

RackPak/M2-40

1U 19" 4 Slot MicroTCA compliant Chassis



The RackPak/M2-40 MicroTCA® chassis is a 1U 19" rack offering up to 4 AdvancedMC™ mid-size slots, two are single mid-size plus two MTCA.4 compliant RTMs. The RackPak/M2-40 system is the perfect base for small and low-cost computer platforms in medical, industrial automation, transportation, military, and telecommunication. It supports high-end computing applications with up to 4 AMC CPU modules as well as I/O configurations. Based on the MicroTCA® and AdvancedMC™ PICMG® standards it is the best solution for long life cycle applications.

The RackPak/M2-40 includes an embedded MCH, which offers basic system management functions. The build-in cooling unit provides air flow from right-to-left

The system is fitted with a single 400W AC power supply. Cooling system and PSU are designed for a maximum of 80W power dissipation per slot.

Features

- 19" rack-mount chassis, 1U height
- 4 AdvancedMC mid-size slots, 2 single mid-size AMC slots, 2 double mid-size RTM slots
- 1 eMCH build in
- 1 400W AC power supply build in
- MTCA.4 R1.0, AMC.0, AMC.1, AMC.2, AMC.3 compliant
- Full hot-swap support
- Size: 443,6 x 373,0 x 43,6 (mm)
- Rear-I/O for slot 3 and 4 (MTCA.4 compliant)
- Right-to-left air flow
- Low cost platform

Mechanics

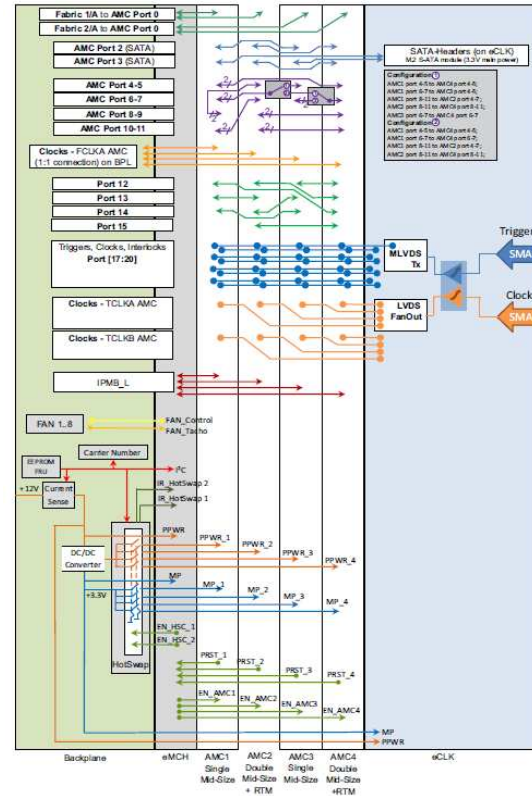
The chassis is made from steel and is self contained, the inner rails are made from V2a steel. The outer chassis is RAL9005 (black) painted, other colours are available upon request (might need NRE or MOQ).

Backplane Diagram

The backplane is fully compliant to MTCA.0 standard. PCIe links are supplied by the AMC CPU fitted into AMC slot 1, PCIe MUX split the available PCIe links to the different AMC slots (see backplane diagram). Two different configurations are possible via eMCH setting. On AMC port 12 to 15, there are local slot-to-slot interconnects, to enable fast direct board to board communication. AMC port 17 to 20 are offering a chain connection between each AMC slot for trigger, clocks or interlock signals.

The clock signals of each AMC slot connect to the MCH slot: The backplane do support TCLKA, TCLKB and FCLKA.

RackPak/M2-40 backplane interconnect

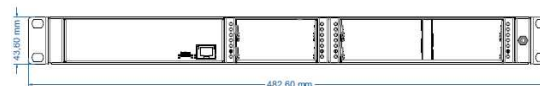


Specifications

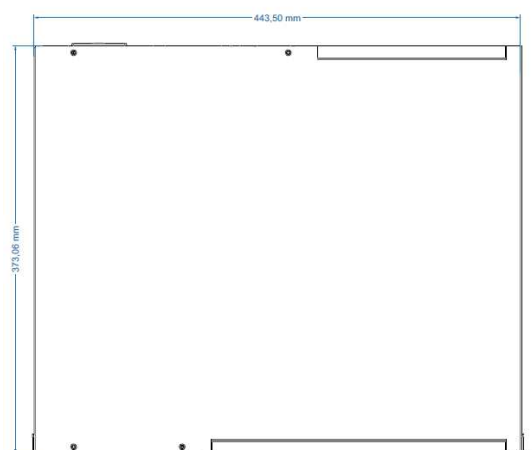
Construction	19" rack-mount, 1U height, self-contained top and bottom cover, RAL 9005 painted
Shelf Manager	MTCA compliant eMCH module, build-in, restricted feature set
Cooling System	7 fans total (right-to-left air-flow), supports up to 80W power dissipation in each slot (50W+30W), dust filter compliant to UL 94HF-1
Power Supply	400W build-in 100-240VAC open frame power supply, 50/60Hz, 4x 12VDC PP, 4x 3,3VDC MP, 120mVpp
Weight	5,8 kg without filler panels
Operating Temp.	-5°C ... +50°C
Storage Temp.	-25°C ... +70°C
Humidity	up to 85% RH non-condensing
Electromagnetic Compatibility	System configurations conforming to EN55032 class B
Dimensions	19" x 1U x 378 mm (WxHxD) 443,5 x 43,6 x 373,0 (mm)
Compliance	MicroTCA PIGMG MTCA.0 R1.0, MTCA.4 R1.0, AdvancedMC PIGMG AMC.0 R2.0, AdvancedMC PIGMG AMC.1 R1.0

System Views

Front View



Top View



Ordering Information

RackPak/M2-40	2U 19" SMTCA chassis, 6 DMS Slots, cooling from front to left
FP-DMS	Filler panel, double mid-size
FP-MS	Filler panel, mid-size
KIT-DS/SS	Splitter kit

The RackPak/M2-10 is available with different AMC CPU modules, e.g. Concurrent AM F5x or AM G64 series.

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