

# VT886

## 2U MTCA Chassis with 12 AMCs, AC Input



VT886

### Key Features

- MTCA System Platform 19" x 2U x 14.2" deep
- Up to twelve AMCs: four full-size and eight mid-size
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Dual star topology
- Radial I2C bus to each AMC
- High-speed routing on 26 layers (40G capable)
- High-speed MTCA connectors (12.5 GHz)
- Removable Air Filter, Power Module and Fan Tray

### Benefits

- 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



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# VT886

The VT886 is a 2U MTCA chassis with four full-size and eight mid-size AMC slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It also provides CLK1, CLK2, and CLK3 to each slot in addition to the JTAG signals.

The unit's unique dual tongue feature provides extra power to 4 slots and enables an additional 21 differential pairs between these slots. It also allows up to 8 double-width mid-height AMC modules.

The VT886 has full redundancy. It is capable of having redundant MCH, Power Modules and redundant Cooling Units for high availability. An option exists for redundant/non-redundant clock per MTCA specification. The CLK3 option can be configured for the Fabric clock and Telecom clock.

The chassis has a JTAG Switch Module (JSM) slot per MTCA specification. This provides transparent communication between the front JTAG Port and the selected AMC device.

## Power Supply

The VT886 has a Dual Power Module (PM) option. The PM slots are in the rear with the universal AC input.

## Cooling and Temperature Sensors

The VT886 has airflow from right to left 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 VT886 is fitted with a Telco alarm that constantly monitors the chassis for any anomalies and alerts the user by LED indication on the Front Panel. It has its own dedicated slot and can be directly accessed via a Micro DB-9 connector.

## FRU Information and Carrier Locator

The VT886 has dual redundant FRU information and Carrier Locators. 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 VT886 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: VT886 Front View



