

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 XAU1
- 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

AdvancedTCA®

40G



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VT835

The VT835 offers unprecedented performance density with a ATCA node slot and 8 mid-size, single width AMC's in 3U height. Typically, only 4 mid-sized AMC's can fit on an ATCA carrier, but with VadaTech's unique design, 8 AMC's can fit in a single chassis to provide AMC's versatility of processors, FPGAs, storage, graphics, I/O options and much more. Double-width AMC's 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.

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. Temperature sensors throughout the chassis monitor the intake and the outtake air temperature.

Shelf Input/Output

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

Scorpionware™ Software

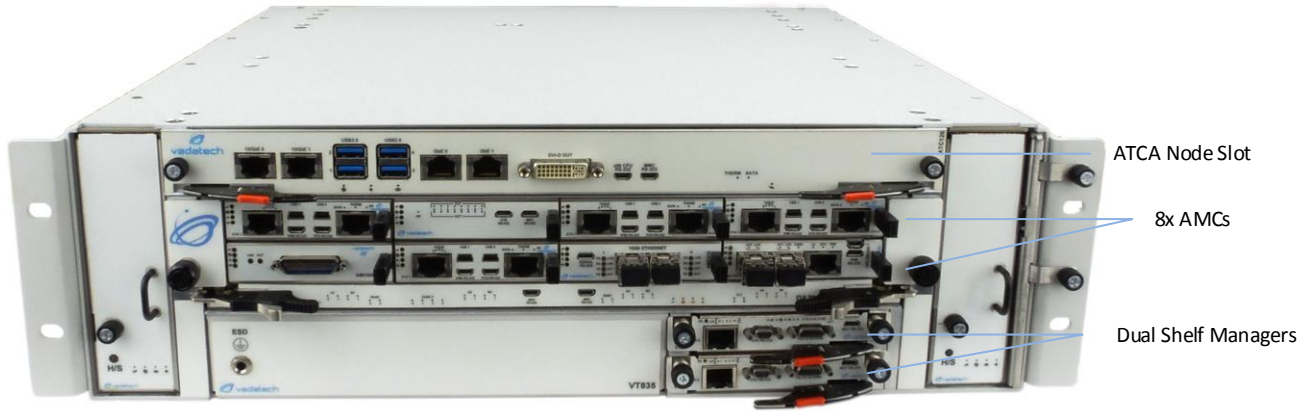
VadaTech's Scorpionware software can be used to access information about the current state of the Shelf or the Carrier, obtain information such as the FRU population, or monitor alarms, power management, current sensor values, and the overall health of the Shelf. The software GUI is very powerful, providing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



