

# VT887

3U MicroTCA.4.1 Chassis @ 1100 W,  
360 W per slot



VT887

## Key Features

- Three full-size double-width AMC slots
- Rear Transition Module (RTM) with extra power connector (for two of the three slots)
- 360 W per slot including the RTM (for the first two slots) Slot 3 is 90W
- PinoutPlus™ support, 2nd tongue on all AMC slots
- Right to left cooling
- Single MCH
- Four power supply for a total of 1100W
- Option for RTM in the front or rear
- JSM (JTAG Switch Module) Support

## Benefits

- Vast performance density with 3 full-height slots
- High bandwidth local interconnects via innovative PinoutPlus™
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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# VT887

The VT887 is an 3U MTCA.4.1 chassis (RTM backplane does not route all the MTCA.4.1 specification signals) that provides 3 full-size, double-width AMC slots. The chassis backplane is routed on high-speed low loss material for high-speed applications such as 40GbE.

The VT887 has the PinoutPlus™, which allows dual tongue AMC modules to be utilized. The PinoutPlus™ allows more power to each module (up to 200W, only the first two slots) as well as adding an additional 21 pairs of high-speed differential signals between slots. The use of the tongue 2 connector complies with the AMC.0 specification.

The VT887 1100W is universal AC power supply. Two of the slots can dissipate up to 360W each (including the RTM) and the third slot can dissipate up to 90W. The VT887 has an additional power connector on the RTM backplane to allow RTMs to draw up to 160W per slot.

The VT887 has a single MCH slot, Telco Alarm, as well as having an option for the JSM (JTAG Switch Module). It provides FCLKA, TCLKA and TCLKB to each slot.



Figure 1: VT887 Front View

# Architecture

## Cooling and Temperature Sensors

The VT887 has intelligent cooling units. The cooling airflow is from right to left. There are numerous temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis.

## Power Supplies

The VT887 has a 1100 W power supply. The input voltage is from 110-240V AC (frequency from 47-63 Hz).

## Telco Alarm

The VT887 provides Telco Alarm functionality to alert about any anomaly within the chassis. The Telco Alarm is provided via a Micro DB-9 as well as LEDs in the front to show any anomaly. The Telco Alarm has its own dedicated slot.

## FRU Information and Carrier Locator

The VT887 has FRU information and a Carrier Locator. The Carrier Locator is assigned by mechanical dip switches which are easily accessible via the front panel. The MCH reads the Locator via its private I2C bus.

