AMC
Dual HPC-FMC Carrier.

DAMC-FMC25

Electronics

μTCA®

Technology

The DAMC-FMC25 is a general-purpose mezzanine carrier with the ability to host two FMC high pin count mezzanines (HPC) each. It is based on Spartan-6 and Virtex-5 FPGAs. FPGA-integrated Power PC Processors allow to do high performance computation with high data throughput between FMCs, RTM and PCIe bus on the MTCA backplane. Local DDR2 memory can be used to store measurement data which couldn't be sent via PCIe during acquisition.

Applications

- Telecommunication
- Automation industry
- COTS applications
- Accelerators
- Research & development

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Accelerators | Photon Science | Particle Physics

Deutsches Elektronen-Synchrotron
A Research Centre of the Helmholtz Association

DESY

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Benefits

- High-Performance LVDS links to FMC modules and RTMs (1Gbps per channel)

- Up to 4 MGTs can be routed to FMC slots (0/4 or 2/2 configuration)

- Flexible clocking options including SMA front panel clock input

- IPMI-based firmware update support

- IPMI-configureable JTAG switching including backplane, FMCs and RTM

- Redundant memories for both FPGAs (32Mb each)

- DDR2 Memory for booth FPGAs

- Debug interface on front panel (over USB)

Data Processing

- Dual-FPGA processing

- XC6SLX45T for serial communication including PCIe

- XC5VFX70T for FMC communication (including MGTs)

Compatibility

- Rear IO connected to FPGA, Class D1.0

- Supports 2 FMCs: two HPC module

- Full AMC-backplane support

- Compatible RTM products: DRTM-AD84, DRTM-PZT4 etc.

- Compatible DESY FMC products: DFMC-MD22, DFMC-AD16, DFMC-SFP4 etc.

Mechanical

- Double width, mid-size with full size option

- Dimensions: 148.5 mm (W) x 180.6 mm (D) (5.486 in x 7.11 in)

Compliance

- IPMI 1.5, MMC V1.0

- MicroTCA.4
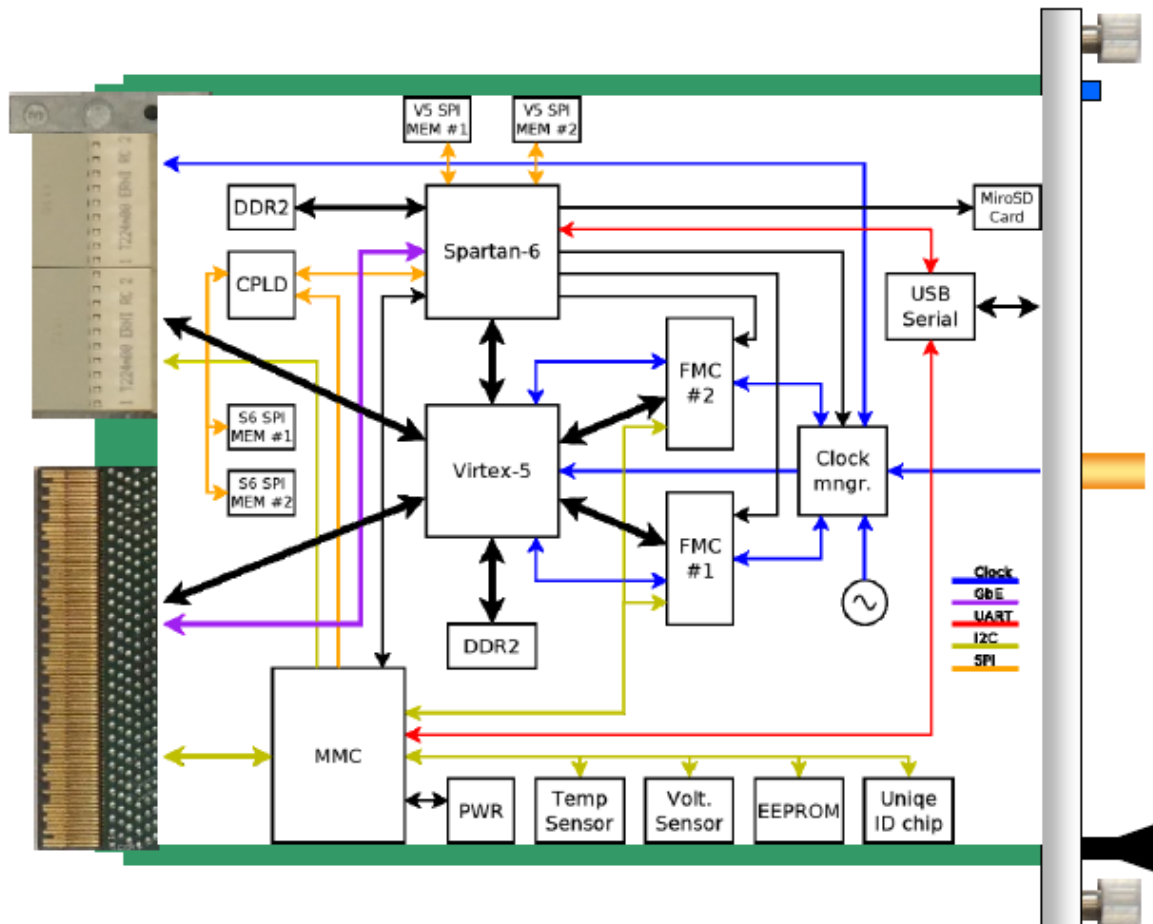
- VITA 57

- RoHS

Licensensors

The board has been licensed to CAENels and is available to 3rd parties

HELMHOLTZ | ASSOCIATION

DESY

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Functional Block Diagram

Service + IP status

DESY offers the DAMC-FMC25 for licensing to industry. DESY can modify this product to meet special customer requirements.

Requests of potential licensees regarding regional or international property rights can be considered.

For further information please visit: https://mtca.desy.de