

**Meeting Participants**

<b>Penticton</b>	Amy, Brent, Dave F, Donna, Mark, Sonja, Zhang, Zoran
<b>Socorro</b>	Bruce, Bryan, Kevin, Mark, Michael
<b>Jodrell Bank</b>	Bryan, Dave, Roger

**Software Focus**

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| <b>Sonja Vrcic</b>    | <ul style="list-style-type: none"><li>• Making changes to the Station Board GUI as requested by Dave F.<ul style="list-style-type: none"><li>→ Storing command tree file for board status is useful in testing.</li><li>→ Worked on error count indicators. Bruce to implement the counter.</li><li>→ Relative or absolute mode is to be determined.</li></ul></li><li>• Forwarded a list of items re: CMIB tasks for Bruce.</li></ul>  |
| <b>Kevin Ryan</b>     | <ul style="list-style-type: none"><li>• Just started working on the intelligent diff.</li><li>• The test executor will run on a separate, partitioned server. Kevin will think about implementation.</li><li>• Kevin will be on vacation October 8 to 20.</li></ul>   |
| <b>Bruce Rowen</b>    | <ul style="list-style-type: none"><li>• Making changes to the filters: device drivers to load filter tables and MAHs: ready for testing in a few days.<ul style="list-style-type: none"><li>→ Working on a scheme to allow users to load filters.</li></ul></li><li>• Will start writing routines, ASCII to BDF for look up and co-efficient tables.</li><li>• Added power up for the correlator chip.</li><li>• Brent commented that will need a GUI for the re-timing FPGA and GUIs for the front panel LED, correlator chip and LTA.</li></ul> |
| <b>Martin Pokorny</b> | <ul style="list-style-type: none"><li>• Working on the Binary Data Format document.<ul style="list-style-type: none"><li>→ Content has been determined, now figuring out how to proceed.</li></ul></li></ul>  |
| <b>Michael Rupen</b>  | <ul style="list-style-type: none"><li>• Working on the BDF document with Martin and Dave H.</li><li>• Preparing for the EVLA Advisory Committee meeting scheduled for next week.</li></ul>  |

**New Software Action Items**

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- There are no new Software Action Items from this meeting.

**Continuing Software Action Items**

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- Simon to provide feedback for the CBE software as related to eMERLIN.
- Amy to adjust the schedule to show 6 months of Critical On-the-Sky testing instead of 4 months.
- Simon requested, please include Roger in the email discussion of boundaries of the config mapper.
- Bill to write and distribute for comment an email explaining the possible use of Apache Tomcat for realtime distribution of monitor and control products from the Station Board.

- Bruce to add memory dump definitions to schema.
- In progress – Brent to forward pin numbers to Kevin.
- Long-term – Kevin to develop an RFS for RPMIB test software, which will be needed by summer 2007.
- Michael to send out email re: estimated dates for next steps as related to Binary Data Format document.
- When time, Dave DR and Bruce to discuss offline re: diagnostic display for different points on the Station Board.

### ***Hardware Update***

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#### **Brent Carlson**

- Number one priority will be to write the RFS for the RFP FPGA.
- Fixed the Recirculation FPGA clock glitch; it is now in use for testing.
- Doing the final review of the Baseline Board schematic and layout with Zhang.
  - Scheduled to be forwarded to BMS for DFM by the end of September.
- Will travel to ATNF, Australia from September 7 to 22.

#### **Dave Fort**

- The functional testing of the Station Board is going well.
  - The highest junction temperature of the hottest row of filter FPGAs on the board is 47°C, which is within spec.
  - **Action** – Brent to let Guy S. know board temperature.
  - Zoran is making minor changes to accommodate two more power supplies to feed the filter bank.
  - The Station Board design package is scheduled to be forwarded to BMS by the end of September.

#### **Zoran Ljusic**

- Released the preliminary BOM to BMS for long, lead-time parts yesterday.
  - Can easily accommodate 2 new power supplies with just a minor shifting of components.
  - Need to determine re: to use heat sinks or air-flow deflector.
  - Should be able to forward for DFM by mid-September.
  - Brent would like one BGA solder stencil for each type of chip on the board to be included in RFQ for BMS.
  - Dave intends working on the JTAG vectors once the board comes back from BMS.
  - **Action** – Amy to get BMS to quote re: JTAG test vector generation and JTAG testing at BMS.
  - **Action** – Dave F to contact Morley re: BMS or DRAO to perform JTAG testing for the Station Board.
  - If BMS performs the testing, then DRAO will need to ship 48V bench power supply, 5V control line and cables (wiring harness).
  - **Action** – Mark to get test equipment together for shipping to BMS as it will be needed for the Baseline Board testing whether or not BMS does the testing for the Station Board.

#### **Zhang Heng**

- Reviewing the Baseline Board design with Brent; not much left to do.
  - **Action** – Zhang to generate silkscreen OBD file for Amy then forward files to BMS for DFM.
  - Power supplies need to be included in an auxiliary BOM.
  - **Action** – Amy to identify and separate out “do not install” parts of the BOM and include them in a separate section at the end of the BOM.

**Mark Halman**

- Making changes to the heatsink.
  - The heatsink design was completed until the new FPGAs were identified as needing cooling.
  - Need to decide re: finned or screw-on heatsinks.
- Received a quote for the foam material between the FPGAs and the heatsink.
  - Can be applied directly to the FPGA (20 and 30 thou samples are on their way).
  - Material is tacky so can stick to the FPGA and easily be peeled off and re-applied as needed. Can be machine placed.
- Investigating Station Board heat dissipation.
  - Inserted Dave's values into the spreadsheet; results don't look disastrous.
  - Still have the option of turning the fans up.
- Working on the blanking plate panels for the 12U crates.
  - Still investigating how to fill the drill holes, with plastic or ?
- Ready to go with the correlator chip test board.
  - Mark to talk with Zhang before making modifications.

***Project Management***

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**Amy Fink**

- Bids are arriving re: production parts.
- Working on the BOM for the Station Board; waiting for the Baseline Board to be complete.
- Power connection boards (vertical and horizontal) arrived yesterday; Amy is waiting for Ralph to sign off on the purchase.

**Bryan Anderson**

- The height of the ceiling in Simon's old office where the eMERLIN correlator is going is not a problem.
  - Can use standard height racks.
  - **Action** – Bryan to double check with Dave Brown.