DBID EPU0 LPA_DB Instance ID
0x020	0	32	U1234	LPAE0DBKEY EPU0 LPA_DB File Key
0x024	0	32	U1234	LPAE0NORMHNDLRS EPU0 Event Handler Mask for LAT Physics Normal Mode
0x028	0	32	U1234	LPAE0TOOHNDLRS EPU0 Event Handler Mask for LAT Physics TOO Mode
0x02C	0	32	U1234	LPAE0GRB0HNDLRS EPU0 Event Handler Mask for LAT Physics GRB0 Mode
0x030	0	32	U1234	LPAE0GRB1HNDLRS EPU0 Event Handler Mask for LAT Physics GRB1 Mode
0x034	0	32	U1234	LPAE0GRB2HNDLRS EPU0 Event Handler Mask for LAT Physics GRB2 Mode
0x038	0	32	U1234	LPAE0SOLARHNDLRS EPU0 Event Handler Mask for LAT Physics Solar Mode
0x03C	0	32	U1234	LPAE0CALIBHNDLRS EPU0 Event Handler Mask for LAT Physics Calibration Mode
0x040	0	32	U1234	LPAE0DIAGHNDLRS EPU0 Event Handler Mask for LAT Physics Diagnostic Mode
0x044	0	32	U1234	LPAE0CFGID EPU0 Last Event Handler Configuration ID
0x048	0	32	U1234	LPAE0NORMCFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics Normal Mode
0x04C	0	32	U1234	LPAE0TOOCFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics TOO Mode
0x050	0	32	U1234	LPAE0GRB0CFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics GRB0 Mode
0x054	0	32	U1234	LPAE0GRB1CFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics GRB1 Mode
0x058	0	32	U1234	LPAE0GRB2CFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics GRB2 Mode
0x05C	0	32	U1234	LPAE0SOLARCFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics Solar Mode
0x060	0	32	U1234	LPAE0CALIBCFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics Calibration Mode
0x064	0	32	U1234	LPAE0DIAGCFGASC EPU0 Last Configuration Associated Event Handler Mask for LAT Physics Diagnostic Mode

Offset	S	L	Type	ITOS name, attribute(s), and description
0x068	0	32	U1234	LPAE0DGMPOSTCNT EPU0 Datagram Post Count
0x06C	0	32	U1234	LPAE0GRBID EPU0 GRB Processor ID
0x070	0	32	U1234	LPAE0GRBPOSTCNT EPU0 GRB Summary Post Count
0x074	0	32	U1234	LPAE0COMPLEVEL EPU0 Compression Level

18.2.2 `EPU1CFG` (738/0x2E2)

Description:

"LPA EPU1 Configuration Status Packet" Telemetry Packet

Contains LPA EPU status information for configuration and execution of physics runs.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LPAE1EVHOUTMASK EPU1 Event Handler Output Enable Mask
0x00F	0	8	U1	LPAE1POSTOUTMASK EPU1 Physical Post Output Enable Mask
0x010	0	32	U1234	LPAE1RUNID EPU1 Run ID
0x014	0	32	U1234	LPAE1MODEID EPU1 LPA Mode ID
0x018	0	32	U1234	LPAE1STARTTIMSEC EPU1 Run Start Time
0x01C	0	32	U1234	LPAE1DBID EPU1 LPA_DB Instance ID
0x020	0	32	U1234	LPAE1DBKEY EPU1 LPA_DB File Key
0x024	0	32	U1234	LPAE1NORMHNDLRS EPU1 Event Handler Mask for LAT Physics Normal Mode
0x028	0	32	U1234	LPAE1TOOHNDLRS EPU1 Event Handler Mask for LAT Physics TOO Mode
0x02C	0	32	U1234	LPAE1GRB0HNDLRS EPU1 Event Handler Mask for LAT Physics GRB0 Mode
0x030	0	32	U1234	LPAE1GRB1HNDLRS EPU1 Event Handler Mask for LAT Physics GRB1 Mode
0x034	0	32	U1234	LPAE1GRB2HNDLRS EPU1 Event Handler Mask for LAT Physics GRB2 Mode
0x038	0	32	U1234	LPAE1SOLARHNDLRS EPU1 Event Handler Mask for LAT Physics Solar Mode
0x03C	0	32	U1234	LPAE1CALIBHNDLRS EPU1 Event Handler Mask for LAT Physics Calibration Mode
0x040	0	32	U1234	LPAE1DIAGHNDLRS EPU1 Event Handler Mask for LAT Physics Diagnostic Mode
0x044	0	32	U1234	LPAE1CFGID EPU1 Last Event Handler Configuration ID
0x048	0	32	U1234	LPAE1NORMCFGASC

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU1 Last Configuration Associated Event Handler Mask for LAT Physics Normal Mode
0x04C	0	32	U1234	LPAE1TOOCFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics TOO Mode
0x050	0	32	U1234	LPAE1GRB0CFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics GRB0 Mode
0x054	0	32	U1234	LPAE1GRB1CFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics GRB1 Mode
0x058	0	32	U1234	LPAE1GRB2CFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics GRB2 Mode
0x05C	0	32	U1234	LPAE1SOLARCFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics Solar Mode
0x060	0	32	U1234	LPAE1CALIBCFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics Calibration Mode
0x064	0	32	U1234	LPAE1DIAGCFGASC EPU1 Last Configuration Associated Event Handler Mask for LAT Physics Diagnostic Mode
0x068	0	32	U1234	LPAE1DGMPOSTCNT EPU1 Datagram Post Count
0x06C	0	32	U1234	LPAE1GRBID EPU1 Active GRB Processor ID
0x070	0	32	U1234	LPAE1GRBPOSTCNT EPU1 GRB Summary Post Count
0x074	0	32	U1234	LPAE1COMPLEVEL EPU1 Compression Level

18.2.3 EPU2CFG (739/0x2E3)

Description:

"LPA EPU2 Configuration Status Packet" Telemetry Packet

Contains LPA EPU status information for configuration and execution of physics runs.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LPAE2EVHOUTMASK EPU2 Event Handler Output Enable Mask
0x00F	0	8	U1	LPAE2POSTOUTMASK EPU2 Physical Post Output Enable Mask
0x010	0	32	U1234	LPAE2RUNID EPU2 Run ID
0x014	0	32	U1234	LPAE2MODEID EPU2 LPA Mode ID
0x018	0	32	U1234	LPAE2STARTTIMSEC EPU2 Run Start Time
0x01C	0	32	U1234	LPAE2DBID EPU2 LPA_DB Instance ID
0x020	0	32	U1234	LPAE2DBKEY EPU2 LPA_DB File Key
0x024	0	32	U1234	LPAE2NORMHNDLRS

Offset	S	L	Type	ITOS name, attribute(s), and description
				EPU2 Event Handler Mask for LAT Physics Normal Mode
0x028	0	32	U1234	LPAE2TOOHNDLRS EPU2 Event Handler Mask for LAT Physics TOO Mode
0x02C	0	32	U1234	LPAE2GRB0HNDLRS EPU2 Event Handler Mask for LAT Physics GRB0 Mode
0x030	0	32	U1234	LPAE2GRB1HNDLRS EPU2 Event Handler Mask for LAT Physics GRB1 Mode
0x034	0	32	U1234	LPAE2GRB2HNDLRS EPU2 Event Handler Mask for LAT Physics GRB2 Mode
0x038	0	32	U1234	LPAE2SOLARHNDLRS EPU2 Event Handler Mask for LAT Physics Solar Mode
0x03C	0	32	U1234	LPAE2CALIBHNDLRS EPU2 Event Handler Mask for LAT Physics Calibration Mode
0x040	0	32	U1234	LPAE2DIAGHNDLRS EPU2 Event Handler Mask for LAT Physics Diagnostic Mode
0x044	0	32	U1234	LPAE2CFGID EPU2 Last Event Handler Configuration ID
0x048	0	32	U1234	LPAE2NORMCFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics Normal Mode
0x04C	0	32	U1234	LPAE2TOOCFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics TOO Mode
0x050	0	32	U1234	LPAE2GRB0CFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics GRB0 Mode
0x054	0	32	U1234	LPAE2GRB1CFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics GRB1 Mode
0x058	0	32	U1234	LPAE2GRB2CFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics GRB2 Mode
0x05C	0	32	U1234	LPAE2SOLARCFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics Solar Mode
0x060	0	32	U1234	LPAE2CALIBCFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics Calibration Mode
0x064	0	32	U1234	LPAE2DIAGCFGASC EPU2 Last Configuration Associated Event Handler Mask for LAT Physics Diagnostic Mode
0x068	0	32	U1234	LPAE2DGMPOSTCNT EPU2 Datagram Post Count
0x06C	0	32	U1234	LPAE2GRBID EPU2 Active GRB Processor ID
0x070	0	32	U1234	LPAE2GRBPOSTCNT EPU2 GRB Summary Post Count
0x074	0	32	U1234	LPAE2COMPLEVEL EPU2 Compression Level

18.2.4 ALRTTRG (833/0x341)

Description:

"LAT Burst Trigger Alert Telemetry" Telemetry Packet

One LATTRIGGER Alert Telemetry packet per burst is sent to the SC for transmission to the ground.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LPARECINFOVER Record Info Version
	4	4	U12	LPARECINFOTYP Record Info Type
	8	8	U12	LPARECINFOSEQ Record Info Sequence Count
0x010	0	32	U1234	LPABDECLSEC Burst Declaration Time Seconds
0x014	0	32	U1234	LPABDECLUSEC Burst Declaration Time Microseconds
0x018	0	12	U1234	LPABCLASSRSVD Burst Reserved
	12	1	U1234	LPABCLASSCNF Burst Confirmed
	13	1	U1234	LPABCLASSTYPE Burst Type
	14	2	U1234	LPABCLASSMETH Burst Location Method
	16	16	U1234	LPABCLASSSIZE Burst Window Size
0x01C	0	16	U12	LPABSIGTEMPORAL Termporal Burst Significance
0x01E	0	16	U12	LPABSIGSPATIAL Spatial Burst Significance
0x020	0	16	U12	LPALOCRA Burst Location RA in Arcmin
0x022	0	16	I12	LPALOCDEC Burst Location DEC in Arcmin
0x024	0	16	U12	LPALOCERR Burst Location Error in Arcmin
0x026	0	16	U12	LPALOCGAMCNT Number gammas used in location
0x028	0	32	U1234	LPAEARLPHSEC Earliest Photon Time Seconds
0x02C	0	32	U1234	LPAEARLPHUSEC Earliest Photon Time Microseconds
0x030	0	32	U1234	LPALATESPHSEC Latest Photon Time Seconds
0x034	0	32	U1234	LPALATESPHUSEC Latest Photon Time Microseconds
0x038	0	16	U12	LPAGAMCNTRNG0 Gammas-0-100- MeV
0x03A	0	16	U12	LPAGAMCNTRNG1 Gammas-100MeV- 1GeV
0x03C	0	16	U12	LPAGAMCNTRNG2 Gammas-1GeV- 10GeV
0x03E	0	16	U12	LPAGAMCNTRNG3 Gammas-10GeV- up
0x040	0	16	U12	LPAQUAT0 Burst Quaternion
0x042	0	16	U12	LPAQUAT1

Offset	S	L	Type	ITOS name, attribute(s), and description
				Burst Quaternion
0x044	0	16	U12	LPAQUAT2 Burst Quaternion
0x046	0	16	U12	LPAQUAT3 Burst Quaternion
0x048	0	16	U12	LPATRGPRMSTAT00 Trigger Parameter
0x04A	0	16	U12	LPATRGPRMSTAT01 Trigger Parameter
0x04C	0	16	U12	LPATRGPRMSTAT02 Trigger Parameter
0x04E	0	16	U12	LPATRGPRMSTAT03 Trigger Parameter
0x050	0	16	U12	LPATRGPRMTHR00 Trigger Parameter
0x052	0	16	U12	LPATRGPRMTHR01 Trigger Parameter
0x054	0	16	U12	LPATRGPRMTHR02 Trigger Parameter
0x056	0	16	U12	LPATRGPRMTHR03 Trigger Parameter

18.2.5 ALRTUPDATE (834/0x342)

Description:

"LAT Burst Update Alert Telemetry" Telemetry Packet

The LAT shall provide this Alert Telemetry to the SC (for transmission to the ground) as updates to its burst processing are available. No more than ten of these Updates shall be generated per burst ID.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LPARECINFOVER Record Info Version
	4	4	U12	LPARECINFOTYP Record Info Type
	8	8	U12	LPARECINFOSEQ Record Info Sequence Count
0x010	0	32	U1234	LPABDECLSEC Burst Declaration Time Seconds
0x014	0	32	U1234	LPABDECLUSEC Burst Declaration Time Microseconds
0x018	0	12	U1234	LPABCLASSRSVD Burst Reserved
	12	1	U1234	LPABCLASSCNF Burst Confirmed
	13	1	U1234	LPABCLASSTYPE Burst Type
	14	2	U1234	LPABCLASSMETH Burst Location Method
	16	16	U1234	LPABCLASSSIZE

Offset	S	L	Type	ITOS name, attribute(s), and description
				Burst Window Size
0x01C	0	16	U12	LPABSIGTEMPORAL Termporal Burst Significance
0x01E	0	16	U12	LPABSIGSPATIAL Spatial Burst Significance
0x020	0	16	U12	LPALOCRA Burst Location RA in Arcmin
0x022	0	16	I12	LPALOCDEC Burst Location DEC in Arcmin
0x024	0	16	U12	LPALOCERR Burst Location Error in Arcmin
0x026	0	16	U12	LPALOCGAMCNT Number gammas used in location
0x028	0	32	U1234	LPAEARLPHSEC Earliest Photon Time Seconds
0x02C	0	32	U1234	LPAEARLPHUSEC Earliest Photon Time Microseconds
0x030	0	32	U1234	LPALATESPHSEC Latest Photon Time Seconds
0x034	0	32	U1234	LPALATESPHUSEC Latest Photon Time Microseconds
0x038	0	16	U12	LPAGAMCNTRNG0 Gammas-0-100- MeV
0x03A	0	16	U12	LPAGAMCNTRNG1 Gammas-100MeV- 1GeV
0x03C	0	16	U12	LPAGAMCNTRNG2 Gammas-1GeV- 10GeV
0x03E	0	16	U12	LPAGAMCNTRNG3 Gammas-10GeV- up
0x040	0	16	U12	LPAQUAT0 Burst Quaternion
0x042	0	16	U12	LPAQUAT1 Burst Quaternion
0x044	0	16	U12	LPAQUAT2 Burst Quaternion
0x046	0	16	U12	LPAQUAT3 Burst Quaternion
0x048	0	16	U12	LPATRGPRMSTAT00 Trigger Parameter
0x04A	0	16	U12	LPATRGPRMSTAT01 Trigger Parameter
0x04C	0	16	U12	LPATRGPRMSTAT02 Trigger Parameter
0x04E	0	16	U12	LPATRGPRMSTAT03 Trigger Parameter
0x050	0	16	U12	LPATRGPRMTHR00 Trigger Parameter
0x052	0	16	U12	LPATRGPRMTHR01 Trigger Parameter
0x054	0	16	U12	LPATRGPRMTHR02 Trigger Parameter
0x056	0	16	U12	LPATRGPRMTHR03

Offset	S	L	Type	ITOS name, attribute(s), and description
				Trigger Parameter

18.2.6 `ALRTCLOSE` (835/0x343)

Description:

"LAT Burst Closeout Alert Telemetry" Telemetry Packet

The LAT shall provide this Alert Telemetry to the SC when it closes its burst processing for the specified burst. No more than one of these Closeout Records shall be generated per burst ID.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	4	`U12`	`LPARECINFOVER` Record Info Version
	4	4	`U12`	`LPARECINFOTYP` Record Info Type
	8	8	`U12`	`LPARECINFOSEQ` Record Info Sequence Count
`0x010`	0	32	`U1234`	`LPABDECLSEC` Burst Declaration Time Seconds
`0x014`	0	32	`U1234`	`LPABDECLUSEC` Burst Declaration Time Microseconds
`0x018`	0	12	`U1234`	`LPABCLASSRSVD` Burst Reserved
	12	1	`U1234`	`LPABCLASSCNF` Burst Confirmed
	13	1	`U1234`	`LPABCLASSTYPE` Burst Type
	14	2	`U1234`	`LPABCLASSMETH` Burst Location Method
	16	16	`U1234`	`LPABCLASSSIZE` Burst Window Size
`0x01C`	0	16	`U12`	`LPABSIGTEMPORAL` Termporal Burst Significance
`0x01E`	0	16	`U12`	`LPABSIGSPATIAL` Spatial Burst Significance
`0x020`	0	16	`U12`	`LPALOCRA` Burst Location RA in Arcmin
`0x022`	0	16	`I12`	`LPALOCDEC` Burst Location DEC in Arcmin
`0x024`	0	16	`U12`	`LPALOCERR` Burst Location Error in Arcmin
`0x026`	0	16	`U12`	`LPALOCGAMCNT` Number gammas used in location
`0x028`	0	32	`U1234`	`LPAEARLPHSEC` Earliest Photon Time Seconds
`0x02C`	0	32	`U1234`	`LPAEARLPHUSEC` Earliest Photon Time Microseconds
`0x030`	0	32	`U1234`	`LPALATESPHSEC` Latest Photon Time Seconds
`0x034`	0	32	`U1234`	`LPALATESPHUSEC`

Offset	S	L	Type	ITOS name, attribute(s), and description
				Latest Photon Time Microseconds
0x038	0	16	U12	LPAGAMCNTRNG0 Gammas-0-100- MeV
0x03A	0	16	U12	LPAGAMCNTRNG1 Gammas-100MeV- 1GeV
0x03C	0	16	U12	LPAGAMCNTRNG2 Gammas-1GeV- 10GeV
0x03E	0	16	U12	LPAGAMCNTRNG3 Gammas-10GeV- up
0x040	0	16	U12	LPAQUAT0 Burst Quaternion
0x042	0	16	U12	LPAQUAT1 Burst Quaternion
0x044	0	16	U12	LPAQUAT2 Burst Quaternion
0x046	0	16	U12	LPAQUAT3 Burst Quaternion
0x048	0	16	U12	LPATRGPRMSTAT00 Trigger Parameter
0x04A	0	16	U12	LPATRGPRMSTAT01 Trigger Parameter
0x04C	0	16	U12	LPATRGPRMSTAT02 Trigger Parameter
0x04E	0	16	U12	LPATRGPRMSTAT03 Trigger Parameter
0x050	0	16	U12	LPATRGPRMTHR00 Trigger Parameter
0x052	0	16	U12	LPATRGPRMTHR01 Trigger Parameter
0x054	0	16	U12	LPATRGPRMTHR02 Trigger Parameter
0x056	0	16	U12	LPATRGPRMTHR03 Trigger Parameter

18.2.7 SIUEVTSTAT (950/0x3B6)

Description:

"SIU Event Statistics" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.8 EPU0EVTSTAT (951/0x3B7)

Description:

"EPU0 Event Statistics" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.9 EPU1EVTSTAT (952/0x3B8)

Description:

"EPU1 Event Statistics" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.10 EPU2EVTSTAT (953/0x3B9)

Description:

"EPU2 Event Statistics" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.11 SIUEVTDAT (955/0x3BB)

Description:

"LPA SIU Event Data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.12 EPU0EVTDAT (956/0x3BC)

Description:

"LPA EPU0 Event Data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHEADER Tertiary Header

18.2.13 EPU1EVTDAT (957/0x3BD)

Description:

"LPA EPU1 Event Data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.2.14 EPU2EVTDAT (958/0x3BE)

Description:

"LPA EPU2 Event Data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPATHDR Tertiary Header

18.3 Discretes

18.3.0 `LPAMODES` (LPA Mode ID) Discrete

Description:

Definition:

0 LPA Normal Mode (`LPANORMAL`)

1 LPA TOO Mode (`LPATOO`)

2 LPA GRB0 Suspect Mode (`LPAGRB0`)

3 LPA GRB1 Confirm Mode (`LPAGRB1`)

4 LPA GRB2 Closeout Mode (`LPAGRB2`)

5 LPA Solar Mode (`LPASOLAR`)

6 LPA Calibration Mode (`LPACALIBRATION`)

7 LPA Diagnostic Mode (`LPADIAGNOSTIC`)

Used by:

???

19 LRA Package

19.0 Overview

The LRA package provides the most primitive access to all registers that configure and control the instrument. LRA runs within the Instrument Physics task.

