

VT038

ATCA Shelf Manager for VT836



VT038

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

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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.



VadaTech IPMI Trace Viewer 2.1

Filter: Platform Event && Request

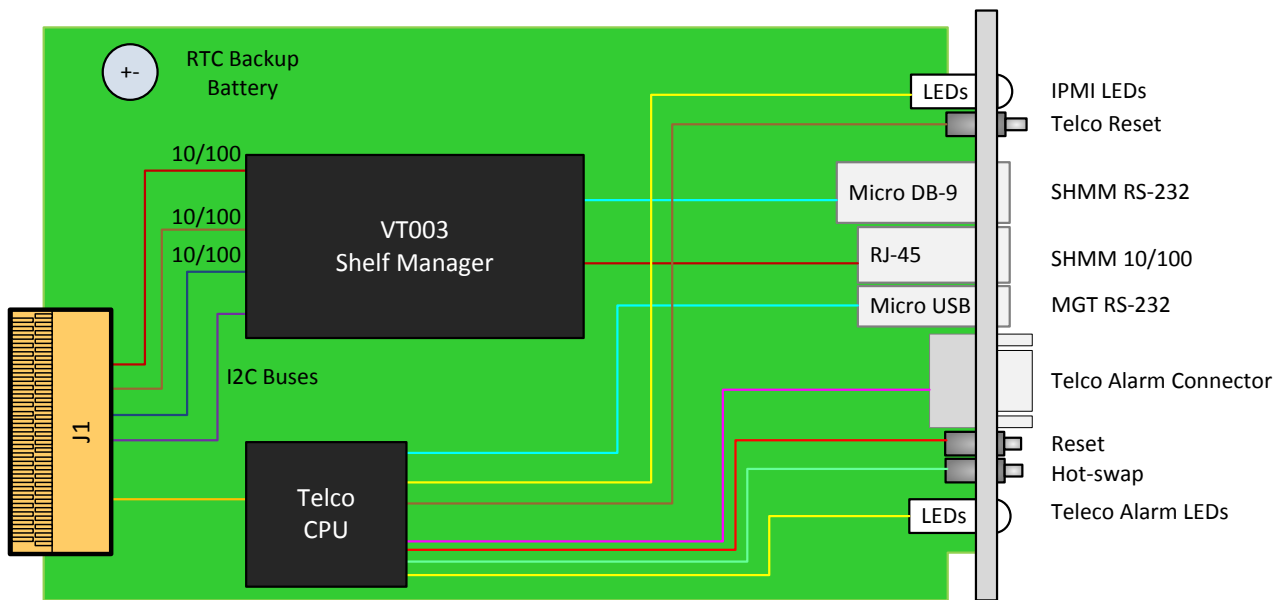
No.	Time	Bus	Dir	Src	Dest	Seq	Net Fn	Command
722	77.050.000	IPMB-A	REQ	0x92	0x20	16	Sensor/Event	Platform Event
724	77.330.000	IPMB-A	REQ	0x88	0x20	1	Sensor/Event	Platform Event
725	77.410.000	IPMB-A	REQ	0x90	0x20	20	Sensor/Event	Platform Event
728	77.740.000	IPMB-B	REQ	0x88	0x20	2	Sensor/Event	Platform 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-R	RFO	0x92	0x20	20	Sensor/Event	Platform Event

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

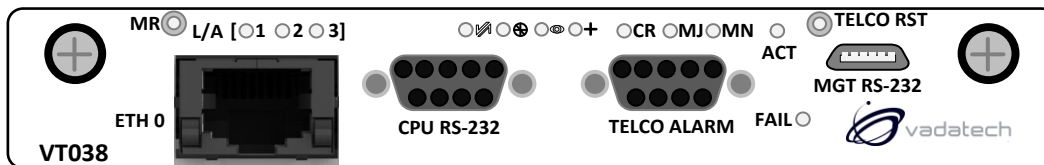
- Header
- Body
 - Event Message Revision : 0x04 (4)
 - Sensor Type : 0x01 (Temperature)
 - Sensor Number : 0x02 (2)
 - Event Type : 0x01 (Threshold)
 - Event Direction : 0x01 (Deassertion)
 - Offset : 0x07 (Upper Non-Critical Going High)
 - Byte 2 Encoding : 0x01 (Trigger Reading)
 - Byte 3 Encoding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

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

Block Diagram



Front Panel



Specifications

Architecture		
Physical	Dimensions	Width: 6.2" (157.48 mm)
		Depth: 4.1" (104.14 mm)
		Height: 0.8" (20.32 mm)
Type	Shelf Manager	For VadaTech VT836 ATCA Chassis
Standards		
ATCA	Type	PICMG 3.0 Revision 2.0
Module Management	IPMI	Version 2.0
Configuration		
Power	VT038	4W
Environmental	Temperature	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial versions also available (See environmental spec sheet)
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock	Operating 30Gs on each axis
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		
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 ISO9001:2000 and AS9100B:2004 standards
Warranty		Two (2) years

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ TCA 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

B = Battery		H = Temperature Range
0 = None 1 = Lithium 2 = Super Cap 3 = Lithium and Super Cap		0 = Commercial 1 = Industrial
		J = Conformal Coating
		0 = None 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

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

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