VT894 – 7U µTCA Chassis, 12 AMC Full Size Slots, Extended Options

7U µTCA Chassis, 12 AMCs

KEY FEATURES

- µTCA System Platform 19" x 7U x 10.5" deep (with handles 12" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to twelve AMCs: double module, full-size
- Bottom to top cooling
- Dual star topology, radial I²C bus to each AMC
- High-speed routing on 26 layers
- Redundant FRU information devices and Carrier Locator
- 1000W AC Power supply option
- Telco Alarm
- CLK1, CLK2 and CLK3
- No active components on the backplane
- JTAG Switch Module (JSM) Slot
- ESD-Jack at the top front
- Cooling from bottom to top
- RoHS compliant

µTCA™

Benefits of Choosing VadaTech

- Bottom-to-top cooling configuration
- 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 VT894 is a 7U 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. It provides CLK1, CLK2, and CLK3 to each slot.

The VT894 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units (CU) for high availability. The VT894 cooling is from bottom to top.

There is an option for redundant/non-redundant clock per µTCA specification. The CLK3 option can be configured for the Fabric clock as well as Telecom clock.

There is an option 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 VT894 has a Telco Alarm as well as Redundant FRU information devices and carrier locators. The VT894 has a JSM slot which routes to each JTAG port of the AMC.

The VT894 routes ports 12-15 and 17-20 between slots.

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POWER SUPPLY

The VT894 has an option for a 1000 W power supply. The input voltage is from 110 to 240 VAC (frequency from 47 to 63 Hz). The VT894 provides –48 V connectors to the front of the chassis to power the Dual Power Modules. The AC input is from the back of the chassis. The AC supply has an on/off switch on front top of the chassis.

COOLING AND TEMPERATURE SENSORS

The VT894 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 VT894 provides Telco Alarm functionality to alert about any anomaly within the chassis. The Telco Alarm is provided through a Micro DB-9 connector with LEDs in the front to show any anomaly. The Telco Alarm has its own dedicated slot.

FRU INFORMATION AND CARRIER LOCATOR

The VT894 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 Carrier locator information through a private I^2C bus.

