vadatech
THE POWER OF VISION

2U µTCA.4 Chassis with 8 AMCs – VT812

2U µTCA.4 Chassis, 8 AMCs

KEY FEATURES

- 19" x 2U x 14.2" deep chassis with redundant MCH, Power Modules and integrated Cooling Units
- Supports a mix of MTCA.0 and MTCA.4 AMCs
- 26-layer backplane
- High speed µTCA connectors (12.5 GHz)
- Radial I2C bus to each AMC and telco alarm
- JTAG Switch Module (JSM) slot for programming/debugging with front port access
- TCLKA, TCLKB, TCLKC, TCLKD and FCLKA
- Removable Air Filter, Power Module and Fan Tray
- Single or dual 500W AC Universal Power Module or dual 796W DC module
- ESD jack
- IPMI 2.0 compliant

Benefits of Choosing VadaTech

High performance density with 8 AMCs and redundant MCHs and PMs in a 2U height

Versatile mix of 4 MTCA.4 slots with rear I/O and 4 single or double width MTCA.0 slots

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 VT812 is a compact, cost-effective µTCA.4 chassis supporting redundant MCH and power. It supports four µTCA.4 mid-size AMCs plus RTMs, and up to four standard single or double module AMCs, all in a compact 2U form factor.

The VT812 supports redundant MCH and Power Modules. There are no active components on the backplane and the unit has dual redundant FRU information and Carrier Locators.

The compact design, together with a mix of µTCA.4 and standard µTCA.0 slots mean the VT812 is well suited to deployed applications with high I/O requirements.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.

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POWER SUPPLY

The VT812 has the option of single or dual 500W AC power supply (UTC017) or 796W DC supply (UTC013) integrated at the rear of the chassis.

COOLING AND TEMPERATURE SENSORS

The VT812 has an intelligent Cooling Units. The cooling airflow is from right to left. 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 VT812 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 VT812 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 µTCA chassis on the market, the VT812 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 µTCA 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

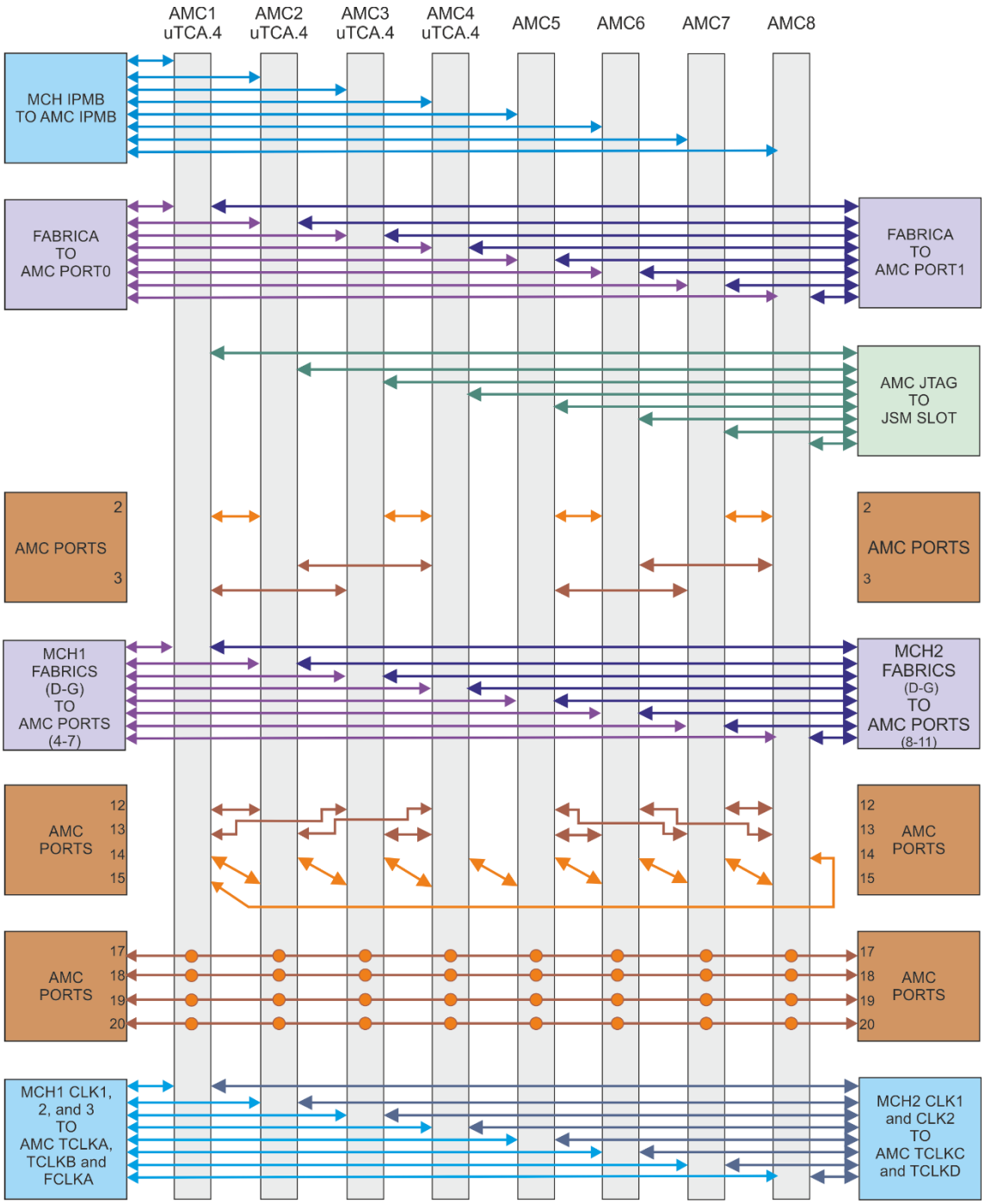
<table>
<tr><td>AMC 1
MTCA.4</td><td rowspan="2">MCH 1</td><td rowspan="2"></td><td>AMC 5</td></tr>
<tr><td>AMC 2
MTCA.4</td><td rowspan="2">AMC 6</td></tr>
<tr><td>AMC 3
MTCA.4</td><td rowspan="2">MCH 2</td><td rowspan="2"></td><td>AMC 7</td></tr>
<tr><td>AMC 4
MTCA.4</td><td>TELCO</td><td>AMC 8</td></tr>
</table>