The package supports the following functions:

- Configure ACD front-end electronics
- Configure GASU (i.e., CRU, GEM, EBM, AEM)
- Configure PDU
- Configure TKR and CAL front-end electronics

19.1 Command Packets

19.1.0 `LRANOOP` (1664/0x680:0)

Description:

"No-op" Telecommand Packet

Perform a no-op to check that the LRA task is alive.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

19.1.1 `LRAREAD` (1664/0x680:1)

Description:

"Read registers" Telecommand Packet

Read the register(s) specified by the command parameters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	8	`U1`	`LRACMPNT` Component
`0x009`	0	8	`U1`	`LRABLOCK` Register block
`0x00A`	0	8	`U1`	`LRATEM` TEM number
`0x00B`	0	8	`U1`	`LRACC` Cable controller
`0x00C`	0	8	`U1`	`LRARC` Readout controller
`0x00D`	0	8	`U1`	`LRAFE` Front-end number
`0x00E`	0	8	`U1`	`LRAREG` Register
`0x00F`	0	8	`U1`	`LRADEST` Output destination

19.1.2 `LRALOAD` (1664/0x680:2)

Description:

"Load registers" Telecommand Packet

Load register(s) with the specified value.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LRACMPNT Component
0x009	0	8	U1	LRABLOCK Register block
0x00A	0	8	U1	LRATEM TEM number
0x00B	0	8	U1	LRACC Cable controller
0x00C	0	8	U1	LRARC Readout controller
0x00D	0	8	U1	LRAFE Front-end number
0x00E	0	8	U1	LRAREG Register
0x00F	0	8	U1	LRAPAD Padding
0x010	0	32	U1234	LRAVALHI Register value high
0x014	0	32	U1234	LRAVALLO Register value low

19.1.3 `LRACONTROL` (1664/0x680:3)

Description:

"Control operation" Telecommand Packet

Perform a control operation on a LAT component.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LRACMPNT Component
0x009	0	8	U1	LRABLOCK Register block
0x00A	0	8	U1	LRATEM TEM number
0x00B	0	8	U1	LRACC Cable controller
0x00C	0	8	U1	LRARC Readout controller
0x00D	0	8	U1	LRAFE Front-end number

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LRAREG Register
0x00F	0	8	U1	LRAPAD Padding

19.1.4 LRALATRESET (1664/0x680:4)

Description:

"Reset the LAT" Telecommand Packet

Perform a LAT reset operation.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

19.1.5 LRALAM (1664/0x680:5)

Description:

"Look-at-me operation" Telecommand Packet

Perform a look-at-me operation on the specified component.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	8	U1	LRACMPNT Component
0x009	0	8	U1	LRATEM TEM number

19.1.6 LRALAMLCB (1664/0x680:6)

Description:

"Look-at-me LCB" Telecommand Packet

Perform a LAM look-at-me operation on the specified slave LCB.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LRALAMCPT Component
0x00C	0	32	U1234	LRALAMVAL LAMLCB value
0x010	0	32	U1234	LRALAMMSK LAMLCB mask

19.1.7 `LRASTATPERIOD` (1664/0x680:7)

Description:

"Set the statistics update period" Telecommand Packet

Set the LRA statistics data update period. If zero is specified, the default value of 100 (1 second) is used.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LRAPERIOD` Statistics collection period

19.1.8 `LRASTATCLEAR` (1664/0x680:8)

Description:

"Clear statistics data" Telecommand Packet

Clear the LRA statistics data.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

19.1.9 `LRASTATSEND` (1664/0x680:9)

Description:

"Send statistics data to the SSR" Telecommand Packet

Send the accumulated LRA statistics data to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

19.1.10 `LRASTATTEMS` (1664/0x680:10)

Description:

"Set the mask of TEMs for EBM stats" Telecommand Packet

Set the bit mask of TEMs to be used in turn when collecting the counts of events read by the EBM. If a value of zero is specified, the default value of 0xffff (all TEMs) is used.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`I1234`	`LRATEMMASK` Mask of TEMs for EBM stats

19.1.11 `LRAESRSEND` (1664/0x680:11)

Description:

"Send ESR data to the SSR" Telecommand Packet

Read the error and status register data and send it to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

19.2 Enumerations

19.2.0 `BLOCKS` (Register block numbers) Enumeration

Description:

The possible values that can be used for a register block number.

Definition:

0 Common controller registers (`CC`)

1 GEM TAM generator registers (`TAM`)

1 AEM & PDU environmental monitor registers (`ENV`)

1 EBM statistics registers (`EST`)

2 GEM statistics registers (`STAT`)

3 GEM scheduler registers (`SCH`)

4 GEM region of interest registers (`ROI`)

5 GEM input enable registers (`TIE`)

6 GEM window registers (`WIN`)

Used by:

???

19.2.1 `CMPNTS` (Component codes) Enumeration

Description:

Codes to be used when specifying a LAT component in the LOAD, READ, CONTROL and LAM commands.

Definition:

1 GEM (`GEM`)

2 EBM (`EBM`)

3 PDU0 (`PDU0`)

4 PDU1 (`PDU1`)

5 CRU (`CRU`)

6 TEM (`TEM`)

7 TIC (`TIC`)

8 CCC (`CCC`)

9 CRC (`CRC`)

10 CFE (`CFE`)

11 TCC (`TCC`)

12 TRC (`TRC`)

13 TFE (`TFE`)

14 AEM (`AEM`)

15 ARC (`ARC`)

16 AFE (`AFE`)

255 Broadcast value (`BCAST`)
Causes the operation to be performed on all slave components. Valid only for the LOAD command.

Used by:

???

19.2.2 `CPUS` (CPU component values) Enumeration

Description:

The allowed values for the (CPU) component field of the LAMLCB command.

Definition:

33 External SIU (`SIUE`)

34 SIU 0 (`SIU0`)

35 SIU 1 (`SIU1`)

36 EPU 0 (`EPU0`)

37 EPU 1 (`EPU1`)

38 EPU 2 (`EPU2`)

255 Broadcast value (`BCAST`)
Used to broadcast to all CPUs.

Used by:

???

19.3 Telemetry Packets

19.3.0 LRAREGDATA (753/0x2F1)

Description:

"Register data" Telemetry Packet

Returned register data

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	8	U1	LRASEQN Sequence number
0x00F	0	8	U1	LRACOUNT Packet count
0x010	0	8	U1	LRARCMPNT Component
0x011	0	8	U1	LRARBLOCK Register block
0x012	0	8	U1	LRARTEM TEM number
0x013	0	8	U1	LRARCC Cable controller
0x014	0	8	U1	LRARRC Readout controller
0x015	0	8	U1	LRARFE Front-end number
0x016	0	8	U1	LRARREG Register
0x017	0	8	U1	LRAFILL Filler
0x018	0	16	U12	LRATMASK TEM mask
0x01A	0	8	U1	LRANTEM Number of TEMs
0x01B	0	8	U1	LRANCC Number of CCs
0x01C	0	8	U1	LRANRC Number of RCs
0x01D	0	8	U1	LRANFE Number of FEs
0x01E	0	8	U1	LRANREG Number of registers
0x01F	0	8	U1	LRAWIDTH Register width
0x020	0	16	U12	LRAVALUE Word of register values

19.3.1 `LRASSRDATA` (928/0x3A0)

Description:

"LRA data returned via the SSR" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LRATHDR` Tertiary header

20 LSM Package

20.0 Overview

The LSM package processes the seven telecommands per second that the spacecraft sends the LAT continuously to inform the LAT of things like orbital position, time, etc. LSM runs in its own task.

The package supports the following functions:

- Wall clock time services (GPS)

20.1 Command Packets

20.1.0 `LSMSSROUTPUTOFF` (1680/0x690:0)

Description:

"Turn off echo of Magic 7 commands to SSR" Telecommand Packet

Turns off the output of Magic 7 commands to the SSR. These originate as commands from the spacecraft and can be echoed to the science output.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

20.1.1 `LSMSSROUTPUTON` (1680/0x690:1)

Description:

"Turn on echo of Magic 7 commands to the SSR" Telecommand Packet

Turns on the output of Magic 7 commands to the SSR. These originate as commands from the spacecraft and can be echoed to the science output.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

20.1.2 `LSMNOOP` (1680/0x690:2)

Description:

"No operation" Telecommand Packet

This telecommand does nothing except generate a command confirmation response from the LSM task.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LSMNODE` Computer to send the command to
	4	12	`U12`	`LSMTRANID` Transaction ID

20.1.3 LSMSIATTITUDE (1793/0x701:1)

Description:

"SC Attitude Broadcast Message" Telecommand Packet

The SC sends this message 5 times a second on the CTDB bus. It contains information about the SC-J2000 attitude.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LSEC Timestamp seconds
0x00C	0	32	U1234	LSUB Timestamp microseconds
0x010	0	64	F12345678	LQUAT0 Attitude quaternion element
0x018	0	64	F12345678	LQUAT1 Attitude quaternion element
0x020	0	64	F12345678	LQUAT2 Attitude quaternion element
0x028	0	64	F12345678	LQUAT3 Attitude quaternion element
0x030	0	32	F1234	LAVEL0 Attitude angular velocity element
0x034	0	32	F1234	LAVEL1 Attitude angular velocity element
0x038	0	32	F1234	LAVEL2 Attitude angular velocity element

20.1.4 LSMSIANCILLARY (1793/0x701:2)

Description:

"SC Ancillary Broadcast Message" Telecommand Packet

The SC sends this message once a second on the CTDB bus. It contains a variety of ancillary information about the SC status.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LSEC Timestamp seconds
0x00C	0	32	U1234	LSUB Timestamp microseconds
0x010	0	32	F1234	LPOS0 Ancillary position element
0x014	0	32	F1234	LPOS1 Ancillary position element
0x018	0	32	F1234	LPOS2 Ancillary position element
0x01C	0	32	F1234	LVEL0 Ancillary velocity element

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x020`	0	32	`F1234`	`LVEL1` Ancillary velocity element
`0x024`	0	32	`F1234`	`LVEL2` Ancillary velocity element
`0x028`	0	8	`U1`	`LMODE` Ancillary GNC mode
`0x029`	0	8	`U1`	`LSSR` Ancillary SSR usage
`0x02A`	0	16	`U12`	`LFLAGS` Ancillary SC flags

20.1.5 `LSMSITIMETONE` (1793/0x701:3)

Description:

"SC Timetone Broadcast Message" Telecommand Packet

The SC sends this message once a second on the CTDB bus. It contains the GPS time information to associate with the next GPS time hack.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	32	`U1234`	`LSEC` Timestamp seconds
`0x00C`	0	16	`U12`	`LFLAGS` Timetone SC flags

20.2 Enumerations

20.2.0 `LSMNODEID` (List of CPU nodes addressable with LSM commands) Enumeration

Description:

List of CPU nodes addressable with LSM commands

Definition:

0 The SIU computer (`SIU`)
The SIU computer

1 The EPU0 computer (`EPU0`)
The EPU0 computer

2 The EPU1 computer (`EPU1`)
The EPU1 computer

3 The EPU2 computer (`EPU2`)
The EPU2 computer

4 The EPU3 computer (external crate) (`EPU3`)
The EPU3 computer (external crate)

Used by:

???

20.3 Telemetry Packets

20.3.0 `MAGIC7` (1020/0x3FC)

Description:

"Output of Magic 7 cmds into Science Data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`I12`	`LPADCOUNT` Pad byte count after packet

21 LSW Package

21.0 Overview

The LSW package checks to see that assorted tasks are "alive".

The package supports the following functions:

- Software watchdog

21.1 Command Packets

21.1.0 `LSWNOOP` (1612/0x64C:0)

Description:

"No-Op" Telecommand Packet

This telecommand does nothing except generate a command confirmation response from the LCM task.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LSWNODE Computer to send the command to
	4	12	U12	LSWTRANID Transaction ID

21.1.1 `LSWDUMPSTART` (1612/0x64C:1)

Description:

"Dump the start line system trace" Telecommand Packet

Dump the start line system trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LSWNODE Computer to send the command to
	4	12	U12	LSWTRANID Transaction ID
0x00A	0	8	U1	LSWDEST Destination for a dump
0x00B	0	8	U1	LSWPAD8 8 bits of padding

21.1.2 `LSWDUMPTRACEID` (1612/0x64C:2)

Description:

"Dump a code trace by numeric identifier" Telecommand Packet

Dump a code trace by numeric identifier. The value zero is reserved for the system trace.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LSWNODE Computer to send the command to
	4	12	U12	LSWTRANID Transaction ID
0x00A	0	8	U1	LSWDEST Destination for a dump
0x00B	0	8	U1	LSWTRACEID Trace identifier

21.1.3 LSWDUMPTRACENAME (1612/0x64C:3)

Description:

"Dump a code trace by name." Telecommand Packet

Dump a code trace by name. The name 'system' is reserved for the system trace.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LSWNODE Computer to send the command to
	4	12	U12	LSWTRANID Transaction ID
0x00A	0	8	U1	LSWDEST Destination for a dump
0x00B	0	8	U1	LSWPAD8 8 bits of padding
0x00C	0	8	I1	LSWNAME0 Trace name
0x00D	0	8	I1	LSWNAME1 Trace name
0x00E	0	8	I1	LSWNAME2 Trace name
0x00F	0	8	I1	LSWNAME3 Trace name
0x010	0	8	I1	LSWNAME4 Trace name
0x011	0	8	I1	LSWNAME5 Trace name
0x012	0	8	I1	LSWNAME6 Trace name
0x013	0	8	I1	LSWNAME7 Trace name
0x014	0	8	I1	LSWNAME8 Trace name
0x015	0	8	I1	LSWNAME9 Trace name
0x016	0	8	I1	LSWNAME10 Trace name
0x017	0	8	I1	LSWNAME11

Offset	S	L	Type	ITOS name, attribute(s), and description
				Trace name
0x018	0	8	I1	LSWNAME12 Trace name
0x019	0	8	I1	LSWNAME13 Trace name
0x01A	0	8	I1	LSWNAME14 Trace name
0x01B	0	8	I1	LSWNAME15 Trace name

21.1.4 **LSWSETTRACECFG** (1612/0x64C:4)

Description:

"Set the values of the trace enable bits." Telecommand Packet

Set the values of the trace enable bits. Each enable is controlled by one bit (bit set means enable). The CONFIGMASK and CONFIGVALU fields operate as a selective set and clear pair. Only bits set in CONFIGMASK will be touched. For those bits, the enable will be set to the equivalent bit in CONFIGVALU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LSWNODE Computer to send the command to
	4	12	U12	LSWTRANID Transaction ID
0x00A	0	16	U12	LSWPAD16 16 bits of padding
0x00C	0	29	U1234	LSWMASKPAD Pad bitfield out to 32 bits
	29	1	U1234	LSWMASKEXC_9 Enable exception 0x900 (decrementer) tracing
	30	1	U1234	LSWMASKEXC_5 Enable exception 0x500 (external hardware interrupt) tracing
	31	1	U1234	LMASKFLUSH Enable cache flushing during task switches
0x010	0	29	U1234	LSWVALUPAD Pad bitfield out to 32 bits
	29	1	U1234	LSWVALUEXC_9 Enable exception 0x900 (decrementer) tracing
	30	1	U1234	LSWVALUEXC_5 Enable exception 0x500 (external hardware interrupt) tracing
	31	1	U1234	LSWVALUFLUSH Enable cache flushing during task switches

21.2 Enumerations

21.2.0 `LSWDEST` (Enumerate the possible destinations of a trace dump) Enumeration

Description:

Enumerate the possible destinations of a trace dump

Definition:

0 Command and telemetry data bus (`CTDB`)
Command and telemetry data bus (otherwise known as 1553)

1 Science data interface (`SDI`)
Science data interface. Also referred to as the SSR.

Used by:

???

21.2.1 `LSWNODEID` (List of CPU nodes addressable with LSW commands) Enumeration

Description:

List of CPU nodes addressable with LSW commands

Definition:

0 The SIU computer (`SIU`)
The SIU computer

1 The EPU0 computer (`EPU0`)
The EPU0 computer

2 The EPU1 computer (`EPU1`)
The EPU1 computer

3 The EPU2 computer (`EPU2`)
The EPU2 computer

4 The EPU3 computer (external crate) (`EPU3`)
The EPU3 computer (external crate)

Used by:

???

21.3 Ranges

21.3.0 `LSWMBZ` (A must-be-zero field) Range

Description:

Used to ensure that padding fields are set to zero.

Definition:

Limits 0 - 0

Used by:

???

21.4 Telemetry Packets

21.4.0 LSWSNAPSIU (995/0x3E3)

Description:

"Dump of a code trace" Telemetry Packet

Dump of a code trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

21.4.1 LSWSNAPEPU0 (996/0x3E4)

Description:

"Dump of a code trace" Telemetry Packet

Dump of a code trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

21.4.2 LSWSNAPEPU1 (997/0x3E5)

Description:

"Dump of a code trace" Telemetry Packet

Dump of a code trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT Pad byte count after telemetry header

21.4.3 LSWSNAPEPU2 (998/0x3E6)

Description:

"Dump of a code trace" Telemetry Packet

Dump of a code trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPADCOUNT

Offset	S	L	Type	ITOS name, attribute(s), and description
				Pad byte count after telemetry header

21.4.4 `LSWSNAPEPU3` (999/0x3E7)

Description:

"Dump of a code trace" Telemetry Packet

Dump of a code trace

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x00E`	0	16	`U12`	`LPADCOUNT` Pad byte count after telemetry header

22 LTC Package

22.0 Overview

The LTC package provides the LAT thermal control mechanism. It reads temperatures from within the instrument, and on that basis, decides how much heat to dump. LTC runs as its own task.

22.1 Command Packets

22.1.0 `LTCRESTART` (1624/0x658:1)

Description:

"Restart and initialize Thermal Control" Telecommand Packet

Restart thermal control by reading configuration files and initializing. Depending on paramter may start active control or passive operation.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LTCFIDTYPE` Config Type (0 = built-in, 2 = read file)
`0x00A`	0	16	`U12`	`LTCPAD16` 16-bit padding
`0x00C`	0	32	`U1234`	`LTCCFGFID` Master config file ID
`0x010`	0	32	`U1234`	`LTCSPARE` Spare 32-bit word

22.1.1 `LTCSTART` (1624/0x658:2)

Description:

"Start control" Telecommand Packet

Start active or passive control.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LTCACTORPASS` Control Mode (0 = passive, 1 = active)

22.1.2 `LTCSTOP` (1624/0x658:3)

Description:

"Terminate Thermal Control processing" Telecommand Packet

Terminates thermal control processing tasks, but message processing remains.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

22.1.3 `LTCSETMODE` (1624/0x658:4)

Description:

"Set thermal control mode to active or passive." Telecommand Packet

Sets thermal control processing to active or processing. Active is normal control by turning on or off heat pipe reservoir heaters to keep termperature within specified limits. Passive does all normal control processing, but does not send commands to heaters.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LTCACTVPASS` Control Mode (0 = passive, 1 = active)

22.1.4 `LTCHTRONOFFCNTL` (1624/0x658:5)

Description:

"Set heater to always on, or off or automatic control." Telecommand Packet

Sets a specified heater to on, or off or automatic control.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LTCHTRNUM` Heater Number (0 -11)
`0x00A`	0	16	`U12`	`LTCONOFFCTL` (0 = auto, 1 = on, 2 = off)

22.1.5 `LTCSETPARAM` (1624/0x658:6)

Description:

"Set control parameters to new values." Telecommand Packet

Sets reservoir and RIT temperature control limits to new values for all or a specified heat pipe. New values are used immediately.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	16	`U12`	`LTCHPSEL` Heat Pipe Select Mask
`0x00A`	0	16	`I12`	`LTCRESLO` RES Low Limit Temperature
`0x00C`	0	16	`I12`	`LTCRESHI` RES High Limit Temperature
`0x00E`	0	16	`I12`	`LTCRITLO` RIT Low Limit Temperature
`0x010`	0	16	`I12`	`LTCRITHI`

Offset	S	L	Type	ITOS name, attribute(s), and description
				RIT High Limit Temperature
0x012	0	16	I12	LTCDBDELTA RIT-RES Delta Limit Temperature

22.1.6 **LTCSETTLMFREQ** (1624/0x658:7)

Description:

"Set LTC telemetry frequency, 0 is off." Telecommand Packet

Set rate of LTC diagnostic telemetry output. Period is in seconds, with '0' disabling diagnostic telemetry output.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LTCTLMFREQ Telmetry Period in seconds

22.1.7 **LTCNOOP** (1624/0x658:8)

Description:

"LTC Task No-op" Telecommand Packet

This telecommand does nothing more than generate a command confirm reply from the LTC task.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description

22.1.8 **LTCCNTLSTART** (1625/0x659:0)

Description:

"LTC Control Start Readout (Internal)" Telecommand Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	16	U12	LTCSPARE Spare 16-bit word

22.1.9 **LTCCNTLPROC** (1625/0x659:1)

Description:

"LTC Control Start Processing (Internal)" Telecommand Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	32	U1234	LTCMR Pointer to LTC Measurement Area
0x00C	0	32	U1234	LTCPDU PDU Index
0x010	0	32	U1234	LTCGRP ADC Group Index
0x014	0	32	U1234	LTCNCL PDU Command List Index

22.2 Telemetry Packets

22.2.0 DiagLTC (730/0x2DA)

Description:

"LAT Thermal Control diagnostic telemetry" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U1	LTC00SELRESHPN LTC HP00 selected RES input HP#
	4	4	U1	LTC00SELRESTYP LTC HP00 selected RES input sensor type
	8	4	U1	LTC00SELRITHPN LTC HP00 selected RIT input HP#
	12	4	U1	LTC00SELRITTYP LTC HP00 selected RIT input sensor type
0x010	0	4	U1	LTC01SELRESHPN LTC HP01 selected RES input HP#
	4	4	U1	LTC01SELRESTYP LTC HP01 selected RES input sensor type
	8	4	U1	LTC01SELRITHPN LTC HP01 selected RIT input HP#
	12	4	U1	LTC01SELRITTYP LTC HP01 selected RIT input sensor type
0x012	0	4	U1	LTC02SELRESHPN LTC HP02 selected RES input HP#
	4	4	U1	LTC02SELRESTYP LTC HP02 selected RES input sensor type
	8	4	U1	LTC02SELRITHPN LTC HP02 selected RIT input HP#
	12	4	U1	LTC02SELRITTYP LTC HP02 selected RIT input sensor type
0x014	0	4	U1	LTC03SELRESHPN LTC HP03 selected RES input HP#
	4	4	U1	LTC03SELRESTYP LTC HP03 selected RES input sensor type
	8	4	U1	LTC03SELRITHPN LTC HP03 selected RIT input HP#
	12	4	U1	LTC03SELRITTYP LTC HP03 selected RIT input sensor type
0x016	0	4	U1	LTC04SELRESHPN LTC HP04 selected RES input HP#
	4	4	U1	LTC04SELRESTYP LTC HP04 selected RES input sensor type
	8	4	U1	LTC04SELRITHPN LTC HP04 selected RIT input HP#
	12	4	U1	LTC04SELRITTYP LTC HP04 selected RIT input sensor type
0x018	0	4	U1	LTC05SELRESHPN LTC HP05 selected RES input HP#

