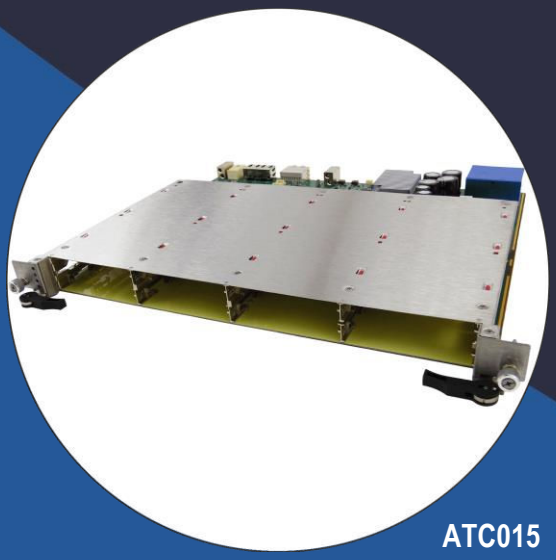
ATC015

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



ATC015

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
- Evaluation board for VadaTech MMC in AdvancedTCA (ATCA) form factor
- MMC can manage an RTM (Rear Transition Module) per ATCA specification as well as up to 8 AMC (Advance Mezzanine Card)
- The MMC can support XMC (Switched Mezzanine Card) and/or FMC (FPGA Mezzanine Card)
- Available tools for creating the FRU/SDR/Detailed HW description
- Serial Over Lan (SOL) capable
- MMC power is ~0.3W when operating
- MMC Operating Temp -40ºC to 85ºC (option to 125ºC)
- 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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ATC015

The ATC015 is an evaluation board for VadaTech third generation Module Management Controller (MMC). It meets all of the requirements for the ATCA carrier manager and/or payload 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 ATCA specification as well as up to 8 AMC modules. Further the MMC can support any combination of XMC and FMC. 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 ATC015 is suitable for prototyping and evaluation of VadaTech MMC with VadaTech or third party ATCA compliant products. The ATC015 can simulate the payload, the RTM and the AMC modules.

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.

Tool

VadaTech's ATC015 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.

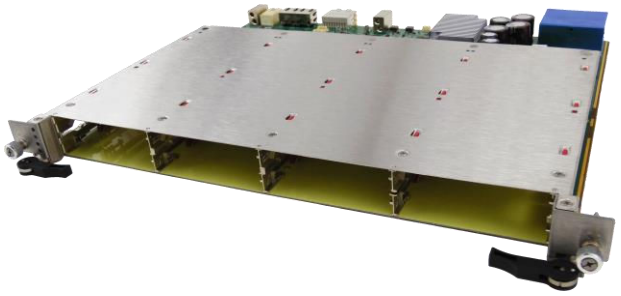

Figure 1: ATC015

Figure 2: ATC015 Top View

Figure 3: ATC015 Front View

Block Diagram

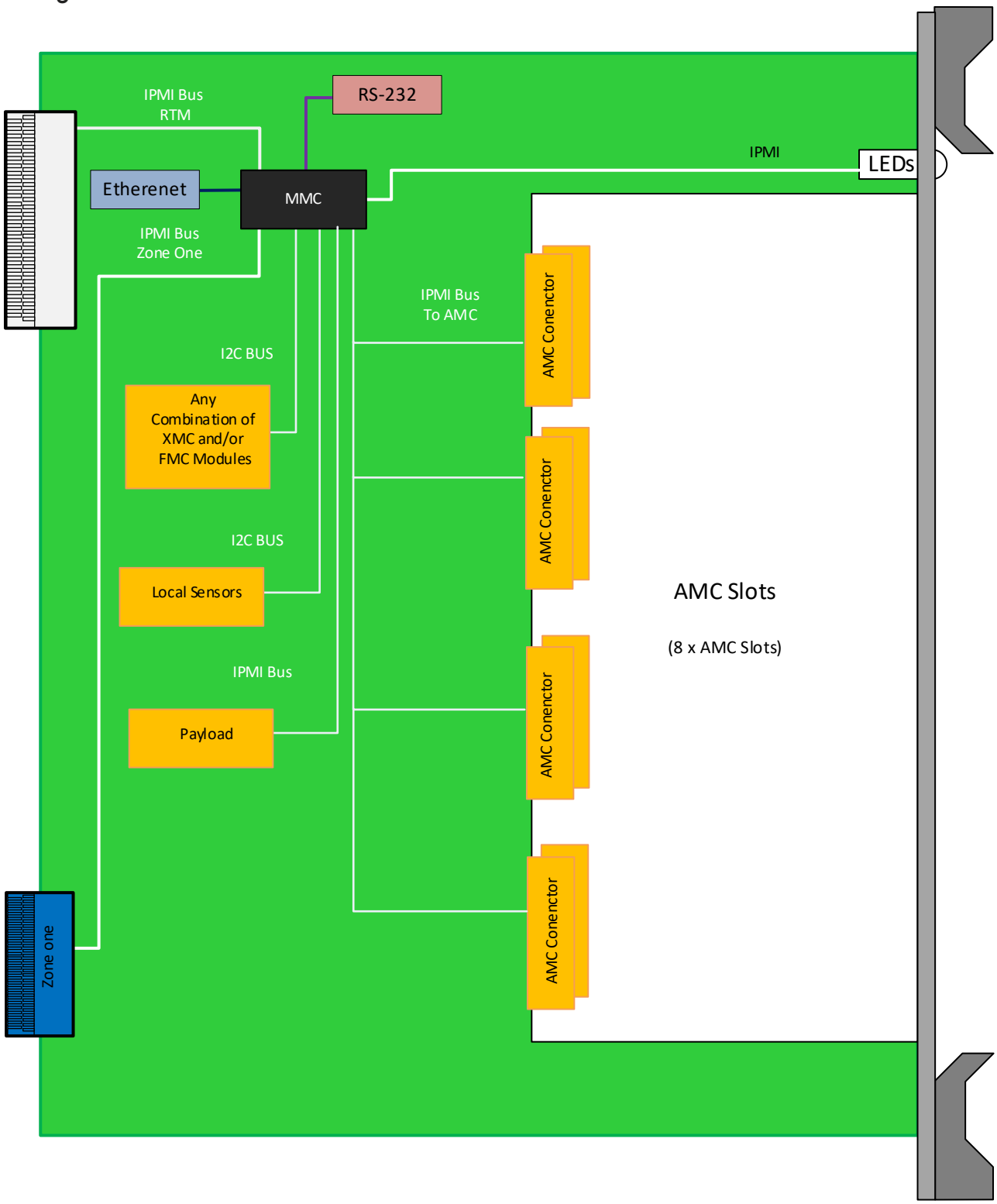

Figure 4: ATC015 Functional Block Diagram

Specifications

Architecture		
Physical	**Dimensions**	Width: 12.687” (322.25 mm)
		Depth: 11.024” (280 mm)
Type	**ATCA**	IPMI MMC Controller
Standards		
Module Management	**IPMI**	IPMI v2.0 and PICMG 3.0
Configuration		
Power	**ATC015**	4W
Environmental	**Temperature**	Operating Temperature: –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

ATC015 – 000-000-000

Related Products

VPX015

- Third Generation IPMI MMC Controller, VPX module
- Meet all requirements per VITA 46.11 standard with support for RTM, dual FMC and dual XMC
- Available tools for creating the FRU/SDR/Detailed HW description

AMC015

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

VT820

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

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