Figure 1: Front View

<table>
<tr><td rowspan="2">PSU 1</td><td rowspan="4"></td><td>RTM 1
MTCA.4</td></tr>
<tr><td>RTM 2
MTCA.4</td></tr>
<tr><td rowspan="2">PSU 2</td><td>RTM 3
MTCA.4</td></tr>
<tr><td>RTM 4
MTCA.4</td></tr>
</table>

Figure 2: Rear View

BACKPLANE CONNECTIONS



SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 2U
		Width 19”
		Depth 14.2”
Type	µTCA Chassis	4 µTCA.0 slots plus 4 µTCA.4 slots
Standards		
AMC	Type	AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	Type	JSM, Telco Alarm, Single/Dual MCH, Single/Dual Power Module and Intelligent Cooling Unit
Configuration		
Power	VT812	500W redundant AC, or 796W DC 85-265V 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		
MTFB	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	
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	

REAR VIEW

ORDERING OPTIONS

VT812 – A0C – DEF – 0HJ

COMMON CONFIGURATIONS

VT812-100-000-000	VT812-200-000-000
VT812-100-010-000	VT812-200-010-000

A = Power Module
0 = Reserved
1 = Single 500W AC (UTC017)
2 = Dual 500W AC (UTC017)
3 = Single 796W DC (UTC013)
4 = Dual 796W DC (UTC013)

C = Chassis FRU Configuration for Power Modules
0 = 1+1 Redundant (One primary and one redundant PM)
1 = Non-Redundant (PM1 – 4 slots and MCH1, PM2 – 4 slots and MCH2)

D = MTCA.0 Slot Size (AMCs 5 to 6)
0 = Single module, mid-size
1 = Double module, mid-size
2 = Single module, full-size (AMC6 not used)
3 = Double module, full-size (AMC6 not used)

E = MTCA.0 Slot Size (AMCs 7 to 8)
0 = Single module, mid-size
1 = Double module, mid-size
2 = Single module, full-size (AMC8 not used)
3 = Double module, full-size (AMC8 not used)

F = JSM
0 = Not installed
1 = Installed

H = Temperature Range
0 = Commercial
1 = Industrial

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS

AMC522 250 MSPS A/D Converter

AMC720 Core i Processor

UTC017 500W AC Power Module

CONTACT US

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