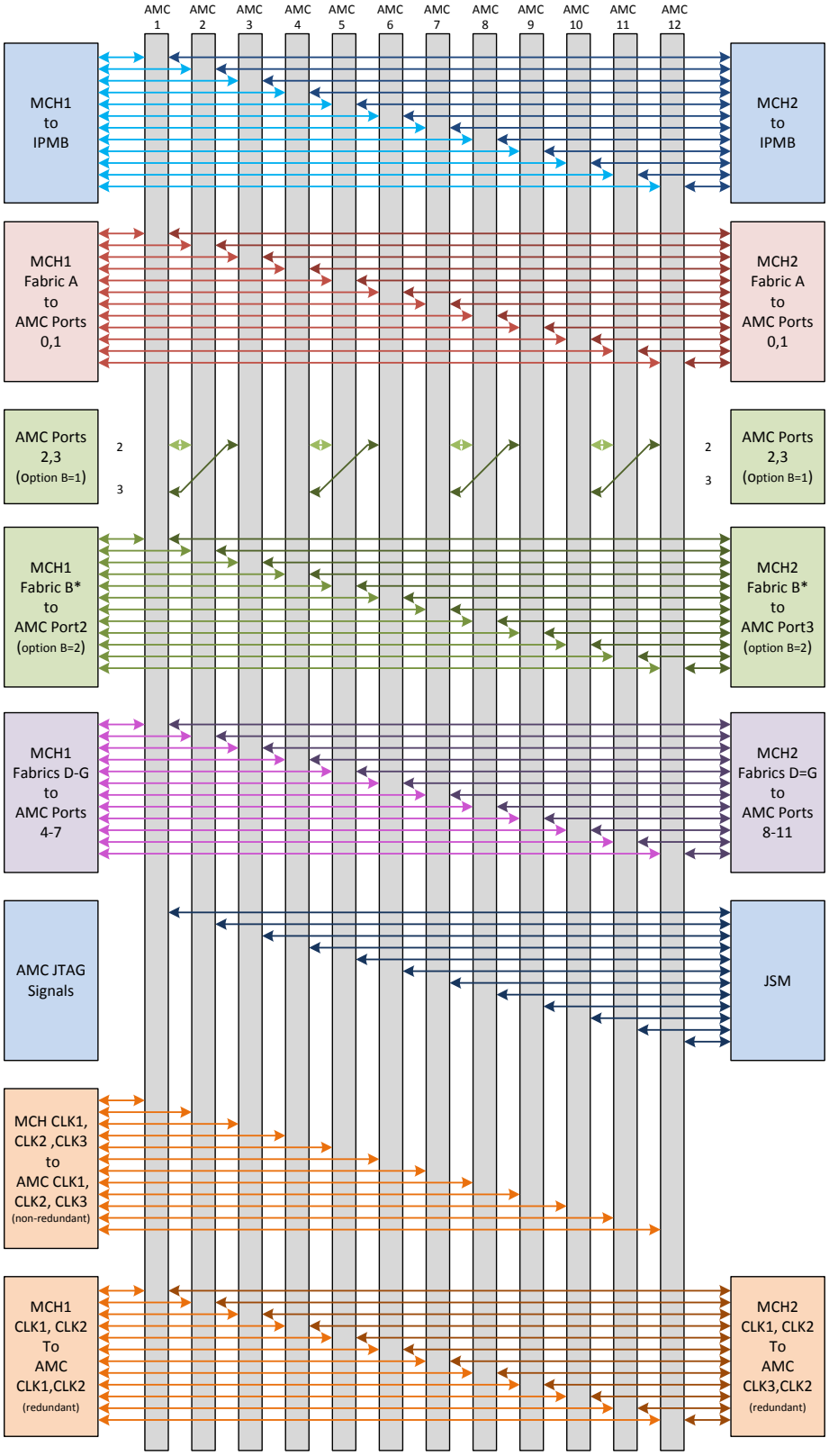
NO ACTIVE COMPONENTS

Unlike other µTCA chassis in the market, the VT894 has no active components on its backplane. This allows easy 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.

