

VT834

100G Dual Slot, Full Mesh, 3U ATCA Chassis



VT834

Key Features

- 19" rackmount 3U ATCA Chassis
- Two ATCA Slots with dual RTM. One Slot can be 9 HP (Standard Slot size 6 HP)
- 100G across the backplane
- Full redundancy for all FRUs
- Redundant AC or DC Power Modules
- Redundant push/pull cooling configuration
- Integrated dual shelf managers with GbE Managed Layer 2 Ethernet Switch
- ESD Jack

Benefits

- Combines the processing power of AdvancedTCA in dual slots
- Unprecedented performance density
- High power (400W) support for each ATCA module
- Superior shelf management solution from VadaTech
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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AdvancedTCA®

100G



VT834

The VT834 features full-mesh configuration that provides unprecedented performance density. This allows the dual ATCA slots exceptional connectivity across the backplane at 100G per port. The backplane connects the two slots, 16 Fabric channels and the 14 Base channels to each other. Base channels one and two of each slot are connected to the layer 2 GbE managed switch. The GbE switch has four GbE ports routed to the front of the chassis.

The two slots support up to 400W for each module, allowing the use of a high-power host processor and FPGA blades. Additional I/O is available through two standard ATCA RTMs.

The VT834 has full redundancy support for all FRUs, including the dual Shelf Managers.

Power Supply

The VT834 is capable of providing single input power or redundant input power.

Cooling and Temperature Sensors

The VT834 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 in the chassis monitor the intake and the outtake air temperature throughout the chassis.

Shelf Manager and GbE Switch

The Chassis has the option of dual shelf management for redundancy. The shelf Manager has an integrated layer two managed switch onboard.

