

A short update on Common DAQ

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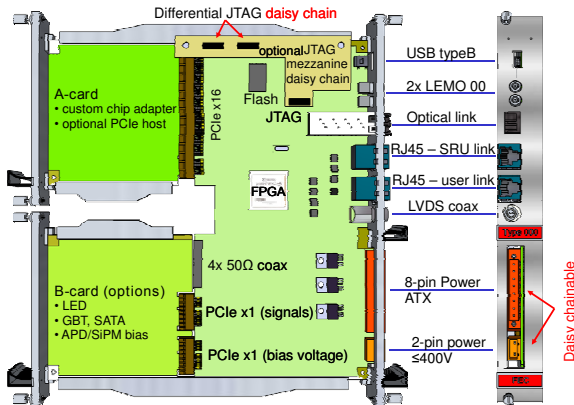
Physikalisches Institut



LC-TPC Workpackage Meeting
11.11.2009

Plans / ideas discussed at satellite meeting during EUDAQ 09 annual meeting

- Extend TLU to be a “Trigger Box”
 - 8 (16? even more?) scintillator inputs
 - Programmable AND / OR configuration
 - Information about trigger available for each event
- Clock distribution
- Make TLU scalable
 - Cascade several TLUs
 - Distribute clock / triggers across several TLUs
- Connectors are changed from RJ45 to HDMI



Graphics taken from Jose Toledo

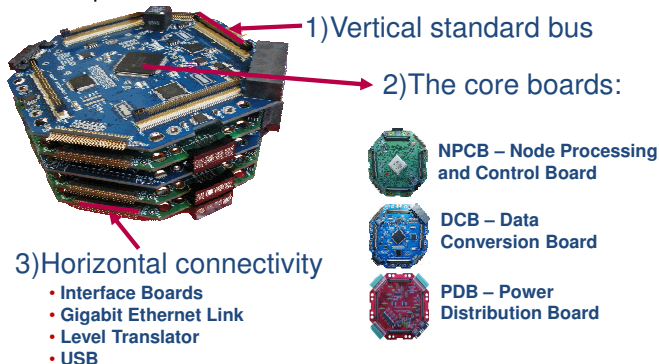
One readout system for all components?

Very different requirements for
different detectors
⇒ Modular system

- Same front end card with FPGA for all components
- Common interface for power, I/O, trigger, control
- Daughter board A interfaces with individual ASICs
- Optional extension board B for bias voltages, calibration pulses etc.

Compact And Programmable Data Acquisition Node

- Developed at Fermilab
- Network based
- Modular
- Scalable
- Originally developed for Si tracking sensors
- System is operational



Graphics taken from Ryan Rivera

Who in LC-TPC will work on Common DAQ?