VT835

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

VT835

Key Features

- 19" rack mount 3U ATCA Hybrid AMC Chassis
- 1x ATCA slot, 8 mid-size AMC slots and 2x ATCA RTM slots
- 40G or 10G fabric across the backplane
- x8 PCIe Gen3, x4 SRIO Gen3, 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
- ESD Jack

Benefits

- 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)
- Superior shelf management solution from VadaTech
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

Advanced TCA®

40G

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VT835

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.

Figure 1: VT835

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.

Chassis Configuration

Front View

ATCA Node Slot

8x AMCs

Dual Shelf Managers

Rear View

2x ATCA RTM Slots
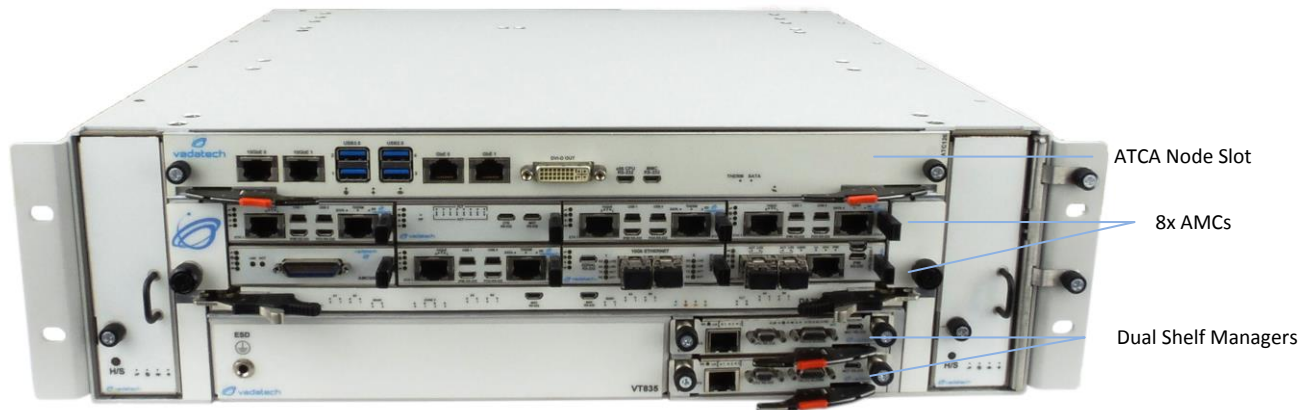
Figure 2: VT835 Chassis Layout

