

# VT882

## 2U MicroTCA Chassis with 8 AMCs, AC Input



VT882

## Key Features

- 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 eight AMCs: Extended-size/full-size and/or mid-size
- Dual star topology on ports 0 and 1
- Radial I2C bus to each AMC
- High-speed routing on 26 layers (40G capable)
- High-speed MTCA connectors (12.5 GHz)
- Telco Alarm
- 720 W AC Universal dual redundant Power Modules
- ESD-Jack

## Benefits

- AC Input
- JTAG Switch Module (JSM) slot with front port access
- Removable Air Filter, Power Module and Fan Tray
- No active components on the backplane
- AS9100 and ISO9001 certified company

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# VT882

The VT882 is a 2U MTCA chassis that provides eight extended-size/full-size and/or mid-size AMC slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It provides TCLKA, TCLKB, TCLKC and TCLKD as well as FLCLKA to each slot in addition to the JTAG signals.

The VT882 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units for high availability. Option for redundant/non-redundant clock per MTCA specification.

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. The VT882 has a Telco Alarm as well as Redundant FRU information devices and carrier locator.

## Power Supplies

The VT882 has an option for Dual Power Module (PM). The PM slots are in the rear with universal AC input.

## Cooling and Temperature Sensors

The VT882 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 right to left. The removable Air Filter has a switch to detect its presence and can be monitored for when it needs to be replaced.

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

## Telco Alarm

The VT882 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. The Telco Alarm has its own dedicated slot and can be directly accessed via a Micro DB-9 connector.

## FRU Information and Carrier Locator

The VT882 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 MTCA chassis on the market, the VT895 has no active components on its back plane, making maintenance and servicing tasks more straightforward.



Figure 1: VT882 Chassis

# Backplane Connections

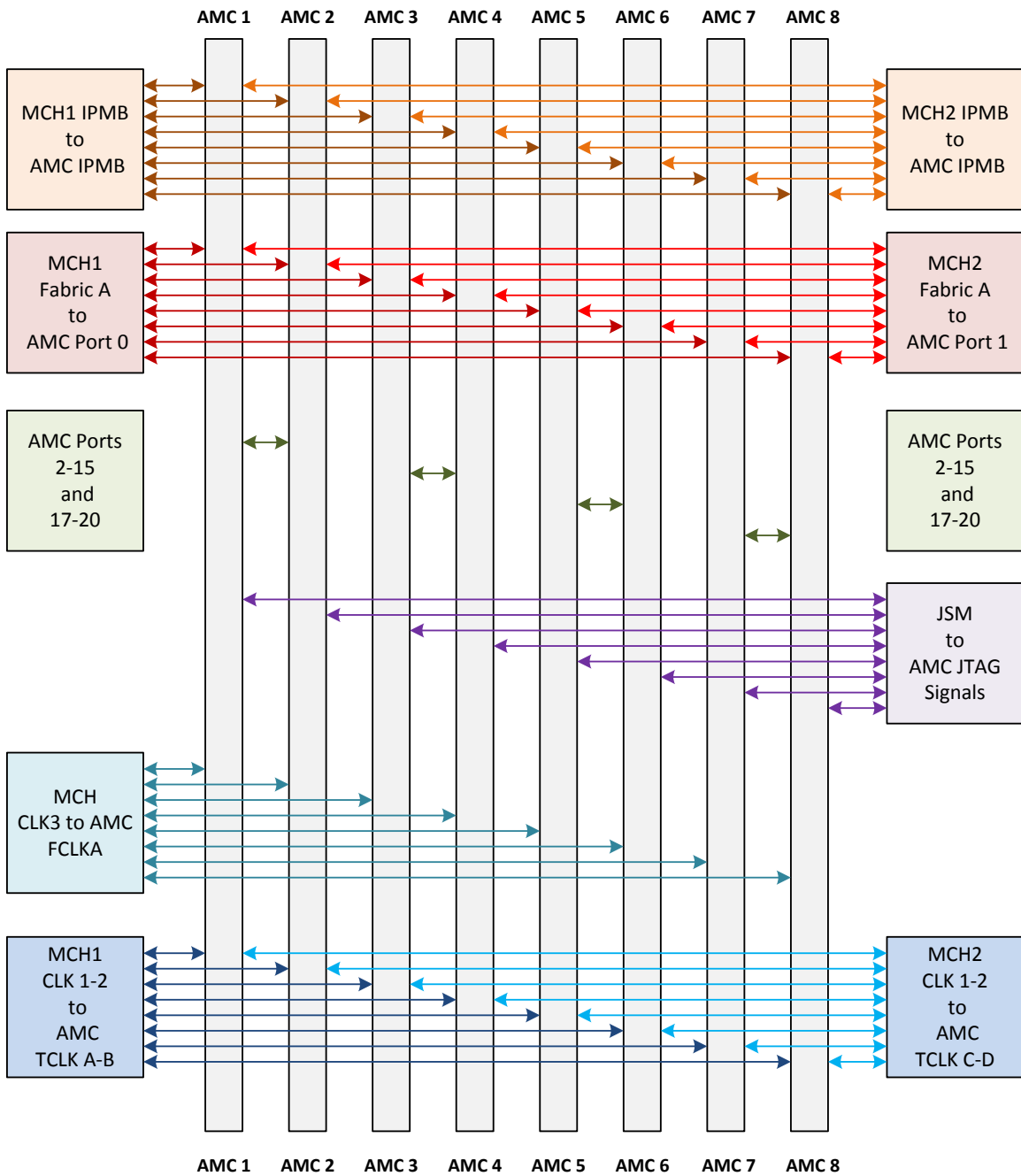
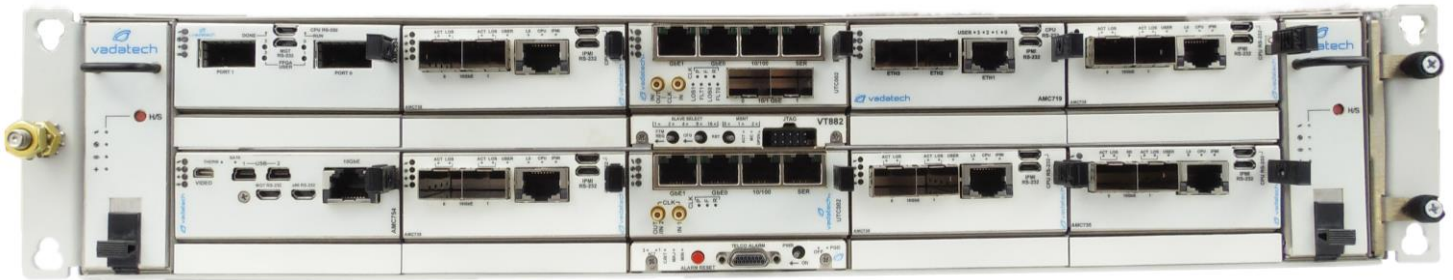


