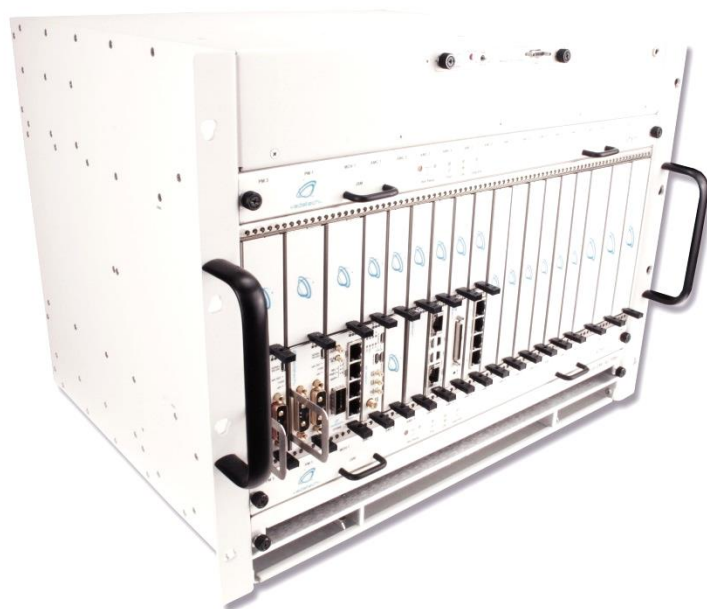


## VT811 – 8U MicroTCA.4 Chassis Platform

8U  $\mu$ TCA.4 Chassis, 12 AMCs



### KEY FEATURES

- $\mu$ TCA System Platform 19" x 8U x 14.9" deep (with handles 16.23" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and quad Power Modules
- Up to twelve AMCs: 12 front mid-size double module slots and RTM slots
- Provision to route cables from the front to the back
- Radial I2C bus to each AMC
- High-speed routing on 30 layers
- High-speed  $\mu$ TCA connectors (12.5 GHz)
- Redundant FRU information devices
- Redundant Carrier Locator
- Dual 1000W AC Power supply option
- Telco Alarm
- FCLKA, TCKA, TCKB, TCLKC AND TCLKD
- No active components on the backplane
- JTAG Switch Module (JSM) Slot
- ESD-Jack at the top front
- RoHS compliant

### Benefits of Choosing VadaTech

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The VT811 is an 8U  $\mu$ TCA chassis that provides 12 AMC mid-height double-module slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It provides FCLKA, TCLKA, TCLKB, TCLKC and TCLKD to each slot.

The VT811 has full redundancy. It's capable of having redundant MCH, Power Modules, as well as redundant Cooling Units (CU) for high availability. Ports 2-3, 12-15 and 17-20 are connected among the slots per the  $\mu$ TCA.4 recommendation.

The VT811 has a Telco Alarm as well as Redundant FRU information devices and carrier locators. A JTAG Switch Module (JSM) slot is available which routes to each JTAG port of the AMC. It also has a provision to route cables from the front to back via a conduit below the card cage.

## POWER SUPPLY

The VT811 has an option for up to 1000W (redundant) power supply. The input voltage is from 110-240 VAC (frequency from 47-63 Hz).

## COOLING AND TEMPERATURE SENSORS

The VT811 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 front to back. The removable Air Filter has a switch to detect its presence and can be monitored for when it needs to be replaced.

There are a total of 12 Temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis.

## TELCO ALARM

The VT811 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 VT811 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 some other  $\mu$ TCA chassis on the market, the VT811 has no active components on the backplane. This supports ease of serviceability.

