

# VT888

## 3U $\mu$ TCA.4 Chassis Platform with six AMC Slots based on R3.0

VT888

### Key Features

- Up to 6 double-width slots in 3U based on  $\mu$ TCA.0 R3.0
  - R3.0 allows 25G per lane  
Each slot can dissipate over 170W  
Non-Volatile Memory Read Only (NVMRO)  
Signal  
Dual Tongue per slot
- Four  $\mu$ TCA.4 slots and two standard  $\mu$ TCA.0 and/or  $\mu$ TCA.1
- 3U with front to back cooling
- Integrated Power Entry Module (PEM) for Universal AC, -48V and/or +24V
- Provision for JTAG Switch Module (JSM)
- ESD jack
- Removable Fan and Filter Tray

### Benefits

- Rugged design for Mil/Aero, Industrial, and Transportation applications with 40GbE and PCIe Gen3 capable
- Ideal for rack environment with compact integration requirements
- Embedded removable fan tray
- Scorpionware™ Shelf Management Software included at no additional cost
- AS9100 and ISO9001 certified company

**100G**



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# VT888

The VT888 is a 3U  $\mu$ TCA.4 chassis with 6 AMC double-width slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. Four of the slots are to the  $\mu$ TCA.4 which allows for the Rear Transition Module (RTM). The chassis has an option for JSM. Each slot can dissipate over 170W based with double tongue modules.

## FRU Information and Carrier Locator

The VT888 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.

## 100G/40GbE/PCIe Gen4 Backplane

The VT888 is based on the R3.0 of the  $\mu$ TCA which allows 100GbE or PCIe Gen4 capable backplane based on VadaTech design optimized for a better signal integrity. Each lane can operate at 25G.

## Cooling and Temperature Sensors

The VT888 provides compact cooling configuration with a single intelligent Cooling Unit for a maximum density. The cooling airflow is front to back. There are multiple Temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis. The sensors are monitored by the Management Controller over redundant IPMI bus. The Cooling Unit is located at the rear in a pull configuration. The fan and filter tray are removable, allowing easy maintenance of the system over time.

