KEY FEATURES

- µTCA System Platform 19" x 6U x 10.4" deep (with handles 12" deep)
- Lightweight aluminum construction
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to twelve AMCs: 12 full size double-module
- Dual Star topology
- Radial I²C bus to each AMC
- High-speed routing on 26 layers
- Redundant FRU information devices & Carrier Locator
- Telco Alarm
- CLK1, CLK2 and CLK3 routed to each slot
- JTAG Switch Module (JSM) Slot
- ESD Jack at the top front of the chassis
- Bottom-to-top cooling configuration
- RoHS compliant

Benefits of Choosing VadaTech

- Lightweight aluminum MicroTCA chassis
- Bottom-to-top redundant cooling configuration for double modules in compact 6U height
- 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 VT895 is a 6U µTCA chassis that provides 12 AMC full-size, double module slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4.

The VT895 has full redundancy, including redundant MCH, Power Modules, as well as redundant Cooling Units (CU) for high availability. The cooling configuration is from bottom-to-top. There is an option for redundant/non-redundant clock per µTCA specification. It provides CLK1, CLK2, and CLK3 to each slot. The CLK3 option can be configured for the Fabric clock as well as Telecom clock.

An option is available for Port 2 and 3 to be directly connected among the adjacent AMCs or to the fabric B (AMC.3 SATA/SAS switch option on the MCH). The chassis routes ports 12-15 and 17-20 to each slot.

The VT895 has a rear Telco Alarm as well as Redundant FRU information devices and carrier locators. A JTAG Switch Module (JSM) slot routes to the JTAG port of each AMC.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.

6U µTCA Chassis, 12 AMCs Full Size – VT895

POWER SUPPLIES

The VT895 has two power module slots in the chassis. AC or DC power modules can be used.

COOLING AND TEMPERATURE SENSORS

The VT895 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 VT895 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 LEDs in the rear to show any anomaly. The Telco alarm module is built into the chassis, located above the fan tray.

FRU INFORMATION AND CARRIER LOCATOR

The VT895 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 other µTCA chassis in the market, the VT895 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.

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.
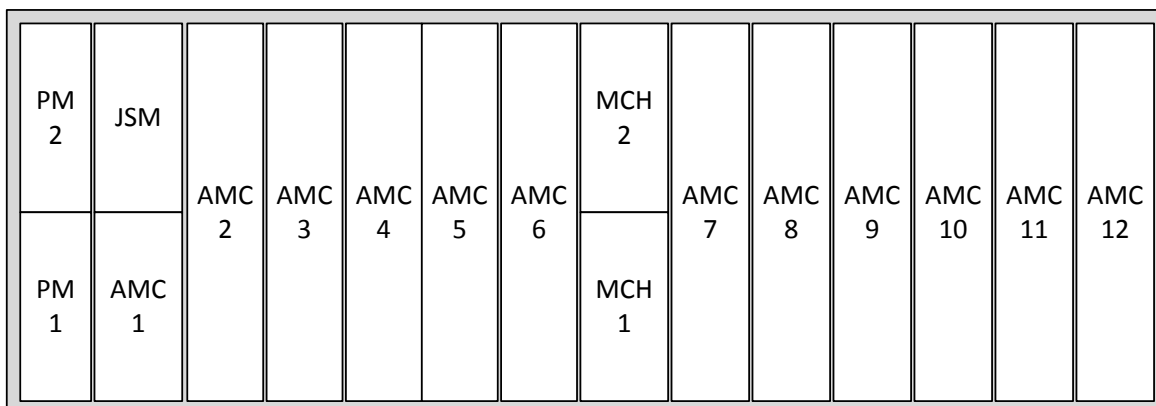
CHASSIS CONFIGURATION

