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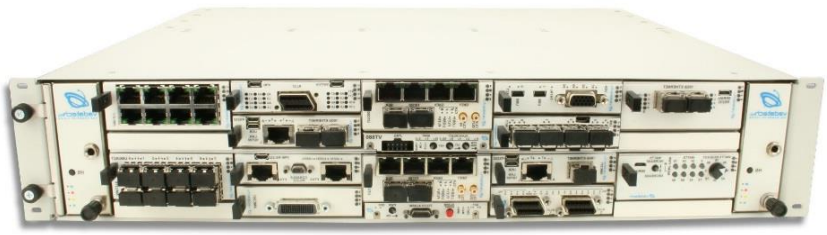
THE POWER OF VISION

VT880 – µTCA Chassis with 12 AMCs, AC Input

2U µTCA, 12 AMCs



KEY FEATURES

- µTCA 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
- Dual star topology
- Radial I2C bus to each AMC
- High-speed routing on 26 layers (40G capable)
- High-speed µTCA connectors (12.5 GHz)
- Telco Alarm
- JTAG Switch Module (JSM) slot with front port access
- Removable Air Filter, Power Module and Fan Tray
- 720W AC Universal dual redundant Power Modules
- No active components on the backplane
- ESD-Jack

µTCA™

Benefits of Choosing VadaTech

- 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

The VT880 is a 2U µTCA 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 µTCA 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 µTCA 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.

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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.

There are a total of 12 Temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis.

TELCO ALARM

The VT880 provides Telco Alarm functionality to alert about any anomaly within the chassis. The Telco Alarm is provide via a Micro DB-9 as well as LED's in the front to show any anomaly. The Telco Alarm has its own dedicated slot.

FRU INFORMATION AND CARRIER LOCATOR

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

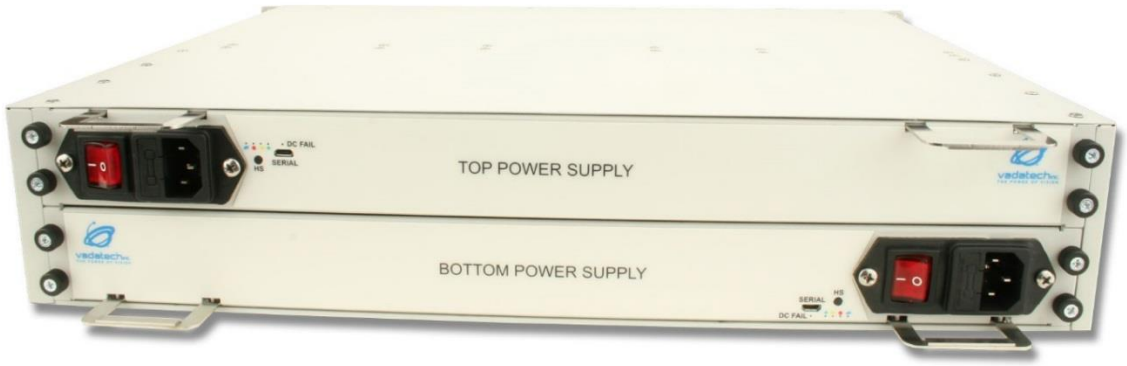
NO ACTIVE COMPONENTS

With respect to other µTCA chassis in the market, the VT880 has no active components on its back plane. This allows ease of serviceability.

SCORPIONWARE™ 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.

