

## 5U $\mu$ TCA Chassis, 12 Full Size AMCs – VT861

5U  $\mu$ TCA Chassis, 12 AMCs



### KEY FEATURES

- $\mu$ TCA System Platform 19" x 5U x 10.5" deep (with handles 12" deep)
- Single MicroTCA Carrier Hub (MCH), dual Cooling Units and single Power Module
- Twelve full-size AMC slots
- Radial I<sup>2</sup>C bus to each AMC
- High-speed routing on 22 layers
- High-speed  $\mu$ TCA connectors (12.5 GHz)
- 1000W AC power supply option
- CLK1, CLK2 and CLK3
- No active components on the backplane
- ESD-Jack at the top front of chassis
- RoHS compliant

### Benefits of Choosing VadaTech

- 40GbE capable backplane
- Elegant design, smooth extraction of FRUs
- 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 VT861 is a 5U  $\mu$ TCA chassis that provides 12 AMC full-size slots that can accept any AMC.1, AMC.2, AMC.3 and/or AMC.4. It provides CLK1, CLK2, and CLK3 to each slot.

The VT861 has full redundancy on its Cooling Units. The CLK3 option can be configured for the Fabric clock, Telecom clock or Fabric B.

There is an option for Port 2 and 3 to be directly connected among the adjacent AMCs or to the fabric B (AMC.3 SATA/SAS switch option on the MCH).

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## POWER SUPPLIES

The VT861 offers an optional single 1000W AC power supply. The AC input voltage is from 110 to 240V AC (frequency from 47 Hz to 63 Hz). The VT861 provides –48V connectors to the front of the chassis to power the Power Modules. The AC input is from the back of the chassis. The AC supply has an on/off switch on front top center of the chassis.

## COOLING AND TEMPERATURE SENSORS

The VT861 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 VT861 provides Telco alarm functionality to alert about any anomaly within the chassis. The Telco Alarm is provide via a Micro DB-9 as well as LEDs in the front to show any anomaly. The Telco alarm module is built into the chassis, located above the fan tray.

## FRU INFORMATION AND CARRIER LOCATOR

The VT861 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 I<sup>2</sup>C 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.