Figure 2: VT886 Rear View

# Backplane Connectors

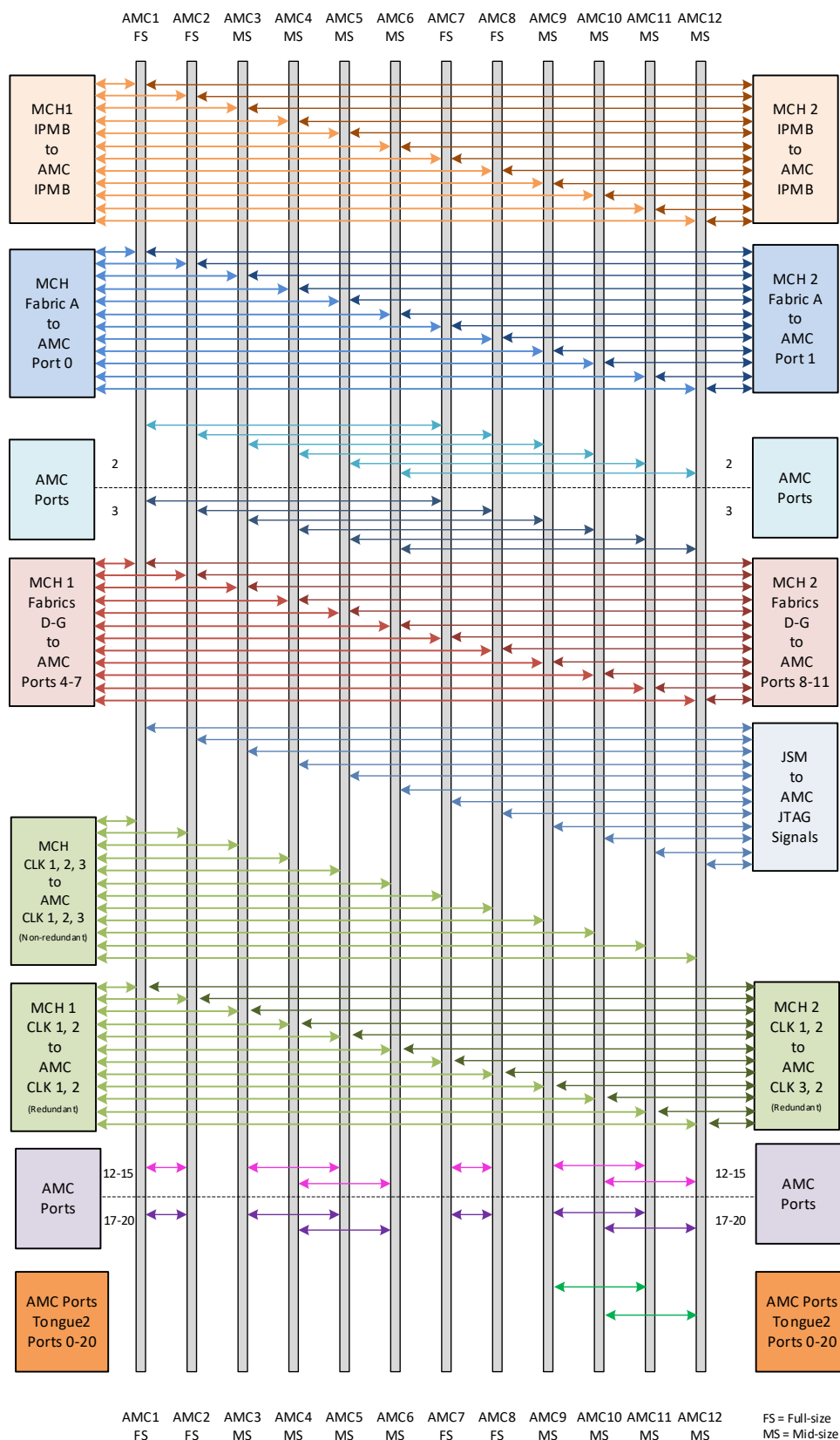


Figure 3: VT886 Backplane Connections

# Chassis Layout

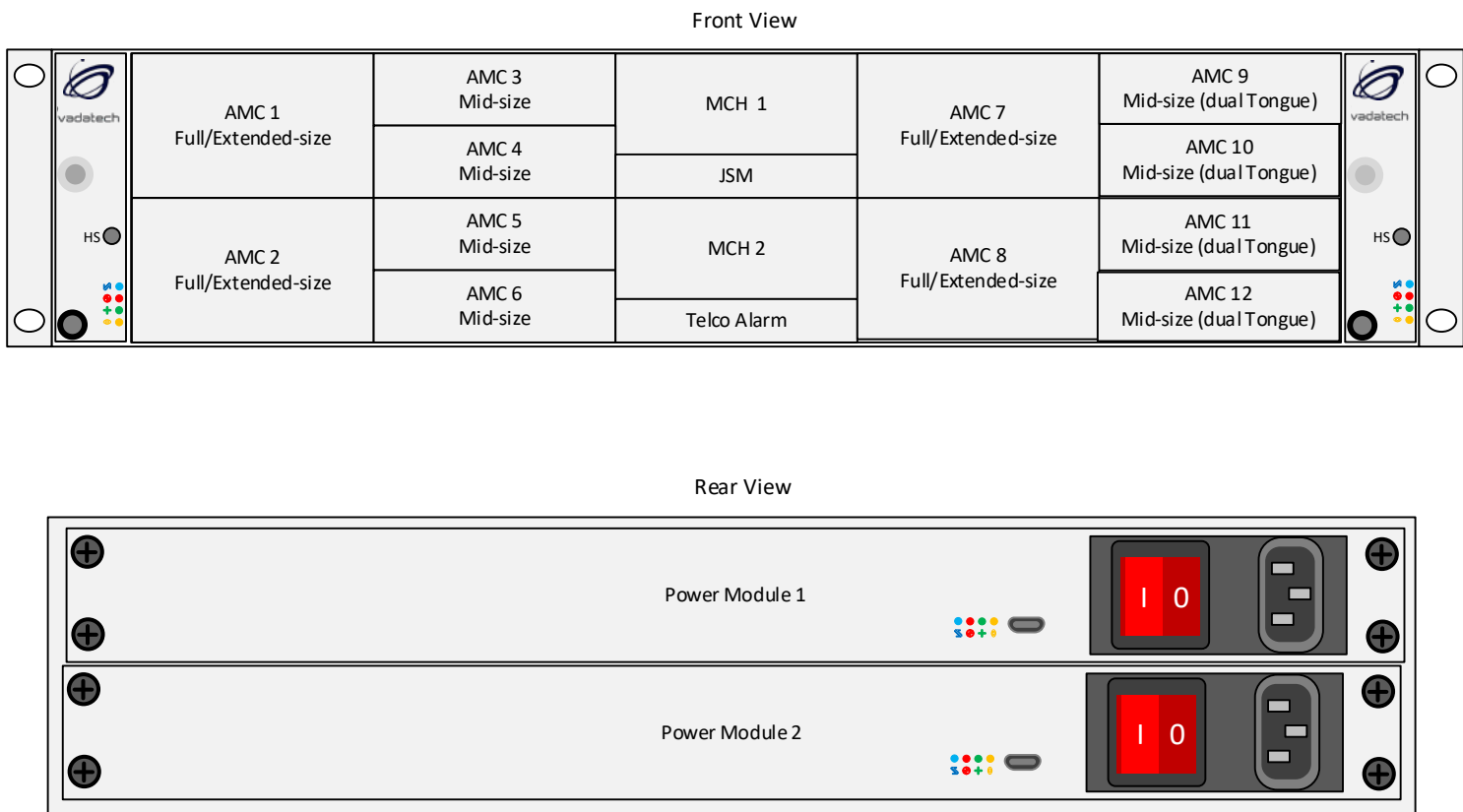


Figure 4: VT886 Chassis Layout

# Specifications

Architecture		
Physical	Dimensions	Height: 2U
		Width: 19"
		Depth: 14.2"
Type	MTCA Chassis	12 AMC.0 Slots
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
MTCA	Type	JSM, Telco Alarm, Dual MCH, Dual Power Module and Dual Intelligent Cooling units
Configuration		
Power	VT886	Dual Power Module (PM) Inserted from the rear
		800W Universal AC Input (110-240V AC with frequency from 47-63 Hz) per Module
Environmental	Temperature	See <a href="#">Ordering Options</a>
		Storage Temperature: -40° to +70°C
	Altitude	10,000 ft operating 40,000 ft non-operating
Relative Humidity		5 to 95% non-condensing
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 <a href="#">VadaTech Terms and Conditions</a>	

## 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

## VT886 – A0C-00F-0HJ

<b>A = Power Supply</b>		
1 = Single AC 2 = Dual AC		
<b>H = Temperature Range</b>		
0 = Commercial 1 = Industrial		
<b>C = CLK3</b>	<b>F = JSM</b>	<b>J = Conformal Coating</b>
1 = Non-redundant (Telco) 2 = Non-redundant (Fabric CLK) 3 = Redundant	0 = No JSM 1 = JSM	0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

## Related Products

AMC720



- Intel® Xeon™ E3 processor
- Single module, mid-size per AMC.0
- PCIe Gen2 (Gen3 on v2 option) x4 on Ports 4-7 and 8-11 or single PCIe x8 on Ports 4-11 (AMC.1)

UTC004



- Unified 1 GHz quad-core CPU for MicroTCA Carrier Management Controller (MCMC), Shelf Manager, Clocking, and Fabric management
- 1GbE base switch with dual 100/1000/10G uplink
- Non-blocking PCIe Gen 3, SRIO Gen 2, 10GbE/40GbE, or Crossbar Switch option to AMC fat pipes with options for up to 40GbE uplink

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- MTCA 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

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