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	4	U1	LTC05SELRESTYP LTC HP05 selected RES input sensor type
	8	4	U1	LTC05SELRITHPN LTC HP05 selected RIT input HP#
	12	4	U1	LTC05SELRITTYP LTC HP05 selected RIT input sensor type
0x01A	0	4	U1	LTC06SELRESHPN LTC HP06 selected RES input HP#
	4	4	U1	LTC06SELRESTYP LTC HP06 selected RES input sensor type
	8	4	U1	LTC06SELRITHPN LTC HP06 selected RIT input HP#
	12	4	U1	LTC06SELRITTYP LTC HP06 selected RIT input sensor type
0x01C	0	4	U1	LTC07SELRESHPN LTC HP07 selected RES input HP#
	4	4	U1	LTC07SELRESTYP LTC HP07 selected RES input sensor type
	8	4	U1	LTC07SELRITHPN LTC HP07 selected RIT input HP#
	12	4	U1	LTC07SELRITTYP LTC HP07 selected RIT input sensor type
0x01E	0	4	U1	LTC08SELRESHPN LTC HP08 selected RES input HP#
	4	4	U1	LTC08SELRESTYP LTC HP08 selected RES input sensor type
	8	4	U1	LTC08SELRITHPN LTC HP08 selected RIT input HP#
	12	4	U1	LTC08SELRITTYP LTC HP08 selected RIT input sensor type
0x020	0	4	U1	LTC09SELRESHPN LTC HP09 selected RES input HP#
	4	4	U1	LTC09SELRESTYP LTC HP09 selected RES input sensor type
	8	4	U1	LTC09SELRITHPN LTC HP09 selected RIT input HP#
	12	4	U1	LTC09SELRITTYP LTC HP09 selected RIT input sensor type
0x022	0	4	U1	LTC10SELRESHPN LTC HP10 selected RES input HP#
	4	4	U1	LTC10SELRESTYP LTC HP10 selected RES input sensor type
	8	4	U1	LTC10SELRITHPN LTC HP10 selected RIT input HP#
	12	4	U1	LTC10SELRITTYP LTC HP10 selected RIT input sensor type
0x024	0	4	U1	LTC11SELRESHPN LTC HP11 selected RES input HP#
	4	4	U1	LTC11SELRESTYP LTC HP11 selected RES input sensor type
	8	4	U1	LTC11SELRITHPN LTC HP11 selected RIT input HP#

Offset	S	L	Type	ITOS name, attribute(s), and description
	12	4	U1	LTC11SELRITTYP LTC HP11 selected RIT input sensor type
0x026	0	4	U1	LTC00RITSTAT LTC HP00 RIT Sensor Status
	4	4	U1	LTC00RESSTAT LTC HP00 Reservoir Sensor Status
0x027	0	4	U1	LTC01RITSTAT LTC HP01 RIT Sensor Status
	4	4	U1	LTC01RESSTAT LTC HP01 Reservoir Sensor Status
0x028	0	4	U1	LTC02RITSTAT LTC HP02 RIT Sensor Status
	4	4	U1	LTC02RESSTAT LTC HP02 Reservoir Sensor Status
0x029	0	4	U1	LTC03RITSTAT LTC HP03 RIT Sensor Status
	4	4	U1	LTC03RESSTAT LTC HP03 Reservoir Sensor Status
0x02A	0	4	U1	LTC04RITSTAT LTC HP04 RIT Sensor Status
	4	4	U1	LTC04RESSTAT LTC HP04 Reservoir Sensor Status
0x02B	0	4	U1	LTC05RITSTAT LTC HP05 RIT Sensor Status
	4	4	U1	LTC05RESSTAT LTC HP05 Reservoir Sensor Status
0x02C	0	4	U1	LTC06RITSTAT LTC HP06 RIT Sensor Status
	4	4	U1	LTC06RESSTAT LTC HP06 Reservoir Sensor Status
0x02D	0	4	U1	LTC07RITSTAT LTC HP07 RIT Sensor Status
	4	4	U1	LTC07RESSTAT LTC HP07 Reservoir Sensor Status
0x02E	0	4	U1	LTC08RITSTAT LTC HP08 RIT Sensor Status
	4	4	U1	LTC08RESSTAT LTC HP08 Reservoir Sensor Status
0x02F	0	4	U1	LTC09RITSTAT LTC HP09 RIT Sensor Status
	4	4	U1	LTC09RESSTAT LTC HP09 Reservoir Sensor Status
0x030	0	4	U1	LTC10RITSTAT LTC HP10 RIT Sensor Status
	4	4	U1	LTC10RESSTAT LTC HP10 Reservoir Sensor Status
0x031	0	4	U1	LTC11RITSTAT LTC HP11 RIT Sensor Status
	4	4	U1	LTC11RESSTAT LTC HP11 Reservoir Sensor Status
0x032	0	4	U12	LTCPAD4 Padding bits.

Offset	S	L	Type	ITOS name, attribute(s), and description
	4	1	U12	LTC11HTRMODE Control mode for VCHP heater 11 (0=manual,1=auto)
	5	1	U12	LTC10HTRMODE Control mode for VCHP heater 10 (0=manual,1=auto)
	6	1	U12	LTC09HTRMODE Control mode for VCHP heater 9 (0=manual,1=auto)
	7	1	U12	LTC08HTRMODE Control mode for VCHP heater 8 (0=manual,1=auto)
	8	1	U12	LTC07HTRMODE Control mode for VCHP heater 7 (0=manual,1=auto)
	9	1	U12	LTC06HTRMODE Control mode for VCHP heater 6 (0=manual,1=auto)
	10	1	U12	LTC05HTRMODE Control mode for VCHP heater 5 (0=manual,1=auto)
	11	1	U12	LTC04HTRMODE Control mode for VCHP heater 4 (0=manual,1=auto)
	12	1	U12	LTC03HTRMODE Control mode for VCHP heater 3 (0=manual,1=auto)
	13	1	U12	LTC02HTRMODE Control mode for VCHP heater 2 (0=manual,1=auto)
	14	1	U12	LTC01HTRMODE Control mode for VCHP heater 1 (0=manual,1=auto)
	15	1	U12	LTC00HTRMODE Control mode for VCHP heater 0 (0=manual,1=auto)
0x034	0	4	U12	LTC00STATDSHPPRI Raw Sensor Status DSHP Pri 0
	4	12	U12	LTC00ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 0
0x036	0	4	U12	LTC00STATDSHPRED Raw Sensor Status DSHP Red 0
	4	12	U12	LTC00ADCDSHPRED Raw Sensor ADC Counts DSHP Red 0
0x038	0	4	U12	LTC00STATXLHPPRI Raw Sensor Status XLHP Pri 0
	4	12	U12	LTC00ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 0
0x03A	0	4	U12	LTC00STATXLHPRED Raw Sensor Status XLHP Red 0
	4	12	U12	LTC00ADCXLHPRED Raw Sensor ADC Counts XLHP Red 0
0x03C	0	4	U12	LTC00STATRSVRPRI Raw Sensor Status RES Pri 0
	4	12	U12	LTC00ADCRSVRPRI Raw Sensor ADC Counts RES Pri 0
0x03E	0	4	U12	LTC00STATRSVRRED Raw Sensor Status RES Red 0
	4	12	U12	LTC00ADCRSVRRED Raw Sensor ADC Counts RES Red 0
0x040	0	4	U12	LTC01STATDSHPPRI Raw Sensor Status DSHP Pri 1
	4	12	U12	LTC01ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 1

Offset	S	L	Type	ITOS name, attribute(s), and description
0x042	0	4	U12	LTC01STATDSHPRED Raw Sensor Status DSHP Red 1
	4	12	U12	LTC01ADCDSHPRED Raw Sensor ADC Counts DSHP Red 1
0x044	0	4	U12	LTC01STATXLHPPRI Raw Sensor Status XLHP Pri 1
	4	12	U12	LTC01ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 1
0x046	0	4	U12	LTC01STATXLHPRED Raw Sensor Status XLHP Red 1
	4	12	U12	LTC01ADCXLHPRED Raw Sensor ADC Counts XLHP Red 1
0x048	0	4	U12	LTC01STATRSVRPRI Raw Sensor Status RES Pri 1
	4	12	U12	LTC01ADCRSVRPRI Raw Sensor ADC Counts RES Pri 1
0x04A	0	4	U12	LTC01STATRSVRRED Raw Sensor Status RES Red 1
	4	12	U12	LTC01ADCRSVRRED Raw Sensor ADC Counts RES Red 1
0x04C	0	4	U12	LTC02STATDSHPPRI Raw Sensor Status DHSP Pri 2
	4	12	U12	LTC02ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 2
0x04E	0	4	U12	LTC02STATDSHPRED Raw Sensor Status DSHP Red 2
	4	12	U12	LTC02ADCDSHPRED Raw Sensor ADC Counts DSHP Red 2
0x050	0	4	U12	LTC02STATXLHPPRI Raw Sensor Status XLHP Pri 2
	4	12	U12	LTC02ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 2
0x052	0	4	U12	LTC02STATXLHPRED Raw Sensor Status XLHP Red 2
	4	12	U12	LTC02ADCXLHPRED Raw Sensor ADC Counts XLHP Red 2
0x054	0	4	U12	LTC02STATRSVRPRI Raw Sensor Status RES Pri 2
	4	12	U12	LTC02ADCRSVRPRI Raw Sensor ADC Counts RES Pri 2
0x056	0	4	U12	LTC02STATRSVRRED Raw Sensor Status RES Red 2
	4	12	U12	LTC02ADCRSVRRED Raw Sensor ADC Counts RES Red 2
0x058	0	4	U12	LTC03STATDSHPPRI Raw Sensor Status DSHP Pri 3
	4	12	U12	LTC03ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 3
0x05A	0	4	U12	LTC03STATDSHPRED Raw Sensor Status DSHP Red 3
	4	12	U12	LTC03ADCDSHPRED Raw Sensor ADC Counts DSHP Red 3

Offset	S	L	Type	ITOS name, attribute(s), and description
0x05C	0	4	U12	LTC03STATXLHPPRI Raw Sensor Status XLHP Pri 3
	4	12	U12	LTC03ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 3
0x05E	0	4	U12	LTC03STATXLHPRED Raw Sensor Status XLHP Red 3
	4	12	U12	LTC03ADCXLHPRED Raw Sensor ADC Counts XLHP Red 3
0x060	0	4	U12	LTC03STATRSVRPRI Raw Sensor Status RES Pri 3
	4	12	U12	LTC03ADCRSVRPRI Raw Sensor ADC Counts RES Pri 3
0x062	0	4	U12	LTC03STATRSVRRED Raw Sensor Status RES Red 3
	4	12	U12	LTC03ADCRSVRRED Raw Sensor ADC Counts RES Red 3
0x064	0	4	U12	LTC04STATDSHPPRI Raw Sensor Status DSHP Pri 4
	4	12	U12	LTC04ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 4
0x066	0	4	U12	LTC04STATDSHPRED Raw Sensor Status DSHP Red 4
	4	12	U12	LTC04ADCDSHPRED Raw Sensor ADC Counts DSHP Red 4
0x068	0	4	U12	LTC04STATXLHPPRI Raw Sensor Status XLHP Pri 4
	4	12	U12	LTC04ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 4
0x06A	0	4	U12	LTC04STATXLHPRED Raw Sensor Status XLHP Red 4
	4	12	U12	LTC04ADCXLHPRED Raw Sensor ADC Counts XLHP Red 4
0x06C	0	4	U12	LTC04STATRSVRPRI Raw Sensor Status RES Pri 4
	4	12	U12	LTC04ADCRSVRPRI Raw Sensor ADC Counts RES Pri 4
0x06E	0	4	U12	LTC04STATRSVRRED Raw Sensor Status RES Red 4
	4	12	U12	LTC04ADCRSVRRED Raw Sensor ADC Counts RES Red 4
0x070	0	4	U12	LTC05STATDSHPPRI Raw Sensor Status DSHP Pri 5
	4	12	U12	LTC05ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 5
0x072	0	4	U12	LTC05STATDSHPRED Raw Sensor Status DSHP Red 5
	4	12	U12	LTC05ADCDSHPRED Raw Sensor ADC Counts DSHP Red 5
0x074	0	4	U12	LTC05STATXLHPPRI Raw Sensor Status XLHP Pri 5
	4	12	U12	LTC05ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 5

Offset	S	L	Type	ITOS name, attribute(s), and description
0x076	0	4	U12	LTC05STATXLHPRED Raw Sensor Status XLHP Red 5
	4	12	U12	LTC05ADCXLHPRED Raw Sensor ADC Counts XLHP Red 5
0x078	0	4	U12	LTC05STATRSVRPRI Raw Sensor Status RES Pri 5
	4	12	U12	LTC05ADCRSVRPRI Raw Sensor ADC Counts RES Pri 5
0x07A	0	4	U12	LTC05STATRSVRRED Raw Sensor Status RES Red 5
	4	12	U12	LTC05ADCRSVRRED Raw Sensor ADC Counts RES Red 5
0x07C	0	4	U12	LTC06STATDSHPPRI Raw Sensor Status DSHP Pri 6
	4	12	U12	LTC06ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 6
0x07E	0	4	U12	LTC06STATDSHPRED Raw Sensor Status DSHP Red 6
	4	12	U12	LTC06ADCDSHPRED Raw Sensor ADC Counts DSHP Red 6
0x080	0	4	U12	LTC06STATXLHPPRI Raw Sensor Status XLHP Pri 6
	4	12	U12	LTC06ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 6
0x082	0	4	U12	LTC06STATXLHPRED Raw Sensor Status XLHP Red 6
	4	12	U12	LTC06ADCXLHPRED Raw Sensor ADC Counts XLHP Red 6
0x084	0	4	U12	LTC06STATRSVRPRI Raw Sensor Status RES Pri 6
	4	12	U12	LTC06ADCRSVRPRI Raw Sensor ADC Counts RES Pri 6
0x086	0	4	U12	LTC06STATRSVRRED Raw Sensor Status RES Red 6
	4	12	U12	LTC06ADCRSVRRED Raw Sensor ADC Counts RES Red 6
0x088	0	4	U12	LTC07STATDSHPPRI Raw Sensor Status DSHP Pri 7
	4	12	U12	LTC07ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 7
0x08A	0	4	U12	LTC07STATDSHPRED Raw Sensor Status DSHP Red 7
	4	12	U12	LTC07ADCDSHPRED Raw Sensor ADC Counts DSHP Red 7
0x08C	0	4	U12	LTC07STATXLHPPRI Raw Sensor Status XLHP Pri 7
	4	12	U12	LTC07ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 7
0x08E	0	4	U12	LTC07STATXLHPRED Raw Sensor Status XLHP Red 7
	4	12	U12	LTC07ADCXLHPRED Raw Sensor ADC Counts XLHP Red 7

Offset	S	L	Type	ITOS name, attribute(s), and description
0x090	0	4	U12	LTC07STATRSVRPRI Raw Sensor Status RES Pri 7
	4	12	U12	LTC07ADCRSVRPRI Raw Sensor ADC Counts RES Pri 7
0x092	0	4	U12	LTC07STATRSVRRED Raw Sensor Status RES Red 7
	4	12	U12	LTC07ADCRSVRRED Raw Sensor ADC Counts RES Red 7
0x094	0	4	U12	LTC08STATDSHPPRI Raw Sensor Status DSHP Pri 8
	4	12	U12	LTC08ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 8
0x096	0	4	U12	LTC08STATDSHPRED Raw Sensor Status DSHP Red 8
	4	12	U12	LTC08ADCDSHPRED Raw Sensor ADC Counts DSHP Red 8
0x098	0	4	U12	LTC08STATXLHPPRI Raw Sensor Status XLHP Pri 8
	4	12	U12	LTC08ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 8
0x09A	0	4	U12	LTC08STATXLHPRED Raw Sensor Status XLHP Red 8
	4	12	U12	LTC08ADCXLHPRED Raw Sensor ADC Counts XLHP Red 8
0x09C	0	4	U12	LTC08STATRSVRPRI Raw Sensor Status RES Pri 8
	4	12	U12	LTC08ADCRSVRPRI Raw Sensor ADC Counts RES Pri 8
0x09E	0	4	U12	LTC08STATRSVRRED Raw Sensor Status RES Red 8
	4	12	U12	LTC08ADCRSVRRED Raw Sensor ADC Counts RES Red 8
0x0A0	0	4	U12	LTC09STATDSHPPRI Raw Sensor Status DSHP Pri 9
	4	12	U12	LTC09ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 9
0x0A2	0	4	U12	LTC09STATDSHPRED Raw Sensor Status DSHP Red 9
	4	12	U12	LTC09ADCDSHPRED Raw Sensor ADC Counts DSHP Red 9
0x0A4	0	4	U12	LTC09STATXLHPPRI Raw Sensor Status XLHP Pri 9
	4	12	U12	LTC09ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 9
0x0A6	0	4	U12	LTC09STATXLHPRED Raw Sensor Status XLHP Red 9
	4	12	U12	LTC09ADCXLHPRED Raw Sensor ADC Counts XLHP Red 9
0x0A8	0	4	U12	LTC09STATRSVRPRI Raw Sensor Status RES Pri 9
	4	12	U12	LTC09ADCRSVRPRI Raw Sensor ADC Counts RES Pri 9

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0AA	0	4	U12	LTC09STATRSVRRED Raw Sensor Status RES Red 9
	4	12	U12	LTC09ADCRSVRRED Raw Sensor ADC Counts RES Red 9
0x0AC	0	4	U12	LTC10STATDSHPPRI Raw Sensor Status DSHP Pri 10
	4	12	U12	LTC10ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 10
0x0AE	0	4	U12	LTC10STATDSHPRED Raw Sensor Status DSHP Red 10
	4	12	U12	LTC10ADCDSHPRED Raw Sensor ADC Counts DSHP Red 10
0x0B0	0	4	U12	LTC10STATXLHPPRI Raw Sensor Status XLHP Pri 10
	4	12	U12	LTC10ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 10
0x0B2	0	4	U12	LTC10STATXLHPRED Raw Sensor Status XLHP Red 10
	4	12	U12	LTC10ADCXLHPRED Raw Sensor ADC Counts XLHP Red 10
0x0B4	0	4	U12	LTC10STATRSVRPRI Raw Sensor Status RES Pri 10
	4	12	U12	LTC10ADCRSVRPRI Raw Sensor ADC Counts RES Pri 10
0x0B6	0	4	U12	LTC10STATRSVRRED Raw Sensor Status RES Red 10
	4	12	U12	LTC10ADCRSVRRED Raw Sensor ADC Counts RES Red 10
0x0B8	0	4	U12	LTC11STATDSHPPRI Raw Sensor Status DSHP Pri 11
	4	12	U12	LTC11ADCDSHPPRI Raw Sensor ADC Counts DSHP Pri 11
0x0BA	0	4	U12	LTC11STATDSHPRED Raw Sensor Status DSHP Red 11
	4	12	U12	LTC11ADCDSHPRED Raw Sensor ADC Counts DSHP Red 11
0x0BC	0	4	U12	LTC11STATXLHPPRI Raw Sensor Status XLHP Pri 11
	4	12	U12	LTC11ADCXLHPPRI Raw Sensor ADC Counts XLHP Pri 11
0x0BE	0	4	U12	LTC11STATXLHPRED Raw Sensor Status XLHP Red 11
	4	12	U12	LTC11ADCXLHPRED Raw Sensor ADC Counts XLHP Red 11
0x0C0	0	4	U12	LTC11STATRSVRPRI Raw Sensor Status RES Pri 11
	4	12	U12	LTC11ADCRSVRPRI Raw Sensor ADC Counts RES Pri 11
0x0C2	0	4	U12	LTC11STATRSVRRED Raw Sensor Status RES Red 11
	4	12	U12	LTC11ADCRSVRRED Raw Sensor ADC Counts RES Red 11

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0C4	0	16	I12	LTC00RITTEMP LTC HP00 RIT temperature celsius
0x0C6	0	16	I12	LTC01RITTEMP LTC HP01 RIT temperature celsius
0x0C8	0	16	I12	LTC02RITTEMP LTC HP02 RIT temperature celsius
0x0CA	0	16	I12	LTC03RITTEMP LTC HP03 RIT temperature celsius
0x0CC	0	16	I12	LTC04RITTEMP LTC HP04 RIT temperature celsius
0x0CE	0	16	I12	LTC05RITTEMP LTC HP05 RIT temperature celsius
0x0D0	0	16	I12	LTC06RITTEMP LTC HP06 RIT temperature celsius
0x0D2	0	16	I12	LTC07RITTEMP LTC HP07 RIT temperature celsius
0x0D4	0	16	I12	LTC08RITTEMP LTC HP08 RIT temperature celsius
0x0D6	0	16	I12	LTC09RITTEMP LTC HP09 RIT temperature celsius
0x0D8	0	16	I12	LTC10RITTEMP LTC HP10 RIT temperature celsius
0x0DA	0	16	I12	LTC11RITTEMP LTC HP11 RIT temperature celsius
0x0DC	0	16	I12	LTC00RESTEMP LTC HP00 RES temperature celsius
0x0DE	0	16	I12	LTC01RESTEMP LTC HP01 RES temperature celsius
0x0E0	0	16	I12	LTC02RESTEMP LTC HP02 RES temperature celsius
0x0E2	0	16	I12	LTC03RESTEMP LTC HP03 RES temperature celsius
0x0E4	0	16	I12	LTC04RESTEMP LTC HP04 RES temperature celsius
0x0E6	0	16	I12	LTC05RESTEMP LTC HP05 RES temperature celsius
0x0E8	0	16	I12	LTC06RESTEMP LTC HP06 RES temperature celsius
0x0EA	0	16	I12	LTC07RESTEMP LTC HP07 RES temperature celsius
0x0EC	0	16	I12	LTC08RESTEMP LTC HP08 RES temperature celsius
0x0EE	0	16	I12	LTC09RESTEMP LTC HP09 RES temperature celsius
0x0F0	0	16	I12	LTC10RESTEMP LTC HP10 RES temperature celsius
0x0F2	0	16	I12	LTC11RESTEMP LTC HP11 RES temperature celsius
0x0F4	0	16	I12	LTCRITLO0 Temperature converted to celsius.
0x0F6	0	16	I12	LTCRITLO1 Temperature converted to celsius.

