

A Low-Cost MicroTCA Crate for use in Low-End Machine Control Systems

Thursday 8 December 2016 11:45 (15 minutes)

This talk will present our current ongoing development of a low-cost MicroTCA system, for the control of “low-end” accelerator components (such as magnets, vacuum, cryogenics etc.). The system utilizes MicroTCA’s key concepts and specifications, but has a modified backplane and power-subsystem.

It is comprised of one CPU/FPGA card, and several, so-called, “Front-End” cards. The modified backplane enables the CPU/FPGA card, to have direct Point-to-Point connections to the Front-End cards, which act as an Interface-Bridge between the CPU/FPGA Card and the controlled components (Magnets PS, for example). This enables one CPU card to control several low-end systems.

Primary authors: Mr REHLICH, Kay (DESY Hamburg); Mr SHEFER SHALEV, Ofir (DESY Hamburg)

Co-authors: Mr KRIVAN, Frantisek (DESY Hamburg); Dr ZIMMER, Manfred (DESY Hamburg); Dr VETROV, Petr (DESY Hamburg); Mr DELFS, Thomas (DESY Hamburg)

Presenter: Mr SHEFER SHALEV, Ofir (DESY Hamburg)

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