



V Rose Microsystems, Inc.

www.vrosemicrosystems.com

VRM-Native-M

Product Data Sheet

Overview:

The VRM-NATIVE-M chassis is a modular 19" chassis in 2 U design supporting up to 12 AMCs and an MCH in full-size and compact form factors, and as an option also in "double full-size". The integrated 90-264 VAC power pack supplies the necessary voltages of 3.3 V for the IPMI and 12 V for the AMCs. The VRM-NATIVE-M was developed for laboratory and field environments and reflects essentially the specifications of PICMG MicroTCA.0 R1.0. Existing and new applications can be migrated to this MicroTCA platform both quickly and cost effectively. This represents a decisive benefit for developers of industrial and telecommunications applications.

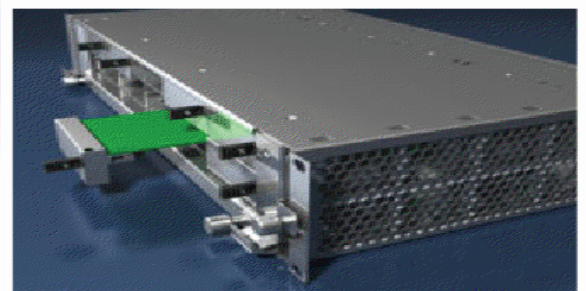
In the initial version, an MCH (MicroTCA Carrier Hub) is supported via the backplane. The chassis is designed such that communication protocols compliant with AMC.1 Type 4 (PCIe and Advanced Switching), AMC.2 Type 4, AMC.2 E2 (GbE) and AMC.3 (SAS/SATA) can all be handled. For SAS and SATA AMC boards, a point-to-point connection is realized via the backplane, so that each slot is able to communicate directly with its neighboring slots via ports 2 and 3. The extremely compact external dimensions, furthermore, permit the chassis to be installed in 300 mm ETSI enclosures. Two independent fan trays ensure reliable cooling of the individual AMC power modules and the MCH (push-pull). Customer-specific designs and backplanes can be supplied upon request.



Features:

- Corresponds to PICMG MicroTCA.0 R1.0
- Extremely compact ready-to-run system
- Chassis depth of 254 mm for installation in 300 mm deep enclosures
- Includes AC/DC power supply
- Support for up to 12.5 Gb/s
- Support for different AMC form factors
- Accommodates up to 12 AMCs and 1 MCH
- Includes 2 hot-swappable fan trays (push-pull)
- Exchangeable air filters
- High EMC shielding
- Flexible guide rails also allow the fitting of "double full-size" AMCs
- HARTING backplane with integrated JTAG connectors for debugging and testing
- Includes con:card+ AMC connector from HARTING
- Robust industrial design ensures minimum sensitivity to impact and vibration
- NEBS-compliant
- Fully assembled, wired and tested

- 482.6 mm (19"), 2 U, 254 mm deep
- Accommodates up to 12 AMCs and 1 MCH
- AC/DC power supply, max. 450 W:
 - Input voltage: min. 90 VAC, max. 264 VAC with PFC
 - Input frequency: min. 47 Hz, max. 63 Hz
 - Input currents: 3.3 VDC/max. 3 A, 12 VDC/max. 38 A
- Cooling via 2 independent fan trays delivering 41 cfm (69.6 m³/h) each, pressure 39 Pa
- With exchangeable air filter
- Backplane and AMC connectors in con:card+ quality from HARTING
- Integrated JTAG connector for debugging and testing
- Supports 12 AMCs (full-size, compact) compliant with AMC.1 Type 4 E2S and AMC.2 Type 4 E2S, as well as 1 MCH
- Weight: 9 kg
- Operating temperature: – 10 °C to + 75 °C
- Storage temperature: – 40 °C to + 85 °C



Ordering:

VRM-Native-M: uTCA chassis