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0F8	0	16	I12	LTCRITLO2 Temperature converted to celsius.
0x0FA	0	16	I12	LTCRITLO3 Temperature converted to celsius.
0x0FC	0	16	I12	LTCRITLO4 Temperature converted to celsius.
0x0FE	0	16	I12	LTCRITLO5 Temperature converted to celsius.
0x100	0	16	I12	LTCRITLO6 Temperature converted to celsius.
0x102	0	16	I12	LTCRITLO7 Temperature converted to celsius.
0x104	0	16	I12	LTCRITLO8 Temperature converted to celsius.
0x106	0	16	I12	LTCRITLO9 Temperature converted to celsius.
0x108	0	16	I12	LTCRITLO10 Temperature converted to celsius.
0x10A	0	16	I12	LTCRITLO11 Temperature converted to celsius.
0x10C	0	16	I12	LTCRITHI0 Temperature converted to celsius.
0x10E	0	16	I12	LTCRITHI1 Temperature converted to celsius.
0x110	0	16	I12	LTCRITHI2 Temperature converted to celsius.
0x112	0	16	I12	LTCRITHI3 Temperature converted to celsius.
0x114	0	16	I12	LTCRITHI4 Temperature converted to celsius.
0x116	0	16	I12	LTCRITHI5 Temperature converted to celsius.
0x118	0	16	I12	LTCRITHI6 Temperature converted to celsius.
0x11A	0	16	I12	LTCRITHI7 Temperature converted to celsius.
0x11C	0	16	I12	LTCRITHI8 Temperature converted to celsius.
0x11E	0	16	I12	LTCRITHI9 Temperature converted to celsius.
0x120	0	16	I12	LTCRITHI10 Temperature converted to celsius.
0x122	0	16	I12	LTCRITHI11 Temperature converted to celsius.
0x124	0	16	I12	LTCRESLO0 Temperature converted to celsius.
0x126	0	16	I12	LTCRESLO1 Temperature converted to celsius.
0x128	0	16	I12	LTCRESLO2 Temperature converted to celsius.
0x12A	0	16	I12	LTCRESLO3 Temperature converted to celsius.

Offset	S	L	Type	ITOS name, attribute(s), and description
0x12C	0	16	I12	LTCRESLO4 Temperature converted to celsius.
0x12E	0	16	I12	LTCRESLO5 Temperature converted to celsius.
0x130	0	16	I12	LTCRESLO6 Temperature converted to celsius.
0x132	0	16	I12	LTCRESLO7 Temperature converted to celsius.
0x134	0	16	I12	LTCRESLO8 Temperature converted to celsius.
0x136	0	16	I12	LTCRESLO9 Temperature converted to celsius.
0x138	0	16	I12	LTCRESLO10 Temperature converted to celsius.
0x13A	0	16	I12	LTCRESLO11 Temperature converted to celsius.
0x13C	0	16	I12	LTCRESHI0 Temperature converted to celsius.
0x13E	0	16	I12	LTCRESHI1 Temperature converted to celsius.
0x140	0	16	I12	LTCRESHI2 Temperature converted to celsius.
0x142	0	16	I12	LTCRESHI3 Temperature converted to celsius.
0x144	0	16	I12	LTCRESHI4 Temperature converted to celsius.
0x146	0	16	I12	LTCRESHI5 Temperature converted to celsius.
0x148	0	16	I12	LTCRESHI6 Temperature converted to celsius.
0x14A	0	16	I12	LTCRESHI7 Temperature converted to celsius.
0x14C	0	16	I12	LTCRESHI8 Temperature converted to celsius.
0x14E	0	16	I12	LTCRESHI9 Temperature converted to celsius.
0x150	0	16	I12	LTCRESHI10 Temperature converted to celsius.
0x152	0	16	I12	LTCRESHI11 Temperature converted to celsius.
0x154	0	16	I12	LTCDBDELTA0 Temperature converted to celsius.
0x156	0	16	I12	LTCDBDELTA1 Temperature converted to celsius.
0x158	0	16	I12	LTCDBDELTA2 Temperature converted to celsius.
0x15A	0	16	I12	LTCDBDELTA3 Temperature converted to celsius.
0x15C	0	16	I12	LTCDBDELTA4 Temperature converted to celsius.
0x15E	0	16	I12	LTCDBDELTA5 Temperature converted to celsius.

Offset	S	L	Type	ITOS name, attribute(s), and description
0x160	0	16	I12	LTCDBDELTA6 Temperature converted to celsius.
0x162	0	16	I12	LTCDBDELTA7 Temperature converted to celsius.
0x164	0	16	I12	LTCDBDELTA8 Temperature converted to celsius.
0x166	0	16	I12	LTCDBDELTA9 Temperature converted to celsius.
0x168	0	16	I12	LTCDBDELTA10 Temperature converted to celsius.
0x16A	0	16	I12	LTCDBDELTA11 Temperature converted to celsius.
0x16C	0	1	U12	LTCCNTLMODE LTC control mode
	1	3	U12	LTCPAD3 Padding bits
	4	1	U12	LTC11HTRCMD Current command for VCHP heater 11 (0=off,1=on)
	5	1	U12	LTC10HTRCMD Current command for VCHP heater 10 (0=off,1=on)
	6	1	U12	LTC09HTRCMD Current command for VCHP heater 9 (0=off,1=on)
	7	1	U12	LTC08HTRCMD Current command for VCHP heater 8 (0=off,1=on)
	8	1	U12	LTC07HTRCMD Current command for VCHP heater 7 (0=off,1=on)
	9	1	U12	LTC06HTRCMD Current command for VCHP heater 6 (0=off,1=on)
	10	1	U12	LTC05HTRCMD Current command for VCHP heater 5 (0=off,1=on)
	11	1	U12	LTC04HTRCMD Current command for VCHP heater 4 (0=off,1=on)
	12	1	U12	LTC03HTRCMD Current command for VCHP heater 3 (0=off,1=on)
	13	1	U12	LTC02HTRCMD Current command for VCHP heater 2 (0=off,1=on)
	14	1	U12	LTC01HTRCMD Current command for VCHP heater 1 (0=off,1=on)
	15	1	U12	LTC00HTRCMD Current command for VCHP heater 0 (0=off,1=on)
0x16E	0	1	U12	LTCRUNMODE LTC run mode
	1	3	U12	LHTRREGPAD3 Padding bits
	4	1	U12	LTC11HTRSTATE VCHP heater state 11 (0=off,1=on)
	5	1	U12	LTC10HTRSTATE VCHP heater state 10 (0=off,1=on)
	6	1	U12	LTC09HTRSTATE VCHP heater state 9 (0=off,1=on)
	7	1	U12	LTC08HTRSTATE VCHP heater state 8 (0=off,1=on)

Offset	S	L	Type	ITOS name, attribute(s), and description
	8	1	U12	LTC07HTRSTATE VCHP heater state 7 (0=off,1=on)
	9	1	U12	LTC06HTRSTATE VCHP heater state 6 (0=off,1=on)
	10	1	U12	LTC05HTRSTATE VCHP heater state 5 (0=off,1=on)
	11	1	U12	LTC04HTRSTATE VCHP heater state 4 (0=off,1=on)
	12	1	U12	LTC03HTRSTATE VCHP heater state 3 (0=off,1=on)
	13	1	U12	LTC02HTRSTATE VCHP heater state 2 (0=off,1=on)
	14	1	U12	LTC01HTRSTATE VCHP heater state 1 (0=off,1=on)
	15	1	U12	LTC00HTRSTATE VCHP heater state 0 (0=off,1=on)

23 MEM Package

23.0 Overview

The MEM package contains routines that are specific to the Memory Dump/Load facility.

23.1 Command Packets

23.1.0 LMEMDUMPMEM (1604/0x644:0)

Description:

"Memory Data Dump" Telecommand Packet

Dump data from a region of memory.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID
0x00A	0	8	U1	LMEMDEST Dump Telemetry Destination
0x00B	0	8	U1	LMEMPAD 8-bit padding
0x00C	0	16	U12	LMEMADDRESSHI Upper 16 Bits of Address/Offset
	16	16	U12	LMEMADDRESSLO Lower 16 Bits of Address/Offset
0x010	0	16	U12	LMEMSIZEHI Upper 16 Bits of Word Count
	16	16	U12	LMEMSIZELO Lower 16 Bits of Word Count

23.1.1 LMEMDUMPCANCEL (1604/0x644:1)

Description:

"Memory Dump Cancel" Telecommand Packet

Cancel a memory dump operation.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID

23.1.2 LMEMDUMPPCI (1604/0x644:2)

Description:

"PCI Device Header Dump" Telecommand Packet

Dump data from a PCI device header.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID
0x00A	0	1	U12	LMEMPCIBUS PCI Bus Address
	1	5	U12	LMEMPCIDEVICE PCI Device Address
	6	2	U12	LMEMPCIFUNCTION PCI Function Address
	8	8	U1	LMEMPAD 8-bit Padding

23.1.3 LMEMDUMPREG (1604/0x644:3)

Description:

"Processor Register Dump" Telecommand Packet

Dump CPU register values.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID

23.1.4 LMEMLOADMEM (1604/0x644:4)

Description:

"Memory Write" Telecommand Packet

Load data to a region in memory.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00A	0	16	U12	LMEMSIZE 16-Bit Word count
0x00C	0	16	U12	LMEMADDRESSHI Upper 16 Bits of Address/Offset
	16	16	U12	LMEMADDRESSLO Lower 16 Bits of Address/Offset
0x010	0	16	U12	LMEMDATA00HI 16-Bit Data Value
0x012	0	16	U12	LMEMDATA00LO 16-Bit Data Value
0x014	0	16	U12	LMEMDATA01HI 16-Bit Data Value
0x016	0	16	U12	LMEMDATA01LO 16-Bit Data Value
0x018	0	16	U12	LMEMDATA02HI 16-Bit Data Value
0x01A	0	16	U12	LMEMDATA02LO 16-Bit Data Value
0x01C	0	16	U12	LMEMDATA03HI 16-Bit Data Value
0x01E	0	16	U12	LMEMDATA03LO 16-Bit Data Value
0x020	0	16	U12	LMEMDATA04HI 16-Bit Data Value
0x022	0	16	U12	LMEMDATA04LO 16-Bit Data Value
0x024	0	16	U12	LMEMDATA05HI 16-Bit Data Value
0x026	0	16	U12	LMEMDATA05LO 16-Bit Data Value
0x028	0	16	U12	LMEMDATA06HI 16-Bit Data Value
0x02A	0	16	U12	LMEMDATA06LO 16-Bit Data Value
0x02C	0	16	U12	LMEMDATA07HI 16-Bit Data Value
0x02E	0	16	U12	LMEMDATA07LO 16-Bit Data Value
0x030	0	16	U12	LMEMDATA08HI 16-Bit Data Value
0x032	0	16	U12	LMEMDATA08LO 16-Bit Data Value
0x034	0	16	U12	LMEMDATA09HI 16-Bit Data Value
0x036	0	16	U12	LMEMDATA09LO 16-Bit Data Value
0x038	0	16	U12	LMEMDATA10HI 16-Bit Data Value
0x03A	0	16	U12	LMEMDATA10LO 16-Bit Data Value

23.1.5 `LMEMLOADPCI` (1604/0x644:5)

Description:

"PCI Device Header Write" Telecommand Packet

Load data to a PCI device header.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LMEMLATUNIT` Target LAT Unit
	4	12	`U12`	`LMEMTRANID` Transaction ID
`0x00A`	0	1	`U12`	`LMEMPCIBUS` PCI Bus Address
	1	5	`U12`	`LMEMPCIDEVICE` PCI Device Address
	6	2	`U12`	`LMEMPCIFUNCTION` PCI Function Address
	8	8	`U12`	`LMEMPCIOFFSET` PCI Offset Address
`0x00C`	0	16	`U12`	`LMEMDATA` 16-Bit Data Value

23.1.6 `LMEMLOADREG` (1604/0x644:6)

Description:

"Processor Register Write" Telecommand Packet

Load data to CPU registers.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
`0x008`	0	4	`U12`	`LMEMLATUNIT` Target LAT Unit
	4	12	`U12`	`LMEMTRANID` Transaction ID
`0x00A`	0	16	`U12`	`LMEMSIZE` 16-Bit Word count
`0x00C`	0	16	`U12`	`LMEMOFFSETHI` Upper 16 Bits of Address/Offset
	16	16	`U12`	`LMEMOFFSETLO` Lower 16 Bits of Address/Offset
`0x010`	0	16	`U12`	`LMEMDATA00HI` 16-Bit Data Value
`0x012`	0	16	`U12`	`LMEMDATA00LO` 16-Bit Data Value
`0x014`	0	16	`U12`	`LMEMDATA01HI` 16-Bit Data Value
`0x016`	0	16	`U12`	`LMEMDATA01LO` 16-Bit Data Value

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	16	U12	LMEMDATA02HI 16-Bit Data Value
0x01A	0	16	U12	LMEMDATA02LO 16-Bit Data Value
0x01C	0	16	U12	LMEMDATA03HI 16-Bit Data Value
0x01E	0	16	U12	LMEMDATA03LO 16-Bit Data Value
0x020	0	16	U12	LMEMDATA04HI 16-Bit Data Value
0x022	0	16	U12	LMEMDATA04LO 16-Bit Data Value
0x024	0	16	U12	LMEMDATA05HI 16-Bit Data Value
0x026	0	16	U12	LMEMDATA05LO 16-Bit Data Value
0x028	0	16	U12	LMEMDATA06HI 16-Bit Data Value
0x02A	0	16	U12	LMEMDATA06LO 16-Bit Data Value
0x02C	0	16	U12	LMEMDATA07HI 16-Bit Data Value
0x02E	0	16	U12	LMEMDATA07LO 16-Bit Data Value
0x030	0	16	U12	LMEMDATA08HI 16-Bit Data Value
0x032	0	16	U12	LMEMDATA08LO 16-Bit Data Value
0x034	0	16	U12	LMEMDATA09HI 16-Bit Data Value
0x036	0	16	U12	LMEMDATA09LO 16-Bit Data Value
0x038	0	16	U12	LMEMDATA10HI 16-Bit Data Value
0x03A	0	16	U12	LMEMDATA10LO 16-Bit Data Value

23.1.7 LMEMDUMPPOOL (1604/0x644:7)

Description:

"Memory Pool Status Dump" Telecommand Packet

Dump the statistics for a memory pool.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID
0x00A	0	16	U12	LMEMPOOLID

Offset	S	L	Type	ITOS name, attribute(s), and description
				Memory Pool ID

23.1.8 LMEMDUMPSYMVAL (1604/0x644:8)

Description:

"Memory Symbol Lookup" Telecommand Packet

Dump the value of a symbol.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID
0x00A	0	8	U1	LMEMNAMESIZE Symbol Name Length
0x00B	0	8	U1	LMEMPAD 8-bit padding
0x00C	0	8	U1	LMEMNAME00 Symbol Name Character
0x00D	0	8	U1	LMEMNAME01 Symbol Name Character
0x00E	0	8	U1	LMEMNAME02 Symbol Name Character
0x00F	0	8	U1	LMEMNAME03 Symbol Name Character
0x010	0	8	U1	LMEMNAME04 Symbol Name Character
0x011	0	8	U1	LMEMNAME05 Symbol Name Character
0x012	0	8	U1	LMEMNAME06 Symbol Name Character
0x013	0	8	U1	LMEMNAME07 Symbol Name Character
0x014	0	8	U1	LMEMNAME08 Symbol Name Character
0x015	0	8	U1	LMEMNAME09 Symbol Name Character
0x016	0	8	U1	LMEMNAME10 Symbol Name Character
0x017	0	8	U1	LMEMNAME11 Symbol Name Character
0x018	0	8	U1	LMEMNAME12 Symbol Name Character
0x019	0	8	U1	LMEMNAME13 Symbol Name Character
0x01A	0	8	U1	LMEMNAME14 Symbol Name Character
0x01B	0	8	U1	LMEMNAME15 Symbol Name Character

Offset	S	L	Type	ITOS name, attribute(s), and description
0x01C	0	8	U1	LMEMNAME16 Symbol Name Character
0x01D	0	8	U1	LMEMNAME17 Symbol Name Character
0x01E	0	8	U1	LMEMNAME18 Symbol Name Character
0x01F	0	8	U1	LMEMNAME19 Symbol Name Character
0x020	0	8	U1	LMEMNAME20 Symbol Name Character
0x021	0	8	U1	LMEMNAME21 Symbol Name Character
0x022	0	8	U1	LMEMNAME22 Symbol Name Character
0x023	0	8	U1	LMEMNAME23 Symbol Name Character
0x024	0	8	U1	LMEMNAME24 Symbol Name Character
0x025	0	8	U1	LMEMNAME25 Symbol Name Character
0x026	0	8	U1	LMEMNAME26 Symbol Name Character
0x027	0	8	U1	LMEMNAME27 Symbol Name Character
0x028	0	8	U1	LMEMNAME28 Symbol Name Character
0x029	0	8	U1	LMEMNAME29 Symbol Name Character
0x02A	0	8	U1	LMEMNAME30 Symbol Name Character
0x02B	0	8	U1	LMEMNAME31 Symbol Name Character
0x02C	0	8	U1	LMEMNAME32 Symbol Name Character
0x02D	0	8	U1	LMEMNAME33 Symbol Name Character
0x02E	0	8	U1	LMEMNAME34 Symbol Name Character
0x02F	0	8	U1	LMEMNAME35 Symbol Name Character
0x030	0	8	U1	LMEMNAME36 Symbol Name Character
0x031	0	8	U1	LMEMNAME37 Symbol Name Character
0x032	0	8	U1	LMEMNAME38 Symbol Name Character
0x033	0	8	U1	LMEMNAME39 Symbol Name Character
0x034	0	8	U1	LMEMNAME40 Symbol Name Character
0x035	0	8	U1	LMEMNAME41 Symbol Name Character

Offset	S	L	Type	ITOS name, attribute(s), and description
0x036	0	8	U1	LMEMNAME42 Symbol Name Character
0x037	0	8	U1	LMEMNAME43 Symbol Name Character
0x038	0	8	U1	LMEMNAME44 Symbol Name Character
0x039	0	8	U1	LMEMNAME45 Symbol Name Character
0x03A	0	8	U1	LMEMNAME46 Symbol Name Character
0x03B	0	8	U1	LMEMNAME47 Symbol Name Character

23.1.9 LMEMDUMPSYMREL (1604/0x644:9)

Description:

"Memory Dump Symbol Relative" Telecommand Packet

Dump memory data starting at an offset relative to a symbol.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID
0x00A	0	8	U1	LMEMDEST Dump Telemetry Destination
0x00B	0	8	U1	LMEMPAD1 8-bit padding
0x00C	0	16	U12	LMEMOFFSETHI Upper 16 Bits of Address/Offset
	16	16	U12	LMEMOFFSETLO Lower 16 Bits of Address/Offset
0x010	0	16	U12	LMEMSIZEHI Upper 16 Bits of Word Count
	16	16	U12	LMEMSIZELO Lower 16 Bits of Word Count
0x014	0	8	U1	LMEMNAMESIZE Symbol Name Length
0x015	0	8	U1	LMEMPAD2 8-bit padding
0x016	0	16	U12	LMEMPAD3 16-bit padding
0x018	0	8	U1	LMEMNAME00 Symbol Name Character
0x019	0	8	U1	LMEMNAME01 Symbol Name Character
0x01A	0	8	U1	LMEMNAME02 Symbol Name Character
0x01B	0	8	U1	LMEMNAME03

Offset	S	L	Type	ITOS name, attribute(s), and description
				Symbol Name Character
0x01C	0	8	U1	LMEMNAME04
				Symbol Name Character
0x01D	0	8	U1	LMEMNAME05
				Symbol Name Character
0x01E	0	8	U1	LMEMNAME06
				Symbol Name Character
0x01F	0	8	U1	LMEMNAME07
				Symbol Name Character
0x020	0	8	U1	LMEMNAME08
				Symbol Name Character
0x021	0	8	U1	LMEMNAME09
				Symbol Name Character
0x022	0	8	U1	LMEMNAME10
				Symbol Name Character
0x023	0	8	U1	LMEMNAME11
				Symbol Name Character
0x024	0	8	U1	LMEMNAME12
				Symbol Name Character
0x025	0	8	U1	LMEMNAME13
				Symbol Name Character
0x026	0	8	U1	LMEMNAME14
				Symbol Name Character
0x027	0	8	U1	LMEMNAME15
				Symbol Name Character
0x028	0	8	U1	LMEMNAME16
				Symbol Name Character
0x029	0	8	U1	LMEMNAME17
				Symbol Name Character
0x02A	0	8	U1	LMEMNAME18
				Symbol Name Character
0x02B	0	8	U1	LMEMNAME19
				Symbol Name Character
0x02C	0	8	U1	LMEMNAME20
				Symbol Name Character
0x02D	0	8	U1	LMEMNAME21
				Symbol Name Character
0x02E	0	8	U1	LMEMNAME22
				Symbol Name Character
0x02F	0	8	U1	LMEMNAME23
				Symbol Name Character
0x030	0	8	U1	LMEMNAME24
				Symbol Name Character
0x031	0	8	U1	LMEMNAME25
				Symbol Name Character
0x032	0	8	U1	LMEMNAME26
				Symbol Name Character
0x033	0	8	U1	LMEMNAME27
				Symbol Name Character
0x034	0	8	U1	LMEMNAME28
				Symbol Name Character
0x035	0	8	U1	LMEMNAME29

Offset	S	L	Type	ITOS name, attribute(s), and description
				Symbol Name Character
0x036	0	8	U1	LMEMNAME30 Symbol Name Character
0x037	0	8	U1	LMEMNAME31 Symbol Name Character
0x038	0	8	U1	LMEMNAME32 Symbol Name Character
0x039	0	8	U1	LMEMNAME33 Symbol Name Character
0x03A	0	8	U1	LMEMNAME34 Symbol Name Character
0x03B	0	8	U1	LMEMNAME35 Symbol Name Character

23.1.10 `LMEMNOOP` (1604/0x644:10)

Description:

"No-Op" Telecommand Packet

A no-op telecommand which does nothing but generate a command confirm reply from the specified CPU.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID

23.1.11 `LMEMDUMPNEXT` (1604/0x644:100)

Description:

"Send Next Dump Packet" Telecommand Packet

Send the next chunk of memory dump data.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LMEMLATUNIT Target LAT Unit
	4	12	U12	LMEMTRANID Transaction ID

23.2 Telemetry Packets

23.2.0 LMEMPOOLDATA (785/0x311)

Description:

"Memory Pool Statistics Dump" Telemetry Packet

Dump of memory pool statistics.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTPOOLLATUNIT ?
	4	12	U12	LMEMTPOOLTRANID ?
0x010	0	16	U12	LMEMTPOOLID ?
0x012	0	16	U12	LMEMTPOOLPAD ?
0x014	0	32	U1234	LMEMTPOOLFREBYT ?
0x018	0	32	U1234	LMEMTPOOLFREBLK ?
0x01C	0	32	U1234	LMEMTPOOLMAXBLK ?
0x020	0	32	U1234	LMEMTPOOLALCBYT ?
0x024	0	32	U1234	LMEMTPOOLALCBLK ?