REAR VIEW



BACKPLANE CONNECTIONS

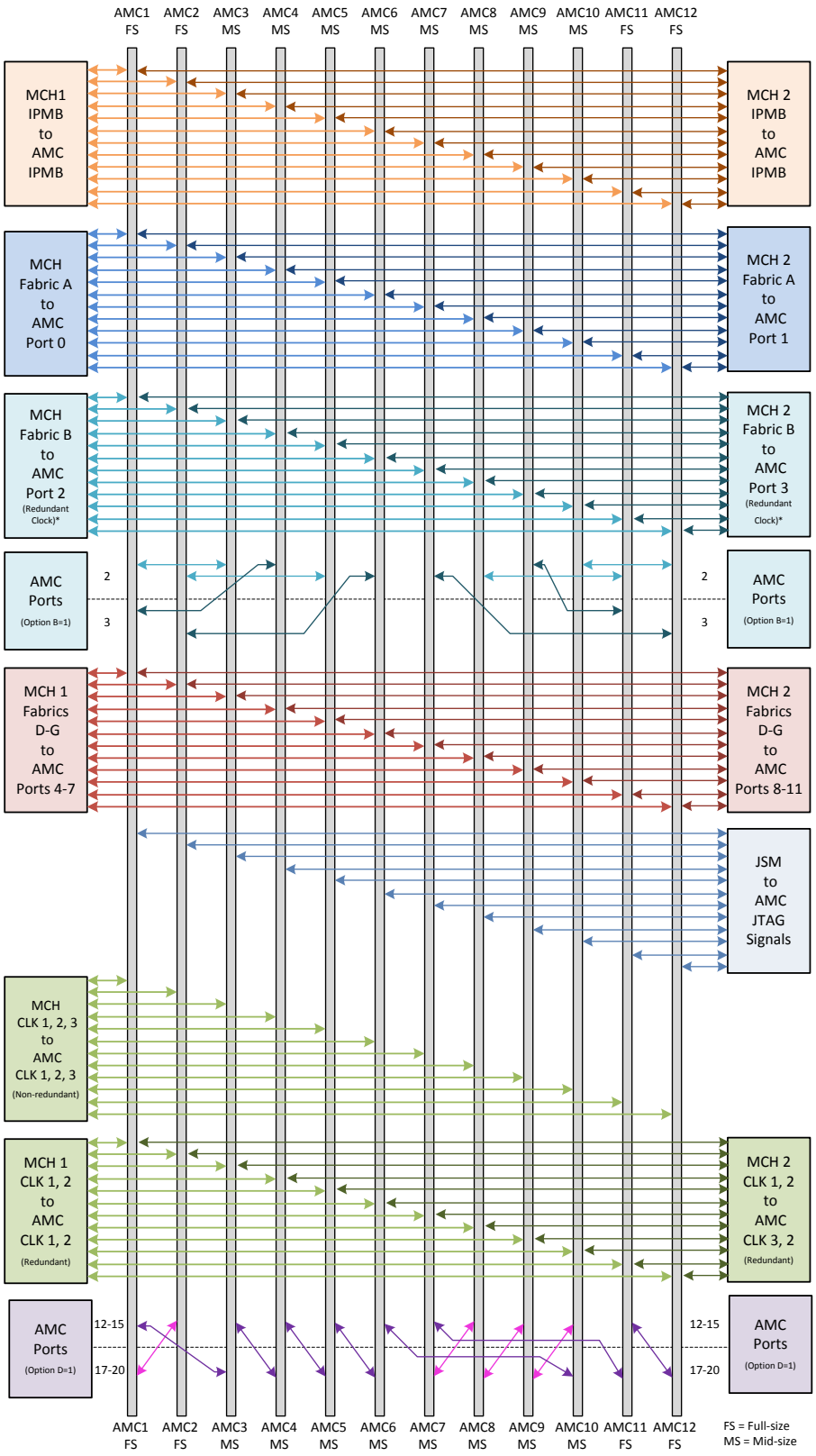
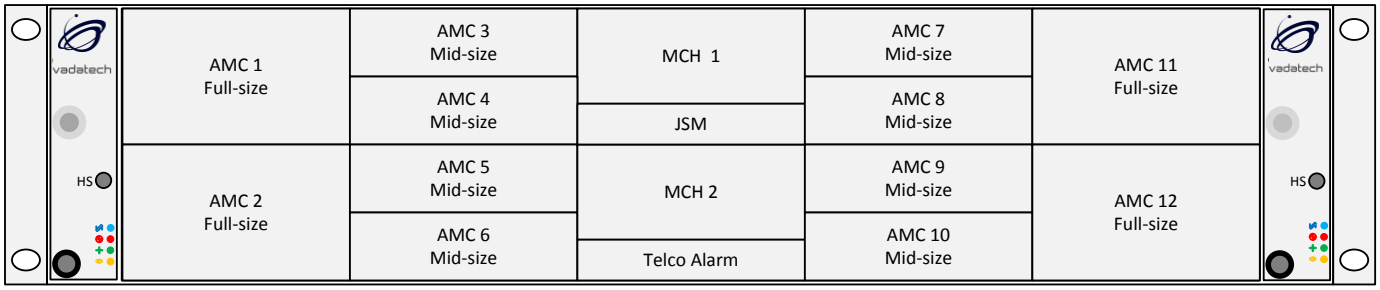


