

VT007



KEY FEATURES

- Bench-top stand alone Shelf Manager
- As IPMI protocol analyzer it can interface to any ATCA chassis via cable
- 3W max power with wide input power range (8V to 24V)
- 32-bit RISC processor @ 180 MHz
- 64 MB of SDRAM and 128 MB of flash
- Dual 10/100 Ethernet ports
- RS-232 Debug port
- Linux release 2.6.15
- Field upgradable with dual boot flash
- IPMI 2.0 compliant
- Telco alarms
- Rich set of management software (refer to the VT001 specification for all software components) such as HPI, RMCP, SNMP, CLI, HTTP, etc.

The VadaTech VT007 Shelf Manager is a bench-top, stand-alone shelf manager and can manage any number of ATCA modules during debugging and development. The VT007 can be interfaced to any ATCA chassis via cable to 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 VT007 through the Ethernet port.

A combination of the VT000 and the VT007 can manage any number of ATCA modules during development and debugging.

The VT007 utilizes the common VadaTech VT001 module as its shelf manager or protocol analyzer.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).

Advanced TCA®

ATCA Bench-Top Shelf Manager and/or Protocol Analyzer

SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 5 in. (144 mm)
		Depth: 7 in. (281 mm)
Type	Shelf Manager	Stand-alone (bench-top)
Standards		
Module Management	IPMI	IPMI Version 2.0 and PICMG 3.x
Configuration		
Power	VT007	3W
Environmental	Temperature	Operating Temperature: 0° to 65° C (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	Interface Connectors	Debug port, RS-232 via RJ-45
		Dual 10/100 Ethernet RJ-45
		Modem Interface DB25
		Reset Switch
	LEDs	IPMI Management Control Activity/Link; user LED, etc.
	Push Button	Reset Switch
Rear	Interface Connectors	DB15 Connector for Telco alarm
		DB15 with five I ² C busses
		Input power (wide range - 8V to 24V)
Software	Operating System	Linux version 2.6.15
Other		
MTBF	MIL Spec 217-F > 235000 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	
Trademarks and Logos	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedMC™ and the AdvancedTCA™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

FIGURE 1: Viewing a captured trace while running the VT007 as an IPMI Protocol Analyzer

The screenshot displays the VadaTech IPMI Trace Viewer 2.1 interface. The main window shows a list of captured IPMI messages with columns for No., Time, Bus, Dir, Src, Dest, Seq, Net Fn, and Command. A filter is applied to show 'Platform Event && Request' messages. The selected message (No. 728) is expanded to show its details in the lower pane.

