VT038
ATCA Shelf Manager for VT836

Key Features

- Quad core ARM processor @ 1 GHz per core
- One GB DDR3 Memory
- FRAM for log messages
- Field upgradable with dual boot flash (32 GB)
- Telco alarms
- 8 GB NAND Flash
- IPMI 2.0 compliant

Benefits

- Active/standby redundancy when utilizing two VT038s
- Rich set of Management software such as HPI, RMCP, SNMP, CLI, HTTP, etc.
- VT038 can run as an IPMI protocol analyser to monitor all IPMB busses
- Full system supply from industry leader
- AS9100 and ISO9001 certified company
VT038

The VadaTech VT038 is VadaTech Shelf Manager for VT836 Shelf based on the Vadatech’s 3rd generation VT003.

The VT038 can 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 IPMB messages for injection into the shelf. The GUI application communicates with the VT038 through the Ethernet port.

When two VT038s are in the system, they operate in redundant active/standby mode. During operation one VT038 is active while the second one is synchronized in hot standby mode. The VT038 is fully hot-swappable to minimize service down time. Lithium Battery and/or Super CAP for the Real Time Clock.
Block Diagram

VT003 Shelf Manager

LEDs
Micro DB-9
RJ-45
Micro USB
IPMI LEDs
Telco Reset
SHMM RS-232
SHMM 10/100
MGT RS-232
Telco Alarm Connector
Reset
Hot-swap
Telco Alarm LEDs

Front Panel

MR L/A [1 2 3]

ETH 0

CPU RS-232
TELCO RST

TELCO ALARM

VT038

CPU RS-232

MGT RS-232

MGT RS-232

ACT

FAIL
## Specifications

### Architecture

<table>
<thead>
<tr>
<th>Physical Dimensions</th>
<th>Width: 6.2” (157.48 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth: 4.1” (104.14 mm)</td>
<td></td>
</tr>
<tr>
<td>Height: 0.8” (20.32 mm)</td>
<td></td>
</tr>
</tbody>
</table>

### Type

| Shelf Manager | For VadaTech VT836 ATCA Chassis |

### Standards

<table>
<thead>
<tr>
<th>ATCA Type</th>
<th>PICMG 3.0 Revision 2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Management IPMI Version 2.0</td>
<td></td>
</tr>
</tbody>
</table>

### Configuration

<table>
<thead>
<tr>
<th>Power</th>
<th>VT038 4W</th>
</tr>
</thead>
</table>

### Environmental

<table>
<thead>
<tr>
<th>Temperature Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial versions also available (See environmental spec sheet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature: -40° to +85°C</td>
</tr>
<tr>
<td>Vibration Operating 9.8 m/s² (1G), 5 to 500Hz on each axis</td>
</tr>
<tr>
<td>Shock Operating 30Gs on each axis</td>
</tr>
<tr>
<td>Relative Humidity 5 to 95 per cent, non-condensing</td>
</tr>
</tbody>
</table>

### Front Panel Interface Connectors

- DB-15 for Telco Alarm
- DB9 for CPU RS-232
- RJ-45 for 10/100
- Micro USB for MGT RS-232
- Push buttons for Reset and Telco Alarm clear

### LEDs

- IPMI, Activity and Status

### Software Support

| Operating System | N/A |

### Conformal Coating

- Humiseal 1A33 Polyurethane (Optional)
- Humiseal 1B31 Acrylic (Optional)

### Other

<table>
<thead>
<tr>
<th>MTBF</th>
<th>MIL Hand book 217-F@ TBD hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications, where applicable</td>
</tr>
<tr>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
</tr>
<tr>
<td>Warranty</td>
<td>Two (2) years</td>
</tr>
</tbody>
</table>

**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.

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# Ordering Options

**VT038 – 0B0-000-0HJ**

<table>
<thead>
<tr>
<th>B = Battery</th>
<th>H = Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = None</td>
<td>0 = Commercial</td>
</tr>
<tr>
<td>1 = Lithium</td>
<td>1 = Industrial</td>
</tr>
<tr>
<td>2 = Super Cap</td>
<td></td>
</tr>
<tr>
<td>3 = Lithium and Super Cap</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J = Conformal Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = None</td>
</tr>
<tr>
<td>1 = Humiseal 1A33 Polyurethane</td>
</tr>
<tr>
<td>2 = Humiseal 1B31 Acrylic</td>
</tr>
</tbody>
</table>

## Related Products

- **VT011**
  - Shelf manager for AdvancedTCA systems
  - Utilizing Gen 3 Shelf Manager VT003
  - Option to plug into ATC139 ATCA Carrier

- **VT037**
  - Quad core ARM processor @ 1GHz per core
  - One GB DDR3 Memory
  - FRAM for log messages

- **VT039**
  - Shelf manager for use in VT825 AdvancedTCA shelf
  - Single module, full-size
  - Redundant failover between the two shelf managers