Figure 1: VT895 Chassis Layout - Front View
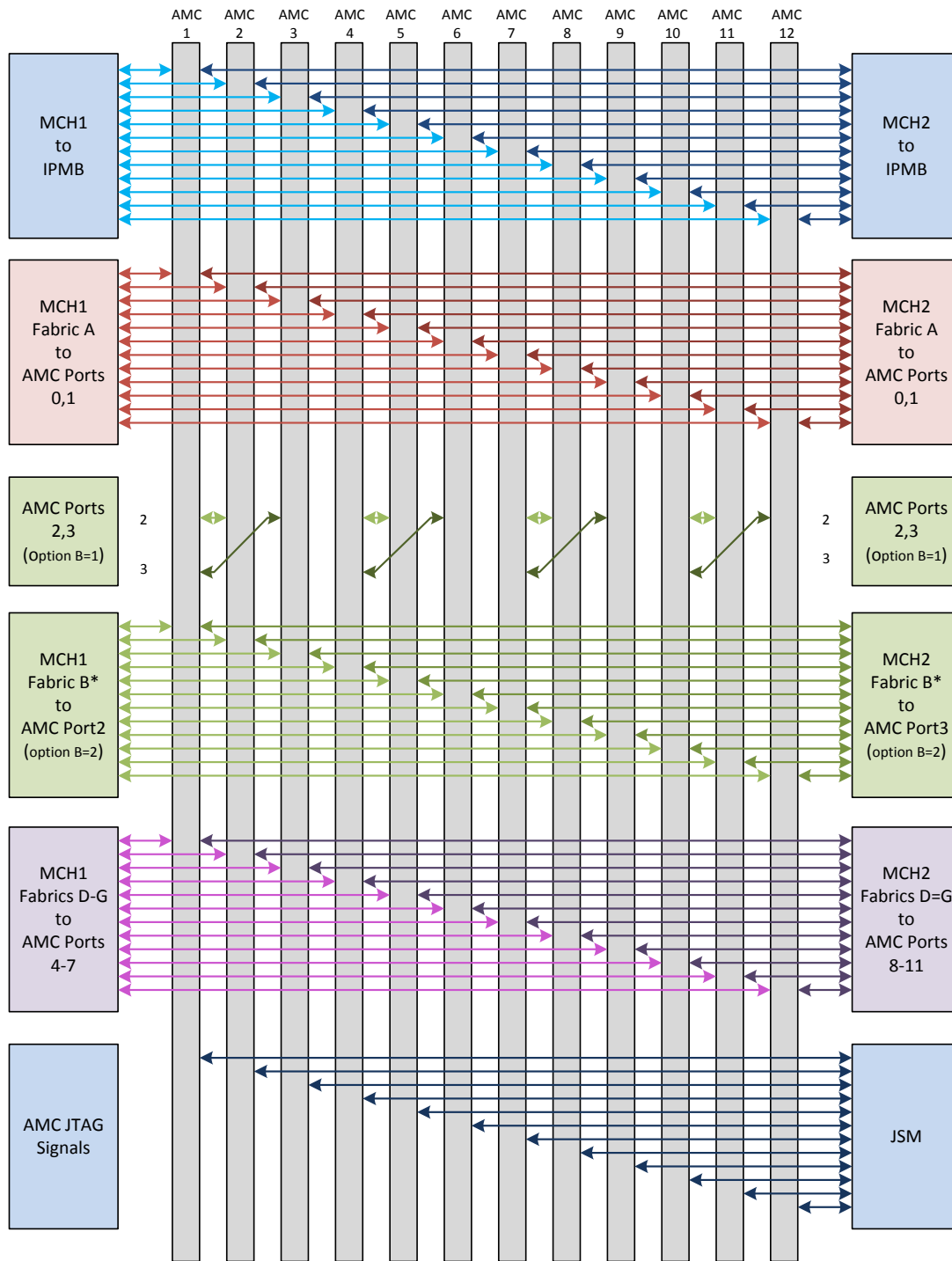
BACKPLANE CONNECTIONS

Figure 2: VT895 Backplane Connections

*Fabric B is partially routed when CLK3 is utilized.

PORTS 12-15 AND 17-20

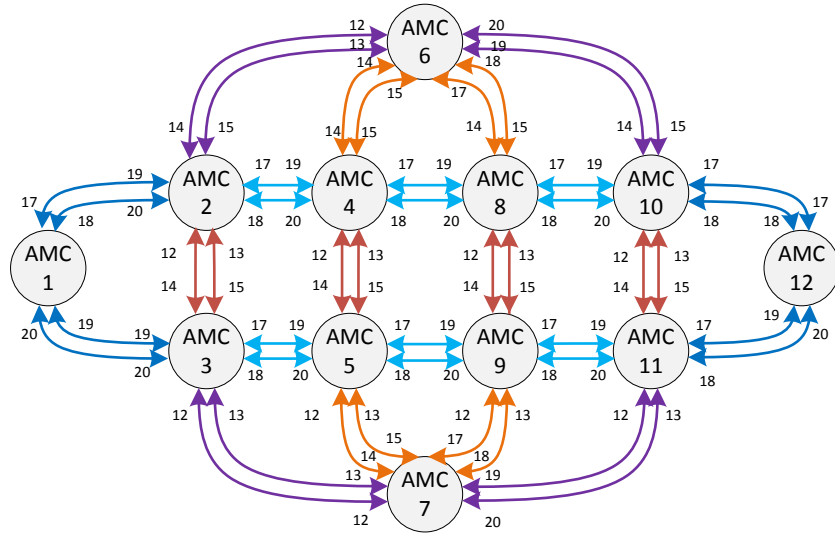Ports 12-15 and ports 17-20 are routed in VT895 as shown below.

