µTCA.4 Chassis with 12 AMC slots

VT811

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THE POWER OF VISION

VT811 KEY FEATURES

- µTCA 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 mid-size double-width front module with 12 mid-size double-width rear
- Provision to route cables from the front to the back
- Radial I2C bus to each AMC
- High-speed routing on 30 layers
- High-speed µTCA 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

The VT811 is a 8U µTCA chassis that provides 12 AMC mid-size double-width 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 uTCA.4 recommendation.

The VT811 has a Telco Alarm as well as Redundant FRU information devices and carrier locators.

The VT811 has a JSM slot which routes to each JTAG port of the AMC.

The VT811 has provision to route cables from the front to back via a conduit on the chassis.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

µTCA™

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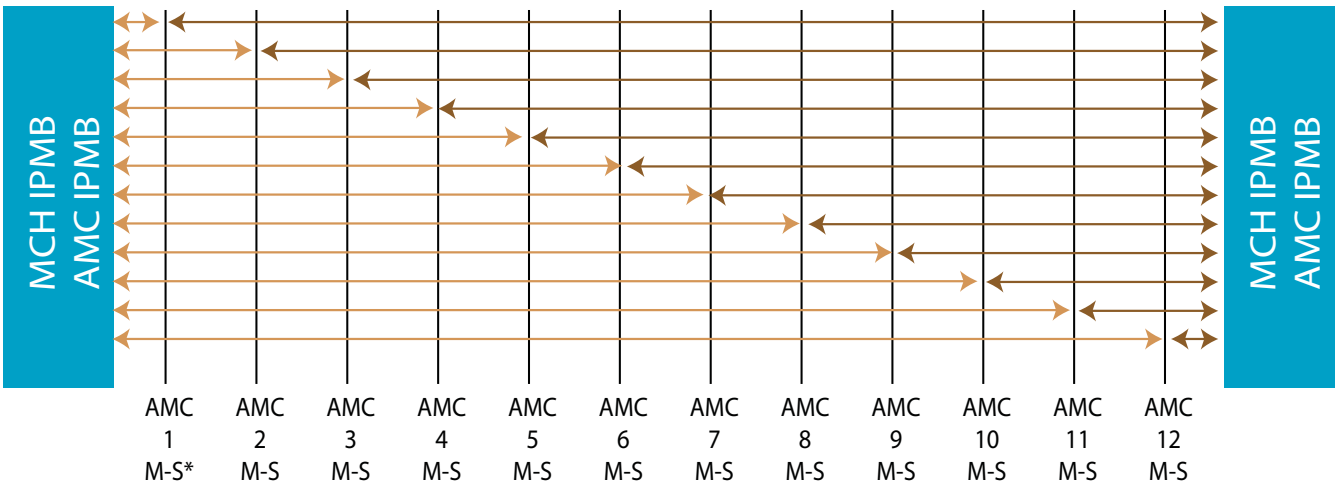
SPECIFICATIONS

Architecture		
		Height 8U
Physical	**Dimensions**	Width: 19”
		Depth 14.9” without the handles and 16.23” with the handles
Type	**µTCA Chassis**	Twelve mid-height AMC.0 double-width slots
Standards		
AMC	**Type**	AMC.0, 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**	option for dual 1000W AC supply
		110-240VAC with frequency from 47-63Hz
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
		Humiseal 1B31 Acrylic
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 Logos	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.	

