AMC015

Third Generation MMC (Module Management Controller) For AMC Evaluation Board

AMC015

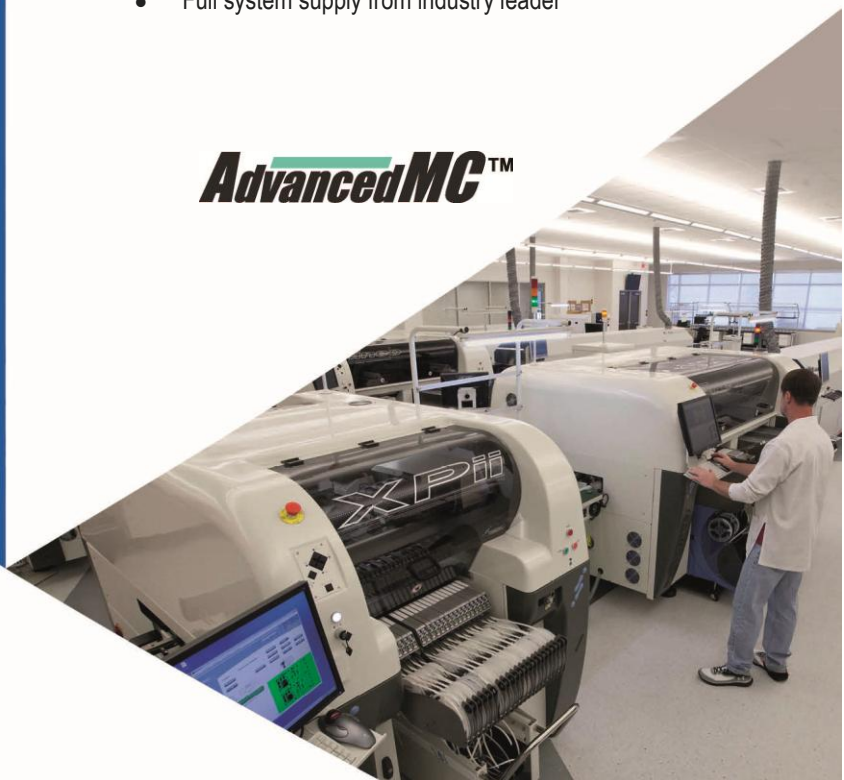
Key Features

- 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 PICMG standard for Advanced Mezzanine Card (AMC)
- Evaluation board for the VadaTech MMC for AMC Modules
    - Meets µTCA.0, µTCA.1, µTCA.2, µTCA.3 and µTCA.4 specifications
    - For µTCA.4 the MMC can manage the Rear Transition Module (RTM)
- The MMC can support two FMC/FMC+ (FPGA Mezzanine Card) module
- Serial Over Lan (SOL) capable
- MMC power is ~0.3W when operating
- MMC Operating Temp -40°C to 85°C (option to 125°C)
- Available tools for creating the FRU/SDR/Detailed HW description
- 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

AdvancedMC™



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AMC015

The AMC015 is an evaluation board for VadaTech third generation Module Management Controller (MMC). It meets all of the requirements of PICMG AMC specification as well as the MicroTCA (µTCA.0, µTCA.1, µTCA.2 and µTCA.4) as laid out in the industry standards from PICMG 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 the µTCA.4 specification as well as up to two FMC/FMC+ (FPGA Mezzanine Card). 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 AMC015 is suitable for prototyping and evaluation of VadaTech MMC with VadaTech or third-party AMC compliant products. The AMC015 can simulate the payload, the RTM and the AMC sensors.