Figure 1: VT835

Chassis Configuration

Front View



Rear View



Figure 2: VT835 Chassis Layout

Block Diagram

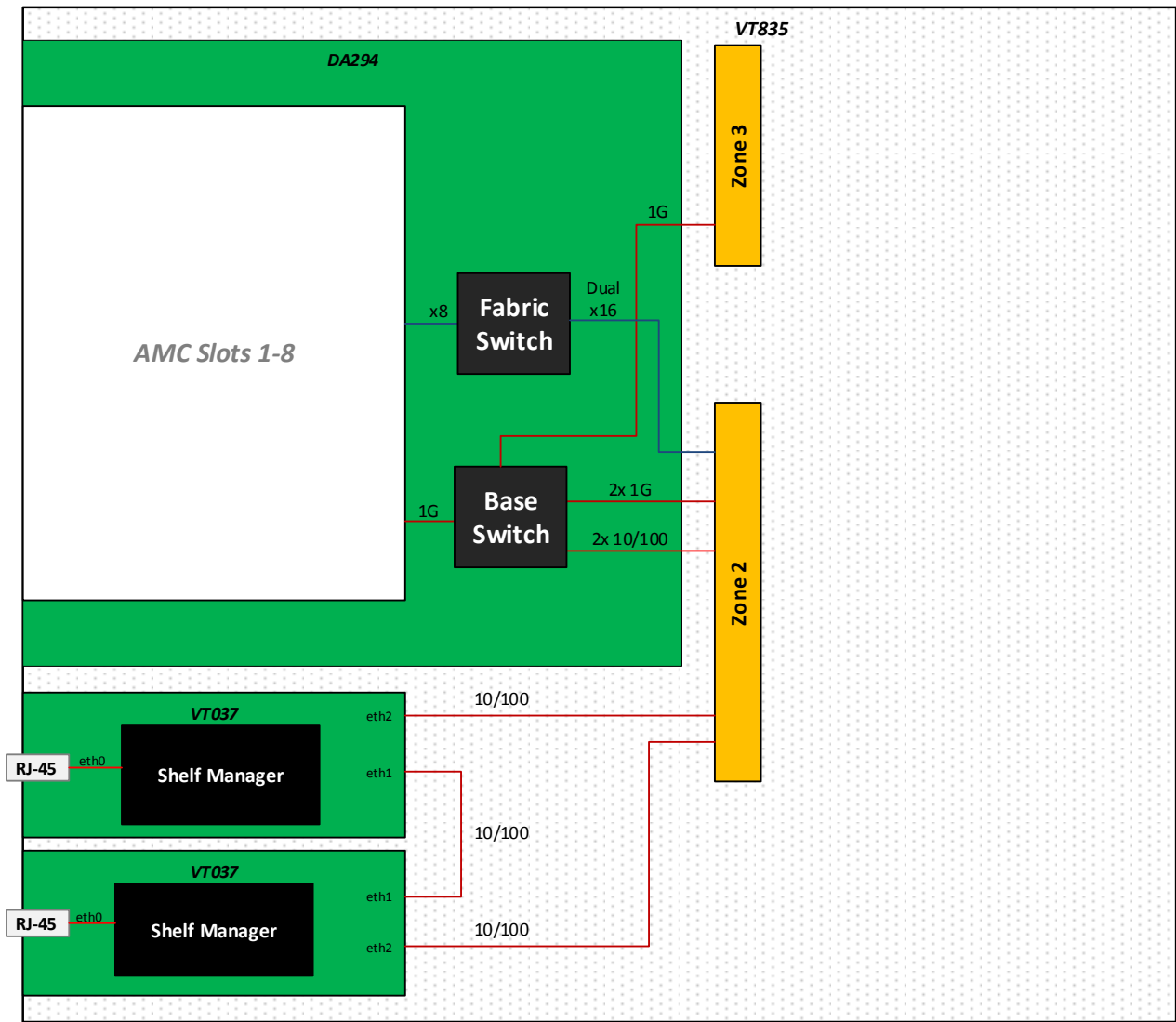


Figure 3: VT835 Functional Block Diagram

Carrier Options

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

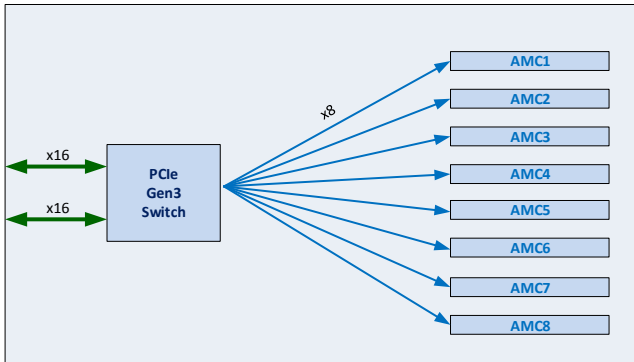


Figure 4: Option C = 1

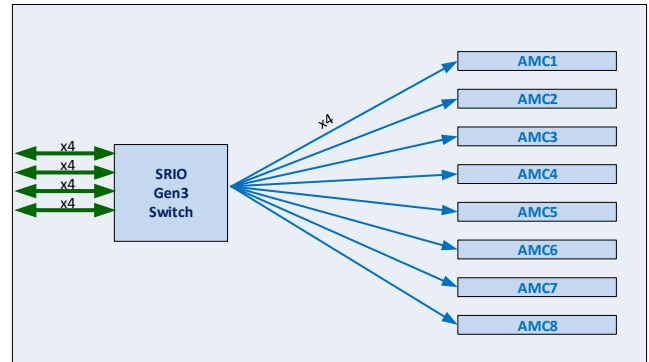


Figure 5: Option C = 2

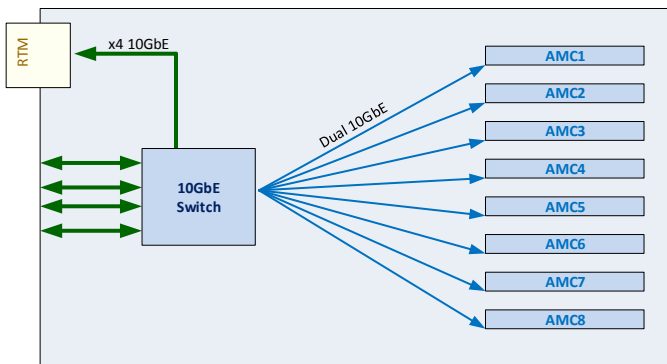


Figure 6: Option C = 3

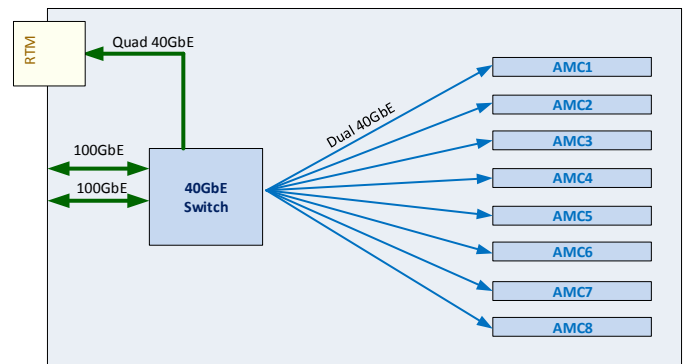


Figure 7: Option C = 4

Specifications

| Architecture | |
|-----------------------|---|
| Physical | Dimensions Height: 3U Width: 19" Depth: 15.3" |
| Type | ATCA Hybrid Chassis 1 Slot for ATCA node, x8 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 1000W Universal AC or –36 to –75V DC input |
| Environmental | Temperature See Ordering Options Storage Temperature: –40° to +70°C |
| | Altitude 10,000 ft operating 40,000 ft non-operating |
| | Relative Humidity 5 to 95% non-condensing |
| 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 | One (1) year, see VadaTech Terms and Conditions |

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), 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 0 = Single (AC) 1 = Dual (redundant AC) 2 = Single (DC) 3 = Dual (redundant, DC) | | |
| B = Shelf Managers 0 = Single 1 = Dual (redundant) | | H= Temperature Range 0 = Commercial 1 = Industrial |
| C = Carrier Fabric* 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) | | J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic |

Notes: * 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

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