

MicroTCA chassis with RTM for Physics applications



- Front slots conform to MicroTCA specification PICMG MicroTCA.0 R1.0
 - 2 x MCH slots Single/Double Full-size
 - 12 x AMC slots Single/Double Mid-size
 - 4 x PM slots Single/Double Full size
- Rear slots according to PICMG Physics WG1 (MTCA.4)
 - 12 x RTM slots Double Mid-size
- Two redundant hot-swap fan trays with EMMC for AMC and uRTM cooling in push-pull configuration.
- Air Flow: bottom front air intake, top rear air exhaust
- Chassis dimensions:
 - Width: 19" Rack mount
 - Height: 9U
 - Depth: 373.30 mm

Order number

The order number is 11890-035.

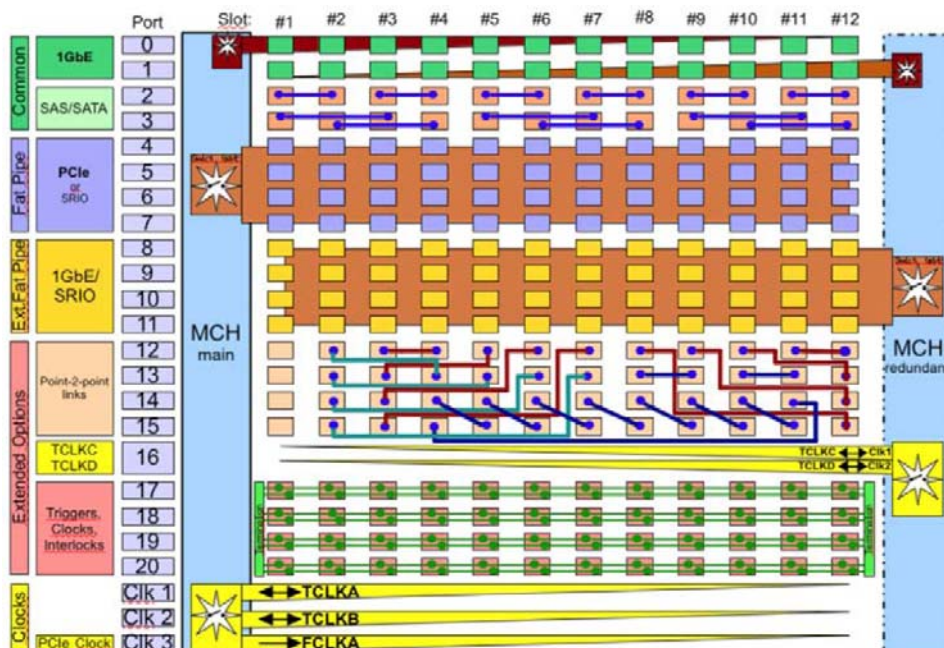
Delivery comprises: subrack, backplane, two removable fan trays, air filter.

Intended use of the chassis

The chassis is designed for high availability physics applications where redundancy of all chassis modules is required. The two push-pull fan trays are removable from the front of the chassis. Cable trays at the front and rear of the chassis facilitate management of cables. The chassis accepts up to four MTCA.0 compliant Power Modules.

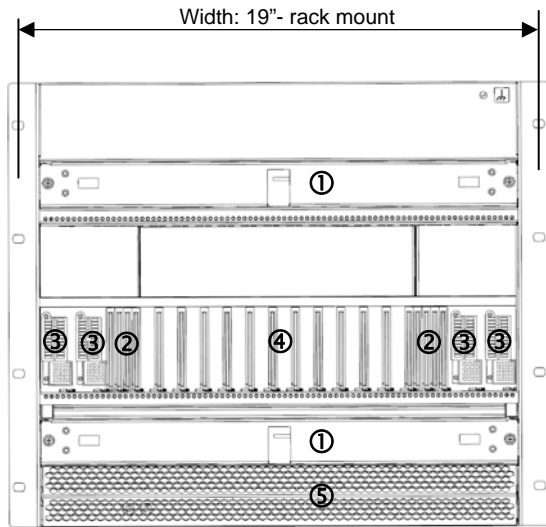
Backplane Topology

The backplane includes special bused connections for triggers, clocks, and interlocks. It also includes point-to-point SAS/SATA and Fabric connections between AMCs.



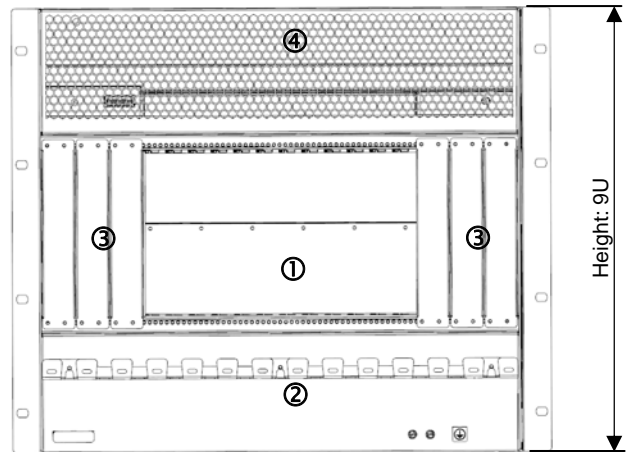
Chassis Components

Front view:



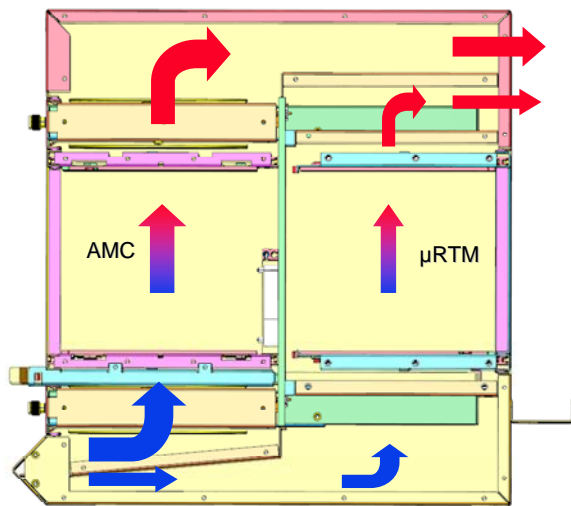
- 1 – Push-Pull fan trays
- 2 – MCH slots
- 3 – Power Module slots
- 4 – 12 double / mid-size AMC slots
- 5 – Air Intake

Rear view:



- 1 – MicroTCA Backplane for 12 double / mid-size uRTM
- 2 – Cable tray
- 3 – Slot covers
- 4 – Air exhaust

Air Flow



The air intake is at the front bottom side of the chassis, the air exhaust is the rear upper side. Air baffles separate the air flow for the front card section and the rear card section in order to maximize cooling capability.

Power distribution

The chassis accepts up to four MTCA.0 compliant Power Modules which are plugged in from the front side of the chassis. There are two adjacent Power Module slots at the left side and two adjacent power module slots at the right side of the chassis allowing various power module combinations; though not all Power Module sizes are available on the market today:

- 4 single-wide / full size (6HP)
- 4 double wide / full size (6HP)
- 2 single wide / 12 HP wide (double width of full-size)
- 2 double wide / 12 HP wide (double width of full-size)