

VT880

2U MTCA Chassis with 12 AMCs,
AC Input



VT880

Key Features

- MTCA System Platform 19" x 2U x 14.2" deep
- Up to twelve AMCs: four full-size and eight mid-size
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Dual star topology
- Radial I2C bus to each AMC
- High-speed routing on 26 layers (40G capable)
- High-speed MTCA connectors (12.5 GHz)
- Removable Air Filter, Power Module and Fan Tray

Benefits

- Compact and versatile configuration
- Full power, cooling and MCH redundancy
- Passive backplane
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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VT880

The VT880 is a 2U MTCA chassis that provides four full-size and eight mid-size AMC slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It provides CLK1, CLK2, and CLK3 to each slot in addition to the JTAG signals.

The VT880 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units for high availability Option for redundant/non-redundant clock per MTCA specification. The CLK3 option can be configured for the Fabric clock as well as Telecom clock.

The chassis has a JTAG Switch Module (JSM) slot per MTCA specification. This provides transparent communication between the front JTAG port and the selected AMC device. The VT880 has a Telco Alarm as well as Redundant FRU information devices and carrier locator.

Power Supply

The VT880 has an option for Dual Power Module (PM). The PM slots are in the rear with universal AC input.

Cooling and Temperature Sensors

The VT880 has Dual intelligent Cooling Units. This redundancy allows fail-safe operation in case one of the cooling units becomes non-operational. The cooling airflow is from right to left. The removable Air Filter has a switch to detect its presence and can be monitored for when it needs to be replaced.

12 chassis mounted temperature sensors monitor the intake and the outtake air temperature throughout the unit.

Telco Alarm

The VT880 is fitted with a Telco alarm that constantly monitors the chassis for any anomalies and alerts the user by LED indication on the Front Panel. It has its own dedicated slot and can be directly accessed via a Micro DB-9 connector.

FRU Information and Carrier Locator

The VT880 has dual redundant FRU information and Carrier Locators. The Carrier Locator is assigned by easily accessible mechanical dip switches. The MCH reads the Locator via its private I2C bus.

No Active Components

Unlike other MTCA chassis on the market, the VT880 has no active components on its back plane, making maintenance and servicing tasks more straightforward.

Scorpion™ Software

VadaTech's Scorpionware software can be used to access information about the current state of the Shelf or the Carrier, obtain information such as the FRU population, or monitor alarms, power management, current sensor values, and the overall health of the Shelf. The software GUI is very powerful, providing a Virtual Carrier and FRU construct for a simple, effective interface.

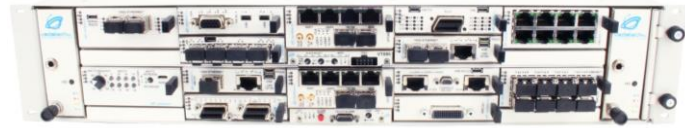
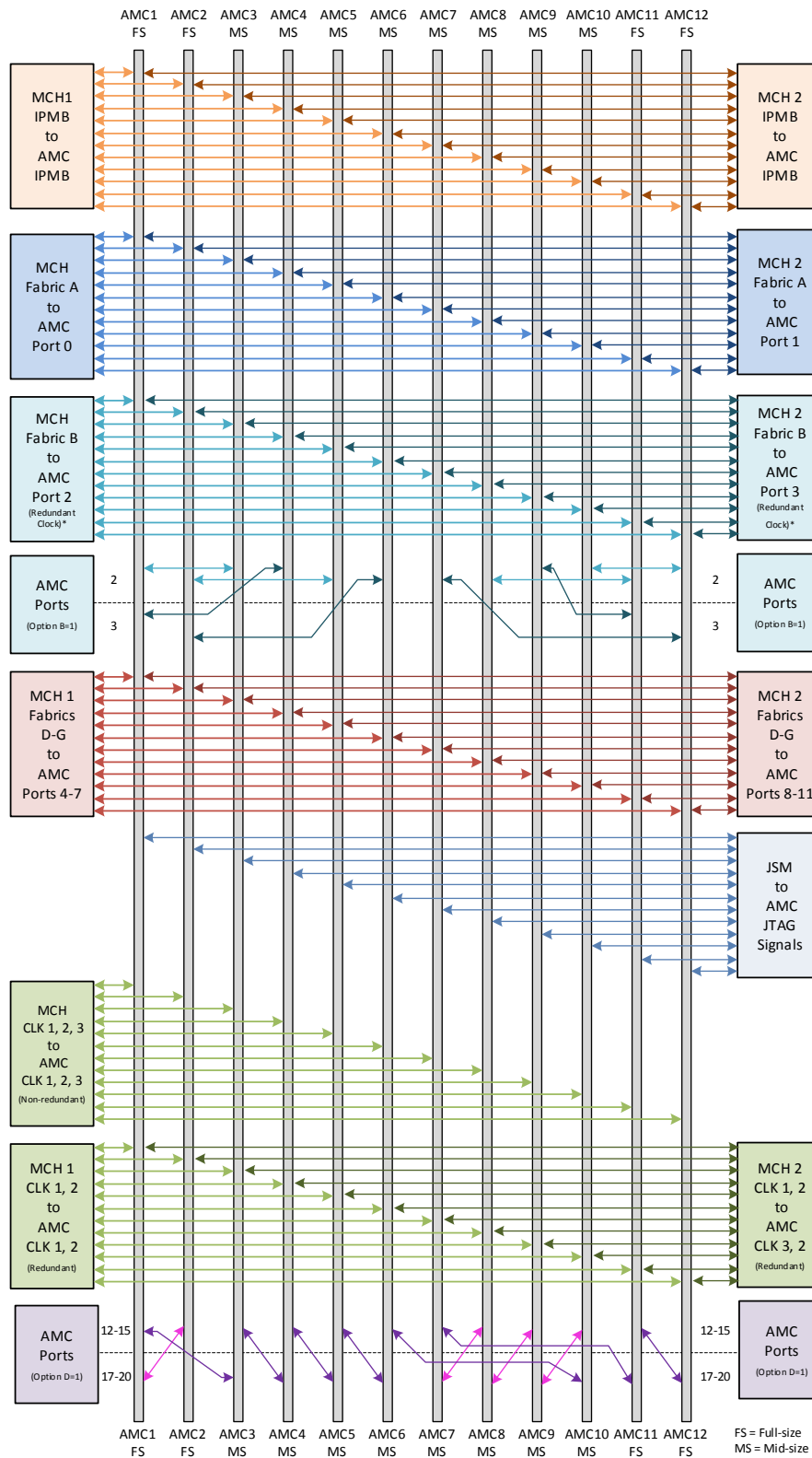