Figure 2: VT882 Backplane Connections

# Chassis Layout



Front View

 HS	AMC 1 Extended-size Full-size Mid-size	AMC 3 Extended-size Full-size Mid-size	MCH 1  JSM	AMC 5 Extended-size Full-size Mid-size	AMC 7 Extended-size Full-size Mid-size	 HS
	AMC 2 Extended-size Full-size Mid-size	AMC 4 Extended-size Full-size Mid-size	MCH 2  Telco Alarm	AMC 6 Extended-size Full-size Mid-size	AMC 8 Extended-size Full-size Mid-size	

Figure 3: VT882 Chassis Front View



Figure 4: VT882 Chassis Rear View

# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Width: 19" Depth: 14.2" Height: 2U
<b>Type</b>	<b>Micro TCA Chassis</b> 8 AMC.0 Slots
Standards	
<b>AMC</b>	<b>Type</b> AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
<b>MTCA</b>	<b>Type</b> PICMG 3.0 Rev 3.0
Configuration	
<b>Power</b>	<b>VT882</b> Dual Power Module (PM) inserted from the rear 720 W Universal AC Input (110-240 V AC with frequency from 47-63 Hz) per Module
<b>Environmental</b>	<b>Temperature</b> Operating Temperature: 0° to 55°C. See <a href="#">environmental spec sheet</a> Storage Temperature: -40° to +70°C
	<b>Altitude</b> 10, 000 ft operating 40, 000 ft non-operating
	<b>Relative Humidity</b> 5 to 95% non-condensing
<b>Cooling</b>	Right to Left
Other	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
<b>Warranty</b>	Two (2) years

## 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

## VT882 – A00-00F-00J

<b>A = Power Supply</b>		
1 = Single AC 2 = Dual AC		
<b>F = JSM</b>		<b>J = Conformal Coating</b>
0 = No JSM 1 = JSM		0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

## Related Products

AMC599



- Xilinx UltraScale™ XCKU115 FPGA
- Dual ADC @ 6.4 GSPS 12-bits or quad ADC at 3.2 GSPS
- Dual DAC (AD9162 or AD9164) @ 12 GSPS 16-bits

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

VT880



- 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

# Contact

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