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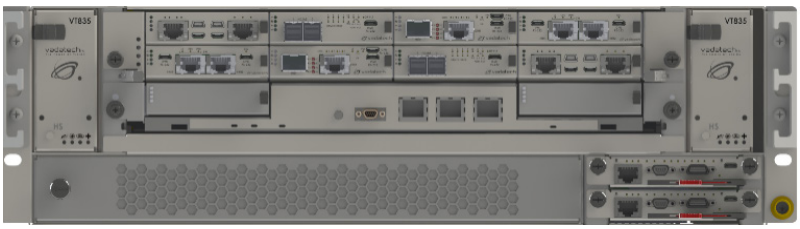
THE POWER OF VISION

3U ATCA Hybrid Chassis with 8 AMCs (Mid-size) – VT835

3U ATCA Hybrid Chassis



KEY FEATURES

- 19" rack mount 3U ATCA Hybrid AMC Chassis
- Holds 1 ATCA slot and 8 mid-size AMC slots
- 40G or 10G fabric across the backplane
- 8x PCIe Gen 3, 4x Gen 2 SRIO, or Layer 2 / 3 managed 10GbE / 40GbE dual XAUI
- Redundant push / pull cooling configuration
- Integrated dual shelf managers, switch and AMC carrier
- Full redundancy for all FRUs
- Redundant AC or DC Power Modules
- 2x ATCA RTM slots
- ESD Jack

Benefits of Choosing VadaTech

- Combines the processing power of AdvancedTCA with the versatility of MicroTCA in one chassis
- Unprecedented performance density with 1 ATCA and 8 mid-size AMC in 3U height
- High power supported for ATCA and AMC slots (400W)
- 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 VT835 offers unprecedented performance density with 1 ATCA node slot and 8 mid-size, single width AMCs in 3U height. Typically, only 4 mid-sized AMCs can fit on an ATCA carrier, with VadaTech's unique design, 8 AMCs can fit in a single chassis to provide AMC's versatility of processors, FPGAs, storage, graphics, I/O options and much more. Double-width AMCs can also be implemented.

The two slots support modules up to 400W, allowing the use of a high power host processor and AMC. Additional I/O is available through two standard ATCA RTMs. The VT835 has full redundancy support for all FRUs, including dual Shelf Managers.

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Power Supply
The VT835 is capable of providing single input power or redundant input power.

Cooling and Temperature Sensors
The VT835 has 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 temperature sensors in the chassis that monitor the intake and the outtake air temperature throughout the chassis.

Shelf Input/Output
RTM (Rear Transition Module) are available per slot including the Switch/Shelf Manager slots.

