

MicroTCA Module Management with DMMC-STAMP: Overview and recent developments

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The DMMC-STAMP SoM (DESY Module Management Controller System on a Module) is a comprehensive management solution for operating a target AMC in a MicroTCA based ecosystem. It comes equipped with pre-installed firmware that covers all mandatory MicroTCA management requirements, plus some useful additional features (e.g. onboard sensors, remote console and in-system-update of the MMC), making it a ready-to-use drop-in solution. Using the optional DMMC Software Development Kit (DMMC-SDK), board developers can enable additional features specific to their AMC board, such as remote console to and in-system updates of the payload FPGAs, PMBUS power management, and AMC sensor integration.

This talk gives an overview of the DMMC-STAMP and recently added features, which were motivated by development of new AMC boards at DESY and requirements of DMMC-STAMP customers. This includes configuration of multiple power management chips, serial-over-IPMB for multiple payload FPGAs, and integration of FMC sensors into IPMI monitoring.

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