FSW Monthly   April 27 '04

Last Month work

Demos

Action items

Next 3 months
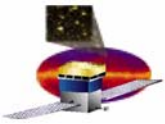
T. Schalk
Ucsc

april activities

- **PBC: increased the initial CPU clock speed to 3.5X (115.5 MHz).**
- **Released PBC V1-1-0 and loaded it into the SLAC RAD750 SUROM.**
- **Continued work on the PBC test plan.**
- **Finished implementation of RAD750 application reboot library.**
- **Finished release of VXW package version V5-0-0. This version has been modified for RAD750 targets to communicate with the PBC at both startup and at warm reboots.**
- **first draft SBC tools**
- **Released package (LFS), which contains two file upload tools, sending and receiving side.**
- **The secondary boot code run at the end of RTOS initialization is finished. This code now has the ability to look in either EEPROM bank or in RAM to find the secondary boot executable module.**

april activities

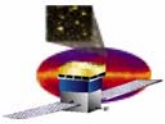- **Testing housekeeping software on the test bed Able to read out values from the PDU on a schedule.**

- **Able to deliver packets via 1553 simulation to a host. Writing test code to confirm the received packet data values against the actual ADC output.**

- **latest release of FSW (named Moscow) included in the new I&T LATTE release (3.0.0)**

- **test bed...**

  - **Demonstrated that multiple (7) TEMs can be powered on via the PDU and configured to respond to periodic triggers, producing events with 9 contributors.**

  - **Verified that the EBM can send events in all three modes (directed, round robin, broadcast).**

  - **worked on configuration code (substantially complete) and communications code (being debugged) for the FES.**

  - **Developing application to monitor the health of the test bed.**

- **Finished testing the LATC API that provides everything except the LATC XML parser**
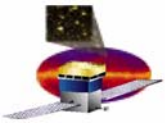
april activities

- **Started Code Reviews**
  - **Did MSG and LCB driver scheduled**
- **Worked on keeping various test stands up to date with the many changes in FSW**
- **Worked on scripts and library functions for the ACD group to use with their new GASU.**
- **Spent some time with Richard Hughes and Brian Winer of Ohio State University discussing practical aspects of setting up and running FES boards. They will be receiving soon a complete test system, including two FES boards**
- **Dedicated usage on a test stand is becoming an issue for software (eg housekeeping) development**
- **Had ITAR retraining for all FSW (& daq) people**
  - **Taped it for missing ppl**

Demo schedule (I)

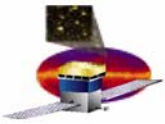- **March demo:**
  - **config gasu... GEM, AEM, EBM**
  - **single event display**
  - **[generate Alert tlm packet   (hardware issue)]**
  - **[generate diagnostic TLM packet (…)]**
  - **Watchdog (from Feb)**
  - **cPCI LCB initialization (moved up from April)**

- **April demo:**

  - **BOOT commands (all)**
  - **boot telem (packets)**
  - **discreet monitor control/reporting**

Action items

- **Completed FSW SRS reviews and re-baselined requirements via FSW CCB**

- **Update FSW Test Plan in response to SRS updates by April**
  - **New PMCS templet being verified**
  - **demos, TRR and FU peer review included**

- **Mapping of FSW requirements to monthly demos**
  - **Beginning with april demo**

- **ISIS requirements doc and delivery schedule under review**

Additional Tasks in next 3 Months

Begin development of Internal LAT Software Communication Protocols
- task-to-task and CPU-to-CPU

- Finish development of all EM2 packages (& design of FU packages)

- Finish up the housekeeping code

- Put detailed schedule into PMCS with hardware dependencies
  - More detail into monthly demos

- **ISIS** deliverables, schedule and formal testing