## 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

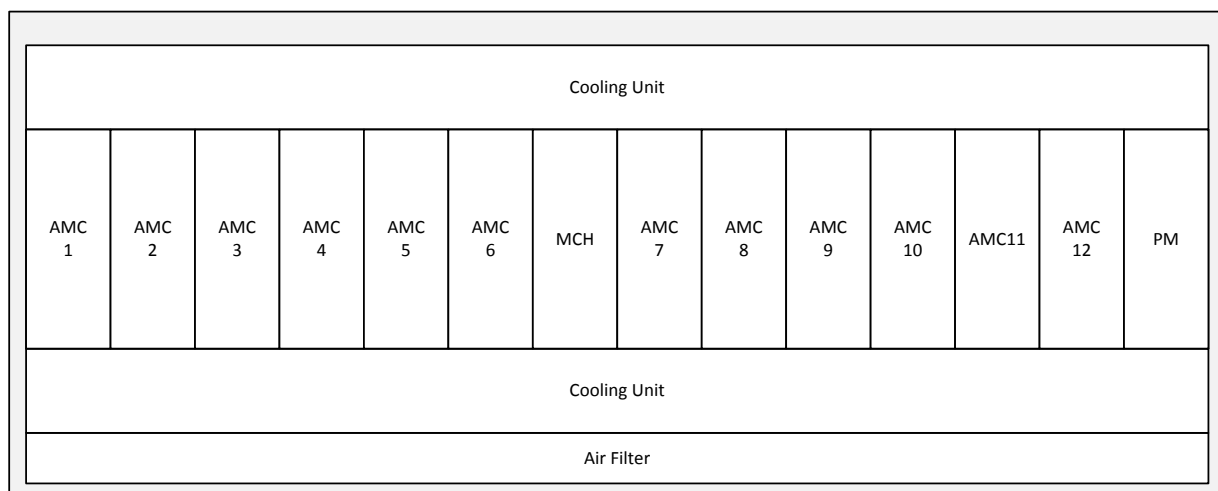
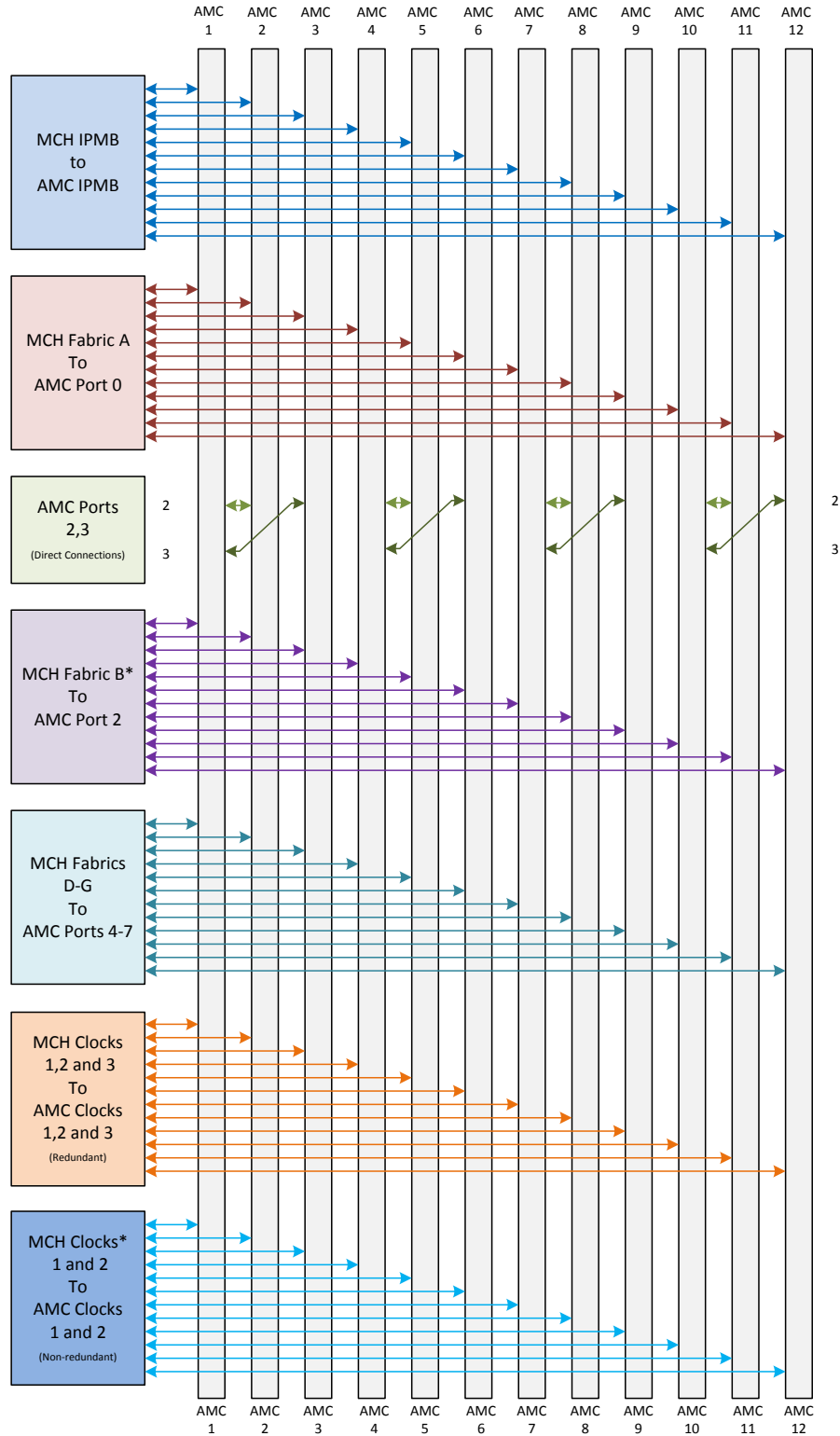


Figure 1: Front View

## BACKPLANE CONNECTIONS



\*When CLK3 is non-redundant, Fabric B will be partially provided only on ports 1 to 6. CLK3 is routed on Fabric B on ports 7 to 12.

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 5U
		Width 19"
		Depth 10.25" without the handles and 12" with the handles
Type	$\mu$ TCA Chassis	12 AMC.0 full size slots
		Single MCH, Single Power Module and Dual Intelligent Cooling units
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
$\mu$ TCA	Type	PICMG 3.0 Rev 3.0
Configuration		
Power	VT861	1000 W, 110V to 240V AC with frequency from 47 to 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	
Compliance	RoHS and NEBS	
Warranty	Two (2) years	
Trademarks and Disclaimer	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice	

# 5U $\mu$ TCA Chassis, 12 Full Size AMC's – VT861

## ORDERING OPTIONS

### VT861 – ABC – 000 – 00J

#### A = Power Supply

0 = None

1 = 1000 W AC

#### B = Ports 2 and 3

1 = Direct connections

2 = To MCH

#### C = CLK3 Type

1 = Telco clock

2 = FCLKA

3 = Fabric B

#### J = Conformal Coating

0 = None

1 = Humiseal 1A33 Polyurethane

2 = Humiseal 1B31 Acrylic

## RELATED PRODUCTS



UTC002 MCH



AMC534  
100G FPGA



AMC720  
Processor AMC

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