*Figure 1: VT888*

## 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: Front view

Figure 3: VT888 Rear View

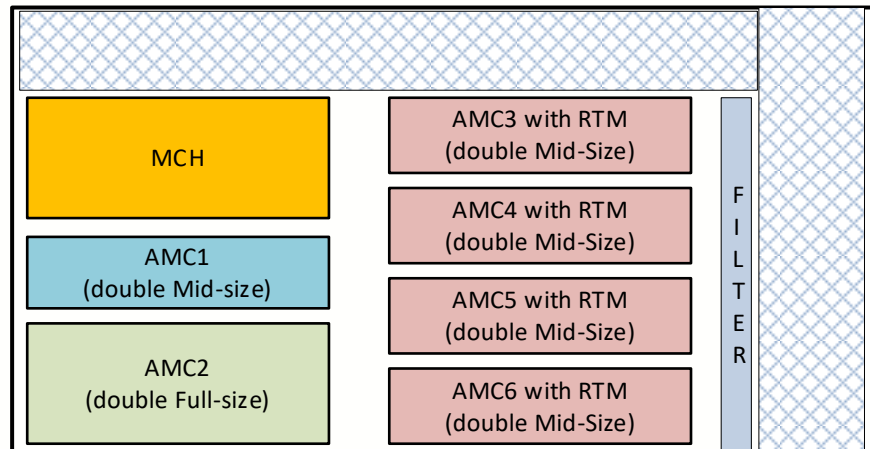