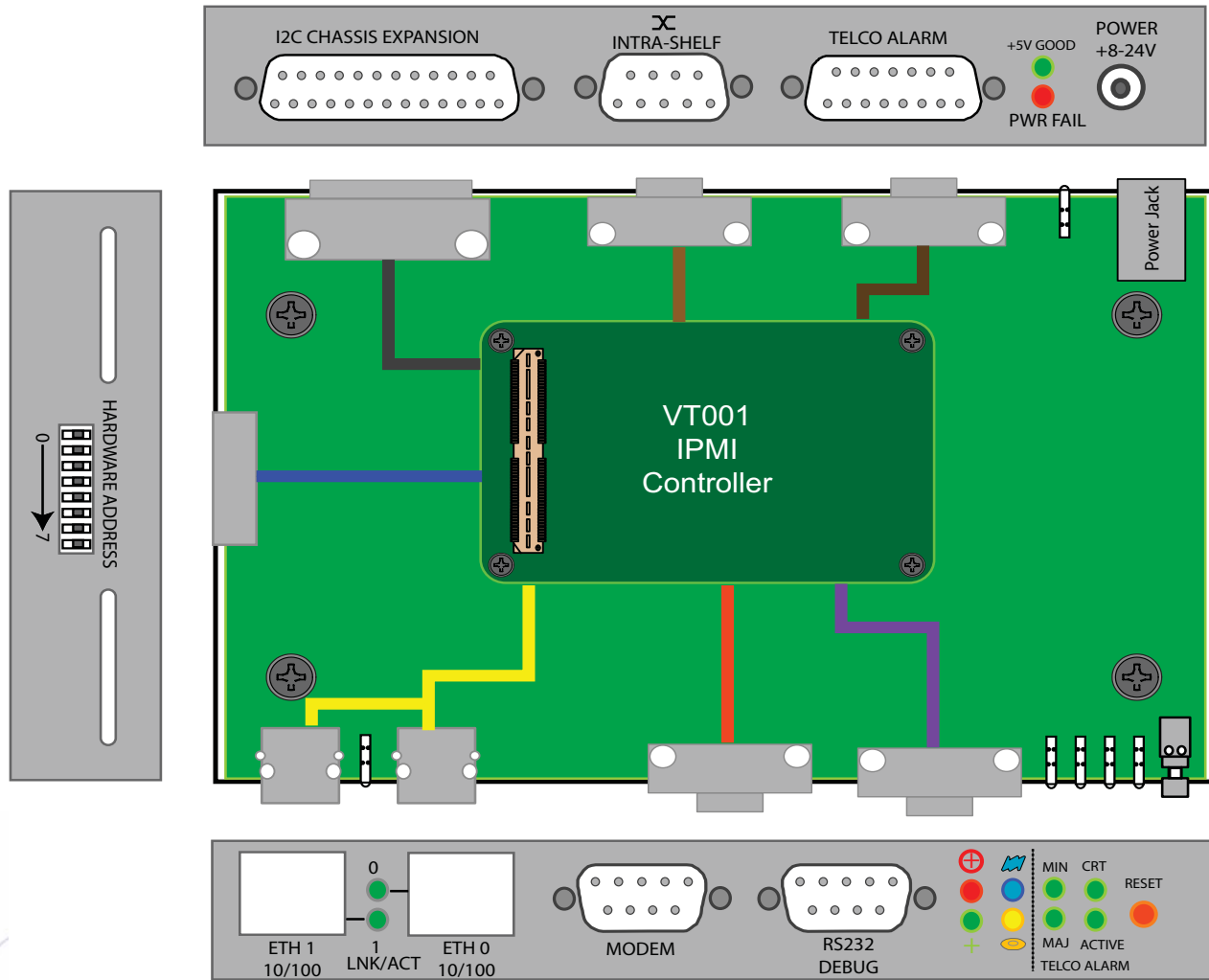
No.	Time	Bus	Dir	Src	Dest	Seq	Net Fn	Command
722	77.050.000	IPMB-A	REQ	0x92	0x20	16	Sensor/Event	Platform Event
724	77.330.000	IPMB-A	REQ	0x88	0x20	1	Sensor/Event	Platform Event
725	77.410.000	IPMB-A	REQ	0x90	0x20	20	Sensor/Event	Platform Event
728	77.740.000	IPMB-B	REQ	0x88	0x20	2	Sensor/Event	Platform Event
729	77.810.000	IPMB-B	REQ	0x92	0x20	20	Sensor/Event	Platform Event
730	77.830.000	IPMB-A	REQ	0x92	0x20	8	Sensor/Event	Platform Event
731	77.840.000	IPMB-B	REQ	0x92	0x20	12	Sensor/Event	Platform Event
732	77.870.000	IPMB-A	REQ	0x92	0x20	16	Sensor/Event	Platform Event
735	78.210.000	IPMB-A	REQ	0x88	0x20	3	Sensor/Event	Platform Event
736	78.230.000	IPMB-B	REQ	0x90	0x20	20	Sensor/Event	Platform Event
738	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	0x92	0x20	8	Sensor/Event	Platform Event
741	78.660.000	IPMB-B	REQ	0x92	0x20	12	Sensor/Event	Platform Event
742	78.690.000	IPMB-A	REQ	0x92	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	0x90	0x20	20	Sensor/Event	Platform Event
745	79.430.000	IPMB-B	REQ	0x88	0x20	6	Sensor/Event	Platform Event
746	79.460.000	IPMB-B	REQ	0x92	0x20	20	Sensor/Event	Platform Event

Request: 0x88 -> 0x20 Platform Event (Sensor/Event) (seq 2)

- Header
- Body
 - Event Message Revision : 0x04 (4)
 - Sensor Type : 0x01 (Temperature)
 - Sensor Number : 0x02 (2)
 - Event Type : 0x01 (Threshold)
 - Event Direction : 0x01 (Deassertion)
 - Offset : 0x07 (Upper Non-Critical Going High)
 - Byte 2 Encoding : 0x01 (Trigger Reading)
 - Byte 3 Encoding : 0x01 (Trigger Value)
 - Reading : 0x31 (49)
 - Threshold : 0x32 (50)

0x20 0x10 0xd0 0x88 0x9 0x2 0x4 0x1 0x2 0x81 0x57 0x31 0x32 0x2b

FIGURE 2. VT007 Functional Block Diagram



ORDERING OPTIONS

VT007 - 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

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