## 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.

## 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.

CHASSIS CONFIGURATION

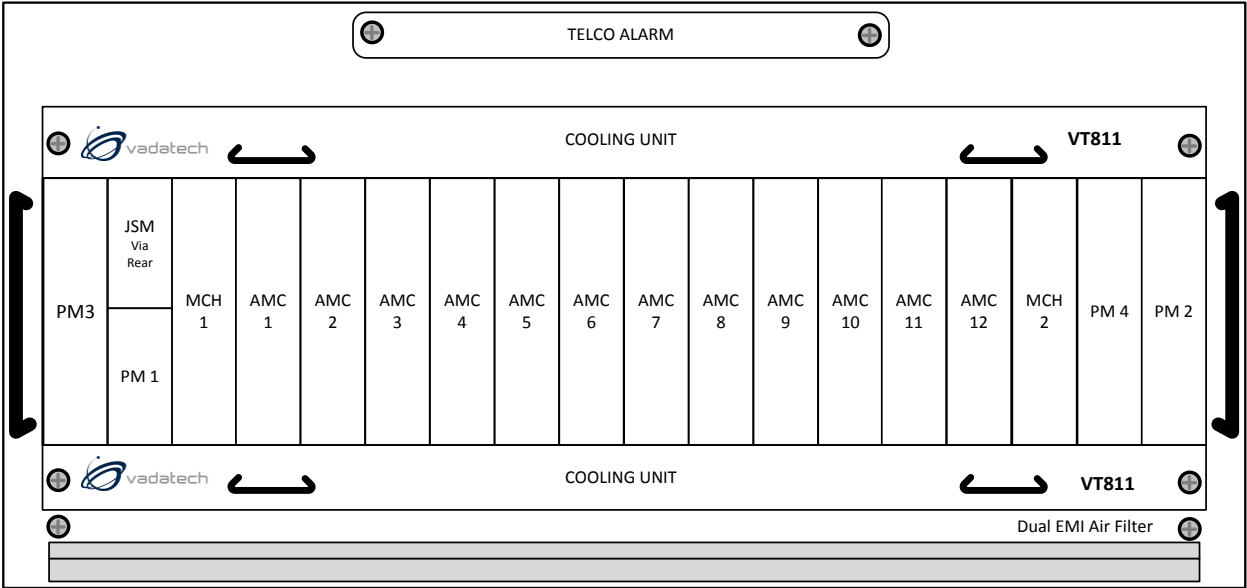


