VT893

7U MTCA Chassis with 11 AMC Full Size Slots

VT893

Key Features

- MTCA 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 eleven AMCs: 11 full-size, double-modules
- Radial I2C bus to each AMC
- Dual Star topology
- No active components on the backplane
- High-speed routing on 26 layers
- Front-to-back cooling

Benefits

- High-speed MTCA connectors (12.5 GHz)
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company
- Full system supply from industry leader

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VT893

The VT893 is a 7U MTCA chassis with 11 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 VT893 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units (CU) for high availability.

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

VT893 has 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 unit has a Telco Alarm, Redundant FRU information devices, carrier locators and a JSM slot which routes to each JTAG port of the AMC.

Power Supplies

The VT893 has an option for a 1000W power supply. The input voltage is from 110-240V AC (frequency from 47-63 Hz). The unit provides -48V 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-center of the chassis.

Cooling and Temperature Sensors

The VT893 has airflow from front to back with Dual intelligent Cooling Units. This redundancy ensures fail-safe operation should one of the cooling units become non-operational. A sensor detects the presence of the replaceable Air Filter, allowing it to be monitored for when it is due to be cleaned/replaced.

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

Telco Alarm

The VT893 is fitted with a Telco alarm that constantly monitors the chassis for any anomalies and alert the user by LED indication on the Front Panel. It can be directly accessed via a Micro DB-9 connector.

FRU Information and Carrier Locator

The VT893 has dual redundant FRU information and Carrier Locator. 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 VT893 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.

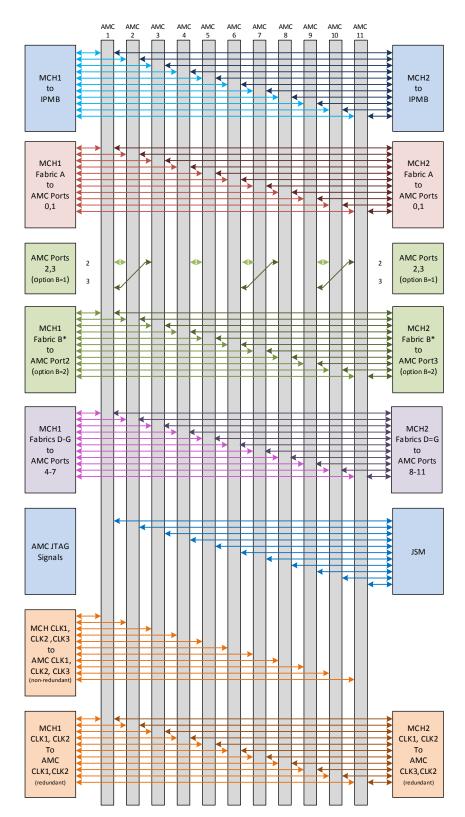

Figure 1: VT893

Backplane Connections

Figure 2: VT893 Backplane Connections

See Figure 2: *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.
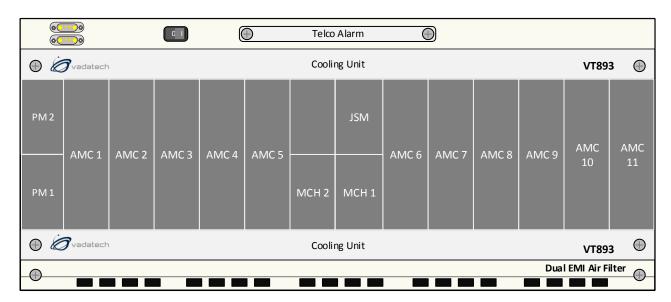
Chassis Layout

Figure 3: VT893 Chassis Layout

VT893 – 7U MTCA Chassis with 11 AMC Full Size Slots

Specifications

Architecture		
Physical	**Dimensions**	Width: 19"
		Depth: 10.25" without handles and 12" with the handles
		Height: 7U
Type	**MTCA Chassis**	11 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
MTCA	**Type**	PICMG 3.0 Rev 3.0
Configuration		
Power	**VT893**	1000W supply
		110-240V AC with frequency from 47-63 Hz
Environmental	**Temperature**	Operating temperature: -5° to 55°C
		Storage Temperature: –40° to +70°C
	Altitude	10,000 ft operating
		40,000 ft non-operating
	Relative Humidity	5 to 95% non-condensing
Cooling		Front to back
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		One (1) year, see VadaTech Terms and Conditions

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

VT893 – ABC-000-0HJ

A = Power Supply		
0 = No Power Supply 1 = 1000W		

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

C = CLK3		J = Conformal Coating
1 = Non-redundant (Telco clock) 2 = Non-redundant (Fabric clock) 3 = Redundant		0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

Related Products

AMC720

- Intel® Xeon™ E3 processor
- Conduction cooled version available
- PCIe Gen2, Gen3 on v2 option

UTC004

- Unified 1 GHz quad-core CPU for MicroTCA Carrier Management Controller (MCMC), Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s
- 1GbE base switch with dual 100/1000/10G uplink

UTC020

- Single module, full-size per AMC.0
- Dual -36V DC to -75V DC input, 936W (available in 468W)
- Hot swappable with support for power module redundancy

Contact

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