VT036

ATCA Shelf Manager and Managed Layer 2 Switch for VT834

VT036

Key Features

- Quad core ARM processor @ 1 GHz per core
- One GB DDR3 Memory
- Onboard managed layer 2 switch
- FRAM for log messages
- Field upgradable with dual boot Flash
- Telco alarm with Micro DB15 connector front panel interface
- Isolated DC/DC converter
- IPMI 2.0 compliant

Benefits

- Active/standby redundancy when utilizing two VT036s
- Rich set of Management software such as HPI, RMCP, SNMP, CLI, HTTP, etc.
- VT036 can run as an IPMI protocol analyser to monitor all IPMB buses
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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VT036

The VadaTech VT036 is a Shelf Manager for the VT834 chassis. It has a layer two managed switch with four Ports routed to the front panel, four Ports to the rear and one to the onboard shelf manager CPU. The unit has a power consumption of 7W.

The VT036 can also run as a protocol analyzer to monitor, inject, capture and validate I2C traffic on the Intelligent Platform Management Bus (IPMB) buses. 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.

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 VT036 through the Ethernet port.

When two VT036s are in the system, they operate in redundant active/standby mode. During operation one VT036 is active while the second one is synchronized in hot standby mode.

The VT036 is fully hot-swappable to minimize service down time. Lithium Battery and/or Super CAP for the Real Time Clock.

Figure 1: VT036

Block Diagram

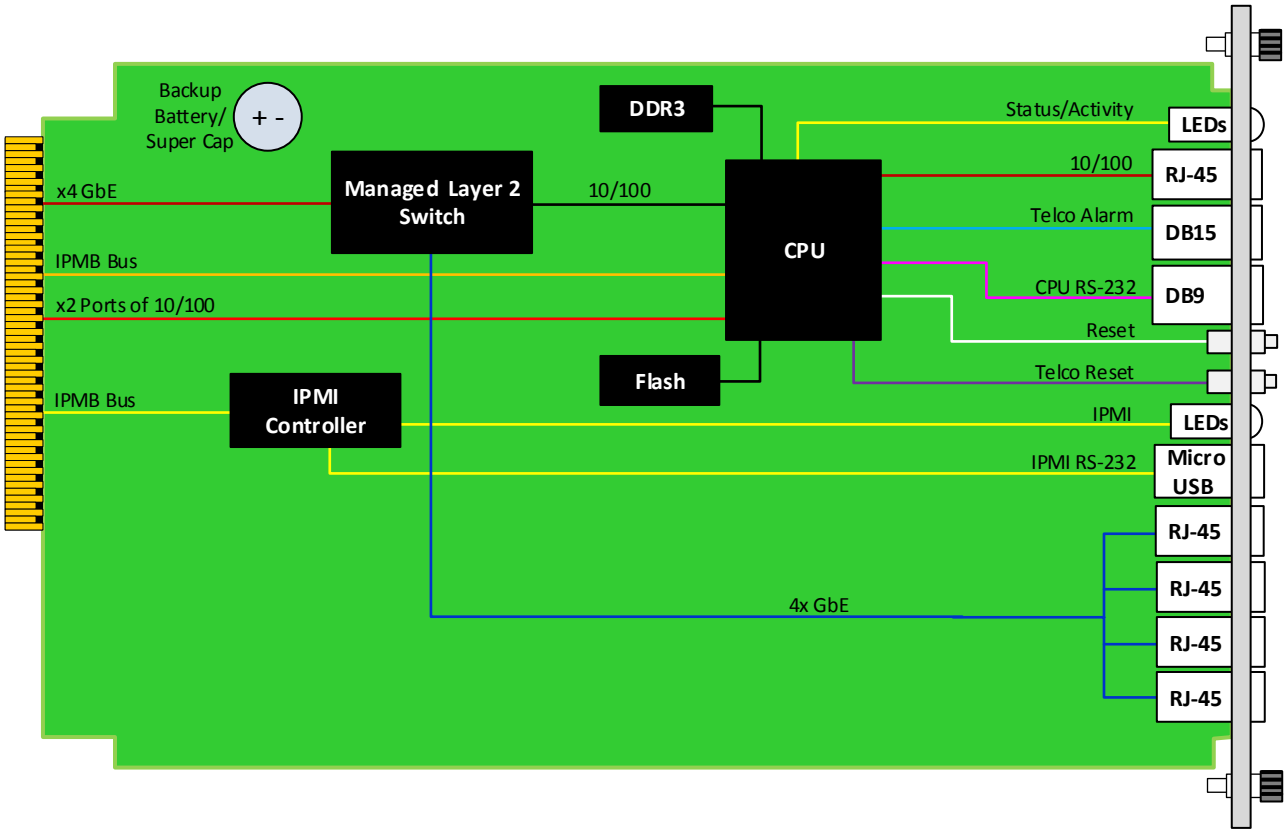

Figure 2: VT036 Functional Block Diagram

Front Panel

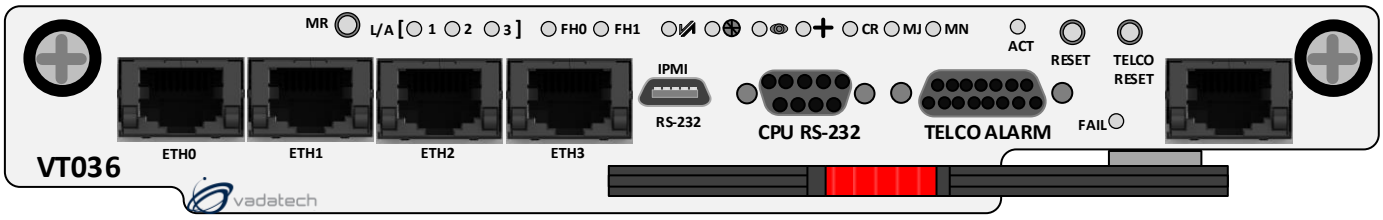

Figure 3: VT036 Front Panel

IPMI Protocol Analyzer

VT036 can be used as an IPMI protocol analyzer. Figure shows the trace viewer output.

