

## 1U Chassis with 6 AMC's, Quad SPF+, Full Redundancy – VT840

1U Chassis, Full Redundancy



### KEY FEATURES

- Six single module, mid-size AMC slots per 1U carrier (or two double module and two single module, mid-size AMC slots)
- Management can run as Shelf Manager or MCMC (MicroTCA Management Controller)
- Fully redundant power with failover (non-redundant is optional)
- x8 PCIe Gen 3 on ports 4 to 11
- GbE Managed Layer 2 (ports 0 and 1)
- Quad SFP+ for 10 GbE via PCIe to 10 GbE network interface
- Quad SAS via PCIe to SAS HBA
- Digital input/output per system

### Benefits of Choosing VadaTech

- Option for full redundancy with two sets of three slots each with own MCH, fabric/base, power, and clocking
- Integrated fans/power modules in rear of chassis to save space
- High performance combination of Quad SAS, Quad SPF+ for 10 GbE, and Layer 2 GbE
- 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 VT840 is a 1U  $\mu$ TCA chassis that provides six mid-size AMC slots with swappable redundant power in the rear of the chassis. The six slots are divided among two sets of three slots, each set with their own dedicated PCIe Fabric, GbE, Power Module, clock structure, and management. The fabric on ports 4-11 is PCIe (AMC.1) and ports 2-3 are routed to adjacent slots (AMC.3). Other features include FCLK to each AMC, a single digital input/output pin per unit (two total on the front panel), and front to rear cooling. The 300W AC power/fan trays and air filters are removable for ease of serviceability.

The VT840 runs management software based on VadaTech's proven VT002 second generation mezzanine. The shelf manager implements IPMI management, FRU management, and shelf environment management for power, thermal, E-keying, etc. The VT840 has integrated dual 10GbE network interface for each set of three slots, which connect to the PCIe fabric via x8 PCIe Gen3.

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

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## Power Supply

The VT840 has dual input power 100-240 V AC with a frequency from 47-63 Hz. The redundant swappable power/fan trays are located in the rear of the chassis to save space. If the failover option is not desired, the chassis can be configured so that each PSU can power a 3-slot segment.

## Scorpionware™ Software

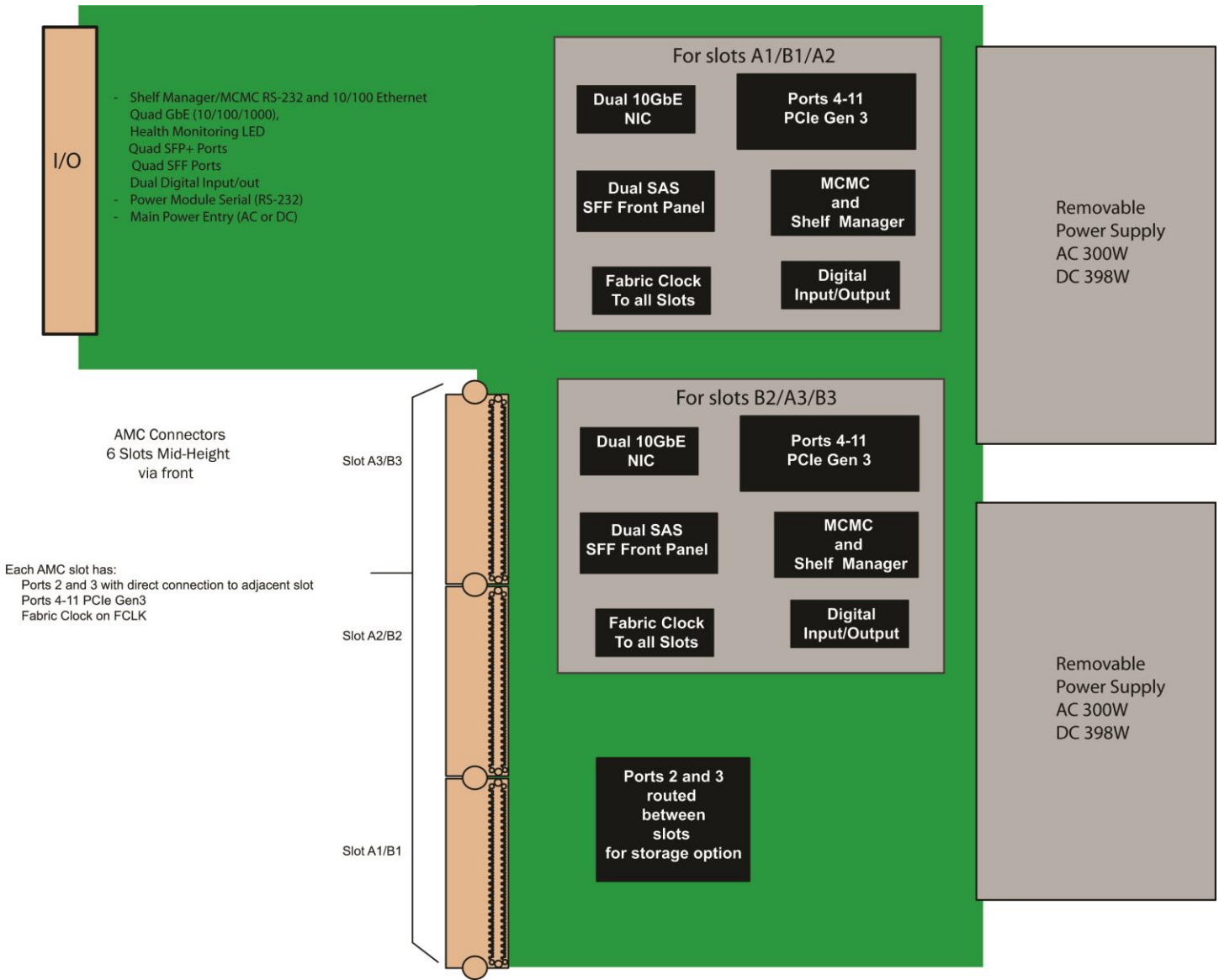
VadaTech's Scorpionware software can be used to access information about the current state of the Shelf or the Carrier, obtain information such as the FRU population, or monitor alarms, power management, current sensor values, and the overall health of the Shelf. The software GUI is very powerful, providing 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.

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## BLOCK DIAGRAM



## CHASSIS CONFIGURATION

Front Panel Ports	AMC B3	AMC B2	AMC B1
	AMC A3	AMC A2	AMC A1

Front View

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## SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 1U
		Width 19"
		Depth 18.5"
Type	µTCA Chassis	6 AMC Slots
Standards		
AMC	Type	AMC.1, AMC.2, and AMC.3
µTCA	Type	MicroTCA.0
Configuration		
Power	VT840	300W Universal AC or 398W DC (-36V to -75V) @ 400 Hz
Environmental	Temperature	Operating Temperature: 0°C to 65° C (Commercial version)
		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

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## ORDERING OPTIONS

### VT840 – AB0 – 000 – 0HJ

#### A = Power Supplies

- 0 = 300W AC
- 1 = 398W DC

#### B = Power Failover

- 0 = Redundant PSUs with failover
- 1 = Independent power to each 3-slot segment (no failover)

#### H = Temperature Range

- 1 = Commercial
- 2 = Industrial

#### J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

## RELATED PRODUCTS



AMC620 SATA Storage Board



AMC720 Intel-based Processor AMC



AMC515 Virtex-7 FPGA Carrier

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