23.2.1 LMEMSYMVAL (786/0x312)

Description:

"Symbol Value Dump" Telemetry Packet

Dump of a symbol's 32-bit value.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTSYMLATUNIT ?
	4	12	U12	LMEMTSYMTRANID ?
0x010	0	32	U1234	LMEMTSYMVALUE ?
0x014	0	8	U1	LMEMTSYMNAMESIZE ?
0x015	0	8	U1	LMEMTSYMPAD8 ?
0x016	0	16	U12	LMEMTSYMPAD16 ?

Offset	S	L	Type	ITOS name, attribute(s), and description
0x018	0	8	U1	LMEMTSYMNAME00 ?
0x019	0	8	U1	LMEMTSYMNAME01 ?
0x01A	0	8	U1	LMEMTSYMNAME02 ?
0x01B	0	8	U1	LMEMTSYMNAME03 ?
0x01C	0	8	U1	LMEMTSYMNAME04 ?
0x01D	0	8	U1	LMEMTSYMNAME05 ?
0x01E	0	8	U1	LMEMTSYMNAME06 ?
0x01F	0	8	U1	LMEMTSYMNAME07 ?
0x020	0	8	U1	LMEMTSYMNAME08 ?
0x021	0	8	U1	LMEMTSYMNAME09 ?
0x022	0	8	U1	LMEMTSYMNAME10 ?
0x023	0	8	U1	LMEMTSYMNAME11 ?
0x024	0	8	U1	LMEMTSYMNAME12 ?
0x025	0	8	U1	LMEMTSYMNAME13 ?
0x026	0	8	U1	LMEMTSYMNAME14 ?
0x027	0	8	U1	LMEMTSYMNAME15 ?
0x028	0	8	U1	LMEMTSYMNAME16 ?
0x029	0	8	U1	LMEMTSYMNAME17 ?
0x02A	0	8	U1	LMEMTSYMNAME18 ?
0x02B	0	8	U1	LMEMTSYMNAME19 ?
0x02C	0	8	U1	LMEMTSYMNAME20 ?
0x02D	0	8	U1	LMEMTSYMNAME21 ?
0x02E	0	8	U1	LMEMTSYMNAME22 ?
0x02F	0	8	U1	LMEMTSYMNAME23 ?
0x030	0	8	U1	LMEMTSYMNAME24 ?
0x031	0	8	U1	LMEMTSYMNAME25 ?

Offset	S	L	Type	ITOS name, attribute(s), and description
0x032	0	8	U1	LMEMTSYMNAME26 ?
0x033	0	8	U1	LMEMTSYMNAME27 ?
0x034	0	8	U1	LMEMTSYMNAME28 ?
0x035	0	8	U1	LMEMTSYMNAME29 ?
0x036	0	8	U1	LMEMTSYMNAME30 ?
0x037	0	8	U1	LMEMTSYMNAME31 ?
0x038	0	8	U1	LMEMTSYMNAME32 ?
0x039	0	8	U1	LMEMTSYMNAME33 ?
0x03A	0	8	U1	LMEMTSYMNAME34 ?
0x03B	0	8	U1	LMEMTSYMNAME35 ?
0x03C	0	8	U1	LMEMTSYMNAME36 ?
0x03D	0	8	U1	LMEMTSYMNAME37 ?
0x03E	0	8	U1	LMEMTSYMNAME38 ?
0x03F	0	8	U1	LMEMTSYMNAME39 ?
0x040	0	8	U1	LMEMTSYMNAME40 ?
0x041	0	8	U1	LMEMTSYMNAME41 ?
0x042	0	8	U1	LMEMTSYMNAME42 ?
0x043	0	8	U1	LMEMTSYMNAME43 ?
0x044	0	8	U1	LMEMTSYMNAME44 ?
0x045	0	8	U1	LMEMTSYMNAME45 ?
0x046	0	8	U1	LMEMTSYMNAME46 ?
0x047	0	8	U1	LMEMTSYMNAME47 ?

23.2.2 LMEMSIUDATA (788/0x314)

Description:

"SIU Memory Dump Data to 1553" Telemetry Packet

Memory dump data from the SIU to the 1553 bus.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTSIULATUNIT Source LAT Unit
	4	12	U12	LMEMTSIUTRANID Transaction ID
0x010	0	32	U1234	LMEMTSIUADDRESS Starting Address
0x014	0	16	U12	LMEMTSIUWORDCNT Word Count
0x016	0	16	U12	LMEMTSIUCMDFUNC Dump Type
0x018	0	32	U1234	LMEMTSIUDATA0 Dump Data Word
0x01C	0	32	U1234	LMEMTSIUDATA1 Dump Data Word
0x020	0	32	U1234	LMEMTSIUDATA2 Dump Data Word
0x024	0	32	U1234	LMEMTSIUDATA3 Dump Data Word
0x028	0	32	U1234	LMEMTSIUDATA4 Dump Data Word
0x02C	0	32	U1234	LMEMTSIUDATA5 Dump Data Word
0x030	0	32	U1234	LMEMTSIUDATA6 Dump Data Word
0x034	0	32	U1234	LMEMTSIUDATA7 Dump Data Word
0x038	0	32	U1234	LMEMTSIUDATA8 Dump Data Word
0x03C	0	32	U1234	LMEMTSIUDATA9 Dump Data Word
0x040	0	32	U1234	LMEMTSIUDATA10 Dump Data Word
0x044	0	32	U1234	LMEMTSIUDATA11 Dump Data Word
0x048	0	32	U1234	LMEMTSIUDATA12 Dump Data Word
0x04C	0	32	U1234	LMEMTSIUDATA13 Dump Data Word
0x050	0	32	U1234	LMEMTSIUDATA14 Dump Data Word
0x054	0	32	U1234	LMEMTSIUDATA15 Dump Data Word
0x058	0	32	U1234	LMEMTSIUDATA16 Dump Data Word
0x05C	0	32	U1234	LMEMTSIUDATA17 Dump Data Word
0x060	0	32	U1234	LMEMTSIUDATA18 Dump Data Word
0x064	0	32	U1234	LMEMTSIUDATA19 Dump Data Word
0x068	0	32	U1234	LMEMTSIUDATA20

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x06C	0	32	U1234	LMEMTSIUDATA21
				Dump Data Word
0x070	0	32	U1234	LMEMTSIUDATA22
				Dump Data Word
0x074	0	32	U1234	LMEMTSIUDATA23
				Dump Data Word
0x078	0	32	U1234	LMEMTSIUDATA24
				Dump Data Word
0x07C	0	32	U1234	LMEMTSIUDATA25
				Dump Data Word
0x080	0	32	U1234	LMEMTSIUDATA26
				Dump Data Word
0x084	0	32	U1234	LMEMTSIUDATA27
				Dump Data Word
0x088	0	32	U1234	LMEMTSIUDATA28
				Dump Data Word
0x08C	0	32	U1234	LMEMTSIUDATA29
				Dump Data Word
0x090	0	32	U1234	LMEMTSIUDATA30
				Dump Data Word
0x094	0	32	U1234	LMEMTSIUDATA31
				Dump Data Word
0x098	0	32	U1234	LMEMTSIUDATA32
				Dump Data Word
0x09C	0	32	U1234	LMEMTSIUDATA33
				Dump Data Word
0x0A0	0	32	U1234	LMEMTSIUDATA34
				Dump Data Word
0x0A4	0	32	U1234	LMEMTSIUDATA35
				Dump Data Word
0x0A8	0	32	U1234	LMEMTSIUDATA36
				Dump Data Word
0x0AC	0	32	U1234	LMEMTSIUDATA37
				Dump Data Word
0x0B0	0	32	U1234	LMEMTSIUDATA38
				Dump Data Word
0x0B4	0	32	U1234	LMEMTSIUDATA39
				Dump Data Word
0x0B8	0	32	U1234	LMEMTSIUDATA40
				Dump Data Word
0x0BC	0	32	U1234	LMEMTSIUDATA41
				Dump Data Word
0x0C0	0	32	U1234	LMEMTSIUDATA42
				Dump Data Word
0x0C4	0	32	U1234	LMEMTSIUDATA43
				Dump Data Word
0x0C8	0	32	U1234	LMEMTSIUDATA44
				Dump Data Word
0x0CC	0	32	U1234	LMEMTSIUDATA45
				Dump Data Word
0x0D0	0	32	U1234	LMEMTSIUDATA46

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x0D4	0	32	U1234	LMEMTSIUDATA47
				Dump Data Word
0x0D8	0	32	U1234	LMEMTSIUDATA48
				Dump Data Word
0x0DC	0	32	U1234	LMEMTSIUDATA49
				Dump Data Word
0x0E0	0	32	U1234	LMEMTSIUDATA50
				Dump Data Word
0x0E4	0	32	U1234	LMEMTSIUDATA51
				Dump Data Word
0x0E8	0	32	U1234	LMEMTSIUDATA52
				Dump Data Word
0x0EC	0	32	U1234	LMEMTSIUDATA53
				Dump Data Word
0x0F0	0	32	U1234	LMEMTSIUDATA54
				Dump Data Word
0x0F4	0	32	U1234	LMEMTSIUDATA55
				Dump Data Word
0x0F8	0	32	U1234	LMEMTSIUDATA56
				Dump Data Word
0x0FC	0	32	U1234	LMEMTSIUDATA57
				Dump Data Word
0x100	0	32	U1234	LMEMTSIUDATA58
				Dump Data Word
0x104	0	32	U1234	LMEMTSIUDATA59
				Dump Data Word
0x108	0	32	U1234	LMEMTSIUDATA60
				Dump Data Word
0x10C	0	32	U1234	LMEMTSIUDATA61
				Dump Data Word
0x110	0	32	U1234	LMEMTSIUDATA62
				Dump Data Word
0x114	0	32	U1234	LMEMTSIUDATA63
				Dump Data Word
0x118	0	32	U1234	LMEMTSIUDATA64
				Dump Data Word
0x11C	0	32	U1234	LMEMTSIUDATA65
				Dump Data Word
0x120	0	32	U1234	LMEMTSIUDATA66
				Dump Data Word
0x124	0	32	U1234	LMEMTSIUDATA67
				Dump Data Word
0x128	0	32	U1234	LMEMTSIUDATA68
				Dump Data Word
0x12C	0	32	U1234	LMEMTSIUDATA69
				Dump Data Word
0x130	0	32	U1234	LMEMTSIUDATA70
				Dump Data Word
0x134	0	32	U1234	LMEMTSIUDATA71
				Dump Data Word
0x138	0	32	U1234	LMEMTSIUDATA72

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x13C	0	32	U1234	LMEMTSIUDATA73 Dump Data Word
0x140	0	32	U1234	LMEMTSIUDATA74 Dump Data Word
0x144	0	32	U1234	LMEMTSIUDATA75 Dump Data Word
0x148	0	32	U1234	LMEMTSIUDATA76 Dump Data Word
0x14C	0	32	U1234	LMEMTSIUDATA77 Dump Data Word
0x150	0	32	U1234	LMEMTSIUDATA78 Dump Data Word
0x154	0	32	U1234	LMEMTSIUDATA79 Dump Data Word
0x158	0	32	U1234	LMEMTSIUDATA80 Dump Data Word
0x15C	0	32	U1234	LMEMTSIUDATA81 Dump Data Word
0x160	0	32	U1234	LMEMTSIUDATA82 Dump Data Word
0x164	0	32	U1234	LMEMTSIUDATA83 Dump Data Word
0x168	0	32	U1234	LMEMTSIUDATA84 Dump Data Word
0x16C	0	32	U1234	LMEMTSIUDATA85 Dump Data Word
0x170	0	32	U1234	LMEMTSIUDATA86 Dump Data Word
0x174	0	32	U1234	LMEMTSIUDATA87 Dump Data Word
0x178	0	32	U1234	LMEMTSIUDATA88 Dump Data Word
0x17C	0	32	U1234	LMEMTSIUDATA89 Dump Data Word

23.2.3 LMEMEPU0DATA (789/0x315)

Description:

"EPU 0 Memory Dump Data" Telemetry Packet

Memory dump data from EPU 0.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTEPU0LATUNIT Source LAT Unit
	4	12	U12	LMEMTEPU0TRANID Transaction ID
0x010	0	32	U1234	LMEMTEPU0ADDRESS Starting Address

Offset	S	L	Type	ITOS name, attribute(s), and description
0x014	0	16	U12	LMEMTEPU0WORDCNT Word Count
0x016	0	16	U12	LMEMTEPU0CMDFUNC Dump Type
0x018	0	32	U1234	LMEMTEPU0DATA0 Dump Data Word
0x01C	0	32	U1234	LMEMTEPU0DATA1 Dump Data Word
0x020	0	32	U1234	LMEMTEPU0DATA2 Dump Data Word
0x024	0	32	U1234	LMEMTEPU0DATA3 Dump Data Word
0x028	0	32	U1234	LMEMTEPU0DATA4 Dump Data Word
0x02C	0	32	U1234	LMEMTEPU0DATA5 Dump Data Word
0x030	0	32	U1234	LMEMTEPU0DATA6 Dump Data Word
0x034	0	32	U1234	LMEMTEPU0DATA7 Dump Data Word
0x038	0	32	U1234	LMEMTEPU0DATA8 Dump Data Word
0x03C	0	32	U1234	LMEMTEPU0DATA9 Dump Data Word
0x040	0	32	U1234	LMEMTEPU0DATA10 Dump Data Word
0x044	0	32	U1234	LMEMTEPU0DATA11 Dump Data Word
0x048	0	32	U1234	LMEMTEPU0DATA12 Dump Data Word
0x04C	0	32	U1234	LMEMTEPU0DATA13 Dump Data Word
0x050	0	32	U1234	LMEMTEPU0DATA14 Dump Data Word
0x054	0	32	U1234	LMEMTEPU0DATA15 Dump Data Word
0x058	0	32	U1234	LMEMTEPU0DATA16 Dump Data Word
0x05C	0	32	U1234	LMEMTEPU0DATA17 Dump Data Word
0x060	0	32	U1234	LMEMTEPU0DATA18 Dump Data Word
0x064	0	32	U1234	LMEMTEPU0DATA19 Dump Data Word
0x068	0	32	U1234	LMEMTEPU0DATA20 Dump Data Word
0x06C	0	32	U1234	LMEMTEPU0DATA21 Dump Data Word
0x070	0	32	U1234	LMEMTEPU0DATA22 Dump Data Word
0x074	0	32	U1234	LMEMTEPU0DATA23 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x078	0	32	U1234	LMEMTEPU0DATA24 Dump Data Word
0x07C	0	32	U1234	LMEMTEPU0DATA25 Dump Data Word
0x080	0	32	U1234	LMEMTEPU0DATA26 Dump Data Word
0x084	0	32	U1234	LMEMTEPU0DATA27 Dump Data Word
0x088	0	32	U1234	LMEMTEPU0DATA28 Dump Data Word
0x08C	0	32	U1234	LMEMTEPU0DATA29 Dump Data Word
0x090	0	32	U1234	LMEMTEPU0DATA30 Dump Data Word
0x094	0	32	U1234	LMEMTEPU0DATA31 Dump Data Word
0x098	0	32	U1234	LMEMTEPU0DATA32 Dump Data Word
0x09C	0	32	U1234	LMEMTEPU0DATA33 Dump Data Word
0x0A0	0	32	U1234	LMEMTEPU0DATA34 Dump Data Word
0x0A4	0	32	U1234	LMEMTEPU0DATA35 Dump Data Word
0x0A8	0	32	U1234	LMEMTEPU0DATA36 Dump Data Word
0x0AC	0	32	U1234	LMEMTEPU0DATA37 Dump Data Word
0x0B0	0	32	U1234	LMEMTEPU0DATA38 Dump Data Word
0x0B4	0	32	U1234	LMEMTEPU0DATA39 Dump Data Word
0x0B8	0	32	U1234	LMEMTEPU0DATA40 Dump Data Word
0x0BC	0	32	U1234	LMEMTEPU0DATA41 Dump Data Word
0x0C0	0	32	U1234	LMEMTEPU0DATA42 Dump Data Word
0x0C4	0	32	U1234	LMEMTEPU0DATA43 Dump Data Word
0x0C8	0	32	U1234	LMEMTEPU0DATA44 Dump Data Word
0x0CC	0	32	U1234	LMEMTEPU0DATA45 Dump Data Word
0x0D0	0	32	U1234	LMEMTEPU0DATA46 Dump Data Word
0x0D4	0	32	U1234	LMEMTEPU0DATA47 Dump Data Word
0x0D8	0	32	U1234	LMEMTEPU0DATA48 Dump Data Word
0x0DC	0	32	U1234	LMEMTEPU0DATA49 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0E0	0	32	U1234	LMEMTEPU0DATA50 Dump Data Word
0x0E4	0	32	U1234	LMEMTEPU0DATA51 Dump Data Word
0x0E8	0	32	U1234	LMEMTEPU0DATA52 Dump Data Word
0x0EC	0	32	U1234	LMEMTEPU0DATA53 Dump Data Word
0x0F0	0	32	U1234	LMEMTEPU0DATA54 Dump Data Word
0x0F4	0	32	U1234	LMEMTEPU0DATA55 Dump Data Word
0x0F8	0	32	U1234	LMEMTEPU0DATA56 Dump Data Word
0x0FC	0	32	U1234	LMEMTEPU0DATA57 Dump Data Word
0x100	0	32	U1234	LMEMTEPU0DATA58 Dump Data Word
0x104	0	32	U1234	LMEMTEPU0DATA59 Dump Data Word
0x108	0	32	U1234	LMEMTEPU0DATA60 Dump Data Word
0x10C	0	32	U1234	LMEMTEPU0DATA61 Dump Data Word
0x110	0	32	U1234	LMEMTEPU0DATA62 Dump Data Word
0x114	0	32	U1234	LMEMTEPU0DATA63 Dump Data Word
0x118	0	32	U1234	LMEMTEPU0DATA64 Dump Data Word
0x11C	0	32	U1234	LMEMTEPU0DATA65 Dump Data Word
0x120	0	32	U1234	LMEMTEPU0DATA66 Dump Data Word
0x124	0	32	U1234	LMEMTEPU0DATA67 Dump Data Word
0x128	0	32	U1234	LMEMTEPU0DATA68 Dump Data Word
0x12C	0	32	U1234	LMEMTEPU0DATA69 Dump Data Word
0x130	0	32	U1234	LMEMTEPU0DATA70 Dump Data Word
0x134	0	32	U1234	LMEMTEPU0DATA71 Dump Data Word
0x138	0	32	U1234	LMEMTEPU0DATA72 Dump Data Word
0x13C	0	32	U1234	LMEMTEPU0DATA73 Dump Data Word
0x140	0	32	U1234	LMEMTEPU0DATA74 Dump Data Word
0x144	0	32	U1234	LMEMTEPU0DATA75 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x148	0	32	U1234	LMEMTEPU0DATA76 Dump Data Word
0x14C	0	32	U1234	LMEMTEPU0DATA77 Dump Data Word
0x150	0	32	U1234	LMEMTEPU0DATA78 Dump Data Word
0x154	0	32	U1234	LMEMTEPU0DATA79 Dump Data Word
0x158	0	32	U1234	LMEMTEPU0DATA80 Dump Data Word
0x15C	0	32	U1234	LMEMTEPU0DATA81 Dump Data Word
0x160	0	32	U1234	LMEMTEPU0DATA82 Dump Data Word
0x164	0	32	U1234	LMEMTEPU0DATA83 Dump Data Word
0x168	0	32	U1234	LMEMTEPU0DATA84 Dump Data Word
0x16C	0	32	U1234	LMEMTEPU0DATA85 Dump Data Word
0x170	0	32	U1234	LMEMTEPU0DATA86 Dump Data Word
0x174	0	32	U1234	LMEMTEPU0DATA87 Dump Data Word
0x178	0	32	U1234	LMEMTEPU0DATA88 Dump Data Word
0x17C	0	32	U1234	LMEMTEPU0DATA89 Dump Data Word

23.2.4 LMEMEPU1DATA (790/0x316)

Description:

