

# VT040

## Shelf Manager, 4<sup>th</sup> Generation

### ATCA, MTCA and VPX platforms



VT040

## 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

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# VT040

The VT040 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 VT040 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: VT040

# Specifications

| Architecture             |   |
|--------------------------|---|
| <b>Physical</b>          | <b>Dimensions</b> Width: 2.125" (54 mm)<br>Depth 3.375" (85.7 mm)                             |
| <b>Type</b>              | <b>Shelf Manager</b> Mezzanine module to mount to a management carrier                        |
| Standards                |   |
| <b>Module Management</b> | <b>IPMI</b> IPMI v2.0 and PICMG 3.0 and VITA  |
| Configuration            |   |
| <b>Power</b>             | <b>VT040</b> 3W   |
| <b>Environmental</b>     | <b>Temperature</b> See <a href="#">Ordering Options</a><br>Storage Temperature: -40° to +90°C |
|                          | <b>Vibration</b> Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500 Hz on each axis                |
|                          | <b>Shock</b> Operating 30G each axis  |
|                          | <b>Relative Humidity</b> 5 to 95% non-condensing  |
| <b>Others</b>            | <b>Mechanical</b> Tyco/Samtec 120 pin   |
| Other                    |   |
| <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 ISO9001:2015 and AS9100D standards                          |
| <b>Warranty</b>          | Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>                              |

## 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

## VT040 – ABC-DE0-0HJ

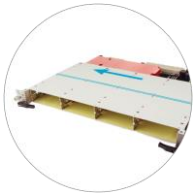
|   |  |   |
|---|--|---|
| <b>A = SDHC Socket Flash*</b><br>0 = No socket Flash<br>1 = 32 GB       | <b>D = Battery</b><br>0 = Installed<br>1 = Not installed   |   |
| <b>B = SPI/Modem Option</b><br>0 = SPI Interface<br>1 = Modem Interface | <b>E = Heat Sink</b><br>0 = Heat spreader (Conduction Cool)<br>1 = Standard Air cooled (fins)<br>2 = Not Installed | <b>H = Temperature Range</b><br>1 = Commercial (Operating Temperature 0° to 65°C)<br>2 = Industrial           |
| <b>C = Flash size</b><br>0 = 64GB<br>1 = 128GB                          |  | <b>J = Conformal Coating</b><br>0 = No coating<br>1 = Humiseal 1A33 Polyurethane<br>2 = Humiseal 1B31 Acrylic |

**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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DOC NO. 4FM737-12 REV 01 | VERSION 1.1 – FEB/24