vadatech
THE POWER OF VISION

1U µTCA.4 Chassis Platform, PCIe Expansion – VT817

1U µTCA.4 Chassis, PCIe

KEY FEATURES

- MicroTCA.4 PCIe Expansion chassis platform, 19" x 1U x 14.2" deep
- Compliant to µTCA.4 specifications with rear IO for High-Energy Physics and other applications
- Supports up to two µTCA.4 mid-size, double module AMCs and RTMs
- Right-to-left cooling
- Integrated shelf manager
- Ports 4-7 and 8-11 are routed to the two AMC slots from the PCIe switch
- Front panel PCIe Gen3 ports (x4, x8 or x16).through quad SFF-8644 connectors
- 250W AC pluggable from rear
- RoHS compliant

Benefits of Choosing VadaTech

- PCIe Expansion chassis for MicroTCA.4 in a compact 1U size
- Flexible fibre/copper installation options
- 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 VT817 is a convenient low-cost MicroTCA.4 PCIe Gen3 Expansion solution. The shelf offers two AMC slots and an integrated MCH. The front panel ports accept PCIe Gen3 inputs from VadaTech's PCI123 PCIe Gen3 board. In use with the PCI123, the VT817 can link x16 PCIe Gen3 to an Industrial PC. There are options for single PCIe input x16, dual PCIe inputs using x8 links or quad PCIe inputs using x4 links.

The double module AMC slots meet the MicroTCA.4 specification for applications that require rear I/O and signal conditioning. Applications include High Energy Physics, video processing, defense, and network security.

The AC power is located in the rear of the chassis and is removable.

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

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POWER SUPPLY

The VT817 uses a removable 250W AC power supply. It is located in the rear of the chassis.

COOLING AND TEMPERATURE SENSORS

The VT817 has an intelligent Cooling Unit. The cooling airflow is from right to left. The removable air filter has an optical switch to detect its presence and can be monitored for when it needs to be replaced.

There are temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis.

BACKPLANE INTERFACE

A mid-plane for the shelf management with the front panel I/O plugs into the passive backplane.

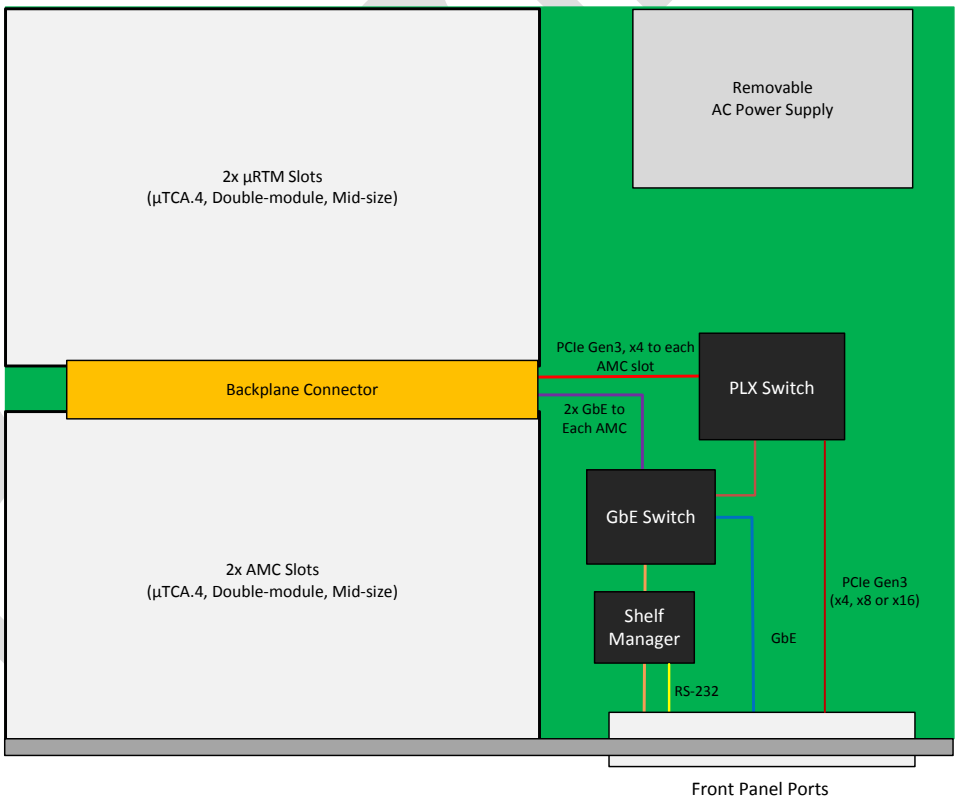
SCORPIONWARE™ SOFTWARE

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.

