

# DESY MMC System on Module

## DMMC-STAMP

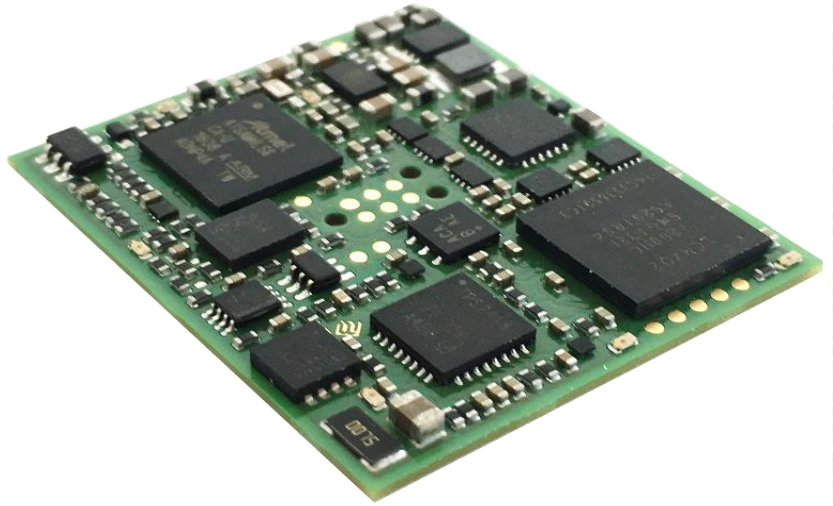
### HIGHLIGHTS

Complete MicroTCA™ management on a single module

Ready-to-use solder-in component based on ARM Cortex®-M4 processor

Serial-over-IPMI Management Console

Pre-programmed component with HPM Firmware-update support



### FEATURES

Full IPMI handling (MCH communication, LEDs, AMC/RTM power, FRU read/write)

Designed for MicroTCA™.0 / .4 / .4.1)

2 kBit EEPROM with unique ID (MAC address)

Complete AMC power management via PmBUS™

Board failure handling (over-current, over-temperature)

Supports two FPGA interfaces (custom interface voltage: 1.2V - 3.3V) including IPMI firmware update

Control of up to two FMC modules

Re-configurable JTAG chain management

USB virtual COM port for MMC and FPGAs

COM-port redirection via IPMI (remote access)

Pre-programmed firmware can be modified with optional SDK

Breakout Board available

The **DESY MMC System on Module** is a small stamp-sized (25.5x29x2.3 mm) component which can be mounted on top or bottom side of any AMC card. The stamp provides a complete hardware and firmware solution to manage the target board including power system, FPGAs, JTAG and RTM. It fully supports in-system update via IPMI and allows serial access via USB or Serial-over-IPMI.

For basic operation no external components are required (except handle and LEDs). The board is a drop-in solution with minimal design effort and no additional development required. The module complete JTAG arbitration for up to two FPGAs and two FMC modules. It allows JTAG access to all user components over the on-board connector or the MTCA backplane (JSM support).

A fully assembled breakout board with the following features is available:

- MicroTCA™.4 AMC format
- RTM connector (Zone 3)
- DC/DC converter with PMBUS manager
- Serial FLASH chip (image for payload FPGA)
- USB connector for command-line access (Virtual COM port)
- All LGA module pins are accessible on breakout section

INTERESTED?  
CONTACT US!

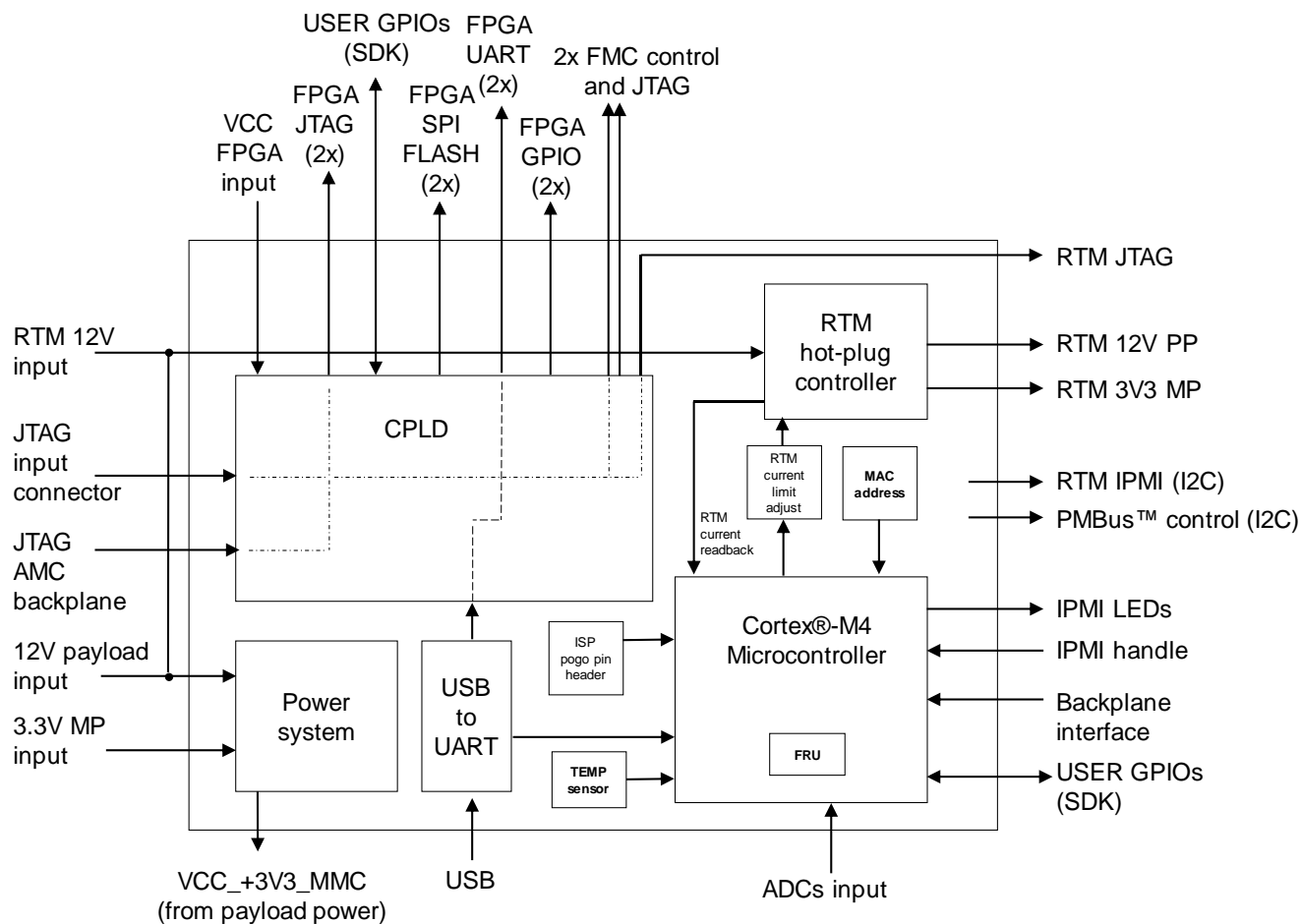
#### DESY

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# DESY MMC System on Module



**Block diagram**

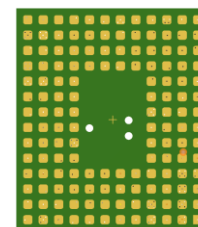


**DMMC-STAMP Breakout Board**

**Actual size views:**



**DMMC-STAMP size comparison**



**LGA bottom view (2mm pitch)**