"EPU 1 Memory Dump Data" Telemetry Packet

Memory dump data from EPU 1.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTEPU1LATUNIT Source LAT Unit
	4	12	U12	LMEMTEPU1TRANID Transaction ID
0x010	0	32	U1234	LMEMTEPU1ADDRESS Starting Address
0x014	0	16	U12	LMEMTEPU1WORDCNT Word Count
0x016	0	16	U12	LMEMTEPU1CMDFUNC Dump Type
0x018	0	32	U1234	LMEMTEPU1DATA0 Dump Data Word
0x01C	0	32	U1234	LMEMTEPU1DATA1

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x020	0	32	U1234	LMEMTEPU1DATA2 Dump Data Word
0x024	0	32	U1234	LMEMTEPU1DATA3 Dump Data Word
0x028	0	32	U1234	LMEMTEPU1DATA4 Dump Data Word
0x02C	0	32	U1234	LMEMTEPU1DATA5 Dump Data Word
0x030	0	32	U1234	LMEMTEPU1DATA6 Dump Data Word
0x034	0	32	U1234	LMEMTEPU1DATA7 Dump Data Word
0x038	0	32	U1234	LMEMTEPU1DATA8 Dump Data Word
0x03C	0	32	U1234	LMEMTEPU1DATA9 Dump Data Word
0x040	0	32	U1234	LMEMTEPU1DATA10 Dump Data Word
0x044	0	32	U1234	LMEMTEPU1DATA11 Dump Data Word
0x048	0	32	U1234	LMEMTEPU1DATA12 Dump Data Word
0x04C	0	32	U1234	LMEMTEPU1DATA13 Dump Data Word
0x050	0	32	U1234	LMEMTEPU1DATA14 Dump Data Word
0x054	0	32	U1234	LMEMTEPU1DATA15 Dump Data Word
0x058	0	32	U1234	LMEMTEPU1DATA16 Dump Data Word
0x05C	0	32	U1234	LMEMTEPU1DATA17 Dump Data Word
0x060	0	32	U1234	LMEMTEPU1DATA18 Dump Data Word
0x064	0	32	U1234	LMEMTEPU1DATA19 Dump Data Word
0x068	0	32	U1234	LMEMTEPU1DATA20 Dump Data Word
0x06C	0	32	U1234	LMEMTEPU1DATA21 Dump Data Word
0x070	0	32	U1234	LMEMTEPU1DATA22 Dump Data Word
0x074	0	32	U1234	LMEMTEPU1DATA23 Dump Data Word
0x078	0	32	U1234	LMEMTEPU1DATA24 Dump Data Word
0x07C	0	32	U1234	LMEMTEPU1DATA25 Dump Data Word
0x080	0	32	U1234	LMEMTEPU1DATA26 Dump Data Word
0x084	0	32	U1234	LMEMTEPU1DATA27

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x088	0	32	U1234	LMEMTEPU1DATA28
				Dump Data Word
0x08C	0	32	U1234	LMEMTEPU1DATA29
				Dump Data Word
0x090	0	32	U1234	LMEMTEPU1DATA30
				Dump Data Word
0x094	0	32	U1234	LMEMTEPU1DATA31
				Dump Data Word
0x098	0	32	U1234	LMEMTEPU1DATA32
				Dump Data Word
0x09C	0	32	U1234	LMEMTEPU1DATA33
				Dump Data Word
0x0A0	0	32	U1234	LMEMTEPU1DATA34
				Dump Data Word
0x0A4	0	32	U1234	LMEMTEPU1DATA35
				Dump Data Word
0x0A8	0	32	U1234	LMEMTEPU1DATA36
				Dump Data Word
0x0AC	0	32	U1234	LMEMTEPU1DATA37
				Dump Data Word
0x0B0	0	32	U1234	LMEMTEPU1DATA38
				Dump Data Word
0x0B4	0	32	U1234	LMEMTEPU1DATA39
				Dump Data Word
0x0B8	0	32	U1234	LMEMTEPU1DATA40
				Dump Data Word
0x0BC	0	32	U1234	LMEMTEPU1DATA41
				Dump Data Word
0x0C0	0	32	U1234	LMEMTEPU1DATA42
				Dump Data Word
0x0C4	0	32	U1234	LMEMTEPU1DATA43
				Dump Data Word
0x0C8	0	32	U1234	LMEMTEPU1DATA44
				Dump Data Word
0x0CC	0	32	U1234	LMEMTEPU1DATA45
				Dump Data Word
0x0D0	0	32	U1234	LMEMTEPU1DATA46
				Dump Data Word
0x0D4	0	32	U1234	LMEMTEPU1DATA47
				Dump Data Word
0x0D8	0	32	U1234	LMEMTEPU1DATA48
				Dump Data Word
0x0DC	0	32	U1234	LMEMTEPU1DATA49
				Dump Data Word
0x0E0	0	32	U1234	LMEMTEPU1DATA50
				Dump Data Word
0x0E4	0	32	U1234	LMEMTEPU1DATA51
				Dump Data Word
0x0E8	0	32	U1234	LMEMTEPU1DATA52
				Dump Data Word
0x0EC	0	32	U1234	LMEMTEPU1DATA53

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x0F0	0	32	U1234	LMEMTEPU1DATA54
				Dump Data Word
0x0F4	0	32	U1234	LMEMTEPU1DATA55
				Dump Data Word
0x0F8	0	32	U1234	LMEMTEPU1DATA56
				Dump Data Word
0x0FC	0	32	U1234	LMEMTEPU1DATA57
				Dump Data Word
0x100	0	32	U1234	LMEMTEPU1DATA58
				Dump Data Word
0x104	0	32	U1234	LMEMTEPU1DATA59
				Dump Data Word
0x108	0	32	U1234	LMEMTEPU1DATA60
				Dump Data Word
0x10C	0	32	U1234	LMEMTEPU1DATA61
				Dump Data Word
0x110	0	32	U1234	LMEMTEPU1DATA62
				Dump Data Word
0x114	0	32	U1234	LMEMTEPU1DATA63
				Dump Data Word
0x118	0	32	U1234	LMEMTEPU1DATA64
				Dump Data Word
0x11C	0	32	U1234	LMEMTEPU1DATA65
				Dump Data Word
0x120	0	32	U1234	LMEMTEPU1DATA66
				Dump Data Word
0x124	0	32	U1234	LMEMTEPU1DATA67
				Dump Data Word
0x128	0	32	U1234	LMEMTEPU1DATA68
				Dump Data Word
0x12C	0	32	U1234	LMEMTEPU1DATA69
				Dump Data Word
0x130	0	32	U1234	LMEMTEPU1DATA70
				Dump Data Word
0x134	0	32	U1234	LMEMTEPU1DATA71
				Dump Data Word
0x138	0	32	U1234	LMEMTEPU1DATA72
				Dump Data Word
0x13C	0	32	U1234	LMEMTEPU1DATA73
				Dump Data Word
0x140	0	32	U1234	LMEMTEPU1DATA74
				Dump Data Word
0x144	0	32	U1234	LMEMTEPU1DATA75
				Dump Data Word
0x148	0	32	U1234	LMEMTEPU1DATA76
				Dump Data Word
0x14C	0	32	U1234	LMEMTEPU1DATA77
				Dump Data Word
0x150	0	32	U1234	LMEMTEPU1DATA78
				Dump Data Word
0x154	0	32	U1234	LMEMTEPU1DATA79

Offset	S	L	Type	ITOS name, attribute(s), and description
				Dump Data Word
0x158	0	32	U1234	LMEMTEPU1DATA80 Dump Data Word
0x15C	0	32	U1234	LMEMTEPU1DATA81 Dump Data Word
0x160	0	32	U1234	LMEMTEPU1DATA82 Dump Data Word
0x164	0	32	U1234	LMEMTEPU1DATA83 Dump Data Word
0x168	0	32	U1234	LMEMTEPU1DATA84 Dump Data Word
0x16C	0	32	U1234	LMEMTEPU1DATA85 Dump Data Word
0x170	0	32	U1234	LMEMTEPU1DATA86 Dump Data Word
0x174	0	32	U1234	LMEMTEPU1DATA87 Dump Data Word
0x178	0	32	U1234	LMEMTEPU1DATA88 Dump Data Word
0x17C	0	32	U1234	LMEMTEPU1DATA89 Dump Data Word

23.2.5 LMEMEPU2DATA (791/0x317)

Description:

"EPU 2 Memory Dump Data" Telemetry Packet

Memory dump data from EPU 2.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	4	U12	LMEMTEPU2LATUNIT Source LAT Unit
	4	12	U12	LMEMTEPU2TRANID Transaction ID
0x010	0	32	U1234	LMEMTEPU2ADDRESS Starting Address
0x014	0	16	U12	LMEMTEPU2WORDCNT Word Count
0x016	0	16	U12	LMEMTEPU2CMDFUNC Dump Type
0x018	0	32	U1234	LMEMTEPU2DATA0 Dump Data Word
0x01C	0	32	U1234	LMEMTEPU2DATA1 Dump Data Word
0x020	0	32	U1234	LMEMTEPU2DATA2 Dump Data Word
0x024	0	32	U1234	LMEMTEPU2DATA3 Dump Data Word
0x028	0	32	U1234	LMEMTEPU2DATA4 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x02C	0	32	U1234	LMEMTEPU2DATA5 Dump Data Word
0x030	0	32	U1234	LMEMTEPU2DATA6 Dump Data Word
0x034	0	32	U1234	LMEMTEPU2DATA7 Dump Data Word
0x038	0	32	U1234	LMEMTEPU2DATA8 Dump Data Word
0x03C	0	32	U1234	LMEMTEPU2DATA9 Dump Data Word
0x040	0	32	U1234	LMEMTEPU2DATA10 Dump Data Word
0x044	0	32	U1234	LMEMTEPU2DATA11 Dump Data Word
0x048	0	32	U1234	LMEMTEPU2DATA12 Dump Data Word
0x04C	0	32	U1234	LMEMTEPU2DATA13 Dump Data Word
0x050	0	32	U1234	LMEMTEPU2DATA14 Dump Data Word
0x054	0	32	U1234	LMEMTEPU2DATA15 Dump Data Word
0x058	0	32	U1234	LMEMTEPU2DATA16 Dump Data Word
0x05C	0	32	U1234	LMEMTEPU2DATA17 Dump Data Word
0x060	0	32	U1234	LMEMTEPU2DATA18 Dump Data Word
0x064	0	32	U1234	LMEMTEPU2DATA19 Dump Data Word
0x068	0	32	U1234	LMEMTEPU2DATA20 Dump Data Word
0x06C	0	32	U1234	LMEMTEPU2DATA21 Dump Data Word
0x070	0	32	U1234	LMEMTEPU2DATA22 Dump Data Word
0x074	0	32	U1234	LMEMTEPU2DATA23 Dump Data Word
0x078	0	32	U1234	LMEMTEPU2DATA24 Dump Data Word
0x07C	0	32	U1234	LMEMTEPU2DATA25 Dump Data Word
0x080	0	32	U1234	LMEMTEPU2DATA26 Dump Data Word
0x084	0	32	U1234	LMEMTEPU2DATA27 Dump Data Word
0x088	0	32	U1234	LMEMTEPU2DATA28 Dump Data Word
0x08C	0	32	U1234	LMEMTEPU2DATA29 Dump Data Word
0x090	0	32	U1234	LMEMTEPU2DATA30 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x094	0	32	U1234	LMEMTEPU2DATA31 Dump Data Word
0x098	0	32	U1234	LMEMTEPU2DATA32 Dump Data Word
0x09C	0	32	U1234	LMEMTEPU2DATA33 Dump Data Word
0x0A0	0	32	U1234	LMEMTEPU2DATA34 Dump Data Word
0x0A4	0	32	U1234	LMEMTEPU2DATA35 Dump Data Word
0x0A8	0	32	U1234	LMEMTEPU2DATA36 Dump Data Word
0x0AC	0	32	U1234	LMEMTEPU2DATA37 Dump Data Word
0x0B0	0	32	U1234	LMEMTEPU2DATA38 Dump Data Word
0x0B4	0	32	U1234	LMEMTEPU2DATA39 Dump Data Word
0x0B8	0	32	U1234	LMEMTEPU2DATA40 Dump Data Word
0x0BC	0	32	U1234	LMEMTEPU2DATA41 Dump Data Word
0x0C0	0	32	U1234	LMEMTEPU2DATA42 Dump Data Word
0x0C4	0	32	U1234	LMEMTEPU2DATA43 Dump Data Word
0x0C8	0	32	U1234	LMEMTEPU2DATA44 Dump Data Word
0x0CC	0	32	U1234	LMEMTEPU2DATA45 Dump Data Word
0x0D0	0	32	U1234	LMEMTEPU2DATA46 Dump Data Word
0x0D4	0	32	U1234	LMEMTEPU2DATA47 Dump Data Word
0x0D8	0	32	U1234	LMEMTEPU2DATA48 Dump Data Word
0x0DC	0	32	U1234	LMEMTEPU2DATA49 Dump Data Word
0x0E0	0	32	U1234	LMEMTEPU2DATA50 Dump Data Word
0x0E4	0	32	U1234	LMEMTEPU2DATA51 Dump Data Word
0x0E8	0	32	U1234	LMEMTEPU2DATA52 Dump Data Word
0x0EC	0	32	U1234	LMEMTEPU2DATA53 Dump Data Word
0x0F0	0	32	U1234	LMEMTEPU2DATA54 Dump Data Word
0x0F4	0	32	U1234	LMEMTEPU2DATA55 Dump Data Word
0x0F8	0	32	U1234	LMEMTEPU2DATA56 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x0FC	0	32	U1234	LMEMTEPU2DATA57 Dump Data Word
0x100	0	32	U1234	LMEMTEPU2DATA58 Dump Data Word
0x104	0	32	U1234	LMEMTEPU2DATA59 Dump Data Word
0x108	0	32	U1234	LMEMTEPU2DATA60 Dump Data Word
0x10C	0	32	U1234	LMEMTEPU2DATA61 Dump Data Word
0x110	0	32	U1234	LMEMTEPU2DATA62 Dump Data Word
0x114	0	32	U1234	LMEMTEPU2DATA63 Dump Data Word
0x118	0	32	U1234	LMEMTEPU2DATA64 Dump Data Word
0x11C	0	32	U1234	LMEMTEPU2DATA65 Dump Data Word
0x120	0	32	U1234	LMEMTEPU2DATA66 Dump Data Word
0x124	0	32	U1234	LMEMTEPU2DATA67 Dump Data Word
0x128	0	32	U1234	LMEMTEPU2DATA68 Dump Data Word
0x12C	0	32	U1234	LMEMTEPU2DATA69 Dump Data Word
0x130	0	32	U1234	LMEMTEPU2DATA70 Dump Data Word
0x134	0	32	U1234	LMEMTEPU2DATA71 Dump Data Word
0x138	0	32	U1234	LMEMTEPU2DATA72 Dump Data Word
0x13C	0	32	U1234	LMEMTEPU2DATA73 Dump Data Word
0x140	0	32	U1234	LMEMTEPU2DATA74 Dump Data Word
0x144	0	32	U1234	LMEMTEPU2DATA75 Dump Data Word
0x148	0	32	U1234	LMEMTEPU2DATA76 Dump Data Word
0x14C	0	32	U1234	LMEMTEPU2DATA77 Dump Data Word
0x150	0	32	U1234	LMEMTEPU2DATA78 Dump Data Word
0x154	0	32	U1234	LMEMTEPU2DATA79 Dump Data Word
0x158	0	32	U1234	LMEMTEPU2DATA80 Dump Data Word
0x15C	0	32	U1234	LMEMTEPU2DATA81 Dump Data Word
0x160	0	32	U1234	LMEMTEPU2DATA82 Dump Data Word

Offset	S	L	Type	ITOS name, attribute(s), and description
0x164	0	32	U1234	LMEMTEPU2DATA83 Dump Data Word
0x168	0	32	U1234	LMEMTEPU2DATA84 Dump Data Word
0x16C	0	32	U1234	LMEMTEPU2DATA85 Dump Data Word
0x170	0	32	U1234	LMEMTEPU2DATA86 Dump Data Word
0x174	0	32	U1234	LMEMTEPU2DATA87 Dump Data Word
0x178	0	32	U1234	LMEMTEPU2DATA88 Dump Data Word
0x17C	0	32	U1234	LMEMTEPU2DATA89 Dump Data Word

23.2.6 LMEMSSRSDATA (980/0x3D4)

Description:

"SIU Memory Dump Data to SSR" Telemetry Packet

Memory dump data from the SIU to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMEMTSSRSHDR SSR Packet Header

23.2.7 LMEMSSR0DATA (981/0x3D5)

Description:

"EPU 0 Memory Dump Data to SSR" Telemetry Packet

Memory dump data from EPU 0 to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMEMTSSR0HDR SSR Packet Header

23.2.8 LMEMSSR1DATA (982/0x3D6)

Description:

"EPU 1 Memory Dump Data to SSR" Telemetry Packet

Memory dump data from EPU 1 to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMEMTSSR1HDR SSR Packet Header

23.2.9 **LMEMSSR2DATA** (983/0x3D7)

Description:

"EPU 2 Memory Dump Data to SSR" Telemetry Packet

Memory dump data from EPU 2 to the SSR.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LMEMTSSR2HDR SSR Packet Header

24 PBC Package

24.0 Overview

The PBC package contains routines that are specific to the Primary Boot Code.

The package supports the following functions:

- RAD750 boot and crate initialization

24.1 Command Packets

24.1.0 `LPBCSTART` (1600/0x640:0)

Description:

"Boot code no-op" Telecommand Packet

No-op command for the PBC.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LPBCLATUNIT Target LAT Unit
	4	12	U12	LPBCPAD 12-bit padding

24.1.1 `LPBCRESET` (1600/0x640:1)

Description:

"Warm reboot" Telecommand Packet

Initiate a warm reboot of the unit.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LPBCLATUNIT Target LAT Unit
	4	12	U12	LPBCPAD1 12-bit padding
0x00A	0	16	U12	LPBCPAD2 16-bit Padding
0x00C	0	16	U12	LPBCPRIFLAGSHI Upper 16 Bits of Boot Flags
	16	16	U12	LPBCPRIFLAGSLO Lower 16 Bits of Boot Flags

24.1.2 `LPBCERRDUMP` (1600/0x640:2)

Description:

"Error code pop" Telecommand Packet

Pop the next error code from the PBC error queue.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LPBCLATUNIT Target LAT Unit
	4	12	U12	LPBCPAD 12-bit padding

24.1.3 `LPBCRTOSEXEC` (1600/0x640:3)

Description:

"Boot RTOS" Telecommand Packet

Start the RTOS.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LPBCLATUNIT Target LAT Unit
	4	12	U12	LPBCPAD1 12-bit padding
0x00A	0	16	U12	LPBCPAD2 16-bit Padding
0x00C	0	16	U12	LPBCSBCFLAGSHI Upper 16 Bits of Boot Flags
	16	16	U12	LPBCSBCFLAGSLO Lower 16 Bits of Boot Flags

24.1.4 `LPBCBADCMD` (1600/0x640:4)

Description:

"Invalid boot command" Telecommand Packet

Boot command with an invalid function code. This is used for testing the PBC.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x008	0	4	U12	LPBCLATUNIT Target LAT Unit
	4	12	U12	LPBCPAD 12-bit padding

24.2 Telemetry Packets

24.2.0 LBTHKP (512/0x200)

Description:

"Boot housekeeping telemetry" Telemetry Packet

Boot housekeeping telemetry.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPBCBOOTSTAT Current PBC operating mode
0x010	0	16	U12	LPBCTOTALERRCNT Number of errors encountered
0x012	0	16	U12	LPBCQUEUEERRCNT Number of queued errors
0x014	0	32	U1234	LPBCNEXTERRWORD Error code
0x018	0	16	U12	LPBCTCRECVCNT Received packet count
0x01A	0	16	U12	LPBCTCACCCNT Accepted packet count
0x01C	0	32	U1234	LPBCLASTERRWORD Most recent boot error code
0x020	0	5	U12	LPBCLASTFUNC Last Function Code
	5	11	U12	LPBCLASTAPID Last APID
0x022	0	16	U12	LPBCTCSCCNT Received spacecraft packet count
0x024	0	16	U12	LPBCTCUNSPCNT Received unsupported packet count
0x026	0	16	U12	LPBCFILESTAT File upload state
0x028	0	16	U12	LPBCFILEPKTCNT File upload packet count
0x02A	0	16	U12	LPBCSCRUBADDRHI Hi 16 bits of software scrub address
0x02C	0	16	U12	LPBCBOOTTYPE Boot type
0x02E	0	16	U12	LPBCMEMDUMPWC Memory dump word count
0x030	0	32	U1234	LPBCMEMDUMPADDR Memory dump address
0x034	0	32	U1234	LPBCMEMDUMPDAT00 Memory dump data
0x038	0	32	U1234	LPBCMEMDUMPDAT01 Memory dump data
0x03C	0	32	U1234	LPBCMEMDUMPDAT02 Memory dump data
0x040	0	32	U1234	LPBCMEMDUMPDAT03

Offset	S	L	Type	ITOS name, attribute(s), and description
				Memory dump data
0x044	0	32	U1234	LPBCMEMDUMPDAT04 Memory dump data
0x048	0	32	U1234	LPBCMEMDUMPDAT05 Memory dump data
0x04C	0	32	U1234	LPBCMEMDUMPDAT06 Memory dump data
0x050	0	32	U1234	LPBCMEMDUMPDAT07 Memory dump data
0x054	0	32	U1234	LPBCMEMDUMPDAT08 Memory dump data
0x058	0	32	U1234	LPBCMEMDUMPDAT09 Memory dump data
0x05C	0	32	U1234	LPBCMEMDUMPDAT10 Memory dump data
0x060	0	32	U1234	LPBCMEMDUMPDAT11 Memory dump data
0x064	0	32	U1234	LPBCMEMDUMPDAT12 Memory dump data
0x068	0	32	U1234	LPBCMEMDUMPDAT13 Memory dump data
0x06C	0	32	U1234	LPBCMEMDUMPDAT14 Memory dump data
0x070	0	32	U1234	LPBCMEMDUMPDAT15 Memory dump data

