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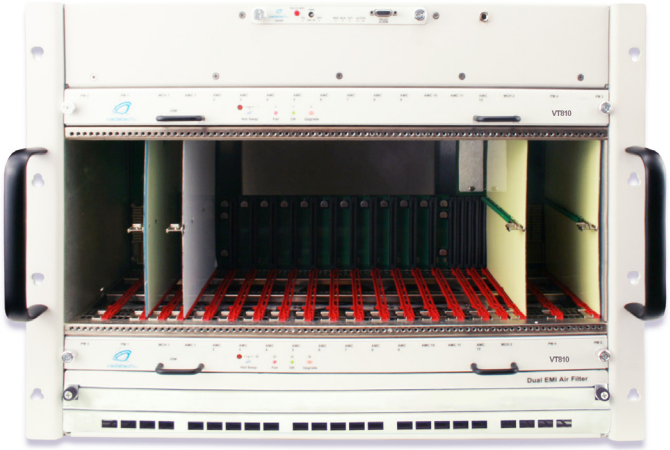
THE POWER OF VISION

VT810 – 7U MicroTCA.4 Chassis Platform

7U MTCA.4 Chassis, 12 AMCs



KEY FEATURES

- MTCA System Platform 19" x 7U x 14.9" deep (with handles 16.23" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and quad Power Modules
- Up to twelve AMCs: 12 front mid-size double module slots and RTM slots
- Bottom to top cooling
- Radial I2C bus to each AMC
- High-speed routing on 30 layers
- High-speed µTCA connectors (12.5 GHz)
- Redundant FRU and Carrier information devices
- Dual 1000W AC Power supply option
- FCLKA, TCKA, TCKB, TCLKC AND TCLKD
- JTAG Switch Module (JSM) Slot
- ESD-Jack at the top front
- RoHS compliant

Benefits of Choosing VadaTech

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The VT810 is a 7U µTCA chassis that provides 12 AMC mid-height double-module slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It provides FCLKA, TCLKA, TCLKB, TCLKC and TCLKD to each slot.

The VT810 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units (CU) for high availability. Ports 2-3, 12-15 and 17-20 are connected among the slots per the uTCA.4 recommendation.

The VT810 has a Telco Alarm as well as Redundant FRU information devices and carrier locators. A JTAG Switch Module (JSM) slot is available which routes to each JTAG port of the AMC.

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POWER SUPPLY

The VT810 can accept up to four double module (redundant) Power Modules. The Power Modules can be AC universal (110 to 240 VAC, frequency from 47 to 63 Hz) or DC (–36 to -75 VDC). Each power module outputs up to 1000 W.

COOLING AND TEMPERATURE SENSORS

The VT810 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 bottom to top. 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 VT810 provides Telco Alarm functionality to alert about any anomaly within the chassis. The Telco Alarm is provided via a Micro DB-9 as well as LEDs in the front to show any anomaly. The Telco Alarm has its own dedicated slot.

FRU INFORMATION AND CARRIER LOCATOR

The VT810 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

Unlike some other µTCA chassis on the market, the VT810 has no active components on the backplane. This supports 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.

