

# VT825

## 13U AdvancedTCA Shelf, 14 Slot



VT825

## Key Features

- 19" rackmount 13U ATCA Chassis Platform
- 40G or 10G ATCA 14-slot backplane with Dual Star base and fabric (Full Mesh optional)
- Conforms to PICMG 3.0 specification Rev.3.0
- Full redundancy for all FRUs
- Split power distribution (odd slots on A1/B1, even slots on A2/B2)
- Superior cooling to over 270 W/slot (15U version available to 400 W/slot)
- 14 Rear Transition Module (RTM) slots

## Benefits

- Base design has over 15,000 global installs
- Fully NEBS compliant
- Superior airflow distribution, even with a fan removed
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

**AdvancedTCA®**

**40G**



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# VT825

The VT825 utilizes the most successful design in the ATCA market, with over 15,000 global installs. The 13U chassis provides up to 14 front and RTM ATCA slots.

The backplane for the VT825 can be 10G or 40G Dual Star topology (Mesh is available upon request). Two PEM (Power Entry Modules) are standard with options for redundancy. The front air filter is removable and an EMC mat below the card cage helps to redirect airflow.

The chassis is NEBS compliant with front-to-rear airflow. The VT825 has powerful blowers above an air plenum over the card cage. If one of the four blowers are removed, the airflow within the plenum follows the path of least resistance, keeping the static pressure low. This is a critical feature to support the NEBS requirements for fan failure/removal.

The 14-Slot backplane has been independently tested to ensure that it meets 40G ATCA requirements per the PICMG 3.1 R2.0 specification. 10G Backplanes are also available. The VadaTech shelf manager is standard, but other options are available.

## Power Supply

The VT825 shelf uses standard rear Power Entry Modules (PEMs) that are configurable on either 50 Amp or 100 Amp redundant and non-redundant configurations dependent on system power requirements.

## Cooling and Temperature Sensors

The VT825 uses 4 180 CFM blowers with dual IPMI for failover. Contact factory for further details.

## Shelf Input/Output

RTM (Rear Transition Module) are available per slot.

## VadaTech Shelf Manager

The VadaTech shelf manager is based on our standard VT002 mezzanine. It incorporates the Intelligent Platform Management Interface (IPMI v2.0) and the PICMG 3.x specification on a mezzanine module are available in the chassis. The shelf manager features include:

- 32-bit RISC processor @ 400 MHz
- 64 Mbytes of DDR @ 266 MHz
- 128 Mbytes of flash
- Integrated Intelligent Fan Controller
- 32 Kbyte FRAM for log messages
- Firmware is field upgradable with dual boot
- Low power (3 W)
- Dual 10/100 Ethernet ports
- Three RS-232 ports
- Rich set of management software such as HPI, RMCP+, SNMP, CLI, HTTP, HPM, E-Keying, etc.



Figure 1: VT825

# Cooling Airflow

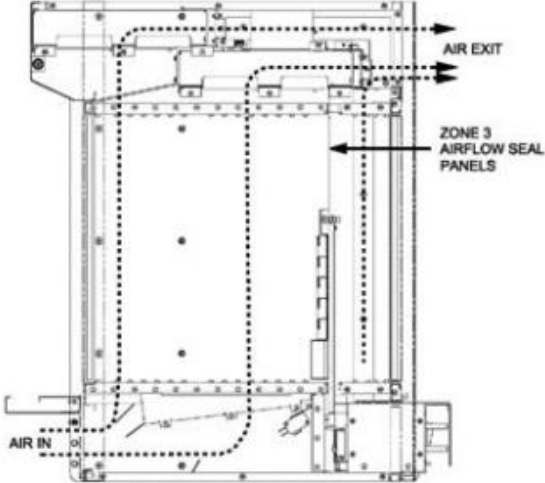


Figure 2: VT825 Cooling Airflow

# Specifications

<b>Architecture</b>	
<b>Physical</b>	<b>Dimensions</b> Height: 13U Width: 19" Depth: 385 mm
<b>Type</b>	<b>ATCA Shelf</b> 14 Slot ATCA
<b>Standards</b>	
<b>ATCA</b>	<b>Type</b> PICMG 3.0 Rev 3.0
<b>Configuration</b>	
<b>Environmental</b>	<b>Temperature</b> Operating temperature: -5° to 55°C, See <a href="#">environmental spec sheet</a> Storage Temperature: -40° to +70°C
	<b>Relative Humidity</b> 5 to 95% non-condensing
<b>Other</b>	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
<b>Warranty</b>	Two (2) years

## 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.

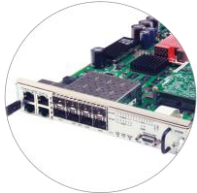
# Ordering Options

## VT825 – ABC-D00-00J

<b>A = Power Supply</b> 0 = No Power Supply 1 = Single 50 Amp DC 2 = Single 100 Amp DC 3 = Dual 50 Amp DC (redundant) 4 = Dual 100 Amp DC (redundant)	<b>D = Cable Management Trays</b> 0 = Front and Rear Cable Management Trays 1 = No Cable Management Trays	
<b>B = Backplane</b> 1 = Dual Star (10GB) 2 = Dual Star (40GB) 3 = Mesh (custom)		
<b>C = Switched Shelf Manager</b> 0 = Dual VadaTech Shelf Managers 1 = Other Shelf Manager 2 = Reserved		<b>J = Temperature and Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

## Related Products

VT030



- 10GbE Switching Shelf Manager eliminates need for separate switch slots
- Compliant to PICMG 3.0 base and PICMG 3.1 fabric interface (10GbE/GbE) specifications
- Compact 1.0" H x 5.685" W x 11.096" D size

ATC807



- Managed Layer two 10GbE and 1GbE switch
- GbE to Base Interface for 15 Node slots plus two Shelf
- Eight SFP+ cages for 10GbE ports (each port can run as GbE or 10GbE)

VT000



- Powers a single ATCA module
- IPMI hardware address and parity
- Fuse on each of the power rails

# Contact

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