The VT004 is a carrier which utilizes the VadaTech Shelf Manager. The carrier is designed to fit the LCR chassis. The carrier meets all the requirements per ATCA specification including Telco alarms, isolated DC/DC converter, LEDs, etc.

When two VT004s are in the system, they operate in redundant active/standby mode. During operation one VT004 is active while the second one is synchronized in hot standby mode. The VT004 is fully hot-swappable to minimize service down time.

Each IPMI bus has a 64-byte FIFO to allow for a full IPMI packet on each I2C bus so there is no packet loss during operation.

The VT004 can also run as a protocol analyzer to monitor, inject, capture and validate I2C traffic on the Intelligent Platform Management Bus (IPMB). A Graphical User Interface (GUI) validates and displays the IPMI packets or schedules IPMI messages for injection into the shelf. The GUI application communicates with the VT004 through the Ethernet port.
INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

IPMI PROTOCOL ANALYZER

---

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**

**Header**

- Event Message Revision : 0x34 (4)
- Sensor Type : 0x31 (Temperature)
- Sensor Number : 0x32 (2)
- Event Type : 0x31 (Threshold)
- Event Direction : 0x31 (Assertion)
- Offset : 0x37 (Upper Non-Critical Going High)
- Byte 2 Encoding : 0x31 (Trigger Reading)
- Byte 3 Encoding : 0x31 (Trigger Value)
- Reading : 0x31 (42)
- Threshold : 0x32 (50)

**No: 25**

- Time : 77.650.000
- Bus : 0
- Dr : 0
- Sr : 0
- Dest : 0
- Seq : 0
- NetFn : 0
- Command : 2

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**

---

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**

---

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**

---

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**

---

**Request: 0x80 -> 0x20 Platform Event | Sensor/Event | seq 2**
BLOCK DIAGRAM

FRONT PANEL
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Dimensions</th>
<th>Physical</th>
<th>Width: 3.937&quot; (100 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Depth:</td>
<td>11.06&quot; (280.7 mm)</td>
</tr>
<tr>
<td>Type</td>
<td>Shelf Manager</td>
<td>For LCR Chassis: 14 and 5 slot</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td>Module Management</td>
<td>IPMI version 2.0 and PICMG 3.0</td>
<td></td>
</tr>
<tr>
<td>Configuration</td>
<td>Power</td>
<td>VT004</td>
<td>4 W typical, 5 W max</td>
</tr>
<tr>
<td>Environmental</td>
<td>Temperature</td>
<td>Operating Temperature: 0° to 55° C, (Air flow requirement is to be greater than 100 LFM) Available in Industrial Temp</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Storage Temperature: -40° to +90° C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration</td>
<td>1G, 5 – 500 Hz on each axis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shock</td>
<td>30Gs on each axis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relative Humidity</td>
<td>5 to 95 percent, non-condensing</td>
<td></td>
</tr>
<tr>
<td>Front Panel</td>
<td>Interface Connectors</td>
<td>Micro DB-15 connector for telco alarm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>RS-232 via Micro DB-9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10/100 Ethernet via RJ-45</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEDs</td>
<td>IPMI Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Activity/Link and User LEDs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Push Button</td>
<td>Reset switch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mechanical</td>
<td>Hot-swap extractor handle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Software</td>
<td>Operating Systems</td>
<td>Linux</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>MTBF</td>
<td>MIL Hand book 217-F @ 233,000 Hrs</td>
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<tr>
<td></td>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications where applicable</td>
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<tr>
<td></td>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
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<tr>
<td></td>
<td>Compliance</td>
<td>RoHS and NEBS</td>
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<td>Warranty</td>
<td>Two (2) years</td>
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<td>Trademarks and Disclaimer</td>
<td>The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice</td>
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Shelf Manager for LCR ATCA Chassis – VT004

ORDERING OPTIONS

VT004 – ABC – 000 – 0HJ

A = Software
1 = Shelf Manager
2 = IPMI Protocol Analyzer

B = Front Panel
1 = No Load
2 = Include RJ-45

C = IPMI Controller
0 = VT001
1 = VT003

H = Operating Temperature
1 = Commercial
2 = Industrial

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS

VT830 5U ATCA SlotSaver Chassis
ATC133 ATCA Carrier Quad AMC
ART131 ATCA RTM Common Pinout

CONTACT US

VadaTech Corporate Office
198 N. Gibson Rd,
Henderson, NV 89014
Email: info@vadatech.com
Telephone: +1 702 896-3337
Fax: +1 702 896-0332

Asia Pacific Sales Office
7 Floor, No. 2, Wenhu Street, Neihu District,
Taipei 114, Taiwan
Email: info@vadatech.com
Telephone: +886-2-2627-7655
Fax: +886-2-2627-7792

VadaTech European Sales Office
Ocean Village Innovation Centre, Ocean Way,
Ocean Village, Southampton, SO14 3JZ
Email: info@vadatech.com
Telephone: +44 2380 381982
Fax: +44 2380 381983

info@vadatech.com