



# VT039 – Shelf Manager for VT825 13U AdvancedTCA Shelf



# **KEY FEATURES**

- Shelf manager for use in VT825 AdvancedTCA shelf
- Single module, full-size
- Redundant failover between the two shelf managers
- Quad Core ARM Freescale processor @ 1 GHz per core
- 1 GB DDR3 memory
- FRAM for log messages
- 32 GB of Flash
- 8 GB of NAND Flash
- 10/100 Ethernet port
- RS-232 ports
- I2C Real Time Clock with battery backup
- Rich set of Management software (refer to the VT003 specification for all software components) such as HPI, RMCP, SNMP, CLI, HTTP, etc
- IPMI 2.0 compliant
- RoHS compliant

### Benefits of Choosing VadaTech

- Incorporates VadaTech's 3rd generation shelf manager with HTTP, SNMP, HPI, RMCP, CLI and other software features
- Efficient re-use of existing designs/components reduce costs
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

The VadaTech VT039 is VadaTech Shelf Manager for VT825 Shelf based on the Vadatech's  $3^{\rm rd}$  generation VT003.

The VT039 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 VT039 through the Ethernet port.

When two VT039s are in the system, they operate in redundant active/standby mode. During operation one VT039 is active while the second one is synchronized in hot standby mode. The VT039 is fully hot-swappable to minimize service down time.

Lithium Battery and/or Super CAP for the Real Time Clock.

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## **BLOCK DIAGRAM**

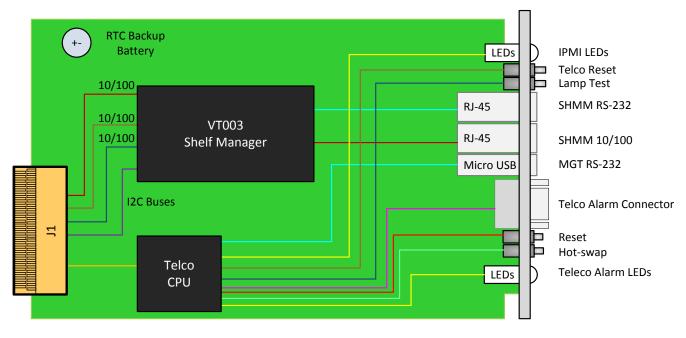


Figure 1: VT039 Block Diagram

## **FRONT PANEL**

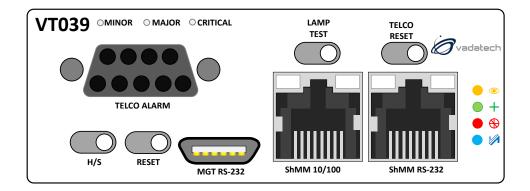


Figure 2: VT039 Front Panel View

Doc No. 4FM737-12 Rev 01



### **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.

### **PROTOCOL ANALYZER**

VT039 can be used as an IPMI protocol analyzer. Figure 3 shows an example trace viewer output.

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Figure 3: VT039 IPMI Protocol Analyzer – Trace Viewer Output Example



### **SPECIFICATIONS**

Architecture							
Physical	Dimensions	Single module, full-size					
•		Width: 4.04" (102.6 mm)					
		Depth: 5.68" without handles (144.27 mm)					
Туре	ATCA Shelf Manager	Designed for VT825 Shelf					
Standards							
Module Management	IPMI	IPMI Version 2.0 and PICMG 3.0					
Configuration							
Power	VT039	4 W					
Environmental	Temperature	Operating temperature: 0° to 55°C (See environmental spec sheet)					
		Storage Temperature: -40° to +90° C					
	Vibration	Operating 9.8 m/s² (1G), 5 to 500 Hz					
	Shock	30Gs on each axis					
	Relative Humidity	5 to 95 percent, non-condensing					
Front Panel	LEDs	IPMI management control					
		Telco Alarm, Link/Activity					
	Connectors	ShMM 10/100, ShMM RS-232 via RJ-45					
		MGT RS-232 via micro USB					
		Telco Alarm via micro DB-15					
	Push button	Hot-swap, reset, lamp test and telco alarm reset					
Other							
MTBF	MIL Handbook 217-F@T	MIL Handbook 217-F@TBD Hrs					
Certifications	Designed to meet FCC, CE and UL certifications where applicable						
Compliance	RoHS and NEBS						
Standards	Standards VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards						
Warranty	Two (2) years	Two (2) years					

#### 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**

### VT039 - AB0 - 000 - 0HJ

A = Software Option
0 = Shelf Manager/Protocol analyser
(VT003 included)
1 = As Telco Alarm only (VT003 is not included)
B = Battery

0 = None 1 = Lithium 2 = Super Cap

3 = Lithium and super cap

H = Operating Temperature 0 = Commercial

1 = Industrial

J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

RELATED PRODUCTS



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Version 1.2 - MAR/16

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