VadaTech VT005 Shelf Manager is form, fit and functionally compatible to the Intel® Model MPCMM0001. The VT005 is a 5W module. The VT005 can also run as a protocol analyzer to monitor, inject, capture and validate I²C traffic on the Intelligent Platform Management Bus (IPMB) on all the radial busses. 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 VT005 through the Ethernet port.

The VT005 has true radial bussing with dual FPGAs for redundancy. 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.

When two VT005s are in the system, they operate in redundant active/standby mode. During operation one VT005 is active while the second one is synchronized in hot standby mode. The VT005 is fully hot-swappable to minimize service down time.
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Physical Dimensions</th>
<th>Width: 5.687 in. (144 mm)</th>
<th>Depth: 11.077 in. (281 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Shelf Manager</td>
<td>For Intel compatible chassis</td>
<td></td>
</tr>
</tbody>
</table>

#### Standards
- **Module Management**: IPMI, IPMI Version 2.0 and PICMG 3.0

#### Configuration
- **Power**: VT005, 4W typical, 5W max
- **Environmental**
  - **Temperature**: Operating Temperature: 0° to 65° C (Air flow requirement is to be greater than 100 LFM) Available in Industrial Temp
  - **Storage Temperature**: -40° to +90° C
- **Vibration**: 1G, 5-500Hz each axis
- **Shock**: 30Gs each axis
- **Relative Humidity**: 5 to 95 percent, non-condensing

#### Front Panel
- **Interface Connectors**: DB15 connector for Telco alarm
  - RS-232 via RJ-45
  - Dual 10/100 Ethernet RJ-45
  - Reset Switch
- **LEDs**: IPMI Management Control
  - Activity/Link; user LED, etc.
- **Push Button**: Reset Switch
- **Mechanical**: Hot Swap Ejector Handle

#### Software Support
- **Operating Systems**: Linux version 2.6.15

#### Other
- **MTBF**: MIL Spec 217-F > 221,000 Hrs.
- **Certifications**: Designed to meet FCC, CE and UL certifications where applicable
- **Standards**: VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
- **Compliance**: RoHS and NEBS
- **Warranty**: Two (2) years

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FIGURE 1: Viewing a captured trace when running the VT005 as an IPMI Protocol Analyzer
ORDERING OPTIONS

VT005 - A00 - 000 - OHJ

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

H = Operating Temp
1 = Commercial
2 = Industrial

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

FIGURE 2. VT005 Functional Block Diagram

Telco Alarm
RS-232
10/100 Mbit Ethernet
Reset

CPU
SDRAM
Flash
Peripherals

FPGA

I2C True Radial Bus

GPIO, RS-232, LED, etc.

Telco Alarm
RS-232
10/100 Mbit Ethernet
Reset

FPGA

I2C True Radial Bus

GPIO, RS-232, LED, etc.

LEDs

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