IPMB Bus

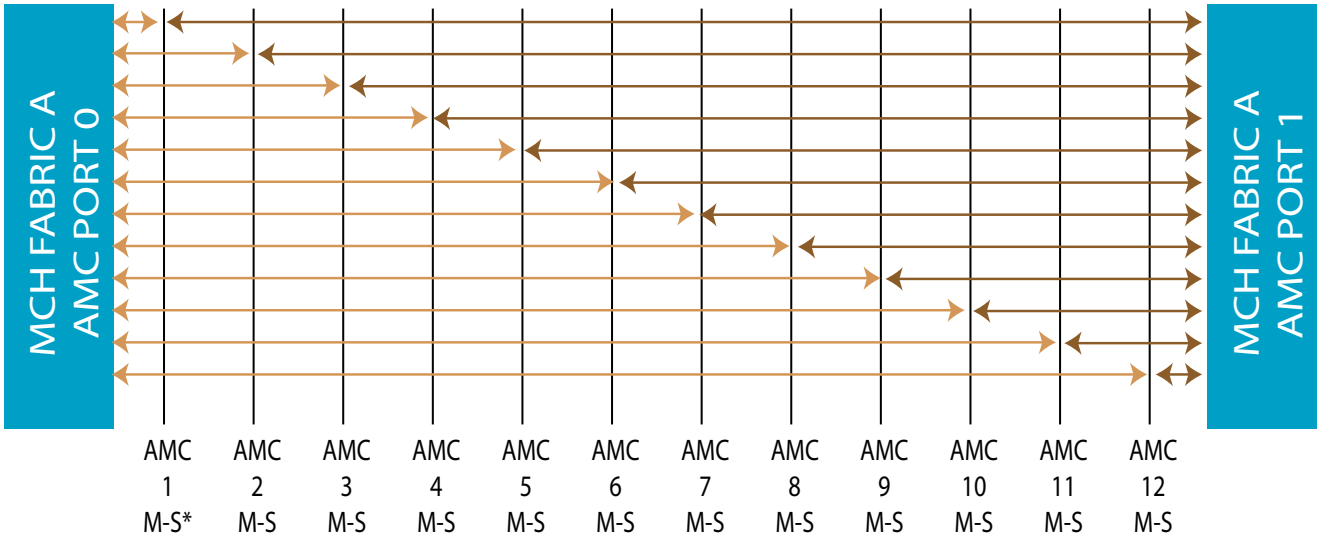
The I2C bus from each AMC is routed radially to each of the MCH.



*M-S (Mid-Size)

FIGURE 1. VT811 Topology for AMC I2C Bus

Ports 0 and 1

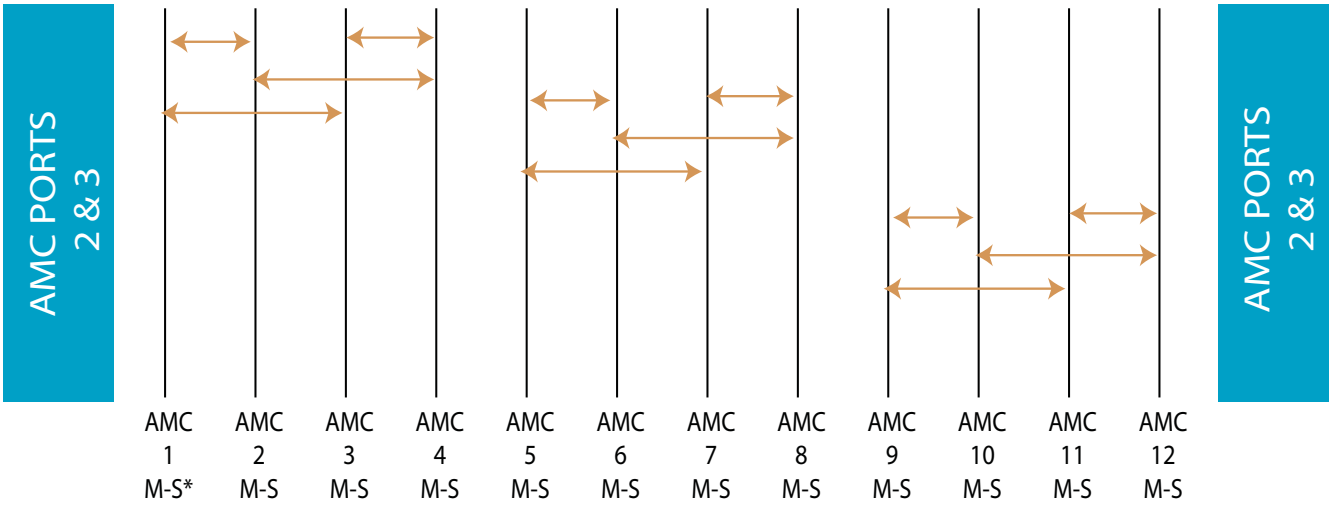


*M-S (Full-Size)