Figure 4: VT888 Chassis Slots

# Backplane Connections

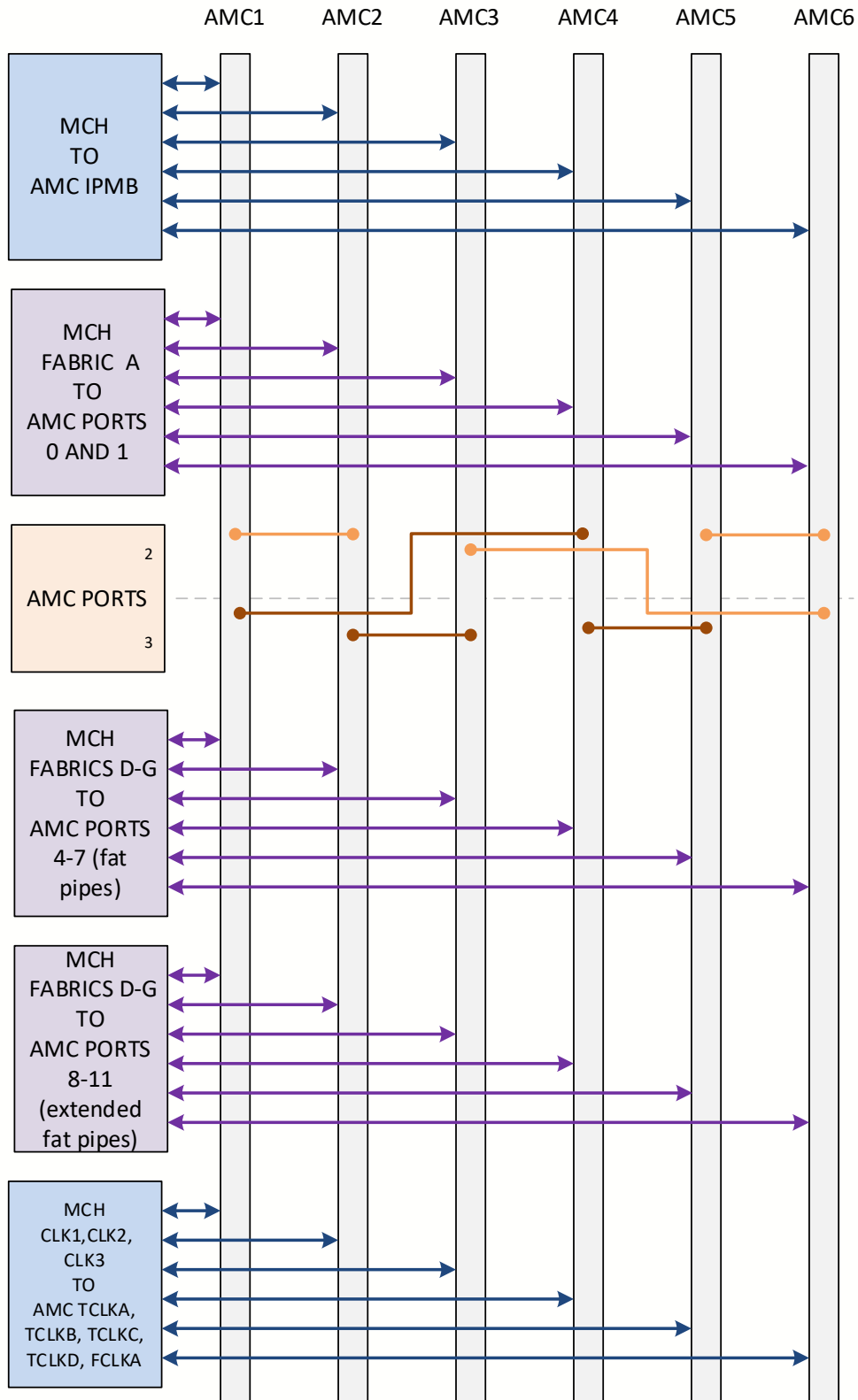
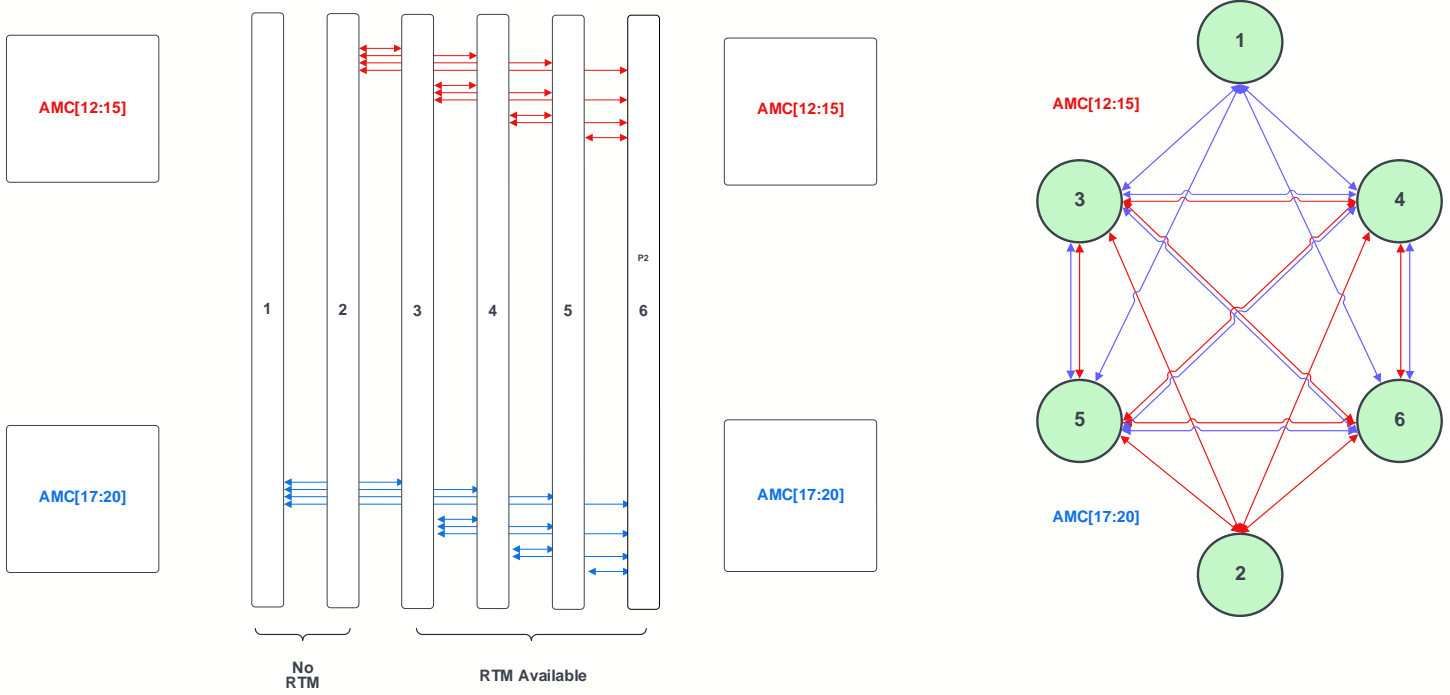


