

VT040R

Shelf Manager, 4th Generation

ATCA, MTCA and VPX platforms



VT040R

Key Features

- Quad ARM Cortex-A53 core @ 1.6 GHz per core
- 4 GB LP-DDR4 memory
- FRAM for log messages
- 64 GB of NAND Flash
- Option for 32 GB of Flash as removable SDHC
- Form, fit functional to VadaTech VT001, VT002 and VT003
- Operate across multiple platforms ATCA, MTCA and VPX like the previous generations
- Dual 10/100 Ethernet Ports
- I2C Real Time Clock with battery backup

Benefits

- 4th Generation shelf manager in mezzanine format allows use in multiple form factors
- Backwards compatibility to 3rd Generation (VT003) and earlier shelf managers
- Compact size with low (3W) power consumption
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

μTCA[®]

OpenVPX[™]

AdvancedTCA[®]



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VT040R

The VT040R incorporates the Intelligent Platform Management Interface (IPMI v2.0) and the PICMG 3.x specification for mezzanine modules. It is VadaTech's 4th generation shelf manager product and provides a complete hardware and software solution in the size of a credit card using less than 3W.

The VT040R can be deployed on any custom management carriers for the rapid development of dedicated Shelf Managers on an ATCA, MTCA and VPX module. This allows the ATCA, MTCA and VPX module to replace a dedicated Shelf Manager, thereby reducing overall system cost.

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: VT040R



Figure 2: VT040R Top View



Figure 3: VT040R Bottom View

Specifications

Architecture		
Physical	Dimensions	Width: 2.125" (54 mm)
		Depth 3.375" (85.7 mm)
Type	Shelf Manager	Mezzanine module to mount to a management carrier
Standards		
Module Management	IPMI	IPMI v2.0 and PICMG 3.0 and VITA
Configuration		
Power	VT040R	3W
Environmental	Temperature	See Ordering Options
		Storage Temperature: -40° to +90°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500 Hz on each axis
	Shock	Operating 30G each axis
	Relative Humidity	5 to 95% non-condensing
Others	Mechanical	Tyco/Samtec 120 pin
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 ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, 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

VT040R – ABC-0E0-0HJ

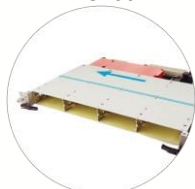
A = SDHC Socket Flash*		
0 = No socket Flash 1 = 32 GB		
B = SPI/Modem Option	E = Heat Sink	H = Temperature Range
0 = SPI Interface 1 = Modem Interface 2 = SPI with MCH support	0 = Heat spreader (Conduction Cool) 1 = Standard Air cooled (fins) 2 = Not Installed 3 = Machined Aluminium**	1 = Commercial (Operating Temperature 0° to 65°C) 2 = Industrial
C = Flash size	J = Conformal Coating	
0 = 64GB 1 = 128GB	0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic 3 = Parylene	

Notes:

*Module does not need the SDHC flash to operate

Related Products

ATC133



- 10G ATCA Carrier
- Managed Layer 2 software
- Four full-size AMC slots

VT000



- Allows connection to shelf managers (such as VadaTech's bench-top style VT007)
- Powers a single ATCA module
- IPMI hardware address and parity

VT830



- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

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