FIGURE 2. VT811 Topology for AMC Ports 0 and 1

Ports 2 and 3

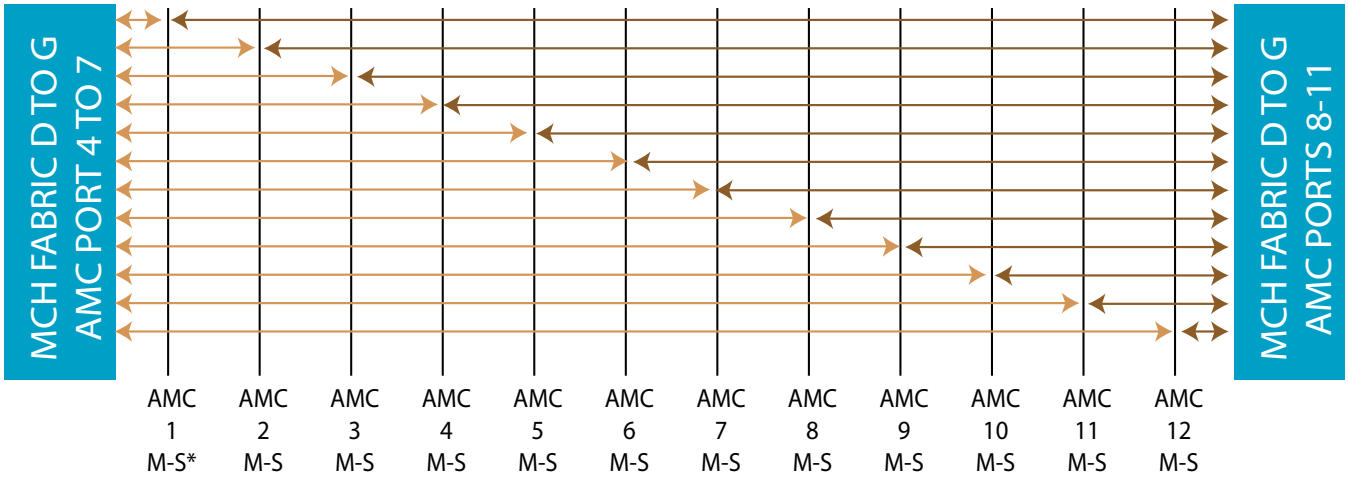
Topology for Ports 2 and 3 with direct connections among the slots



*M-S (Full-Size)

FIGURE 3. VT811 Topology for AMC Ports 2 and 3

Ports 4-7and 8-11



*M-S (Mid-Size)