24.2.1 LBTEPU0HKP (609/0x261)

Description:

"EPU 0 Boot Housekeeping Telemetry" Telemetry Packet

Boot housekeeping telemetry from EPU 0.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPBC0BOOTSTAT Current PBC operating mode
0x010	0	16	U12	LPBC0TOTALERRCNT Number of errors encountered
0x012	0	16	U12	LPBC0QUEUEERRCNT Number of queued errors
0x014	0	32	U1234	LPBC0NEXTERRWORD Error code
0x018	0	16	U12	LPBC0TCRECVCNT Received packet count
0x01A	0	16	U12	LPBC0TCACCCNT Accepted packet count
0x01C	0	32	U1234	LPBC0LASTERRWORD Most recent boot error code
0x020	0	5	U12	LPBC0LASTFUNC Last Function Code

Offset	S	L	Type	ITOS name, attribute(s), and description
	5	11	U12	LPBC0LASTAPID Last APID
0x022	0	16	U12	LPBC0TCSCCNT Received spacecraft packet count
0x024	0	16	U12	LPBC0TCUNSPCNT Received unsupported packet count
0x026	0	16	U12	LPBC0FILESTAT File upload state
0x028	0	16	U12	LPBC0FILEPKTCNT File upload packet count
0x02A	0	16	U12	LPBC0SCRUBADDRHI Hi 16 bits of software scrub address
0x02C	0	16	U12	LPBC0BOOTTYPE Boot type
0x02E	0	16	U12	LPBC0DUMPWC Memory dump word count
0x030	0	32	U1234	LPBC0DUMPADDR Memory dump address
0x034	0	32	U1234	LPBC0DUMPDATA00 Memory dump data
0x038	0	32	U1234	LPBC0DUMPDATA01 Memory dump data
0x03C	0	32	U1234	LPBC0DUMPDATA02 Memory dump data
0x040	0	32	U1234	LPBC0DUMPDATA03 Memory dump data
0x044	0	32	U1234	LPBC0DUMPDATA04 Memory dump data
0x048	0	32	U1234	LPBC0DUMPDATA05 Memory dump data
0x04C	0	32	U1234	LPBC0DUMPDATA06 Memory dump data
0x050	0	32	U1234	LPBC0DUMPDATA07 Memory dump data
0x054	0	32	U1234	LPBC0DUMPDATA08 Memory dump data
0x058	0	32	U1234	LPBC0DUMPDATA09 Memory dump data
0x05C	0	32	U1234	LPBC0DUMPDATA10 Memory dump data
0x060	0	32	U1234	LPBC0DUMPDATA11 Memory dump data
0x064	0	32	U1234	LPBC0DUMPDATA12 Memory dump data
0x068	0	32	U1234	LPBC0DUMPDATA13 Memory dump data
0x06C	0	32	U1234	LPBC0DUMPDATA14 Memory dump data
0x070	0	32	U1234	LPBC0DUMPDATA15 Memory dump data

24.2.2 **LBTEPU1HKP** (610/0x262)

Description:

"EPU 1 Boot Housekeeping Telemetry" Telemetry Packet

Boot housekeeping telemetry from EPU 1.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPBC1BOOTSTAT Current PBC operating mode
0x010	0	16	U12	LPBC1TOTALERRCNT Number of errors encountered
0x012	0	16	U12	LPBC1QUEUEERRCNT Number of queued errors
0x014	0	32	U1234	LPBC1NEXTERRWORD Error code
0x018	0	16	U12	LPBC1TCRECVCNT Received packet count
0x01A	0	16	U12	LPBC1TCACCCNT Accepted packet count
0x01C	0	32	U1234	LPBC1LASTERRWORD Most recent boot error code
0x020	0	5	U12	LPBC1LASTFUNC Last Function Code
	5	11	U12	LPBC1LASTAPID Last APID
0x022	0	16	U12	LPBC1TCSCCNT Received spacecraft packet count
0x024	0	16	U12	LPBC1TCUNSPCNT Received unsupported packet count
0x026	0	16	U12	LPBC1FILESTAT File upload state
0x028	0	16	U12	LPBC1FILEPKTCNT File upload packet count
0x02A	0	16	U12	LPBC1SCRUBADDRHI Hi 16 bits of software scrub address
0x02C	0	16	U12	LPBC1BOOTTYPE Boot type
0x02E	0	16	U12	LPBC1DUMPWC Memory dump word count
0x030	0	32	U1234	LPBC1DUMPADDR Memory dump address
0x034	0	32	U1234	LPBC1DUMPDATA00 Memory dump data
0x038	0	32	U1234	LPBC1DUMPDATA01 Memory dump data
0x03C	0	32	U1234	LPBC1DUMPDATA02 Memory dump data
0x040	0	32	U1234	LPBC1DUMPDATA03 Memory dump data
0x044	0	32	U1234	LPBC1DUMPDATA04

Offset	S	L	Type	ITOS name, attribute(s), and description
				Memory dump data
0x048	0	32	U1234	LPBC1DUMPDATA05 Memory dump data
0x04C	0	32	U1234	LPBC1DUMPDATA06 Memory dump data
0x050	0	32	U1234	LPBC1DUMPDATA07 Memory dump data
0x054	0	32	U1234	LPBC1DUMPDATA08 Memory dump data
0x058	0	32	U1234	LPBC1DUMPDATA09 Memory dump data
0x05C	0	32	U1234	LPBC1DUMPDATA10 Memory dump data
0x060	0	32	U1234	LPBC1DUMPDATA11 Memory dump data
0x064	0	32	U1234	LPBC1DUMPDATA12 Memory dump data
0x068	0	32	U1234	LPBC1DUMPDATA13 Memory dump data
0x06C	0	32	U1234	LPBC1DUMPDATA14 Memory dump data
0x070	0	32	U1234	LPBC1DUMPDATA15 Memory dump data

24.2.3 LBTEPU2HKP (611/0x263)

Description:

"EPU 2 Boot Housekeeping Telemetry" Telemetry Packet

Boot housekeeping telemetry from EPU 2.

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LPBC2BOOTSTAT Current PBC operating mode
0x010	0	16	U12	LPBC2TOTALERRCNT Number of errors encountered
0x012	0	16	U12	LPBC2QUEUEERRCNT Number of queued errors
0x014	0	32	U1234	LPBC2NEXTERRWORD Error code
0x018	0	16	U12	LPBC2TCRECVCNT Received packet count
0x01A	0	16	U12	LPBC2TCACCCNT Accepted packet count
0x01C	0	32	U1234	LPBC2LASTERRWORD Most recent boot error code
0x020	0	5	U12	LPBC2LASTFUNC Last Function Code
	5	11	U12	LPBC2LASTAPID Last APID

Offset	S	L	Type	ITOS name, attribute(s), and description
0x022	0	16	U12	LPBC2TCSCCNT Received spacecraft packet count
0x024	0	16	U12	LPBC2TCUNSPCNT Received unsupported packet count
0x026	0	16	U12	LPBC2FILESTAT File upload state
0x028	0	16	U12	LPBC2FILEPKTCNT File upload packet count
0x02A	0	16	U12	LPBC2SCRUBADDRHI Hi 16 bits of software scrub address
0x02C	0	16	U12	LPBC2BOOTTYPE Boot type
0x02E	0	16	U12	LPBC2DUMPWC Memory dump word count
0x030	0	32	U1234	LPBC2DUMPADDR Memory dump address
0x034	0	32	U1234	LPBC2DUMPDATA00 Memory dump data
0x038	0	32	U1234	LPBC2DUMPDATA01 Memory dump data
0x03C	0	32	U1234	LPBC2DUMPDATA02 Memory dump data
0x040	0	32	U1234	LPBC2DUMPDATA03 Memory dump data
0x044	0	32	U1234	LPBC2DUMPDATA04 Memory dump data
0x048	0	32	U1234	LPBC2DUMPDATA05 Memory dump data
0x04C	0	32	U1234	LPBC2DUMPDATA06 Memory dump data
0x050	0	32	U1234	LPBC2DUMPDATA07 Memory dump data
0x054	0	32	U1234	LPBC2DUMPDATA08 Memory dump data
0x058	0	32	U1234	LPBC2DUMPDATA09 Memory dump data
0x05C	0	32	U1234	LPBC2DUMPDATA10 Memory dump data
0x060	0	32	U1234	LPBC2DUMPDATA11 Memory dump data
0x064	0	32	U1234	LPBC2DUMPDATA12 Memory dump data
0x068	0	32	U1234	LPBC2DUMPDATA13 Memory dump data
0x06C	0	32	U1234	LPBC2DUMPDATA14 Memory dump data
0x070	0	32	U1234	LPBC2DUMPDATA15 Memory dump data

25 PIG Package

25.0 Overview

The PIG package is a utility that powers on and initializes the GASU.

25.0.0 PIGDATA (1022/0x3FE)

Description:

"Returned PIG data" Telemetry Packet

Layout:

Offset	S	L	Type	ITOS name, attribute(s), and description
0x00E	0	16	U12	LTHDR Tertiary header

26 Telecommand Packet Index, by APID

APID	FC	Cmd. Packet (I)	Section	Descripti
0x640	0	LPBCSTART	PBC/cmd/LBTSTART/000_P.LBTSTART.shtml:%	Boot code
0x640	1	LPBCRESET	PBC/cmd/LBTRESET/000_P.LBTRESET.shtml:%	Warm reb
0x640	2	LPBCERRDUMP	PBC/cmd/LBTERRDUMP/000_P.LBTERRDUMP.shtml:%	Error cod
0x640	3	LPBCRTOSEXEC	PBC/cmd/LBTRTOSEXEC/000_P.LBTRTOSEXEC.shtml:%	Boot RTO
0x640	4	LPBCBADCMD	PBC/cmd/LBTBAD/000_P.LBTBAD.shtml:%	Invalid bo
0x641	0	LFILUPLSTART	FILE/cmd/UploadStart/000_P.UploadStart.sh	File Upl
0x641	1	LFILUPLCANCEL	FILE/cmd/UploadCancel/000_P.UploadCanc	File Uplo
0x641	2	LFILUPLCOMMIT	FILE/cmd/UploadCommit/000_P.UploadCo	File Upl
0x641	3	LFILUPLDATA	FILE/cmd/UploadData/000_P.UploadDa	File Upl
0x641	4	LFILUPLEPU	FILE/cmd/UploadEPU/000_P.UploadE	File Uplo
0x642	0	LDDTWRITEF[illegible]	DDT/cmd/write_file/000_P.write	Write fi
[illegible]	[illegible]	LMEMDUMPMEM	MEM/cmd/LMEMDUMPMEM/000_P.LME	Memory
[illegible]	[illegible]	LMEMDUMPCANCEL	MEM/cmd/LMEMDUMPCANCEL/000_P	Memory
[illegible]	[illegible]	LMEMDUMPPCI	MEM/cmd/LMEMDUMPPCI/000_P	PCI Devi
[illegible]	[illegible]	LMEMDUMPREG	MEM/cmd/LMEMDUMPREG/000_P	Processor
[illegible]	[illegible]	LMEMLOADMEM	MEM/cmd/LMEMLOADMEM/000	Memory
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

APID	FC	Cmd. Pkt(s)	Section	Description

27 Telecommand Packet Index, by Mnemonic (ITOS)

Cmd. Packet (I)	APID	FC	Section	Descripti
GFSWLATCLOSEOUT	0x6F1	3	LPA/cmd/BurstClose/000_P.BurstClose.shtml:%	LAT Burs
GFSWLATTRIGGER	0x6F1	1	LPA/cmd/BurstTrg/000_P.BurstTrg.shtml:%	LAT Burs
LCIABORT	0x67C	2	LCI/cmd/ABORT/000_P.ABORT.shtml:%	Abort a r
LCICALIBRATE	0x67C	1	LCI/cmd/CALIBRATE/000_P.CALIBRATE.shtml:%	Initiate th
LCINOOP	0x67D	0	LCI/cmd/NOOP/000_P.NOOP.shtml:%	No opera
LCMCMDRESPONSE	0x695	1	LCM/cmd/CmdResponse/000_P.CmdResponse.shtml:%	Change ta
LCMCPURESET	0x695	4	LCM/cmd/CpuReset/000_P.CpuReset.shtml:%	Reset a C
LCMERRORCFG	0x694	2	LCM/cmd/ErrorCfg/000_P.ErrorCfg.shtml:%	Configure
LCMIMAGEDUMP	0x695	8	LCM/cmd/ImageDump/000_P.ImageDump.shtml:%	Dump co
LCMMODDUMP	0x695	2	LCM/cmd/ModuleDump/000_P.ModuleDump.shtml:%	Generate
LCMMSGOUT	0x695	7	LCM/cmd/MsgOutCfg/000_P.MsgOutCfg.shtml:%	Configure
LCMMSGRESPONSE	0x695	0	LCM/cmd/MsgResponse/000_P.MsgResponse.shtml:%	Change ta
LCMNOOP	0x695	6	LCM/cmd/Noop/000_P.Noop.shtml:%	LCM no-
LCMSCRUBCFG	0x694	1	LCM/cmd/ScrubCfg/000_P.ScrubCfg.shtml:%	Configure
LCMSCRUBRUN	0x694	0	LCM/cmd/ScrubRun/000_P.ScrubRun.shtml:%	Run mem
LCMSTATS	0x695	5	LCM/cmd/Stats/000_P.Stats.shtml:%	Set up the
LCMTASKDUMP	0x695	3	LCM/cmd/TaskDump/000_P.TaskDump.shtml:%	Generate
LCMTURBORESET	0x696	0	LCM/cmd/TurboReset/000_P.TurboReset.shtml:%	Turbo res
LDDTWRITEFILE	0x642	0	DDT/cmd/write_file/000_P.write_file.shtml:%	Write a fi
LFILUPLCANCEL	0x641	1	FILE/cmd/UploadCancel/000_P.UploadCancel.shtml:%	File Uplo
LFILUPLCOMMIT	0x641	2	FILE/cmd/UploadCommit/000_P.UploadCommit.shtml:%	File Uplo
LFILUPLDATA	0x641	3	FILE/cmd/UploadData/000_P.UploadData.shtml:%	File Uplo
LFILUPLEPU	0x641	4	FILE/cmd/UploadEPU/000_P.UploadEPU.shtml:%	File Uplo
LFILUPLSTART	0x641	0	FILE/cmd/UploadStart/000_P.UploadStart.shtml:%	File Uplo
LFSDIRCREATE	0x648	2	LFS/cmd/DirCreate/000_P.DirCreate.shtml:%	Directory
LFSDIRDELETE	0x648	3	LFS/cmd/DirDelete/000_P.DirDelete.shtml:%	Directory
LFSDIRDUMP	0x648	5	LFS/cmd/DirDump/000_P.DirDump.shtml:%	Directory
LFSFILECOPY	0x648	1	LFS/cmd/FileCopy/000_P.FileCopy.shtml:%	File Copy
LFSFILEDELETE	0x648	0	LFS/cmd/FileDelete/000_P.FileDelete.shtml:%	File Dele
LFSFILEDUMPC	0x648	4	LFS/cmd/FileDumpCTDB/000_P.FileDumpCTDB.shtml:%	File Dum
LFSFILEDUMPS	0x648	8	LFS/cmd/FileDumpSSR/000_P.FileDumpSSR.shtml:%	File Dum
LFSNOOP	0x648	9	LFS/cmd/Noop/000_P.Noop.shtml:%	LFS No-C
LFSSYSCHECK	0x648	7	LFS/cmd/SysCheck/000_P.SysCheck.shtml:%	File Syste
LFSSYSFORMAT	0x649	0	LFS/cmd/SysFormat/000_P.SysFormat.shtml:%	File Syste
LFSSYSMOUNT	0x649	1	LFS/cmd/SysMount/000_P.SysMount.shtml:%	File Syste
LFSSYSREPAIR	0x649	2	LFS/cmd/SysRepair/000_P.SysRepair.shtml:%	File Syste
LFSSYSSTATUS	0x648	6	LFS/cmd/SysStatus/000_P.SysStatus.shtml:%	File Syste
LHKCANCELDIAG	0x650	4	LHK/cmd/CancelDiag/000_P.CancelDiag.shtml:%	Cancel a
LHKNEWSCHEDFILE	0x650	5	LHK/cmd/NewSchedFile/000_P.NewSchedFile.shtml:%	Request a
LHKNEWSCHEDINST	0x650	6	LHK/cmd/NewSchedInst/000_P.NewSchedInst.shtml:%	Request a number
LHKNOOP	0x650	3	LHK/cmd/Noop/000_P.Noop.shtml:%	LHK No-
LHKREQDIAGPKT	0x650	0	LHK/cmd/ReqDiagPacket/000_P.ReqDiagPacket.shtml:%	Request a
LHKSTOPDIAG	0x650	2	LHK/cmd/StopDiag/000_P.StopDiag.shtml:%	Stop Diag
LHKSYSRESET	0x650	1	LHK/cmd/SysReset/000_P.SysReset.shtml:%	System R
LIHDUMPLIMITS	0x654	9	LIH/cmd/DumpLimits/000_P.DumpLimits.shtml:%	Dump the
LIHDUMPLIMITSADC	0x654	8	LIH/cmd/DumpLimitsAdc/000_P.DumpLimitsAdc.shtml:%	Dump the
LIHENABACTION	0x654	2	LIH/cmd/EnableActions/000_P.EnableActions.shtml:%	Enable/di
LIHLOADLIMITS	0x654	1	LIH/cmd/LoadLimits/000_P.LoadLimits.shtml:%	Load AD
LIHNOOP	0x654	0	LIH/cmd/Noop/000_P.Noop.shtml:%	No opera
LIHSETACTIONSADC	0x654	4	LIH/cmd/SetActionsAdc/000_P.SetActionsAdc.shtml:%	Set action

Cmd. Packet (I)	APID	FC	Section	Descripti
LIHSETLIMITSADC	0x654	3	LIH/cmd/SetLimitsAdc/000_P.SetLimitsAdc.shtml:%	Set limits
LIHSETNAGADC	0x654	5	LIH/cmd/SetNagTimesAdc/000_P.SetNagTimesAdc.shtml:%	Set the na
LIHSETPERSISTADC	0x654	6	LIH/cmd/SetPersistAdc/000_P.SetPersistAdc.shtml:%	Set persis
LIHSETSETTLEADC	0x654	7	LIH/cmd/SetSettleAdc/000_P.SetSettleAdc.shtml:%	Set the m
LIMARRABORT	0x661	1	LIM/cmd/ARR_Abort/000_P.ARR_Abort.shtml:%	ARR Abo
LIMARRRESPONSE	0x661	0	LIM/cmd/ARR_Response/000_P.ARR_Response.shtml:%	ARR Res
LIMBIASACD	0x663	10	LIM/cmd/Bias_ACD/000_P.Bias_ACD.shtml:%	Set ACD
LIMBIASACDOFF	0x663	25	LIM/cmd/Bias_ACD_Off/000_P.Bias_ACD_Off.shtml:%	Turn Off
LIMBIASACDON	0x663	22	LIM/cmd/Bias_ACD_On/000_P.Bias_ACD_On.shtml:%	Turn On
LIMBIASCAL	0x663	11	LIM/cmd/Bias_CAL/000_P.Bias_CAL.shtml:%	Set CAL
LIMBIASCALOFF	0x663	26	LIM/cmd/Bias_CAL_Off/000_P.Bias_CAL_Off.shtml:%	Turn Off
LIMBIASCALON	0x663	23	LIM/cmd/Bias_CAL_On/000_P.Bias_CAL_On.shtml:%	Turn On
LIMBIASTKR	0x663	12	LIM/cmd/Bias_TKR/000_P.Bias_TKR.shtml:%	Set TKR
LIMBIASTKROFF	0x663	27	LIM/cmd/Bias_TKR_Off/000_P.Bias_TKR_Off.shtml:%	Turn Off
LIMBIASTKRON	0x663	24	LIM/cmd/Bias_TKR_On/000_P.Bias_TKR_On.shtml:%	Turn On
LIMCONFIGGBM	0x663	13	LIM/cmd/Config_GBM/000_P.Config_GBM.shtml:%	Configure
LIMCONFIGHV	0x663	14	LIM/cmd/Config_HV/000_P.Config_HV.shtml:%	Configure
LIMCONFIGPID	0x663	15	LIM/cmd/Config_PID/000_P.Config_PID.shtml:%	Configure
LIMHOLDENTER	0x663	2	LIM/cmd/Hold_Enter/000_P.Hold_Enter.shtml:%	Enter HO
LIMHOLDEXIT	0x663	3	LIM/cmd/Hold_Exit/000_P.Hold_Exit.shtml:%	Exit HOL
LIMLATCCONFIG	0x663	19	LIM/cmd/Latc_Config/000_P.Latc_Config.shtml:%	Call th LATC_ig
LIMLATCRECORD	0x663	17	LIM/cmd/Latc_Record/000_P.Latc_Record.shtml:%	Call the L
LIMLATCVERIFY	0x663	20	LIM/cmd/Latc_Verify/000_P.Latc_Verify.shtml:%	Call the sign func
LIMLOADSHED	0x662	1	LIM/cmd/Load_Shed/000_P.Load_Shed.shtml:%	Load She
LIMLOOKATME	0x664	0	LIM/cmd/Look_At_Me/000_P.Look_At_Me.shtml:%	Send The
LIMMAINFEEDON	0x663	4	LIM/cmd/Main_Feed_On/000_P.Main_Feed_On.shtml:%	Enable M
LIMNOOP	0x663	18	LIM/cmd/Noop/000_P.Noop.shtml:%	LIM No-
LIMPIGRECORD	0x663	16	LIM/cmd/Pig_Record/000_P.Pig_Record.shtml:%	Call the P
LIMPIGVERIFY	0x663	21	LIM/cmd/Pig_Verify/000_P.Pig_Verify.shtml:%	PIG Verif
LIMPOWEROFF	0x663	7	LIM/cmd/Power_Off/000_P.Power_Off.shtml:%	Disable I
LIMPOWERON	0x663	6	LIM/cmd/Power_On/000_P.Power_On.shtml:%	Enable In
LIMSAAENTER	0x663	8	LIM/cmd/SAA_Enter/000_P.SAA_Enter.shtml:%	Enter SA
LIMSAAEXIT	0x663	9	LIM/cmd/SAA_Exit/000_P.SAA_Exit.shtml:%	Exit SAA
LIMTOOABORT	0x663	1	LIM/cmd/TOO_Abort/000_P.TOO_Abort.shtml:%	TOO Abo
LIMTOOSTART	0x663	0	LIM/cmd/TOO_Start/000_P.TOO_Start.shtml:%	TOO Star
LMCACDTILEALL	0x69C	3	LMC/cmd/acd_tile_all/000_P.acd_tile_all.shtml:%	ACD Tile
LMCACDTILEPAIR	0x69C	2	LMC/cmd/acd_tile_pair/000_P.acd_tile_pair.shtml:%	ACD Tile
LMCCALLRS	0x69C	0	LMC/cmd/cal_lrs/000_P.cal_lrs.shtml:%	CAL Low
LMCNOOP	0x69C	6	LMC/cmd/noop/000_P.noop.shtml:%	No-op
LMCSTOPCOUNT	0x69C	4	LMC/cmd/stop_count/000_P.stop_count.shtml:%	Stop Acti
LMCTEMDEADTIME	0x69C	5	LMC/cmd/tem_deadtime/000_P.tem_deadtime.shtml:%	TEM Dea
LMCTKRLRS	0x69C	1	LMC/cmd/tkr_lrs/000_P.tkr_lrs.shtml:%	TKR Low
LMEMDUMPCANCEL	0x644	1	MEM/cmd/LMEMDUMPCANCEL/000_P.LMEMDUMPCANCEL.shtml:%	Memory
LMEMDUMPMEM	0x644	0	MEM/cmd/LMEMDUMPMEM/000_P.LMEMDUMPMEM.shtml:%	Memory
LMEMDUMPNEXT	0x644	100	MEM/cmd/LMEMDUMPNEXT/000_P.LMEMDUMPNEXT.shtml:%	Send Nex
LMEMDUMPPCI	0x644	2	MEM/cmd/LMEMDUMPPCI/000_P.LMEMDUMPPCI.shtml:%	PCI Devi
LMEMDUMPPOOL	0x644	7	MEM/cmd/LMEMDUMPPOOL/000_P.LMEMDUMPPOOL.shtml:%	Memory
LMEMDUMPREG	0x644	3	MEM/cmd/LMEMDUMPREG/000_P.LMEMDUMPREG.shtml:%	Processor
LMEMDUMPSYMREL	0x644	9	MEM/cmd/LMEMDUMPSYMREL/000_P.LMEMDUMPSYMREL.shtml:%	Memory
LMEMDUMPSYMVAL	0x644	8	MEM/cmd/LMEMDUMPSYMVAL/000_P.LMEMDUMPSYMVAL.shtml:%	Memory

