

Peripheral backplane status

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Peripheral backplane

History:

- Commercially available J1 section was used with custom J2-J3 6U section.
- Custom 6U section prototype was constructed in 2002
- Was used in all test setups
- No problems found



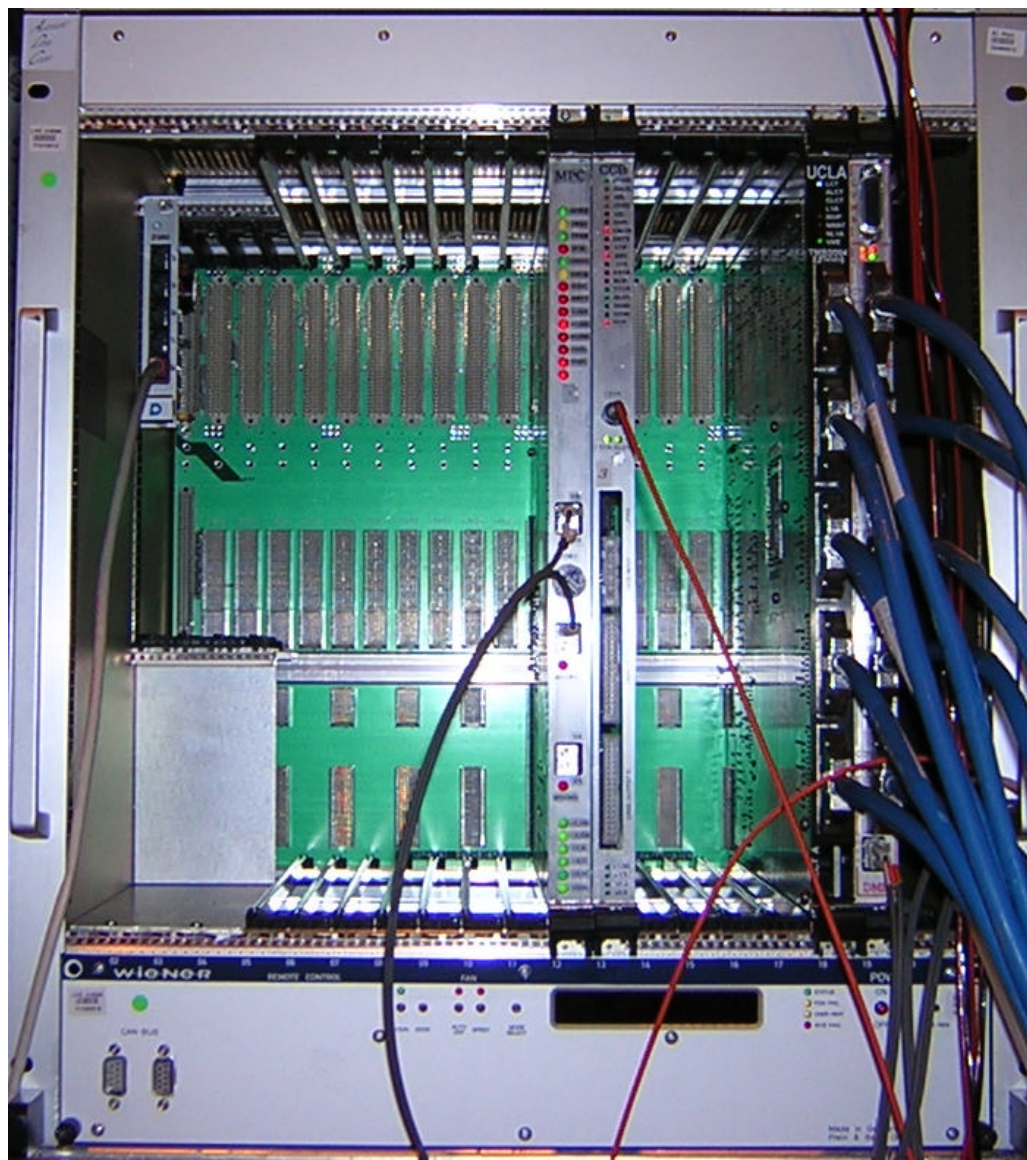
Peripheral backplane

New development:

- Power segmentation in J1 section is required
- No commercial backplanes with segmented power available
- Solution: design full 9U backplane with split power layers in J1
- Design of the new 9U backplane is finished
- Prototype constructed
- Prototype tested (preliminary)
 - FAST site (one chamber, two different TMB/DMB positions)
 - Test beam (two chambers)
- No problems found



New backplane at beam test





Peripheral backplane

Latest development:

- UCLA requests RAT board connectors to be changed
- Section J3 of the backplane needs to be modified

Schedule impact

- board re-design - 1 month
 - mechanical assembly fixture re-design - 0.5 month
 - test equipment re-design - 1 month
 - prototype construction - 1 month
 - delivery of connectors and shrouds type A with 16 mm pin length - 2 months or more (can be done in parallel with re-design)
- Total: 3.5 months



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Production:

- Production plan is in preparation
- Production equipment design underway
 - Test boards
 - Software
 - Press-fit assembly fixtures

- Latest version should be tested with all 21 boards and 9 RAT boards before going to production



Press-fit fixture