FIGURE 4. VT811 Topology for AMC Ports 4-7 and 8-11

Ports 12-15

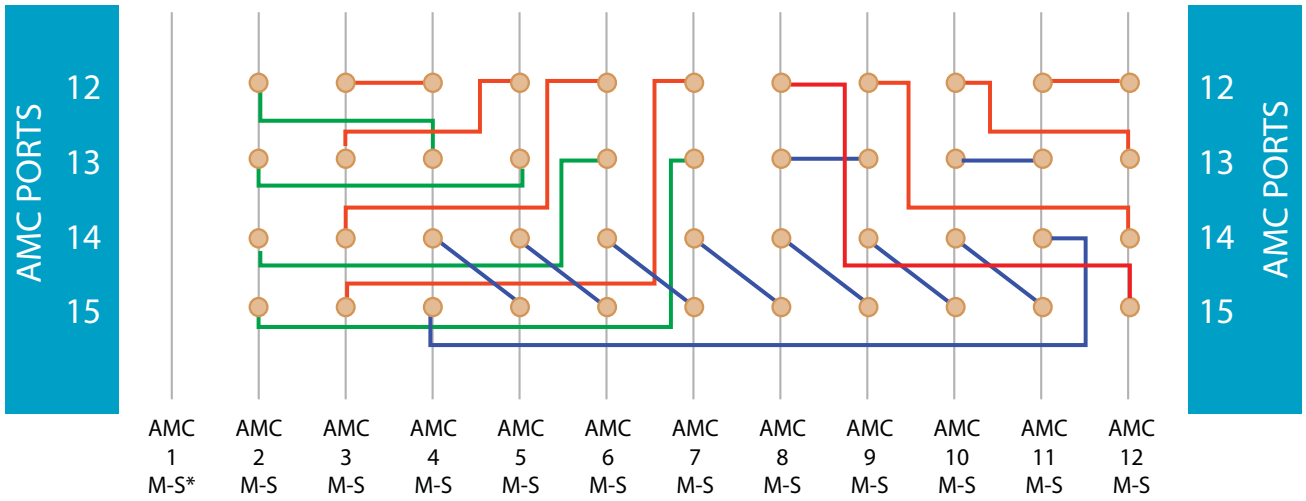


FIGURE 5. VT811 Topology for Ports 12-15

Ports 17-20

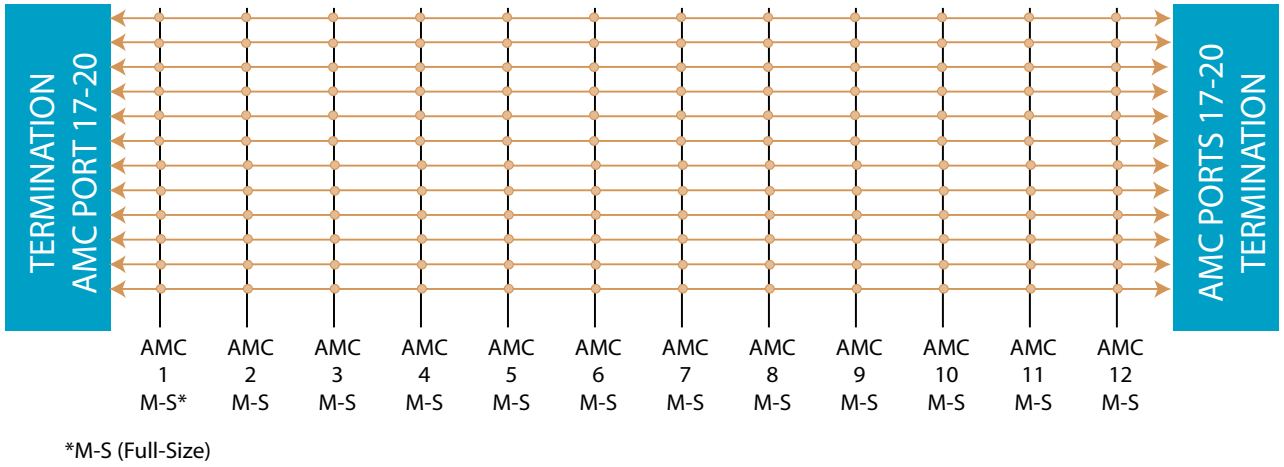


FIGURE 6. VT811 Topology for Ports 17-20 (these ports have termination on both side)