Figure 1: Front View

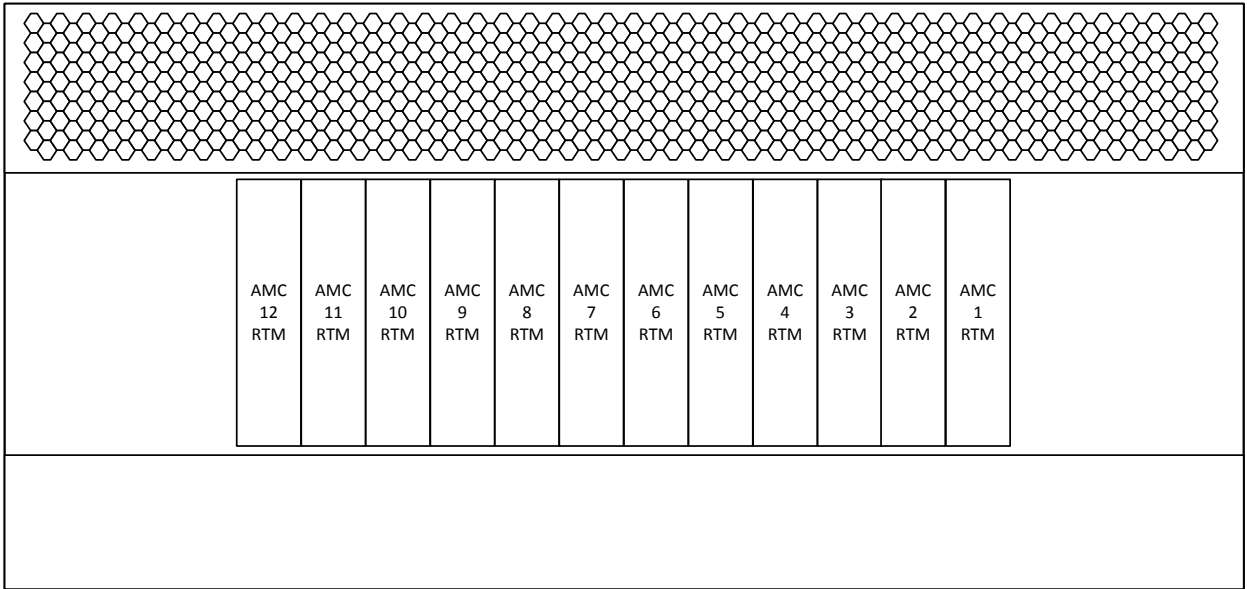


Figure 2: Rear View

## BACKPLANE CONNECTIONS

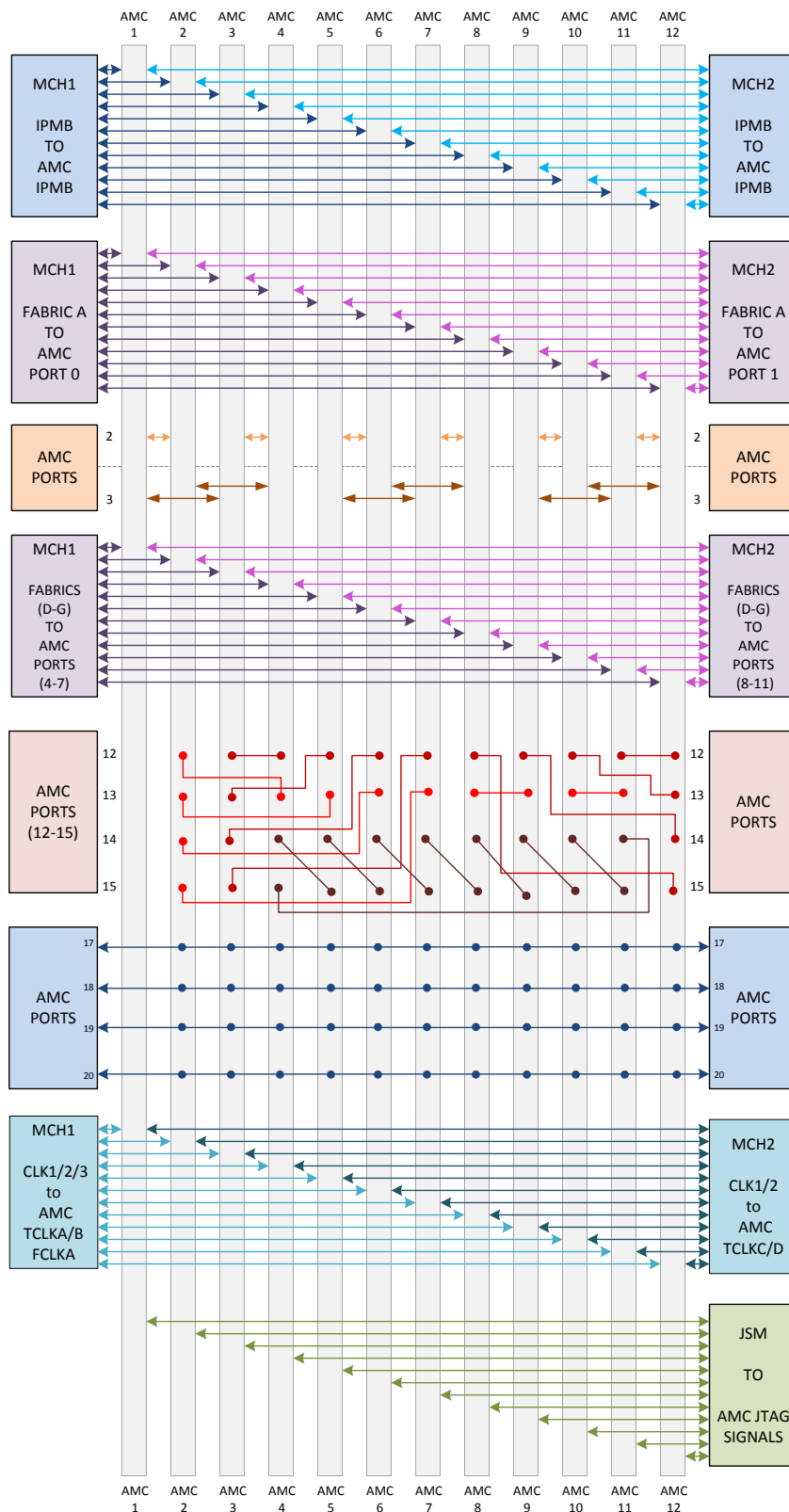
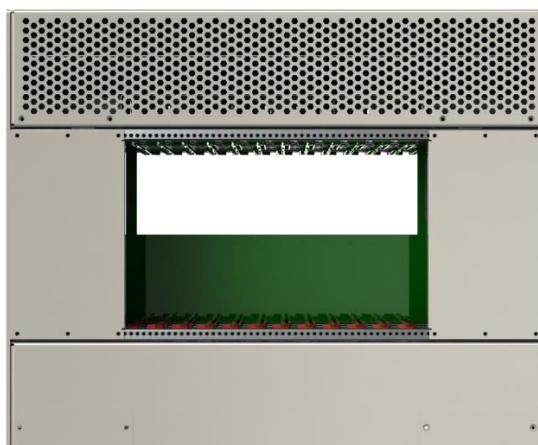


