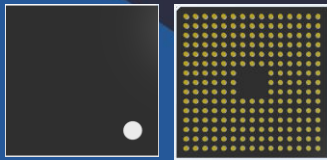


VT061

Third Generation MMC (Module Management Controller) for ATCA, AMC and VPX Platforms



VT061 Single Chip Solution

Key Features

- Complete ATCA, AMC and VPX IPMI compliant reference design with software
- Meets the PICMG specification for Health Management as well as the VITA 46.11 System Management
- MMC is based on ARM 32-bit Cortex-M33
- MMC has 4MB of Flash and 2.5MB of integrated SRAM in 13x13mm BGA
- MMC can support XMC (Switch Mezzanine Card) per VITA 42 and/or FMC/FMC+ (FPGA Mezzanine Card) per VITA 57 and Rear Transition Module (RTM) support
- Used on all VadaTech latest ATCA, AMC and VPX products
- Serial Over Lan (SOL) capable
- Controller uses less than ~0.3W when operating
- RoHS and Lead option Sn-Pb
- MMC Operating Temp -40°C to 85°C (option to 125°C)
- Minimized hardware, footprint size, and power utilization.

Benefits

- 3rd Generation IPMI Controller
- Compact size with low power consumption
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

AdvancedTCA[®]

AdvancedMC[™]

OpenVPX[™]



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VT061

The VT061 is a reference schematic with software which provides a complete hardware and software solution to accelerate the delivery of ATCA, AMC and VPX modules with full IPMI Health Management support. The CPU is based on ARM 32-bit Cortex-M33 (packaged in a 13mm x 13mm BGA) with integrated 4MB of flash, 2.5MB of SRAM, multiple I2C ports, RS-232, WDT, RTC, A/D, etc. The VT061 firmware is field upgradeable and configurable via the I2C bus, RS-232 and supports HPM 2.0.

In most cases the default VT061 firmware can provide all the necessary ATCA, AMC and VPX IPMI functionality without modification to the software. VadaTech can modify the software to meet customer specific design changes. For customers wishing to customize the software, the VT061 development kit is all that is needed to add enhancements.

The VT061 is the most cost-effective solution in the market. The MMC can be purchased from VadaTech pre-programmed.

An NDA is required to obtain the reference schematic and design tools. VadaTech has developed the following reference design to help customer evaluation:

- ATC015 for ATCA deployment [ATC015 - VadaTech](#)
- AMC015 for AMC deployment [AMC015 - VadaTech](#)
- VPX015 for VPX deployment [VPX015 - VadaTech](#)

For the ATCA modules the MMC can manage an RTM per ATCA specification, up to 8 AMC (Advance Mezzanine Card), up to four XMC and/or FMC/FMC+.

For the AMC modules the MMC can support two FMC/FMC+ module as well as an RTM per μ TCA.4.

For the VPX modules the MMC can support an RTM per VITA 46 as well two XMC per VITA 42 and/or two FMC/FMC+ per VITA 57.

Upon engagement with customer VadaTech will provide refence design as well as review customers MMC section of the schematic before fabrication. Vadatech can also provide the full turnkey software for the MMC which is specific to customer board for quick time to market.

VadaTech offering also provides Chassis, Chassis Manager, Power Entry Modules, and backplanes for the complete ATCA, μ TCA and VPX system infrastructure deployment.

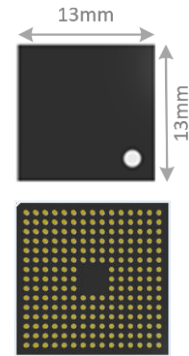


Figure 1: VT061 MMC Top/Bottom View

Specifications

Architecture		
Physical	Dimensions	Width: 13mm MMC only
		Length: 13mm MMC only
Type	IPMI	Installs directly on the ATCA, AMC or VPX modules
Standards		
Module Management	IPMI	IPMI v2.0 and PICMG 3.0
Configuration		
Power	VT061	~300 mW
Environmental	Temperature	Operating -40° to +85°C and option for +125°C
		Storage Temperature: -65° to +150°C
	Vibration	N/A
	Shock	N/A
Others	Relative Humidity	N/A
	Mechanical	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 ISO9001:2000 and AS9100B:2004 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 μ TCA 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

VT061 – A00-D00-0H0-XYZ

A = Programmed Part Architecture	D = Ball Characteristic	
0 = Default Firmware for AMC 1 = Default Firmware for ATCA 2 = Default Firmware for VPX 3 = Reserved 4 = Reserved	0 = RoHS 1 = Sn-Pb (Lead-based Tin-lead)	
		H = Operating Temperature rating
		0 = -40C to 85C 1 = -40 to +125C
		-XYZ (special capture)
		XYZ = 000 (default)

Related Products

VTX661



- 8U Open VPX Rackmount system platform
- Dual Dedicated Switch/management slots
- Up to ten 3U VPX payload slots (with two slots that can have up to 10 HP)

VT820



- 14 Slot Rugged ATCA Shelf
- 12U x 19" wide x 23" deep
- Conforms to PICMG 3.0 specification Rev.3.0

VT815



- MTCA Chassis Platform with rear I/O
- 19" x 9U x 14.9" deep (with handles 16.23" deep)
- Full redundancy with dual MicroTCA Carrier Hubs (MCH), dual cooling units and 3 PSUs

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