# VT053

4<sup>th</sup> Generation

### **ATCA Shelf Manager**

VT053

### Key Features

- Compliant to PICMG 3.0 base specifications
- 10/100 out-of-band, and RS-232 de-bug ports via RJ-45
- Software for Sensor Data Record, event logs, FRU inventory monitoring temp and power, e-keying, alarms and more
- Telco alarm with Micro DB15 connector front panel interface
- Active/standby redundancy when utilizing two VT053 in a system

### Benefits

- Incorporates VadaTech's 4<sup>th</sup> generation shelf manager with HTTP, SNMP, HPI, RMCP, CLI and other software features
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company





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# VT053

The VT053 AdvancedTCA  $4^{\rm th}$  Generation Shelf Manager is designed for use with VadaTech VT831 or VT832 ATCA Chassis.

Full redundancy and failover the Shelf Manager side can be achieved by using two VT053's in the system.

The VT053 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 VT053 is fully hot-swappable to minimize service downtime.

Figure 1: VT053

## Block Diagram

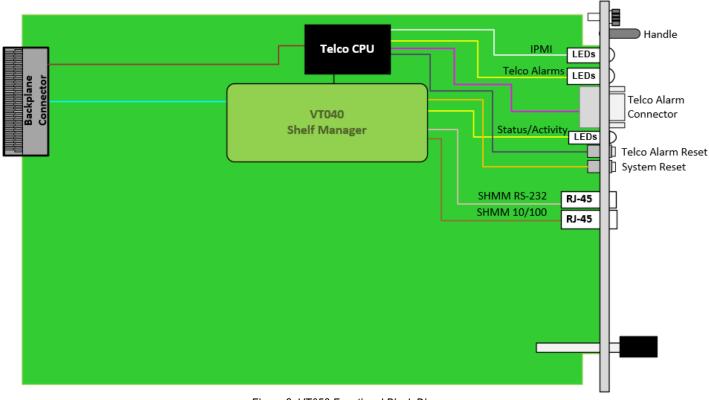


Figure 2: VT053 Functional Block Diagram

### Scorpionware<sup>™</sup> Software

VadaTech's Scorpionware <sup>™</sup> 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.

### **IPMI Protocol Analyzer**

VT053 can be used as an IPMI protocol analyzer, Figure .

	latform Event && Reque	est			•	Express	ion Apply		
١o.	Time	Bus	Dir	Src	Dest	Seq	Net Fn	Command	
22	77.050.000	IPMB-A	REQ	0x92	0x20	16	Sensor/Event	Platform Event	
24	77.330.000	IPMB-A	REQ	0×88	0×20	1	Sensor/Event	Platform Event	
25	77.410.000	IPMB-A	REQ	0×90	0x20	20	Sensor/Event	Platform Event	
28	77.740.000	IPMB-B	REQ	0×88	0x20	2	Sensor/Event	Platform Event	
29 30	77.810.000 77.830.000	IPMB-B IPMB-A	REQ REQ	0x92 0x92	0x20 0x20	20 8	Sensor/Event Sensor/Event	Platform Event Platform Event	
30 31	77.840.000	IPMB-A	REQ	0x92 0x92	0x20 0x20	12	Sensor/Event	Platform Event	
32	77.870.000	IPMB-A	REQ	0x92	0x20	16	Sensor/Event	Platform Event	
35	78.210.000	IPMB-A	REQ	0x88	0x20	3	Sensor/Event	Platform Event	
36	78.230.000	IPMB-B	REQ	0x90	0x20	20	Sensor/Event	Platform Event	
/38	78.610.000	IPMB-B	REQ	0x88	0x20	4	Sensor/Event	Platform Event	
739	78.640.000	IPMB-B	REQ	0x92	0x20	20	Sensor/Event	Platform Event	
740	78.650.000	IPMB-A	REQ	0×92	0x20	8	Sensor/Event	Platform Event	
741	78.660.000	IPMB-B	REQ	0×92	0x20	12	Sensor/Event	Platform Event	
742	78.690.000	IPMB-A	REQ	0×92	0x20	16	Sensor/Event	Platform Event	
743	79.020.000	IPMB-A	REQ	0x88	0x20	5	Sensor/Event	Platform Event	
744	79.050.000	IPMB-A	REQ	0×90	0×20	20	Sensor/Event	Platform Event	
745	79.430.000 79.460.000	IPMB-B	REQ	0×88	0×20	6 20	Sensor/Event Sensor/Event	Platform Event Platform Event	
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Figure 3: IPMI Protocol Analyzer Trace Viewer Output

### Specifications

Architecture				
Physical	Dimensions	Width: 5.685" (144 mm)		
		Depth 11.096" (281 mm)		
Туре	Shelf Manager	VadaTech ATCA Shelf Manager		
Standards				
Module Management	IPMI	IPMI v2.0 and PICMG 3.0		
Configuration				
Power	VT053	3W		
Environmental	Temperature	See Ordering Options		
		Storage Temperature: -40° to +90°C		
	Vibration	Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500 Hz on each axis		
	Shock	Operating 30G each axis		
	Relative Humidity	5 to 95% non-condensing		
Front Panel	Interface Connectors	Micro DB15 connector for Telco Alarm		
		RJ-45 for RS-232 port		
		Single 10/100 out of band port support to the shelf manager		
	LEDs	IPMI management control		
		Activity/Link user LEDs		
	Mechanical	Hot-swap ejector handle		
		Cap-screw		
		Alarm reset and system reset		
Software Support	Operating System	Linux (consult factory for VxWorks, Windows, or other options)		
Other				
MTBF	MIL Hand book 217-F@ TBD hrs			
Certifications	Designed to meet FCC, CE and UL certifications, where applicable			
Standards	VadaTech is certified to both the ISO9001:2015 and AS9100D standards			
Warranty	Two (2) years, see <u>VadaT</u>	ech Terms and Conditions		

#### 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 preconfigured Application-Ready Platforms. Please contact VadaTech Sales for more information.

## **Ordering Options**

### VT053-000-000-0HJ

	H = Temperature Range
	0 = Commercial (Operating Temperature -5° to 65°C) 1 = Industrial
	J = Conformal Coating
	0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

### **Related Products**

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#### VT011



#### VT030



- 10GbE Switching Shelf Manager, eliminates need for separate switch slots
- Compliant to PICMG 3.0 base specs •

• Shelf manager for AdvancedTCA systems Utilizing Gen 3 Shelf Manager VT003

• Option to plug into ATC139 ATCA Carrier

• Compliant to PICMG 3.1 fabric specs





- Switching Shelf Manager (SSM) 40G
- Compliant to PICMG 3.0 base specs •
- Compliant to PICMG 3.1 fabric specs

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