Figure 3: Backplane Connections

## SPECIFICATIONS

| Architecture              |                                                                                                                                                                                                                                                                                                                      |                                                                             |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Physical                  | Dimensions                                                                                                                                                                                                                                                                                                           | Height 8U                                                                   |
|                           |                                                                                                                                                                                                                                                                                                                      | Width 19"                                                                   |
|                           |                                                                                                                                                                                                                                                                                                                      | Depth 14.9" without handles and 16.23" with handles                         |
| Type                      | µTCA Chassis                                                                                                                                                                                                                                                                                                         | Twelve mid-size AMC.0 double module slots                                   |
| Standards                 |                                                                                                                                                                                                                                                                                                                      |                                                                             |
| AMC                       | Type                                                                                                                                                                                                                                                                                                                 | AMC.1, AMC.2, AMC.3 and AMC.4                                               |
| µTCA                      | Type                                                                                                                                                                                                                                                                                                                 | Telco Alarm, Dual MCH, Quad Power Module and Dual Intelligent Cooling units |
| Configuration             |                                                                                                                                                                                                                                                                                                                      |                                                                             |
| Power                     | VT811                                                                                                                                                                                                                                                                                                                | 1000W redundant AC, 110V - 240V AC with frequency from 47 - 63 Hz           |
| Environmental             | Temperature                                                                                                                                                                                                                                                                                                          | Operating Temperature: 0° to 55° C                                          |
|                           |                                                                                                                                                                                                                                                                                                                      | Storage Temperature: -40° to +70° C                                         |
|                           | Altitude                                                                                                                                                                                                                                                                                                             | 10,000 ft operating                                                         |
|                           |                                                                                                                                                                                                                                                                                                                      | 40,000 ft non-operating                                                     |
|                           | Relative Humidity                                                                                                                                                                                                                                                                                                    | 5 to 95 percent, non-condensing                                             |
| Conformal Coating         |                                                                                                                                                                                                                                                                                                                      | Humiseal 1A33 Polyurethane (Optional)                                       |
|                           |                                                                                                                                                                                                                                                                                                                      | Humiseal 1B31 Acrylic (Optional)                                            |
| 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                  | Two (2) years                                                                                                                                                                                                                                                                                                        |                                                                             |
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## REAR VIEW



# VT811 – 8U MicroTCA.4 Chassis Platform

## ORDERING OPTIONS

### VT811 – ABC – 000 – 00J

#### A = Power Module\*

0 = None

1 = Single 500W AC (UTC017)

2 = Dual 500W AC (UTC017)

3 = Single 1000W AC (UTC018)

4 = Dual 1000W AC (UTC018)

5 = Single 796W DC (UTC013)

6 = Dual 796W DC (UTC013)

#### B = JSM\*\*

0 = Without the JSM module

1 = With JSM module

#### C = Chassis FRU Configuration for Power Modules

0 = 1+1 (one Primary and one Redundant)

1 = 2+1 (two Primary and one Redundant)

2 = 2+2 (two Primary and two Redundant)

3 = 3+1 (three Primary and one Redundant)

#### J = Conformal Coating

0 = None

1 = Humiseal 1A33 Polyurethane

2 = Humiseal 1B31 Acrylic

\*The Power Modules (PM) could be purchased separately. For more information regarding each of the PM options, please download the appropriate data sheet from the web.

\*\* The JSM could be purchased separately

## RELATED PRODUCTS



AMC522 MTCA.4  
A/D Converter



AMC725 Xeon E5  
MTCA.4 Processor



UTC017 500W  
AC Power Module

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