

VPX015

Third Generation MMC (Module Management Controller) For VPX 3U and 6U Evaluation Board

VPX015

Key Features

- Based on ARM 32-bit Cortex-M33
- MMC has 4MB of Flash and 2.5MB of integrated SRAM in 13x13mm BGA
- Meets all requirements per VITA 46.11 System Management standard
- Evaluation board for the MMC in VPX form factor
- Available tools for creating the FRU/SDR/Detailed HW description
- MMC can support an RTM (Rear Transition Module) per VITA 46 as well two XMC per VITA 42 and/or two FMC/FMC+ per VITA 57
- Utilized on the VPX 3U as well as 6U modules
- Serial Over Lan (SOL) capable
- Controller uses less than ~0.3W when operating
- MMC Operating Temp -40°C to 85°C (option to 125°C)
- Minimized hardware, footprint size, and power utilization.

Benefits

- Expertise of VadaTech IPMI controllers
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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VPX015

The VPX015 is an evaluation board for VadaTech third generation Module Management Controller (MMC). It meets all of the requirements of the VITA 46.11 System Management specification as laid out in the industry standards from VITA keeping with the long history of VadaTech's Gen1/Gen2 MMC controllers. The MMC software is capable of doing SOL (Serial Over Lan).

The MMC can manage a Rear Transition Module (RTM) based on VITA 46 specification as well as up to two XMC (Switch Mezzanine Card) VITA 42 and /or two FMC/FMC+ (FPGA Mezzanine Card) VITA 57. The MMC has an I2C bus for the local sensors (i.e. temperature, voltage, current, etc.) as well as an IPMI bus to the payload.

The VPX015 is suitable for prototyping and evaluation of VadaTech MMC with VadaTech or third-party VPX compliant products. The VPX015 can simulate the payload, the RTM and the VPX sensors.

The MMC has RS-232 as well as Ethernet port for communication.

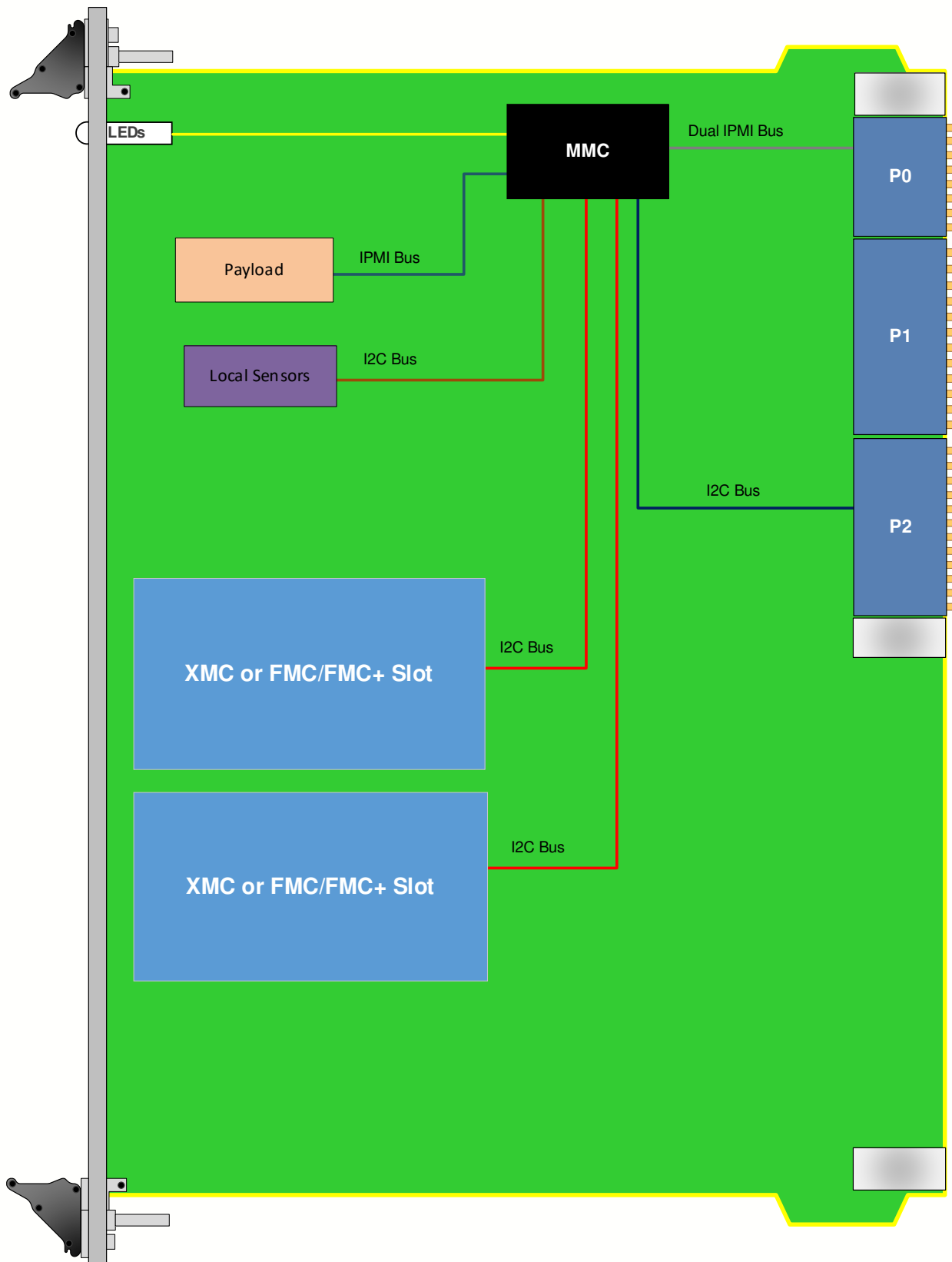
The MMC has 4MB of Flash with 2.5MB of integrated SRAM. The MMC operating temperature is from -40°C to 85°C (option to 125°C) with storage temperature from -65°C to +150°C. The MMC package comes in 13x13mm BGA.

Figure 1: VPX015

Tool

VadaTech's VPX015 is available with binary tools easily installable on third party Linux or Windows for creating the FRU/SDR/Detailed HW description flash images and upgrading the board with them without need to compile software.

Block Diagram



Specifications

Architecture	
Physical	Dimensions 6U, 1" Pitch
	VITA 48.1 slot profile
Type	VPX IPMI MMC Controller
Standards	
Module Management	IPMI IPMI v2.0 and PICMG 3.0
Configuration	
Power	VPX015 3W
Environmental	Temperature Operating temp –40° to +85°C
	Storage Temperature: –40° to +90°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
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

VPX015– 000-000-000

Related Products

AMC015

- Third Generation IPMI MMC Controller, μTCA module
- Meet all requirements per PICMG standard with up to two FMC modules and RTM
- Available tools for creating the FRU/SDR/Detailed HW description

ATC015

- Third Generation IPMI MMC Controller, AdvancedTCA module
- Meet all requirements per PICMG standard with up to 8 AMC modules and RTM
- Available tools for creating the FRU/SDR/Detailed HW description

VTX660

- MTCA System Platform 19" x 5U x 10.5" deep (with handles 12" deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to 12 AMCs in single width/full-size

Contact

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