Figure 1: VT880 Front View



Figure 2: VT880 Rear View

Backplane Connectors



Note: When CLK3 is non-redundant, Fabric B will be partially provided only on ports 1 to 6. CLK3 is routed on Fabric B on ports 7 to 12.

Figure 3: VT880 Backplane Connections

Chassis Layout

Front View

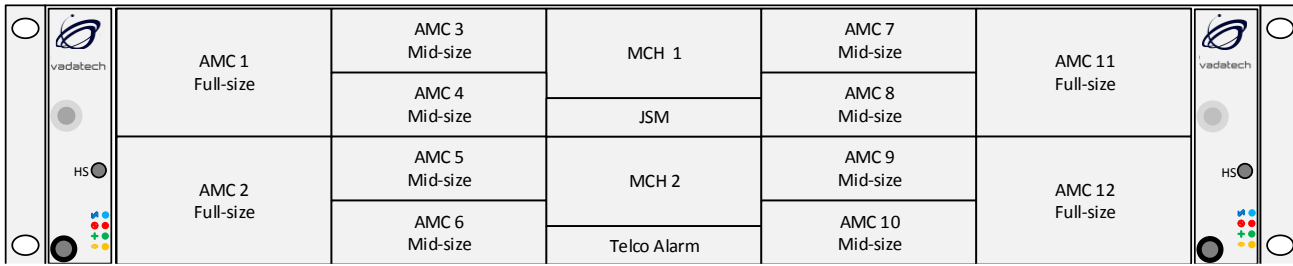


Figure 4: VT880 Chassis Layout

Specifications

Architecture	
Physical	Dimensions Height: 2U
	Width: 19"
	Depth: 14.2"
Type	MTCA Chassis 12 AMC.0 Slots
Standards	
AMC	Type AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
MTCA	Type JSM, Telco Alarm, Dual MCH, Dual Power Module and Dual Intelligent Cooling units
Configuration	
Power	VT880 Dual Power Module (PM) Inserted from the rear 720 W Universal AC Input (110-240 V AC with frequency from 47-63 Hz) per Module
Environmental	Temperature Operating temperature: -5° to 55°C, See environmental spec sheet Storage Temperature: -40° to +70°C
	Altitude 10,000 ft operating 40,000 ft non-operating
	Relative Humidity 5 to 95% non-condensing
Other	
MTBF	MIL Hand book 217-F@ TBD hrs
Certifications	Designed to meet FCC, CE and UL certifications, where applicable
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
Warranty	Two (2) years

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), Power Modules, and more. The company also offers integration services as well as pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VT880 – ABC-D0F-00J

A = Power Supply	D = Ports 12-15 and 17-20	
1 = Single AC 2 = Dual AC	0 = No routing 1 = Backplane routing	
B = Ports 2 and 3		
0 = To MCH 1 = Direct Connection		
C = CLK3	F = JSM	J = Conformal Coating
1 = Non-redundant (Telco) 2 = Non-redundant (Fabric CLK) 3 = Redundant	0 = No JSM 1 = JSM	0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Related Products

AMC720



- Intel® Xeon™ E3 processor
- Single module, mid-size per AMC.0
- PCIe Gen2 (Gen3 on v2 option) x4 on ports 4-7 and 8-11 or single PCIe x8 on ports 4-11 (AMC.1)

UTC004



- Unified 1 GHz quad-core CPU for MCMC (MicroTCA Carrier Management Controller), Shelf Manager, Clocking, and Fabric management
- 1GbE base switch with dual 100/1000/10 G uplink
- Non-blocking PCIe Gen 3, SRIO Gen 2, 10GbE/40GbE, or Crossbar Switch option to AMC fat pipes with options for up to 40GbE uplink

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- MTCA System Platform 19" x 2U x 14.2" deep
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to twelve AMCs: four full-size and eight mid-size

Contact

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

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