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: VT834

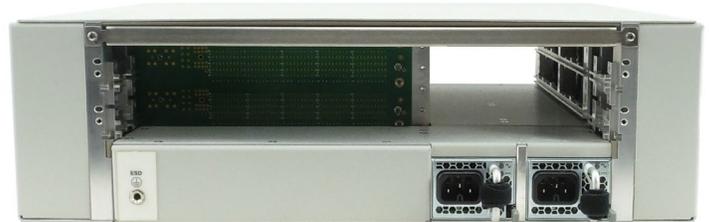


Figure 2: VT834 rear view

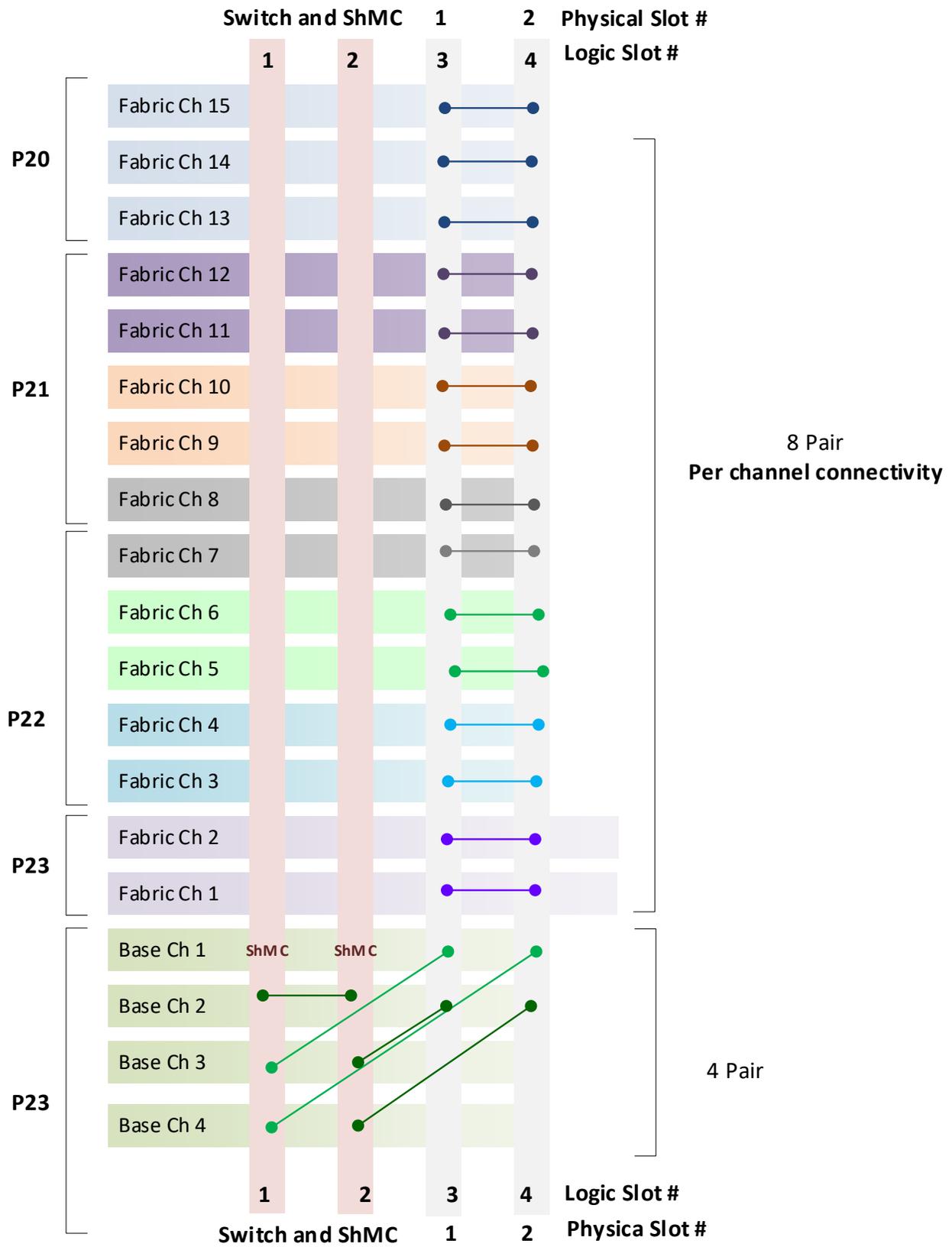


Figure 3: VT834 backplane Full Mesh with Replicated mesh on Node slots

Chassis Layout

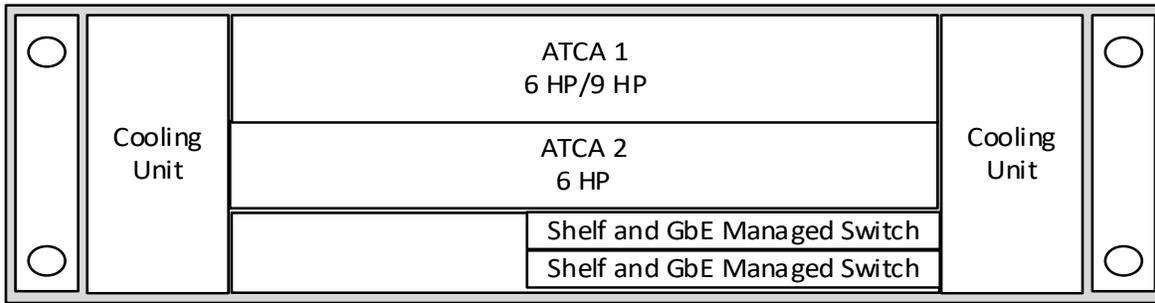


Figure 4: VT834 Chassis Slots

Block Diagram

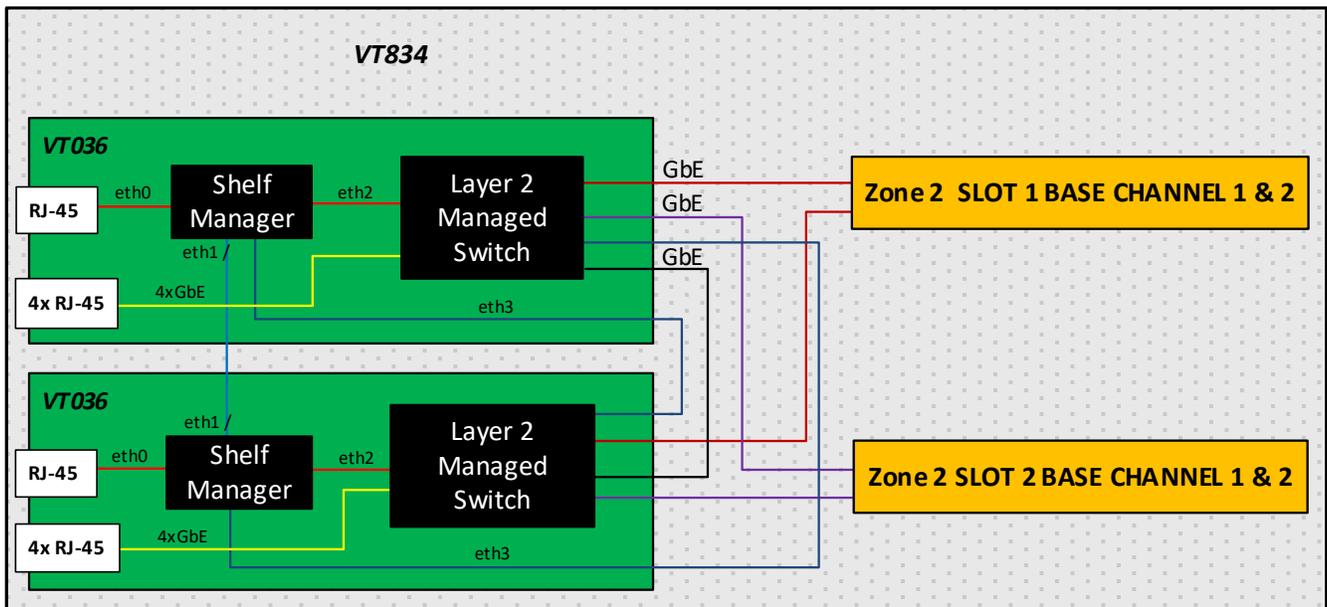


Figure 5: VT834 Functional Block Diagram

Specifications

Architecture	
Physical	Dimensions Height: 3U
	Width: 19"
	Depth: 15.3"
Type	ATCA Chassis Two Slot ATCA full-mesh
Standards	
ATCA	Type PICMG 3.0 Rev 3.0
AMC	Type AMC.0, AMC.1, AMC.2, AMC.3 and AMC.4
Configuration	
Power	VT834 1300W 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 AS9100D 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

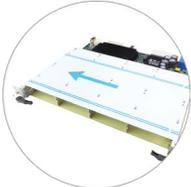
VT834 – AB0-000-0HJ

A = Power Supply		
0 = Single (AC) 1 = Dual (redundant AC) 2 = Single (DC) 3 = Dual (redundant DC)		
B = Shelf Manager with GbE Switch*		H = Temperature Range
0 = Single 1 = Dual (redundant)		0 = Commercial 1 = Industrial
		J = Conformal Coating
		0 = Commercial, no coating (-5 to +55°C) 1 = Commercial Humiseal 1A33 Polyurethane (-5 to +55°C) 2 = Commercial, 1B31 Acrylic (-5 to +55°C)

Notes: *Shelf Manager/GbE switch part number for VT834 is VT036

Related Products

ATC114



- Seven AMC.1 and/or AMC.2 slots
- PCIe up/down stream on any AMC slot with expansion capability via VadaTech AMC113 product
- 48-lane PCIe Gen2 switch

ATC126



- Dual 14-core Intel® Xeon® E5-2658, 2680, 2648L, 2618L, 2620, 2630 v4 processors
- Eight banks of DDR4 for up to 256 GB memory
- 10/40GbE Fabric channels

ATC500



- Dual Virtex UltraScale+ VU13P provides massive DSP power using over 24,000 FPGA DSP slices to deliver up to 12TMACs per second/per board
- Backplane connections support full mesh fabric at 100G
- Network synchronization distributes reference and radio frame clocks across multiple ATC500 boards

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