Cmd. Packet (I)	APID	FC	Section	Descripti
LMEMLOADMEM	0x644	4	MEM/cmd/LMEMLOADMEM/000_P.LMEMLOADMEM.shtml:%	Memory
LMEMLOADPCI	0x644	5	MEM/cmd/LMEMLOADPCI/000_P.LMEMLOADPCI.shtml:%	PCI Devi
LMEMLOADREG	0x644	6	MEM/cmd/LMEMLOADREG/000_P.LMEMLOADREG.shtml:%	Processor
LMEMNOOP	0x644	10	MEM/cmd/LMEMNOOP/000_P.LMEMNOOP.shtml:%	No-Op
LPAASSOCIATE	0x675	0	LPA/cmd/Associate/000_P.Associate.shtml:%	Associate
LPACONFIGURE	0x674	0	LPA/cmd/Configure/000_P.Configure.shtml:%	Configure
LPAGBMCALCINFO	0x660	1	LPA/cmd/GbmCalc/000_P.GbmCalc.shtml:%	GBM Ca
LPAGBMCLOSEOUT	0x660	3	LPA/cmd/GbmClose/000_P.GbmClose.shtml:%	GBM Clo
LPAGBMCREPRECOM	0x660	2	LPA/cmd/GbmRpt/000_P.GbmRpt.shtml:%	GBM Re
LPANOOP	0x675	4	LPA/cmd/Noop/000_P.Noop.shtml:%	LPA No-
LPASETCOMPRESS	0x675	5	LPA/cmd/SetCompress/000_P.SetCompress.shtml:%	Sets the L
LPASETDEFAULT	0x675	6	LPA/cmd/SetDefault/000_P.SetDefault.shtml:%	Set Defau
LPASETGRB	0x675	3	LPA/cmd/SetGrb/000_P.SetGrb.shtml:%	Sets the G
LPASETOUTPUT	0x675	2	LPA/cmd/SetOutput/000_P.SetOutput.shtml:%	Sets the O
LPASTART	0x674	1	LPA/cmd/Start/000_P.Start.shtml:%	Starts a P
LPASTOP	0x674	3	LPA/cmd/Stop/000_P.Stop.shtml:%	Stops a P
LPBCBADCMD	0x640	4	PBC/cmd/LBTBAD/000_P.LBTBAD.shtml:%	Invalid bo
LPBCERRDUMP	0x640	2	PBC/cmd/LBTERRDUMP/000_P.LBTERRDUMP.shtml:%	Error cod
LPBCRESET	0x640	1	PBC/cmd/LBTRESET/000_P.LBTRESET.shtml:%	Warm reb
LPBCRTOSEXEC	0x640	3	PBC/cmd/LBTRTOSEXEC/000_P.LBTRTOSEXEC.shtml:%	Boot RTO
LPBCSTART	0x640	0	PBC/cmd/LBTSTART/000_P.LBTSTART.shtml:%	Boot code
LRACONTROL	0x680	3	LRA/cmd/CONTROL/000_P.CONTROL.shtml:%	Control o
LRAESRSEND	0x680	11	LRA/cmd/ESRSEND/000_P.ESRSEND.shtml:%	Send ESR
LRALAM	0x680	5	LRA/cmd/LAM/000_P.LAM.shtml:%	Look-at-r
LRALAMLCB	0x680	6	LRA/cmd/LAMLCB/000_P.LAMLCB.shtml:%	Look-at-r
LRALATRESET	0x680	4	LRA/cmd/LATRESET/000_P.LATRESET.shtml:%	Reset the
LRALOAD	0x680	2	LRA/cmd/LOAD/000_P.LOAD.shtml:%	Load regi
LRANOOP	0x680	0	LRA/cmd/NOOP/000_P.NOOP.shtml:%	No-op
LRAREAD	0x680	1	LRA/cmd/READ/000_P.READ.shtml:%	Read regi
LRASTATCLEAR	0x680	8	LRA/cmd/STATCLEAR/000_P.STATCLEAR.shtml:%	Clear stat
LRASTATPERIOD	0x680	7	LRA/cmd/STATPERIOD/000_P.STATPERIOD.shtml:%	Set the st
LRASTATSEND	0x680	9	LRA/cmd/STATSEND/000_P.STATSEND.shtml:%	Send stat
LRASTATTEMS	0x680	10	LRA/cmd/STATTEMS/000_P.STATTEMS.shtml:%	Set the m
LSMNOOP	0x690	2	LSM/cmd/Noop/000_P.Noop.shtml:%	No opera
LSMSIANCILLARY	0x701	2	LSM/cmd/SIANCILLARY/000_P.SIANCILLARY.shtml:%	SC Ancil
LSMSIATTITUDE	0x701	1	LSM/cmd/SIATTITUDE/000_P.SIATTITUDE.shtml:%	SC Attitu
LSMSITIMETONE	0x701	3	LSM/cmd/SITIMETONE/000_P.SITIMETONE.shtml:%	SC Timet
LSMSSROUTPUTOFF	0x690	0	LSM/cmd/SSRoutputOff/000_P.SSRoutputOff.shtml:%	Turn off e
LSMSSROUTPUTON	0x690	1	LSM/cmd/SSRoutputOn/000_P.SSRoutputOn.shtml:%	Turn on e
LSWDUMPSTART	0x64C	1	LSW/cmd/DumpStart/000_P.DumpStart.shtml:%	Dump the
LSWDUMPTRACEID	0x64C	2	LSW/cmd/DumpTraceById/000_P.DumpTraceById.shtml:%	Dump a c
LSWDUMPTRACENAME	0x64C	3	LSW/cmd/DumpTraceByName/000_P.DumpTraceByName.shtml:%	Dump a c
LSWNOOP	0x64C	0	LSW/cmd/Noop/000_P.Noop.shtml:%	No-Op
LSWSETTRACECFG	0x64C	4	LSW/cmd/SetTraceConfig/000_P.SetTraceConfig.shtml:%	Set the va
LTCCNTLPROC	0x659	1	LTC/cmd/CntlProc/000_P.CntlProc.shtml:%	LTC Con
LTCCNTLSTART	0x659	0	LTC/cmd/CntlStart/000_P.CntlStart.shtml:%	LTC Con
LTCHTRONOFFCNTL	0x658	5	LTC/cmd/HtrOnOffCtl/000_P.HtrOnOffCtl.shtml:%	Set heater
LTCNOOP	0x658	8	LTC/cmd/Noop/000_P.Noop.shtml:%	LTC Task
LTCRESTART	0x658	1	LTC/cmd/ReStart/000_P.ReStart.shtml:%	Restart ar
LTCSETMODE	0x658	4	LTC/cmd/SetMode/000_P.SetMode.shtml:%	Set therm
LTCSETPARAM	0x658	6	LTC/cmd/SetParam/000_P.SetParam.shtml:%	Set contro
LTCSETTLMFREQ	0x658	7	LTC/cmd/SetTlmFreq/000_P.SetTlmFreq.shtml:%	Set LTC t

Cmd. Packet (I)	APID	FC	Section	Descripti
LTCSTART	0x658	2	LTC/cmd/Start/000_P.Start.shtml:%	Start cont
LTCSTOP	0x658	3	LTC/cmd/Stop/000_P.Stop.shtml:%	Terminate

28 Telecommand Enumeration Index, by Name

Enumeration	Section	Description
`BLOCKS`	LRA/att/_/E.BLOCKS.shtml:%	Register block numbers
`CMPNTS`	LRA/att/_/E.CMPNTS.shtml:%	Component codes
`CPUS`	LRA/att/_/E.CPUS.shtml:%	CPU component values
`LCMCMDACTION`	LCM/att/_/E.LCMCMDACTION.shtml:%	ITC Command Actions
`LCMCMDCLASS`	LCM/att/_/E.LCMCMDCLASS.shtml:%	ITC Command Classes
`LCMCMDLEVEL`	LCM/att/_/E.LCMCMDLEVEL.shtml:%	ITC Command Response Level
`LCMDEVICES`	LCM/att/_/E.LCMDEVICES.shtml:%	Enumeration of available devices
`LCMENABLES`	LCM/att/_/E.LCMENABLES.shtml:%	A disabled/enabled enumeration
`LCMERRCLASS`	LCM/att/_/E.LCMERRCLASS.shtml:%	LCM Error Configuration Classes
`LCMERRLEVEL`	LCM/att/_/E.LCMERRLEVEL.shtml:%	LCM Error Handling Level
`LCMMSGINTER`	LCM/att/_/E.LCMMSGINTER.shtml:%	MSG output interfaces
`LCMMSGLEVEL`	LCM/att/_/E.LCMMSGLEVEL.shtml:%	MSG output level
`LCMNODEID`	LCM/att/_/E.LCMNODEID.shtml:%	List of CPU nodes addressable with LCM commands
`LCMTASKID`	LCM/att/_/E.LCMTASKID.shtml:%	Discrete list of task IDs
`LFILENODEID`	FILE/att/_/E.LFILENODEID.shtml:%	List of CPU nodes addressable with FILE commands
`LFSNODEID`	LFS/att/_/E.LFSNODEID.shtml:%	List of CPU nodes addressable with LFS commands
`LIHADCACTENABLES`	LIH/att/_/E.LIHADCACTENABLES.shtml:%	Enumeration of action enables
`LIHADCACTMSG`	LIH/att/_/E.LIHADCACTMSG.shtml:%	Enumeration of message severity flags
`LIHADCLMTSTATES`	LIH/att/_/E.LIHADCLMTSTATES.shtml:%	Enumeration of ADC limit evaluation states
`LIHENABLESTATES`	LIH/att/_/E.LIHENABLESTATES.shtml:%	A disabled/enabled enumeration
`LSMNODEID`	LSM/att/_/E.LSMNODEID.shtml:%	List of CPU nodes addressable with LSM commands
`LSWDEST`	LSW/att/_/E.LSWDEST.shtml:%	Enumerate the possible destinations of a trace dump
`LSWNODEID`	LSW/att/_/E.LSWNODEID.shtml:%	List of CPU nodes addressable with LSW commands

29 Telecommand Range Index, by Name

30 Telemetry Packet Index, by APID

APID	Section	Description (I)
0x200	PBC/tlm/LBTHKP/000_P.LBTHKP.shtml:%	Boot housekeeping telemetry
0x20E	CTDB/tlm/LCTDBRTDIAG/000_P.LCTDBRTDIAG.shtml:%	CTDB 1553 RT Driver Diagnostics
0x210	LHK/tlm/TemEnvPwr0/000_P.TemEnvPwr0.shtml:%	TEM Power Packet 0
0x211	LHK/tlm/TemEnvPwr1/000_P.TemEnvPwr1.shtml:%	TEM Power Packet 1
0x212	LHK/tlm/TemEnvPwr2/000_P.TemEnvPwr2.shtml:%	TEM Power Packet 2
0x213	LHK/tlm/TemEnvPwr3/000_P.TemEnvPwr3.shtml:%	TEM Power Packet 3
0x214	LHK/tlm/TemEnvPwr4/000_P.TemEnvPwr4.shtml:%	TEM Power Packet 4
0x215	LHK/tlm/TemEnvPwr5/000_P.TemEnvPwr5.shtml:%	TEM Power Packet 5
0x216	LHK/tlm/TemEnvTemp0/000_P.TemEnvTemp0.shtml:%	TEM temperature ADCs for TEMs 0-1
0x217	LHK/tlm/TemEnvTemp1/000_P.TemEnvTemp1.shtml:%	TEM temperature ADCs for TEMs 2-3
0x218	LHK/tlm/TemEnvTemp2/000_P.TemEnvTemp2.shtml:%	TEM temperature ADCs for TEMs 4-5
0x219	LHK/tlm/TemEnvTemp3/000_P.TemEnvTemp3.shtml:%	TEM temperature ADCs for TEMs 6-7
0x21A	LHK/tlm/TemEnvTemp4/000_P.TemEnvTemp4.shtml:%	TEM temperature ADCs for TEMs 8-9
0x21B	LHK/tlm/TemEnvTemp5/000_P.TemEnvTemp5.shtml:%	TEM temperature ADCs for TEMs A-B
0x21C	LHK/tlm/TemEnvTemp6/000_P.TemEnvTemp6.shtml:%	TEM temperature ADCs for TEMs C-D
0x21D	LHK/tlm/TemEnvTemp7/000_P.TemEnvTemp7.shtml:%	TEM temperature ADCs for TEMs E-F
[illegible]	[illegible]	PDU Environmental Packet 0
[illegible]	[illegible]	PDU Environmental Packet 1
[illegible]	[illegible]	PDU Environmental Packet 2
[illegible]	[illegible]	PDU Environmental Packet 3
[illegible]	[illegible]	PDU Environmental Packet 4
[illegible]	[illegible]	PDU Environmental Packet 5
[illegible]	[illegible]	PDU Environmental Packet 6
[illegible]	[illegible]	PDU Environmental Packet 7
[illegible]	[illegible]	AEM Environmental Monitor Packet 0
[illegible]	[illegible]	Low-rate Science/LIM State Packet
[illegible]	[illegible]	Command Statistics Packet 0
[illegible]	[illegible]	Command Statistics Packet 1
[illegible]	[illegible]	SIU Statistics
[illegible]	[illegible]	EPU 0 Statistics
[illegible]	[illegible]	EPU 1 Statistics
[illegible]	[illegible]	EPU 2 Statistics
[illegible]	[illegible]	Thermal Control Data Packet 0
[illegible]	[illegible]	Thermal Control Data Packet 1
[illegible]	[illegible]	Thermal Control Data Packet 2
[illegible]	[illegible]	Thermal Control Data Packet 3
[illegible]	[illegible]	TRC Configuration
[illegible]	[illegible]	TRC Top SIU Monitor Packet
[illegible]	[illegible]	TRC Top EPU 0 Monitor Packet
[illegible]	[illegible]	TRC Top EPU 1 Monitor Packet
[illegible]	[illegible]	TRC Top EPU 2 Monitor Packet
[illegible]	[illegible]	TEM power ADCs for TEMs 0-3
[illegible]	[illegible]	TEM power ADCs for TEMs 4-7
[illegible]	[illegible]	TEM power ADCs for TEMs 8-11
[illegible]	[illegible]	TEM power ADCs for TEMs 12-15
[illegible]	[illegible]	AEM environmental quantities for FREE boards 0 [illegible] the DAB
[illegible]	[illegible]	AEM environmental quantities for FREE boards [illegible] the DAB
[illegible]	[illegible]	SIU status packet
[illegible]	[illegible]	EPU 0 status packet

APID	Section	Description (I)
[illegible]	[illegible]	[illegible] status packet
[illegible]	[illegible]	EPU2 status packet
[illegible]	[illegible]	ITC/EFG configuration of tasks on SIU
[illegible]	[illegible]	ITC/MSG configuration of tasks on EPU0
[illegible]	[illegible]	ITC/MSG configuration of tasks on EPU1
[illegible]	[illegible]	ITC/MSG configuration of tasks on EPU2
[illegible]	[illegible]	LPA filter configuration (based on first LPA_DB ins[illegible] (SIU
[illegible]	[illegible]	LPA filter configuration (based on first LPA_DB ins[illegible] (EPU
[illegible]	[illegible]	LPA filter configuration (based on first LPA_DB ins[illegible] (EPU
[illegible]	[illegible]	LPA filter configuration (based on first LPA_DB ins[illegible] (EPU
[illegible]	[illegible]	GASU counter packet (both GEM and EBM)
[illegible]	[illegible]	LATC status packet
[illegible]	[illegible]	LIM status/summary packet (including LPA and [illegible] tu[illegible]
[illegible]	[illegible]	[illegible] (1553) con[illegible]
[illegible]	[illegible]	Miscellaneous [illegible] information
[illegible]	[illegible]	[illegible] configuration information
[illegible]	[illegible]	[illegible] Boot Housekeeping Telemetry
[illegible]	[illegible]	[illegible] Boot Housekeeping Telemetry
[illegible]	[illegible]	[illegible] Boot Housekeeping Telemetry
[illegible]	[illegible]	Diagnostic TEM Power Packet 0
[illegible]	[illegible]	Diagnostic TEM Power Packet 1
[illegible]	[illegible]	Diagnostic TEM Power Packet 2
[illegible]	[illegible]	Diagnostic TEM Power Pa[illegible]
[illegible]	[illegible]	Diagnostic TEM Power Pa[illegible]
[illegible]	[illegible]	Diagnostic TEM Power Pack[illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	TEM temperature ADCs for TEMs [illegible]
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 0
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 1
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 2
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 3
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 4
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 5
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 6
[illegible]	[illegible]	Diagnostic PDU Environmental Packet 7
[illegible]	[illegible]	Diagnostic [illegible] Environmental Monitor Packet 0
[illegible]	[illegible]	Diagnostic [illegible] State Packet
[illegible]	[illegible]	Diagnostic [illegible] Packet
[illegible]	[illegible]	Diagnostic Command Statistics Packet 1
[illegible]	[illegible]	Diagnostic SIU Statistics
[illegible]	[illegible]	Diagnostic EPU 0 Statistics

31 Telemetry Analog Conv. Index, by Name

Analog Conv.	Section	Description

32 Telemetry Discrete Conv. Index, by Name

Discrete Conv.	Section	Description
LHKADCLMTSTATES	LHK/att/_/D.LHKADCLMTSTATES.shtml:%	Enumeration of ADC limit evaluation states
LHKENABLESTATES	LHK/att/_/D.LHKENABLESTATES.shtml:%	A disabled/enabled enumeration
LHKFILESTATES	LHK/att/_/D.LHKFILESTATES.shtml:%	FILE States
LHKSELECTSTATES	LHK/att/_/D.LHKSELECTSTATES.shtml:%	Enumeration of primary/redundant selections
LHKSETTLESTATES	LHK/att/_/D.LHKSETTLESTATES.shtml:%	ADC settling state
LHKSWITCHSTATES	LHK/att/_/D.LHKSWITCHSTATES.shtml:%	Enumeration of allowed switch states
LIMACTION	LIM/att/_/D.LIMACTION.shtml:%	LIM Action
LIMGRBSTATE	LIM/att/_/D.LIMGRBSTATE.shtml:%	LIM GRB State
LIMOPMODE	LIM/att/_/D.LIMOPMODE.shtml:%	LIM Operating Mode
LIMOTHERSTATE	LIM/att/_/D.LIMOTHERSTATE.shtml:%	LIM Other Task State
LITCNODEID	ITC/att/_/D.LITCNODEID.shtml:%	Discrete list of ITC nodes
LITCTASKID	ITC/att/_/D.LITCTASKID.shtml:%	Discrete list of ITC task IDs
LPAMODES	LPA/att/_/D.LPAMODES.shtml:%	LPA Mode ID

33 Telemetry Limit Set Index, by Name

Limit Set	Section	Description