Figure 1: VT880 Backplane Connections

*** 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.**

CHASSIS LAYOUT

Front View



Rear View

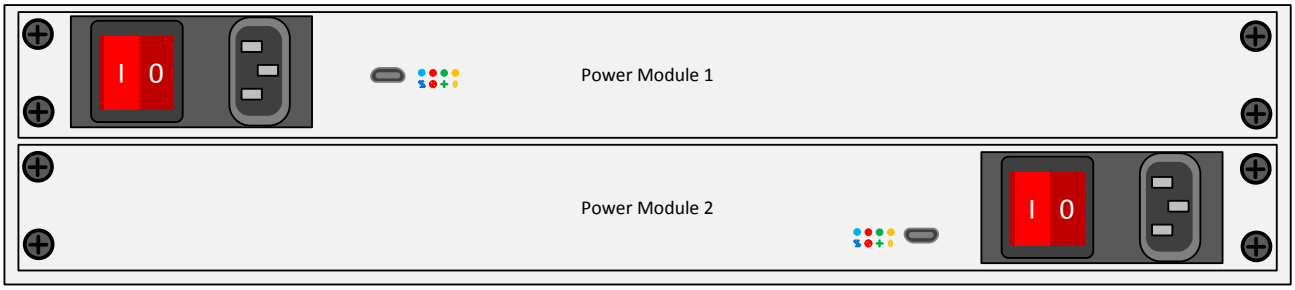


Figure 2: VT880 Chassis Layout

SPECIFICATIONS

Architecture		
Physical	Dimensions	Height: 2U
		Width: 19”
		Depth 14.2”
Type	µTCA Chassis	12 AMC.0 Slots
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	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, 720W Universal AC Input (110-240VAC with frequency from 47-63Hz) per Module
Environmental	Temperature	Operating Temperature: 0° to 55° C
		Storage Temperature: -40° to +70° C
	Altitude	10,000 ft operating
		40,000 ft non-operating
	Relative Humidity	5 to 95 percent, non-condensing
Conformal Coating		Humiseal 1A33 Polyurethane (optional)
		Humiseal 1B31 Acrylic (optional)
Other		
MTBF	MIL Hand book 217-F@ TBD Hrs	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Compliance	PICMG 3.0 Rev 3.0, RoHS 2. Designed to meet NEBS Level 3	
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards	
Warranty	One (1) year limited warranty	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and µTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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
1 = Single AC
2 = Dual AC

B = Ports 2 and 3
0 = To MCH
1 = Direct Connection (as per Backplane connections diagram)

C = CLK3
1 = Non-redundant (Telco)
2 = Non-redundant (Fabric CLK)
3 = Redundant

D = Ports 12-15 and 17-20
0 = No routing
1 = (As shown in backplane routing)

F = JSM
0 = Not installed
1 = Installed

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS

UTC004
MCH for µTCA Chassis (3rd generation)

AMC720
Xeon E3-1125 Processor AMC

VT881
2U uTCA Chassis, 12 AMC, DC

CONTACT US

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