Block Diagram

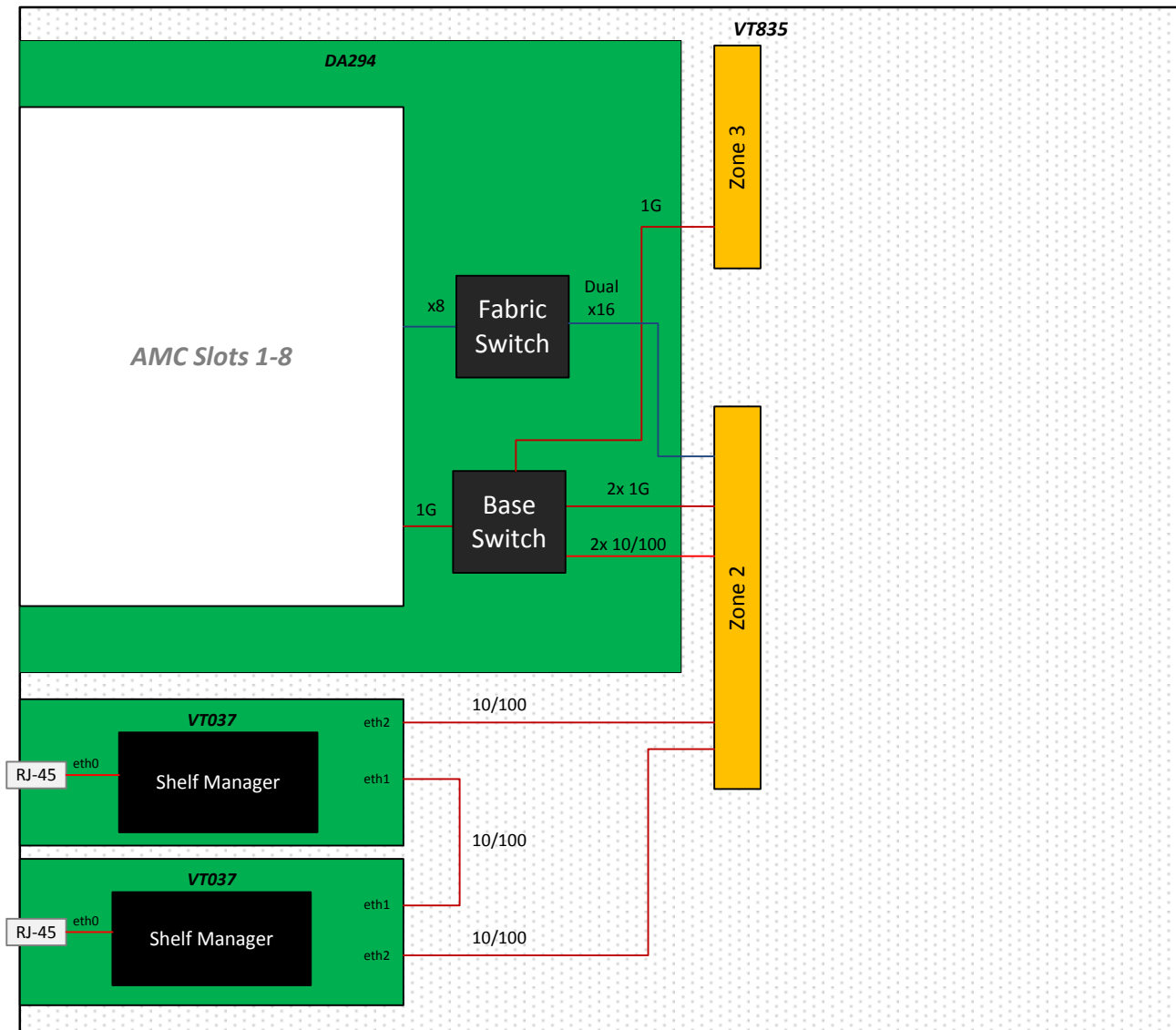Figure 3: Functional Block Diagram

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

Carrier Options

The following illustrations show various carrier options with its associated fabrics (Ordering option C).
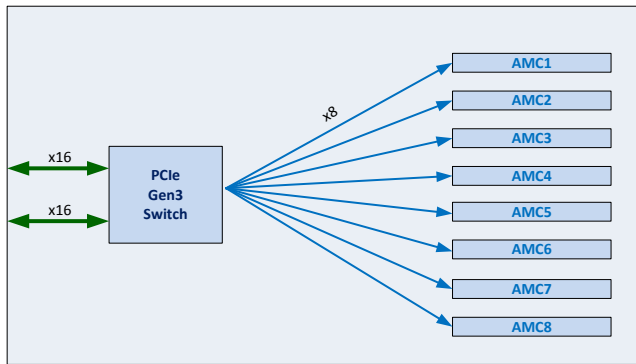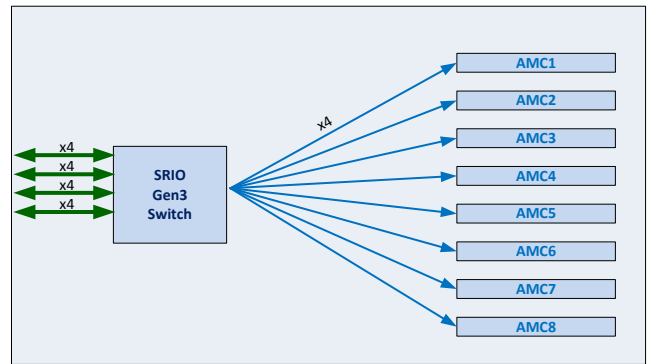