Figure 3: Ports 12-15 and 17-20 Connections

CLOCKS

The µTCA specifies three clocks: CLK1, CLK2, and CLK3. It defines non-redundant and redundant clock networks. The non-redundant clock network connects CLK1, CLK2 and CLK3 of one MCH point-to-point to CLK1, CLK2 and CLK3 of the AMCs. CLK3 can follow the Telco clock or become the Fabric clock per AMC.1 specification. Fabric B will be partially provided only on ports 1 to 6 CLK3 is routed on Fabric B on ports 7 to 12. The redundant clock network option connects the CLK1 of MCH1 and CLK1 of MCH2 point-to-point to each of the CLK1 and CLK3 respectively of each AMC.
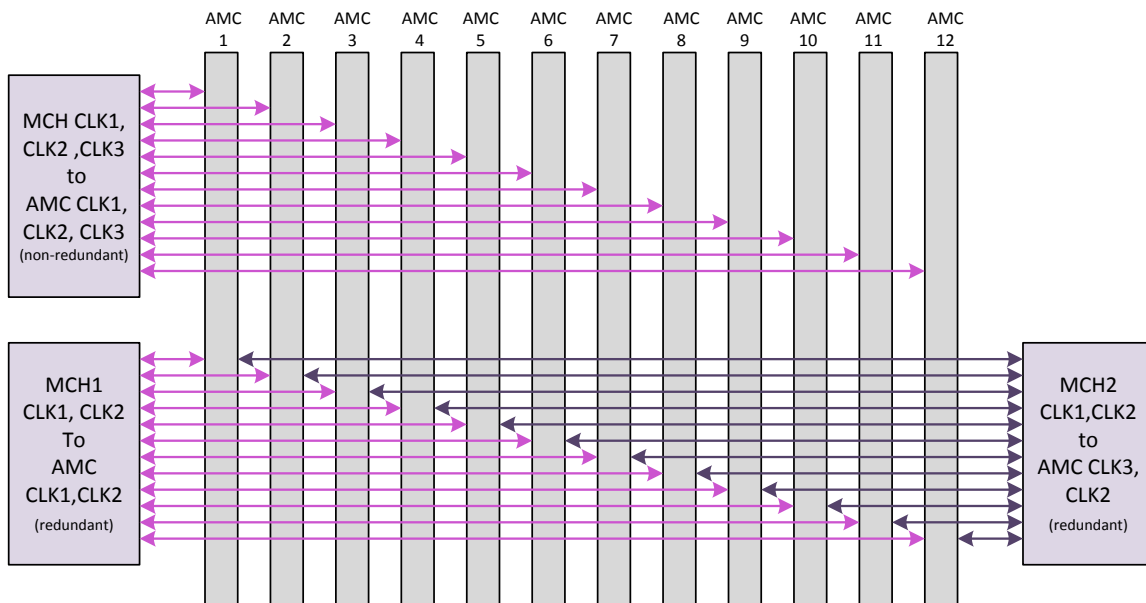

Figure 4: Backplane Clock Connections

SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 6U
		Width 19"
		Depth 10.4" without the handles and 12" with the handles
Type	µTCA Chassis	12 AMC.0 full size slots, Telco Alarm, dual MCH slots, dual Power Module slots and dual intelligent Cooling Units

Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	Type	MicroTCA.0

Configuration		
Power	VT895	Dual PM slots
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
Compliance	RoHS and NEBS
Warranty	Two (2) years
Trademarks and Disclaimer	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice

ORDERING OPTIONS

VT895 – 0BC – 000 – 00J

B = Ports 2 and 3
1 = Direct connections
2 = To MCH

C = MCH CLK3 Channels
1 = Telco (non-redundant)
2 = FCLKA (non-redundant)
3 = Fabric B (redundant)

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

RELATED PRODUCTS

UTC004 40G MCH

**UTC008
JTAG Switch Module**

**UTC010
DC Power Module**

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