## 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.

# Chassis Layout

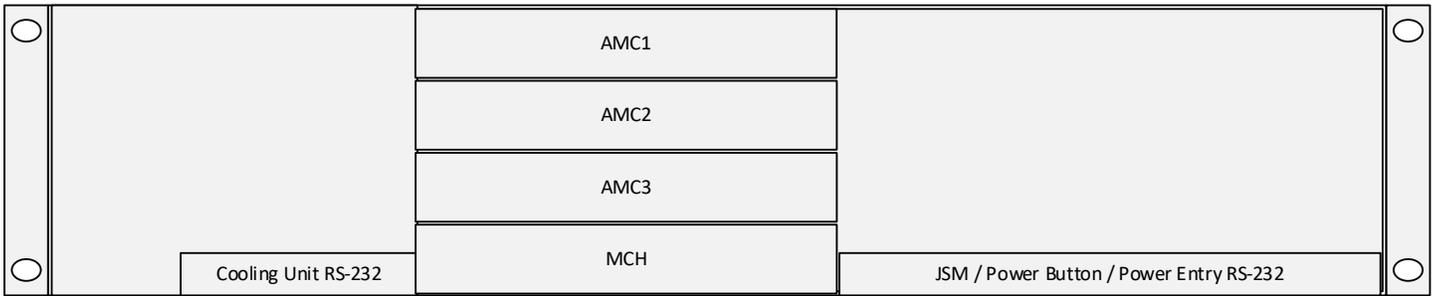


Figure 2: VT887 Chassis Front View

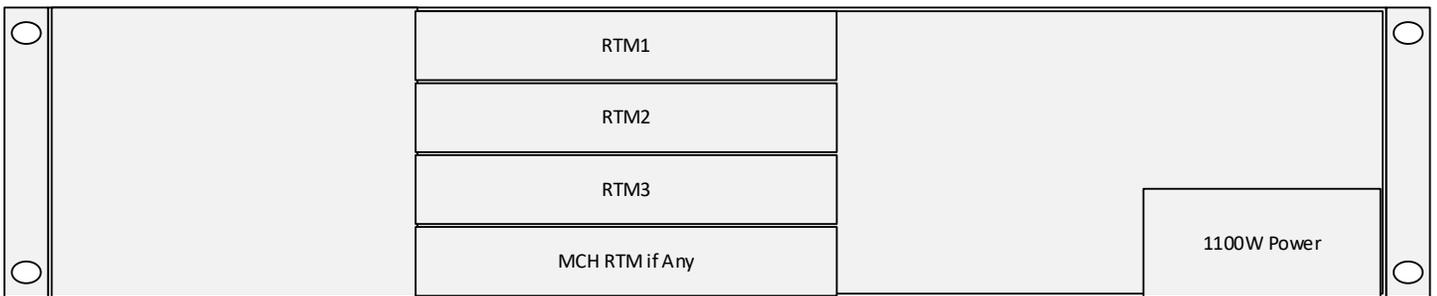


Figure 3: VT887 Chassis Rear View

# Backplane Connections

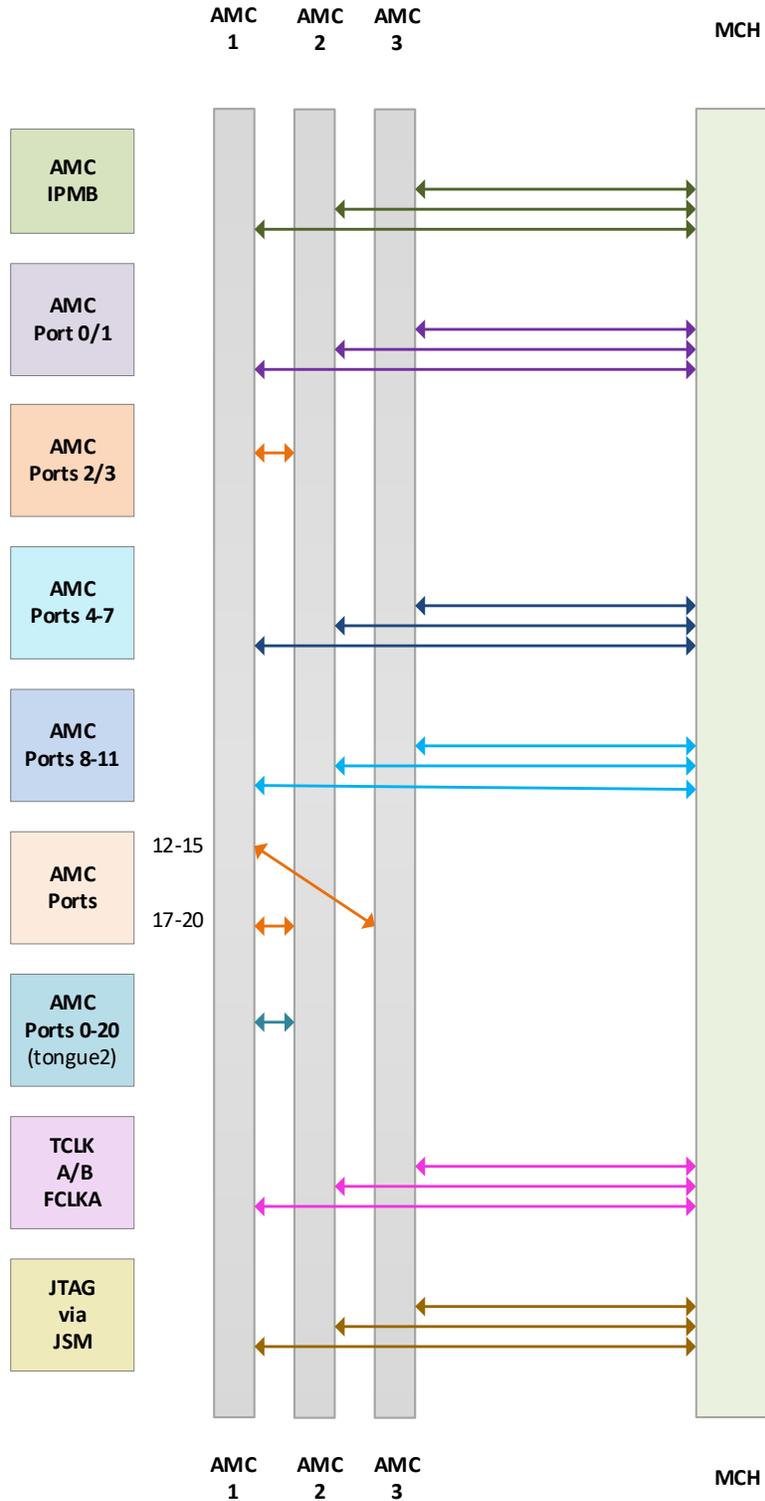


Figure 4: VT887 Backplane Connections

# Chassis Views



Figure 4: VT887 Front View



Figure 5: VT887 Front View

# Specifications

Architecture		
<b>Physical</b>	<b>Dimensions</b>	Height: 3U
		Width: 19"
		Depth 14.5" (369 mm) rear mounting to rear of structure
		Depth 15.6" (396 mm) including the local protrusion (Power supply handle)
<b>Type</b>	<b>MicroTCA Chassis</b>	3 AMC.0 mid-size double-width slots with Tongue 2 and RTM
Standards		
<b>AMC</b>	<b>Type</b>	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
<b>MTCA</b>	<b>Type</b>	MTCA.4.1 (not all the MTCA.4.1. RTM signals are routed on the RTM backplane)
Configuration		
<b>Power</b>	<b>VT887</b>	1100 W supply (up to four 1100W supply, 90-240V AC universal AC with frequency from 47-63Hz)
<b>Environmental</b>	<b>Temperature</b>	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial and extended versions also available (See <a href="#">environmental spec sheet</a> )
		Storage Temperature: -40° to +85°C
	<b>Altitude</b>	10,000 operating 40,000 non-operating
	<b>Relative Humidity</b>	5 to 95 per cent, non-condensing
<b>Conformal Coating</b>		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)
