GLAST Large Area Telescope

Instrument Flight Software Development Team

Functional Demonstration
February 03, 2005

Stanford Linear Accelerator Center

Demonstration Agenda

Demo Agenda Item	Presenter
1. Overview of the Demonstration	Lawrence Jeung
2. Multiple Boot Images Demo	Lawrence Jeung
3. RAM Initialization Demo	Lawrence Jeung
3. Questions from Attendees	NA

Demonstration Overview

- **Today's demo covers Boot Image Selection:**
  - **Showcases new boot code functionality for checking boot images stored in EEPROM and executing the image that passes checksum**
  - **Demonstrator runs a "clean" boot image to show what the error-free boot process looks like**
    - **Then uses a Corelis workstation to create a series of corrupted boot images and observe how the boot code handles and reports the errors**
  - **Addresses Requirement 5.3.1.2.2 (new in upcoming SRS V. 5)**
- **And RAM Initialization:**
  - **Demonstrator displays the contents of SIU RAM before and after initialization**
    - **Before boot, the uninitialized RAM contains some random words**
    - **After boot, the contents of RAM are redisplayed in**
      - **All memory successfully initialized to zeroes**
  - **Addresses Requirement 5.3.1.2.3 (new in upcoming SRS V. 5)**

Hardware Context for the Demonstration

- **The demonstrations are run on the SDIS, a RAD750 crate acting as the SIU**
- **Off to one side, a Corelis workstation is used to introduce errors into boot images for Boot Image Selection Demo**