JSM

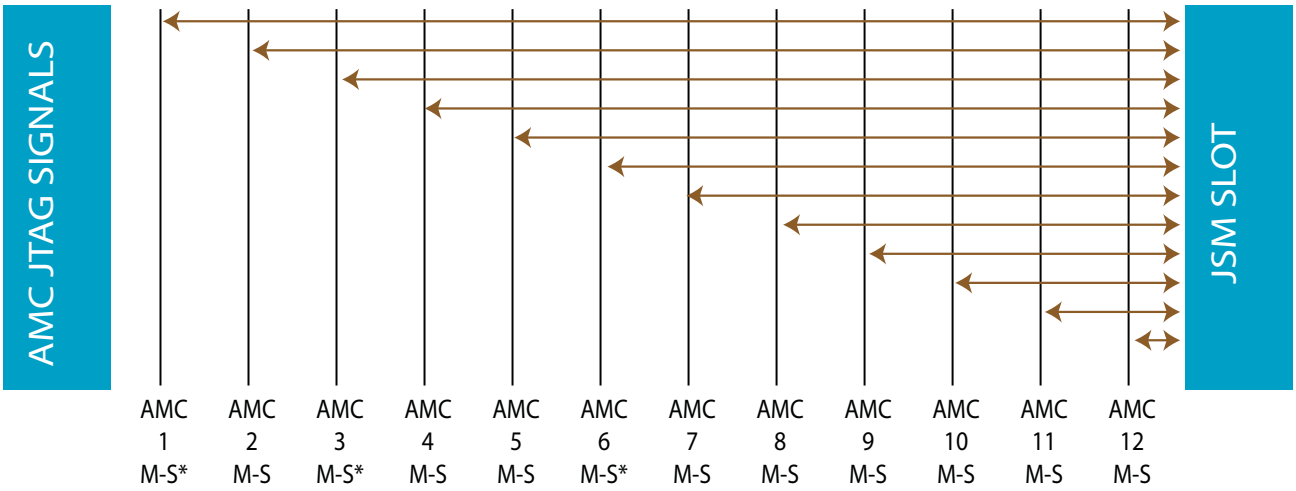


FIGURE 7. VT811 Topology for JSM

Note: The JSM is inserted via the rear of the chassis behind the PM1 slot

Power supply

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

Cooling and Temp 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 provide via a Micro DB-9 as well as LED's 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 other µTCA chassis in the market, the VT811 has no active components on its back plane. This allows ease of serviceability.

End to End Integrated Solution

VadaTech has the entire µTCA infrastructure: MicroTCA Carrier Hub (product UTC001, UTC002 or UTC004) and Power Modules. Please consult the appropriate data sheet to obtain more information.

VadaTech can integrate any of its over 160 AMC modules, customer AMCs, as well as other third party AMCs into the chassis and deliver a complete system for deployment. Please contact VadaTech Sales for more information.

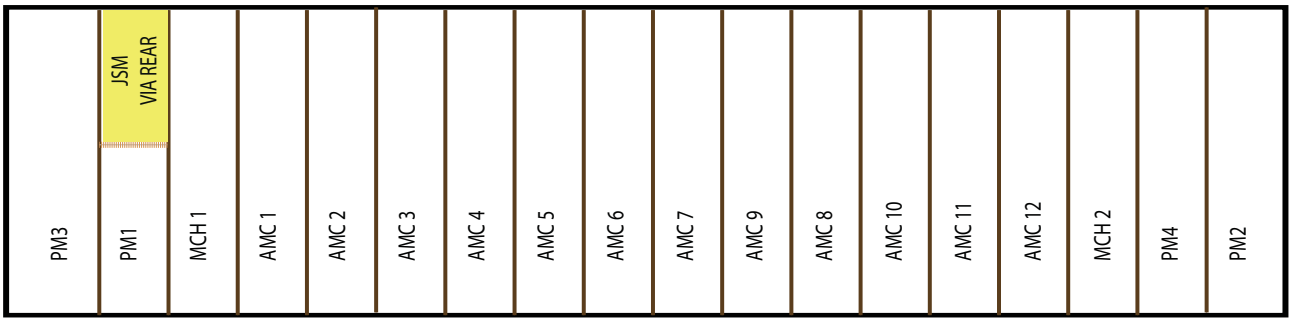


FIGURE 8. VT811 Slot locations

ORDERING OPTIONS

VT811 - ABC - 000 - 00J*

A = AC Power Module**

0 = None
1 = 500W AC (single UTC017 Power Module included)
2 = 500W AC (dual UTC017 Power Module included)
3 = 1000W AC (single UTC018 Power Module included)
4 = 1000W AC (dual UTC018 Power Module included)
5 = 796W DC (single UTC013 Power Module included)
6 = 796W DC (dual UTC013 Power Module included)

B = JSM***

0 = Without the JSM module
1 = With JSM module (UTC030 product included)

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

*VadaTech has an MCH (UTC001, UTC002 and UTC004) and Power Module (UTC010, UTC012 and UTC013) as well as over 160 AMC modules. Contact your sales representative for an end-to-end integrated solution.

**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

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