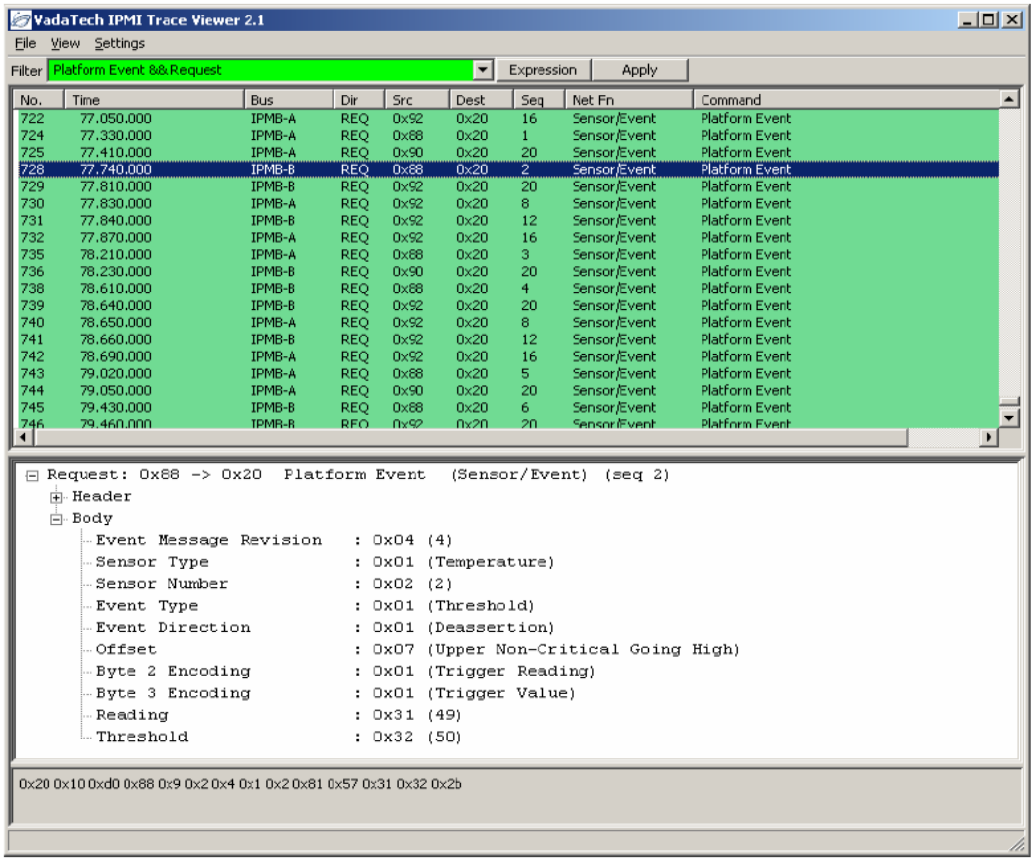

Figure 4: IPMI Protocol Analyzer Trace Viewer Output

Specifications

Architecture		
Physical	**Dimensions**	Width: 3.07” (78 mm)
		Depth 11.46” (291 mm)
Type	**Shelf Manager**	For VadaTech VT834 ATCA Chassis
Standards		
ATCA	**Type**	PICMG 3.0 Revision 2.0
Module Management	**IPMI**	IPMI v2.0
Configuration		
Power	**VT036**	7W
Environmental	**Temperature**	See Ordering Options
		Storage Temperature: –40° to +85°C
	Vibration	Operating 9.8 m/s^2 (1G), 5 to 500 Hz on each axis
	Shock	Operating 30G each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	DB15 connector for Telco Alarm
		DB9 for CPU RS-232
		RJ-45 for 10/100
		Micro USB for IPMI RS-232
		Single 10/100 out of band port support to the shelf manager
		RJ-45 x4 for Ethernet
	LEDs	IPMI management, Activity and Status
	Push Button	Telco Alarm reset and system reset
Software Support	**Operating System**	N/A
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 VadaTech 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 pre-configured Application-Ready Platforms. Please contact VadaTech Sales for more information.

Ordering Options

VT036 – 0B0-000-00J

B = Battery		
0 = Lithium 1 = Super Cap 2 = Lithium and Super Cap		
		J = Temperature Range and Coating
		0 = Commercial (–5° to +55°C), No coating 1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55°C),Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70°C), No coating 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic

Related Products

ATC126

- 19” rack mount 3U ATCA Hybrid
- 1x ATCA slot, 8 mid-size AMC slots and 2x ATCA RTM slots
- 40G or 10G fabric across the backplane

VT830

- Dual 14-core Intel® Xeon® E5-2658, 2680 or 2648L v4 processors
- Eight banks of DDR4 for up to 256 GB memory
- 10/40GbE Fabric channels

VT835

- 19" rackmount 6U ATCA Chassis with integrated Switch and Shelf Manager
- 10GbE/GbE Managed Layer 2
- 40GbE/10GbE/GbE Managed Layer 3

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