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 ATCA and  $\mu$ TCA 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.

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# Ordering Options

## VT887 – ABC-000-00J

<b>A = Power Supply</b>		
0 = Single (1100W, AC) 1 = Reserved		
<b>B = Second Tongue</b>		
0 = None 1 = Installed		
<b>C = JSM</b>		<b>J = Temperature Range and Coating</b>
0 = Reserved 1 = Not installed 2 = Installed		0 = Commercial (–5° to +55° C), No coating 1 = Commercial (–5° to +55° C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55° C), Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70° C), No coating 4 = Industrial (–20° to +70° C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70° C), Humiseal 1B31 Acrylic

## Related Products

### AMC594



- 8-bit ADC at up to dual 56 GSPS
- 2 x 56 or 4 x 28 GSPS channels
- Xilinx UltraScale™ XCVU190 FPGA

### AMC750



- Intel® Xeon E5-2648L v4 (Haswell-EP)
- PCIe Gen 3 on ports 4-7 and 8-11(AMC.1)
- x16 PCIe Gen 3 via Tongue 2

### UTC006



- Fabric options include PCIe Gen3, 40/10GbE, SRIO, Cross Bar Switch (CBS) or Xilinx Virtex-7 690T FPGA for complete flexibility
- Front panel fabric expansion, e.g. quad ports for PCIe Gen 3 (x4, x8, or x16)
- PLL synthesizer for generating any clock frequency

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DOC NO. 4FM737-12 REV 01 | VERSION 1.1 – JAN/22