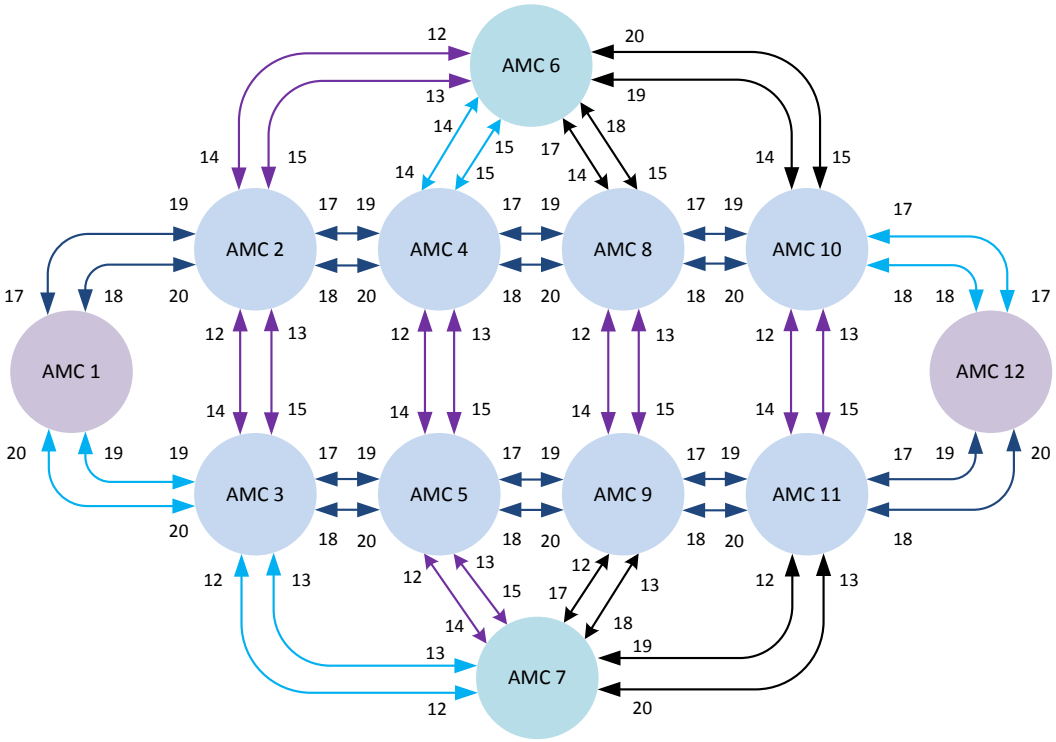
BACKPLANE CONNECTIONS



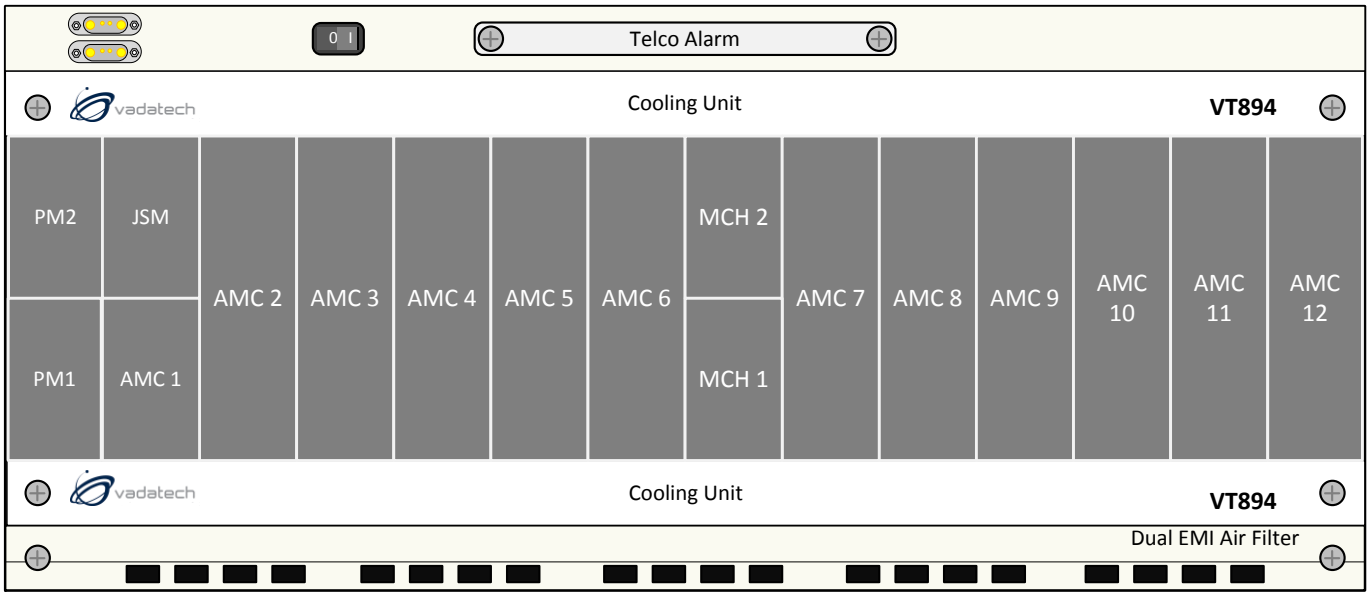
*When CLK3 is non-redundant, Fabric B will be partially provided only on ports 1 to 6. CLK3 is routed on Fabric B on ports 7 to 12.

PORTS 12-15 AND 17-20

The ports 12 – 15 and ports 17 – 20 on the VT894 are routed between the AMC slots as shown below.



CHASSIS CONFIGURATION



SPECIFICATIONS

Architecture		
Physical	Dimensions	Height: 7U
		Width: 19”
		Depth: 10.25” without handles and 12” with the handles
Type	µTCA Chassis	12 Full-size AMC slots
		Telco Alarm, JSM, Dual MCH, Dual Power Module and Dual Intelligent Cooling Units
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	Type	PICMG 3.0 Rev 3.0
Configuration		
Power	VT894	1000 W supply
		110-240 VAC with frequency from 47-63Hz
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	

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

VT894 – ABC – 000 – 00J

A = AC Power Supply
0 = None
1 = 1000 W

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

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

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

RELATED PRODUCTS

UTC004
MCH (3rd generation)

UTC020
DC Power Module

AMC720
Processor AMC, PCIe

CONTACT US

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