Figure 5: VT888 Backplane Connections

# Tongue 1

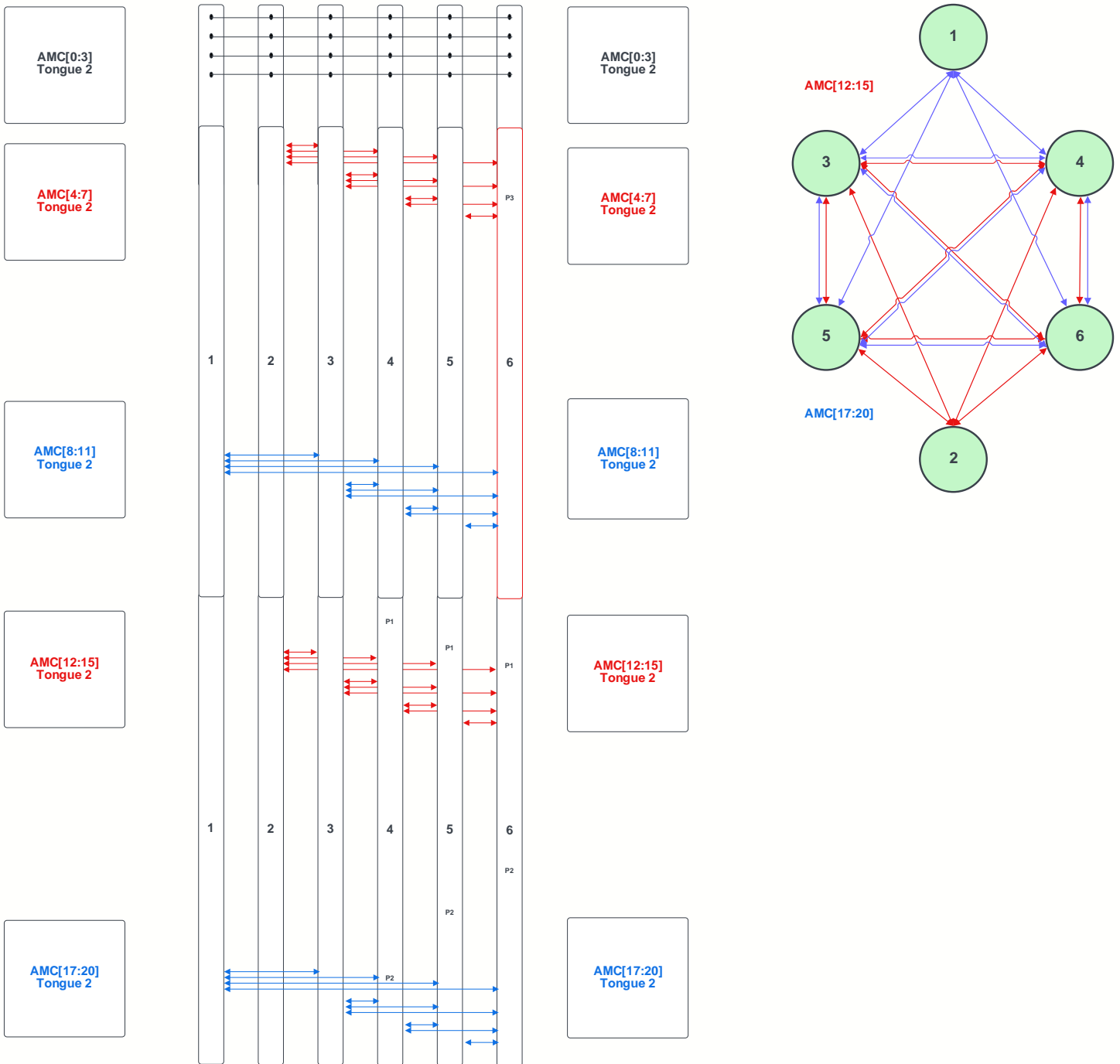
## Dual 5 - Node Full Mesh



6: VT888 Backplane Connections

# Tongue 2

## Redundant Dual 5 - Node Full Mesh



7: VT888 Backplane Connections

# Specifications

| Architecture             |   |
|--------------------------|---|
| <b>Physical</b>          | <b>Dimensions</b> Width: 19"<br>Depth: 15"<br>Height: 3U                                      |
| <b>Type</b>              | <b>MTCA Chassis</b> 4 AMC.4 with two AMC.0 and/or AMC.1 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> MicroTCA.4  |
| <b>Module Management</b> | <b>IPMI</b> v2.0  |
| Configuration            |   |
| <b>Power</b>             | <b>VT888</b> Universal AC (90-246V 47-63Hz), -48V and/or +24V                                 |
| <b>Environmental</b>     | <b>Temperature</b> See <a href="#">Ordering Options</a><br>Storage Temperature: -40° to +70°C |
|                          | <b>Altitude</b> 10,000 ft operating<br>40,000 ft non-operating                                |
|                          | <b>Relative Humidity</b> 5 to 95% non-condensing  |
| 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>          | 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

## VT888 – A00-D00-0HJ

|   |  |   |
|---|--|---|
| <b>A = Power Entry Module</b><br>0 = Single 1200W AC universal<br>1 = Dual 1200W AC universal<br>2 = Single 1000W -48V input<br>3 = Dual 1000W -48V input<br>4 = Single 600W +24V<br>5 = Dual 600W +24V | <b>D = JSM</b><br>0 = JSM not included<br>1 = JSM included |   |
|   |  | <b>H = Temperature Range</b><br>0 = Commercial<br>2 = Industrial  |
|   |  | <b>J = Conformal Coating</b><br>0 = No coating<br>1 = Humiseal 1A33 Polyurethane<br>2 = Humiseal 1B31 Acrylic |

## Related Products

AMC515



- AMC FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 57
- Xilinx Virtex-7 XC7V2000T in 1925 package
- AMC Ports 4-11 are routed to FPGA (protocols such as PCIe, SRIO, XAUI, etc. are FPGA programmable)

AMC720



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

UTC025



- 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



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