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

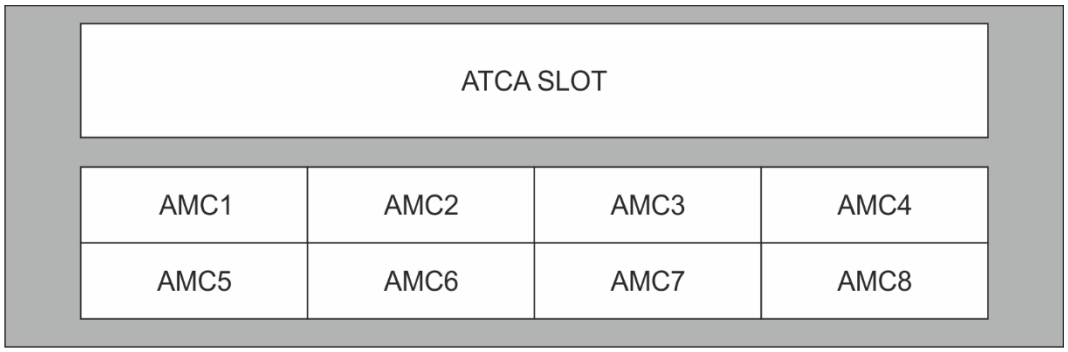


Figure 1: Front View

BLOCK DIAGRAM

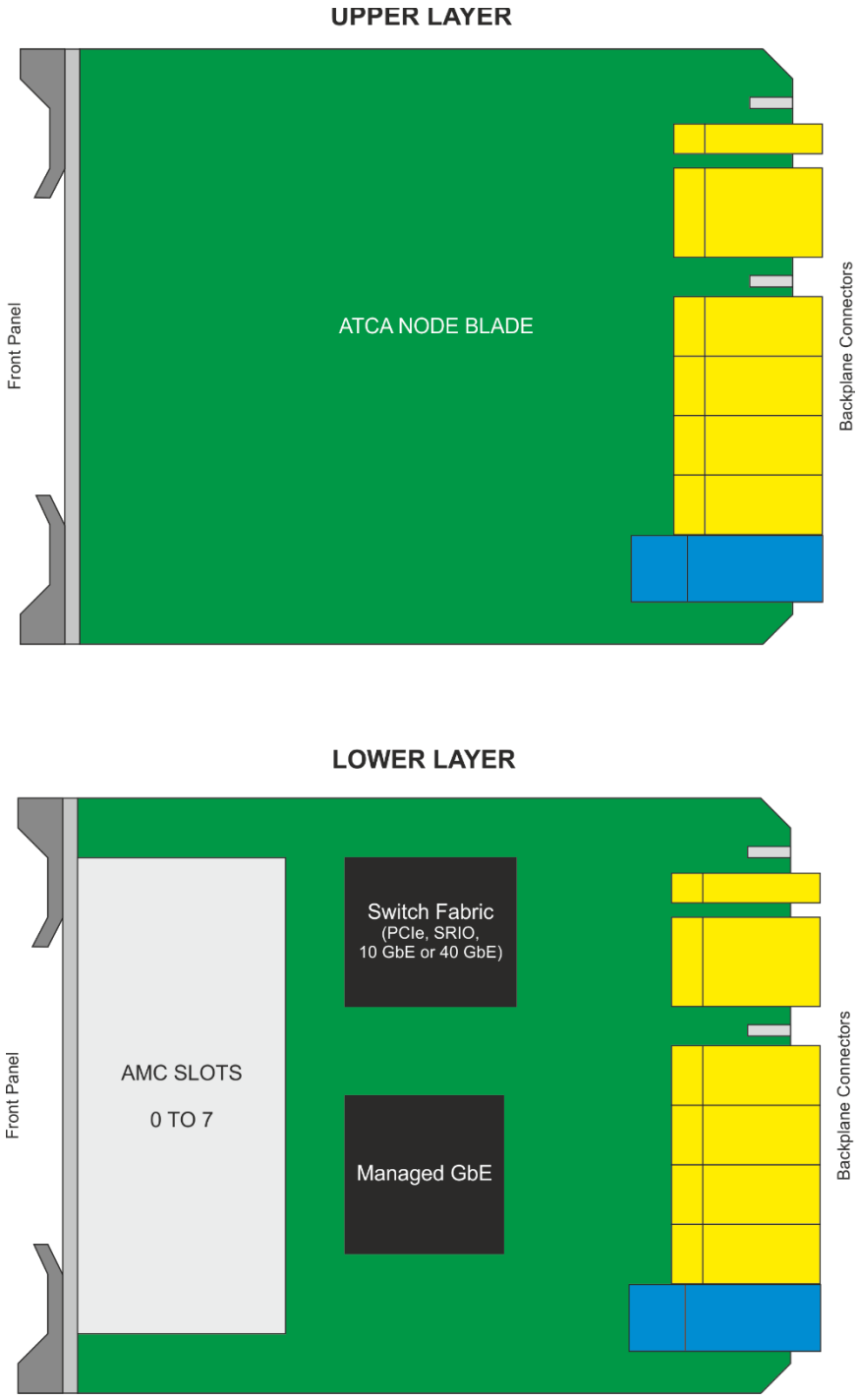
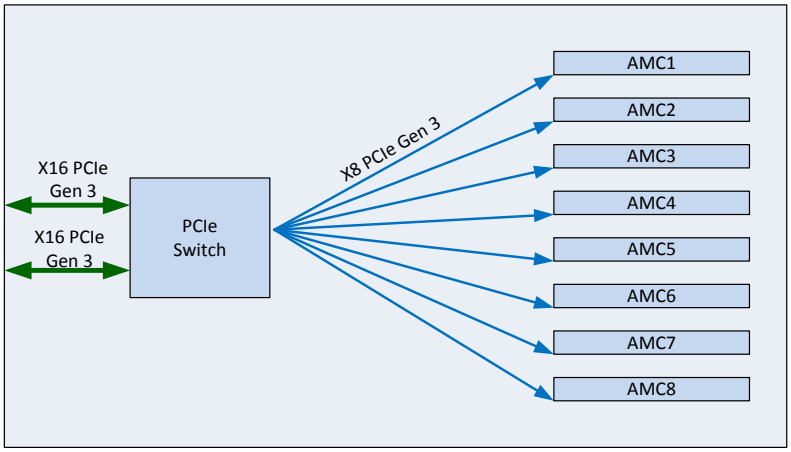
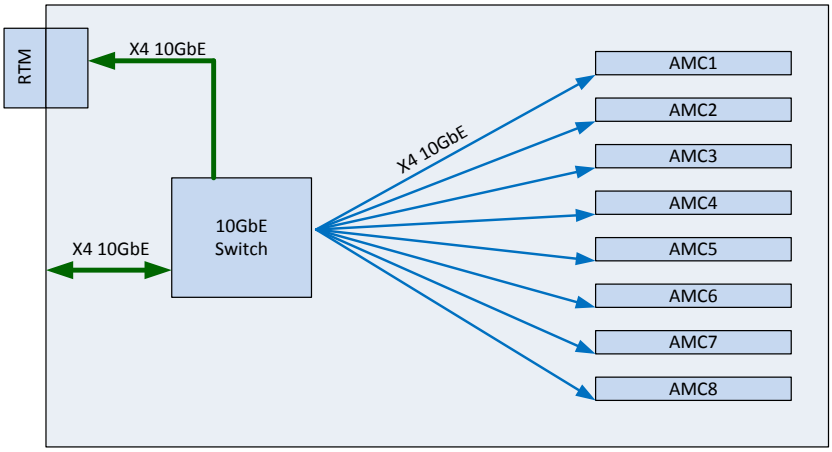