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

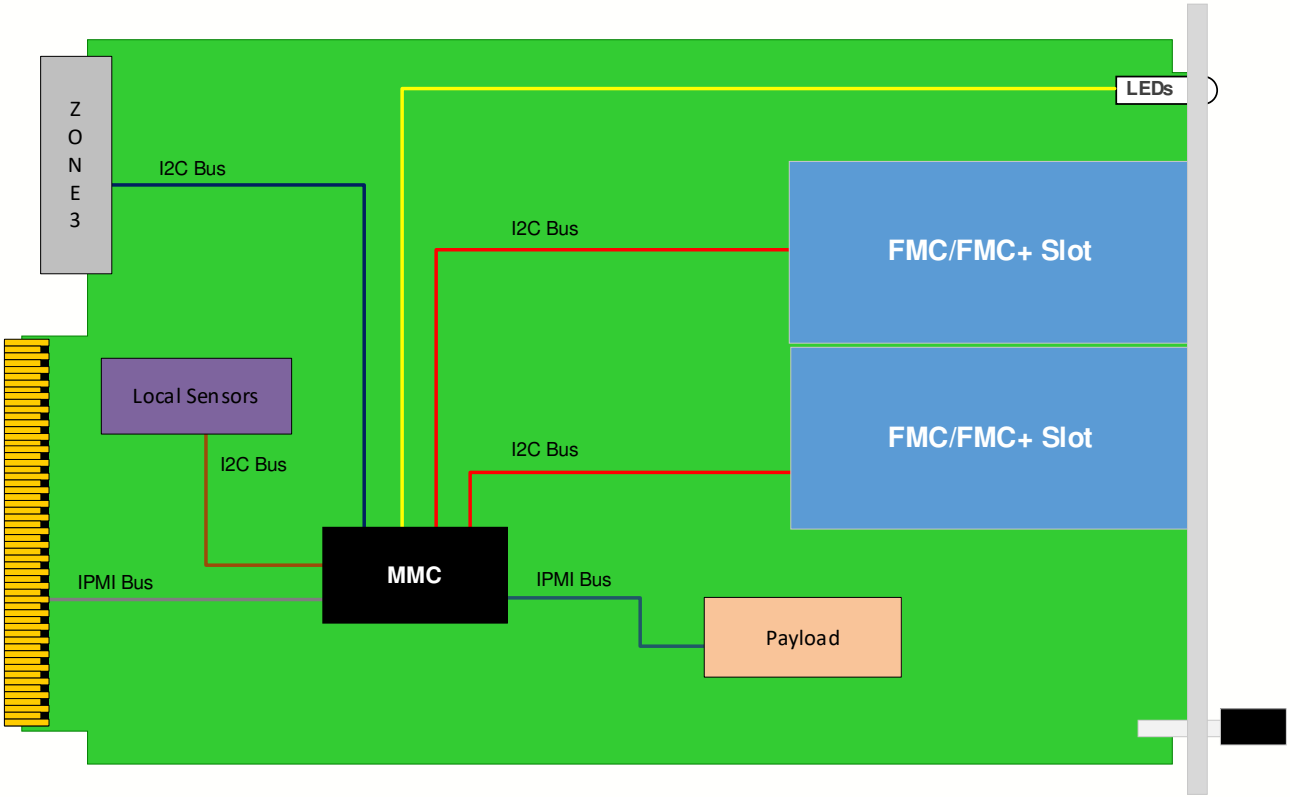
The MMC has 4MB of Flash with 2.5MB of integrated SRAM. The MMC operating temperature is from -40°C to 85°C (option to 125°C) with storage temperature from -65°C to +150°C. The MMC package comes in13x13mm BGA.

Figure 1: AMC015

Tool

VadaTech's AMC015 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**	Width: 2.89” (73.5 mm)
		Depth 7.11” (180.6 mm)
Type	**AMC**	IPMI MMC Controller
Standards		
Module Management	**IPMI**	IPMI v2.0 and PICMG 3.0
Configuration		
Power	**AMC015**	2W
Environmental	**Temperature**	See Ordering Options
		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
Others	**OS**	Tool Linux / Windows
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

AMC015– 00C-000-000

C = Front Panel Size		
1 = Reserved 2 = Reserved 3 = Full-size 4 = Reserved 5 = Reserved 6 = Reserved 7 = Full-size with Captive Screw (µTCA.1/.4) 8 = Reserved		

Notes:

Related Products

VPX015

- Third Generation IPMI MMC Controller, VPX module
- Meet all requirements per VITA 46.11 standard
- Available tools for creating the FRU/SDR/Detailed HW description

ATC015

- Third Generation IPMI MMC Controller, AdvancedTCA module
- Meet all requirements per PICMG standard
- Available tools for creating the FRU/SDR/Detailed HW description

VT866

- 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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