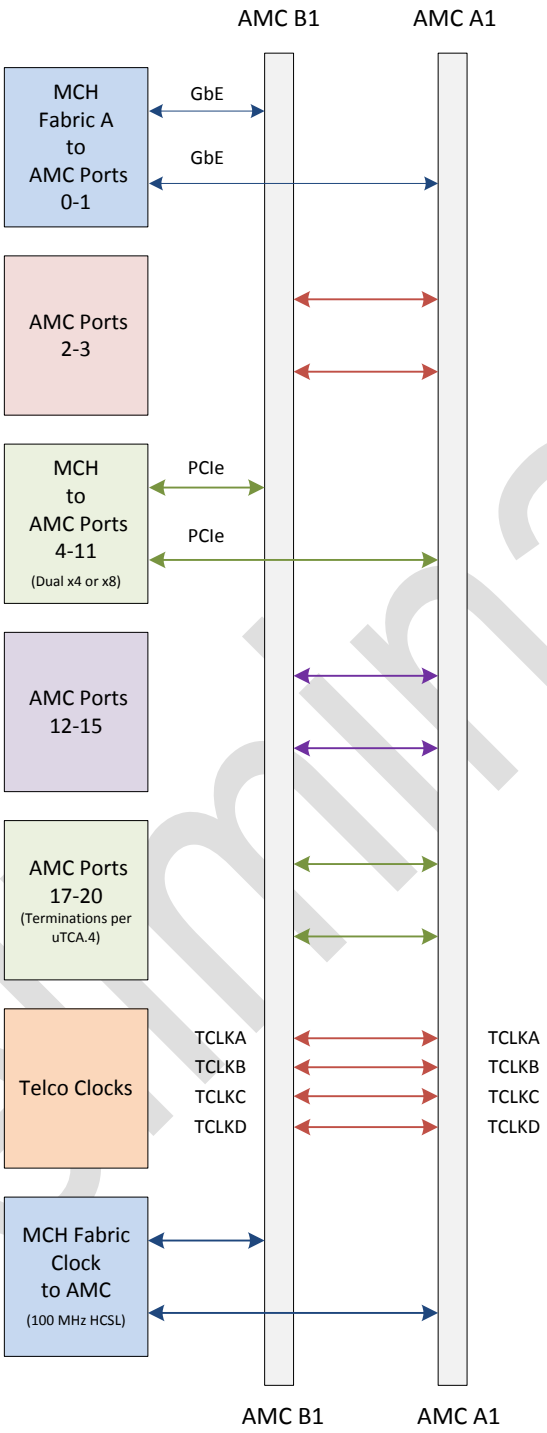
INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

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.

BLOCK DIAGRAM



BACKPLANE CONNECTIONS



SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 1U
		Width 19”
		Depth 14.2”
Type	µTCA Chassis	Two µTCA.4 Slots with µRTMs
		Telco Alarm, JSM, Single MCH, Single/Dual Power Module and Intelligent Cooling Unit
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
µTCA	Type	PICMG 3.0 Rev 3.0
Power	VT817	250W AC
		85-265VAC 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 (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	
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	

ORDERING OPTIONS

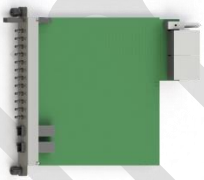
VT817 – 000 – 000 – 0HJ

H = Temperature Range
0 = Commercial
1 = Industrial

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

RELATED PRODUCTS

AMC523 Dual DAC



MRT523 RTM For AMC523

PCI123 PCIe Expansion Module

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