Figure 2: VT835 Block Diagram

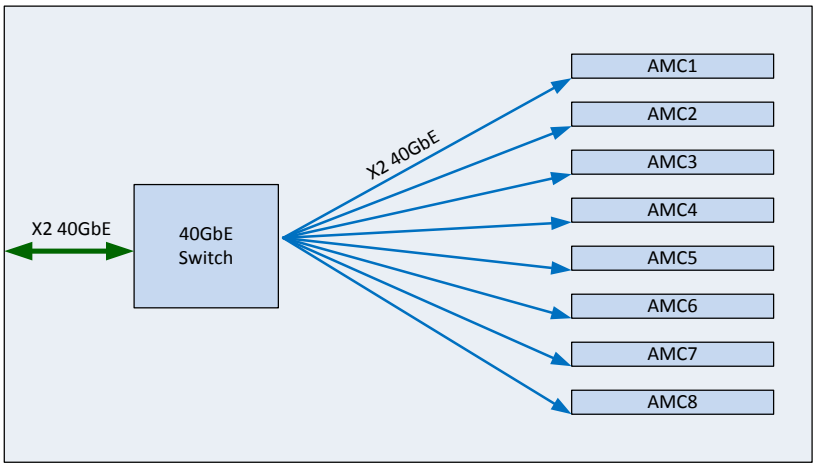
CARRIER OPTIONS



Option A



Option B



Option C

SPECIFICATIONS

Architecture		
Physical	Dimensions	Height 3U
		Width 19”
		Depth 13”
Type	ATCA Hybrid Chassis	1 Slot for ATCA node, 8 mid-size AMC slots (special carrier)
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
ATCA	Type	PICMG 3.0 Rev 3.0
Configuration		
Power	VT835	Quad 1000W, Universal AC or DC (–36V to –75V) input
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	

ORDERING OPTIONS

VT835 – ABC – 000 – 0HJ

A = Power Module
0 = Single
1 = Dual (redundant)

B = Shelf Managers
0 = Single
1 = Dual (redundant)

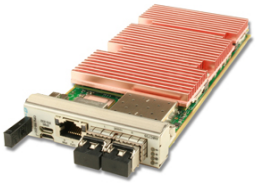
C = Carrier Fabric
0 = Reserved
1 = PCIe Gen 3 x8 for each AMC*
2 = Reserved
3 = 10GbE Layer 2 managed (Dual XAUI)**
4 = 40GbE Layer 3 managed (Dual XAUI / KR)***

H = Temperature Range
0 = Commercial
1 = Industrial

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

*Option A in Carrier section **Option B in Carrier section ***Option C in Carrier section

RELATED PRODUCTS



AMC735 Cavium 10GbE Packet Processor

ATC807 10GbE ATCA Switch

AMC534 100G FPGA

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