CHASSIS CONFIGURATION

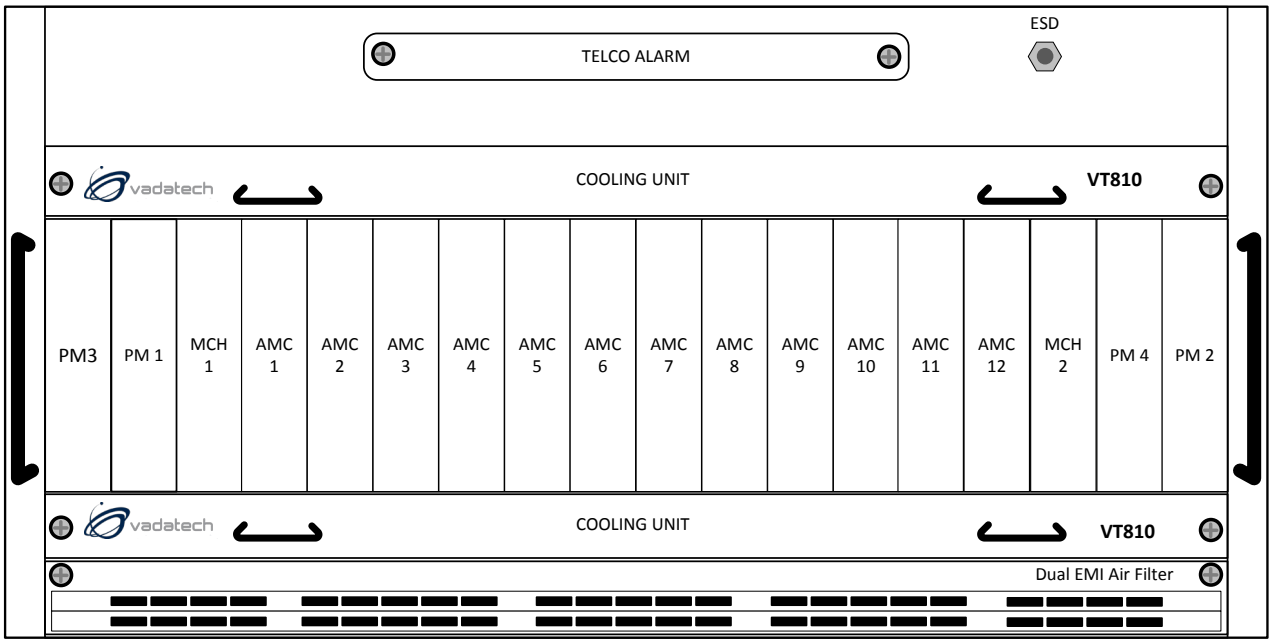

Figure 1: Front View

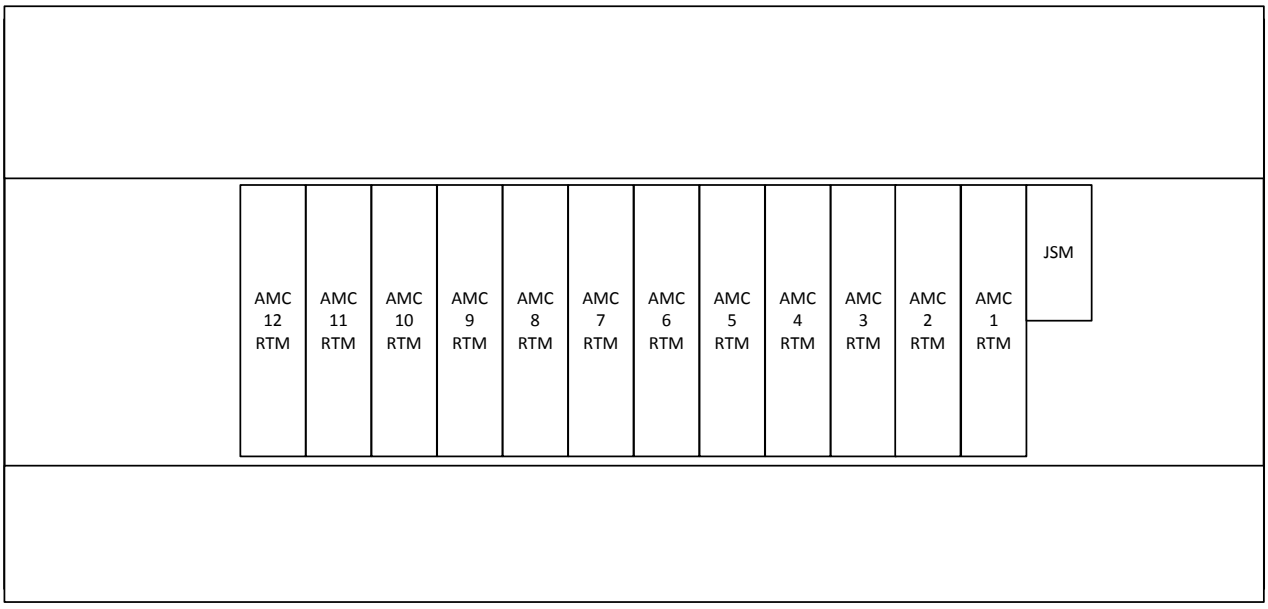

Figure 2: Rear View

BACKPLANE CONNECTIONS

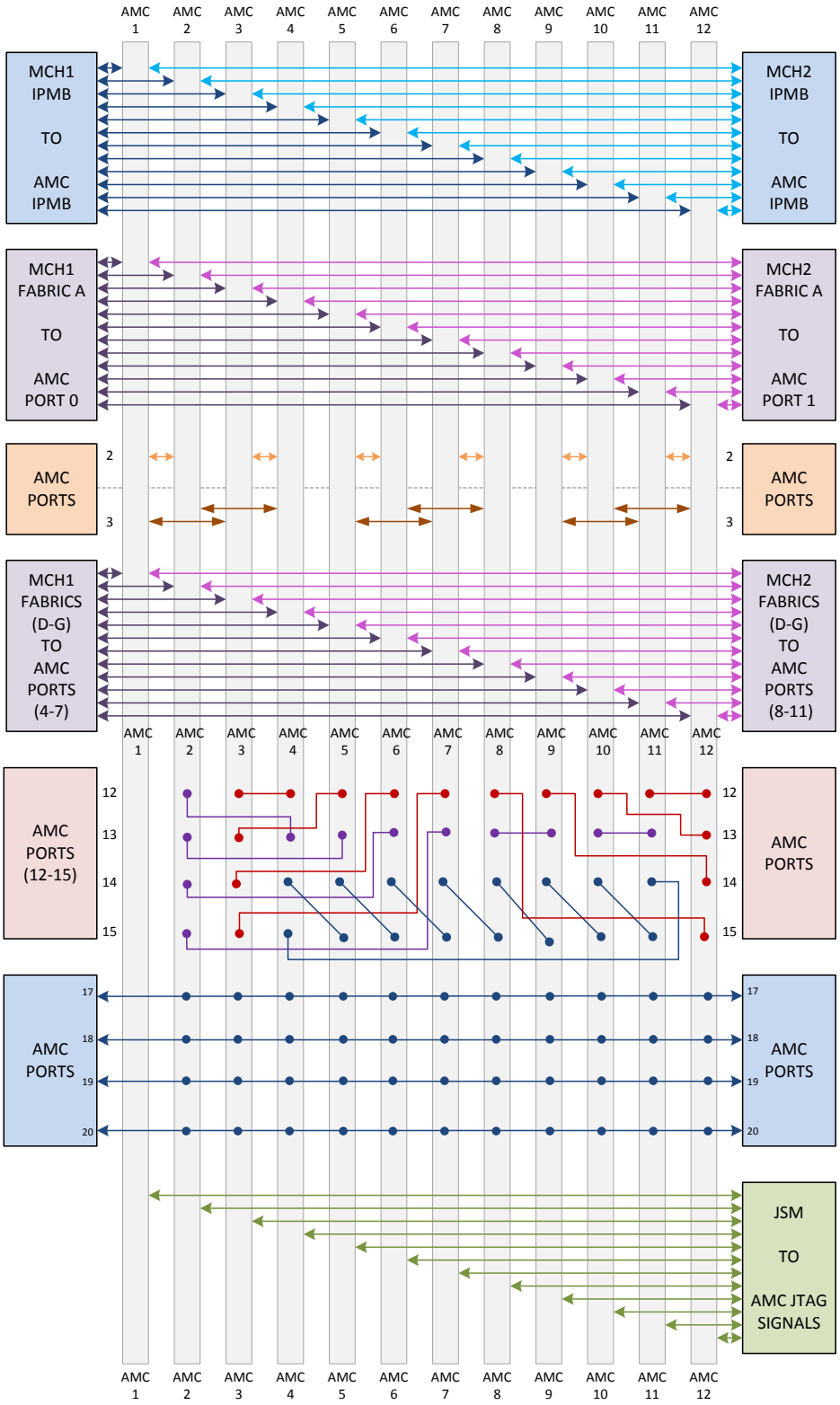

Figure 3: Backplane Connections

SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 7U
		Width 19”
		Depth 14.9” without handles and 16.23” with handles
Type	µTCA Chassis	Twelve mid-size AMC.0 double module slots
Standards		
AMC	Type	AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	Type	Telco Alarm, Dual MCH, Quad Power Module and Dual Intelligent Cooling units
Configuration		
Power	VT810	AC Supply: 1000 W, input 110 to 240 VAC, frequency 47 to 63 Hz or DC Supply: 396/796 W, input -36 to -75 VDC
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	
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 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.

Trademarks and Disclaimer

ORDERING OPTIONS

VT810 – ABC – 000 – 00J

A = Power Module*
0 = None
1 = Single 500W AC (UTC017)
2 = Dual 500W AC (UTC017)
3 = Single 1000W AC (UTC018)
4 = Dual 1000W AC (UTC018)
5 = Single 796W DC (UTC013)
6 = Dual 796W DC (UTC013)

B = JSM**
0 = Without the JSM module
1 = With JSM module

C = Chassis FRU Configuration for Power Modules
0 = 1+1 (one Primary and one Redundant)
1 = 2+1 (two Primary and one Redundant)
2 = 2+2 (two Primary and two Redundant)
3 = 3+1 (three Primary and one Redundant)

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

*The Power Modules (PM) could be purchased separately. For more information regarding each of the PM options, please download the appropriate data sheet from the web.
** The JSM could be purchased separately

RELATED PRODUCTS

UTC006 Double Module MCH PCIe Gen 3 Expansion

AMC726 Core i7 Processor AMC, PCIe

UTC018 AC Power Module 1000W, Double Module

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