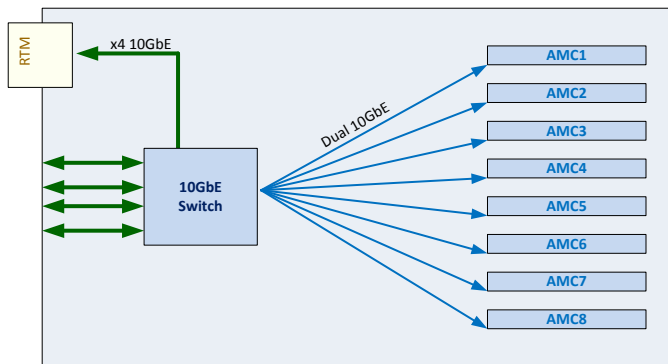*Figure 4: Option C = 1*

Figure 5: Option C = 2
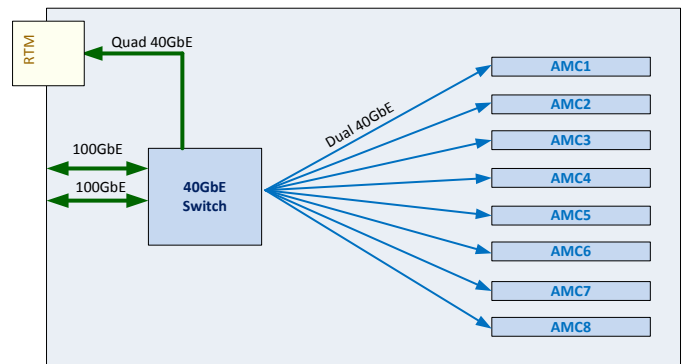

Figure 6: Option C = 3

Figure 7: Option C =4

Specifications

Architecture			
Physical	**Dimensions**	Height: 3U	
		Width: 19"	
		Depth: 15.3"	
Type	**ATCA Hybrid Chassis**	1 Slot for ATCA node, 8 mid-size AMC slots (special carrier)	
Standards			
ATCA	**Type**	PICMG 3.0 Rev 3.0	
AMC	**Type**	AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4	
Configuration			
Power	**VT835**	1000 W, Universal AC or –36 to –75 VDC input	
Environmental	**Temperature**	Operating: 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 per cent, 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	

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.

Ordering Options

VT835 – ABC-000-0HJ

A = Power Module		H= Temperature Range
0 = Single (AC) 1 = Dual (redundant AC) 2 = Single (DC) 3 = Dual (redundant, DC)		

B = Shelf Managers		H= Temperature Range
0 = Single 1 = Dual (redundant))		0 = Commercial 1 = Industrial

C = Carrier Fabric*		J = Conformal Coating
0 = Reserved 1 = PCIe Gen3 x8 to each AMC 2 = SRIO Gen3 x4 to each AMC 3 = 10GbE Layer 2 (Dual XAUI) 4 = 40GbE Layer 3 (Dual XAUI / KR)		0 = None 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

* See Carrier Options for each option with its associated Fabrics.

Related Products

AMC735

- Cavium OCTEON CN67xx Multi-Core
- Core processors rom 8 to 16 and Speeds from 800 MHz to 1.5 GHz
- Dual SFP+ socket supporting 10GbE

ATC807

- AdvancedTCA open standard form factor
- Managed Layer 2 10GbE and 1GbE switch
- 10GbE to the Fabric channel

AMC534

- Altera Stratix V GT FPGA in FFG-1517 package
- Dual zQSFP+ ports to the front panel
- Front panel Port 0 at 100G, Port 1 at up to 40G

Contact

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