AMC101

AMC Carrier for PMC/PrPMC/XMC Modules

AMC101

Key Features

- Support for PMC/PrPMC and XMC modules
- 64-bit PCI-X @133 MHz, with +3.3 V PCI signalling compatible
- PCIe x4 lanes (AMC.1 compliant)
- Transparent or Non-Transparent operating modes
- PMC J4 user I/O connector routed to front panel Mini-SCSI type connector
- IEEE STD P1386.1-2001 (PMC) compliant
- ANSI/VITA 32-2003 (PrPMC) compliant
- ANSI/VITA 42.3 (XMC PCI Express)

Benefits

- IPMI 2.0 compliant Module Management Controller (MMC)
- 32-bit IPMI RISC processor
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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AMC101

The AMC101 is a single, full-size module based on the AMC.1 specification. This patented (US 8472204 B2 & US 20110228474 A1) design allows a PMC/XMC module to fit on a single width AMC.

The PMC/PrPMC PCI-X bus runs at 133 MHz with 64-bit wide bus (the module can auto-negotiate down to 33 MHz with 32-bit). The J4 connector of the PMC/PrPMC is routed to the front panel of the AMC module.

This modular approach allows an AdvancedTCA AMC carrier and MTCA Chassis to utilize the large numbers of PMC modules as well as XMC I/O modules that are available in the market.

The AMC101 can be configured to run in non-transparent, transparent or root complex mode.
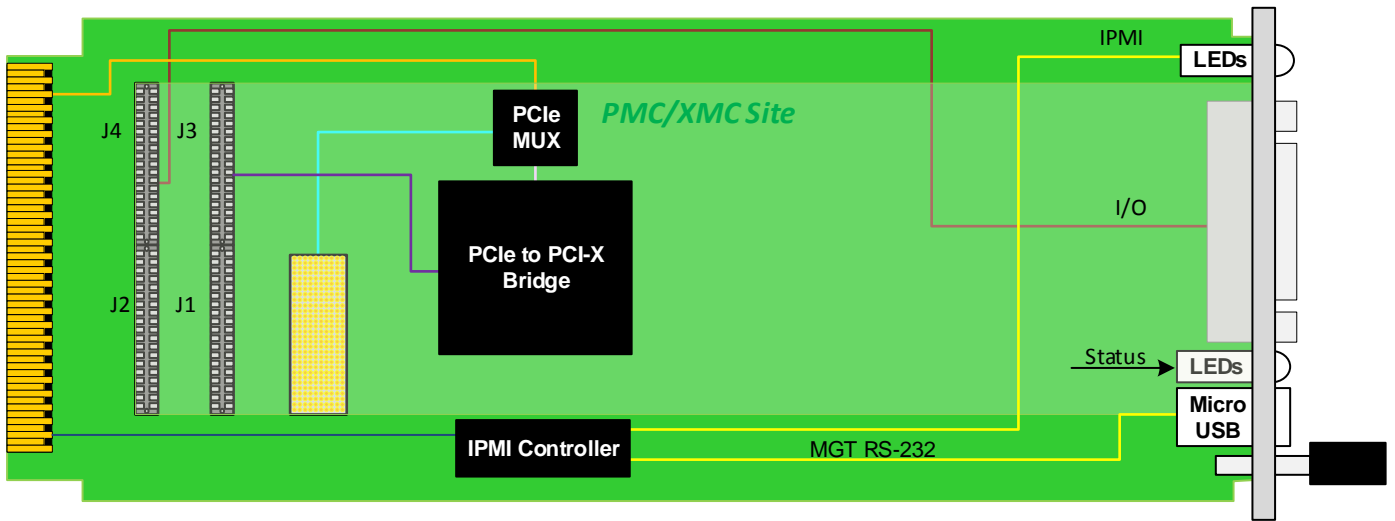

Figure 1: AMC101

Block Diagram

Figure 2: AMC101 Functional Block Diagram

Front Panel

Figure 3: AMC101 MTCA.1 Front Panel

AMC101 – AMC Carrier for PMC/PrPMC/XMC Modules

Specifications

Architecture		
Physical	**Dimensions**	Single module, full-size
		Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Type	**AMC Carrier**	AMC carrier for PMC/PrPMC/XMC modules

Standards		
AMC	**Type**	AMC.0 and AMC.1
Module Management	**IPMI**	IPMI v2.0
PCIe	**Lanes**	x4

Configuration		
Power	**AMC101**	3 W without PMC/PrAMC/XMC
Environmental	**Temperature**	See ordering options and [environmental spec sheet](#)
		Storage Temperature: –40° to +85°C
	Altitude	40,000 ft non-operating
	Vibration	Operating 9.8 m/s^2 (1G), 5 to 500 Hz on each axis
	Shock	Operating 30Gs on each axis
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	Mini SCSI type connector
		Micro USB for MGT RS-232
	LEDs	IPMI management control
		Status
	Mechanical	Hot swap ejector handle

Other	
MTBF	MIL Hand book 217-F@ TBD hrs
Certifications	Designed to meet FCC, CE and UL certifications, where applicable
Compliance	RoHS
Standards	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
Warranty	Two (2) years

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

AMC101 – A0C-000-0HJ

A = XMC VPWR*		
0 = +12 V 1 = +5 V		

		H = Temperature Range
		1 = Commercial 2 = Industrial

C = Front Panel		**J = Conformal Coating**
0 = Full-size MTCA.0 1 = Reserved 2 = Reserved 3 = Reserved 4 = Reserved 5 = Reserved 6 = Full-size, MTCA.1 (captive screws)		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes: * Per VITA specification the XMC VPWR can be powered from +5 V or +12 V. Please consult the XMC module that will be used.

Related Products

UTC004

- Single module, full size per AMC.0
- Unified 1 GHz quad-core CPU for MicroTCA Carrier Management Controller (MCMC), Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s

UTC010

- Single module, full size module per AMC.0
- Dual -36 V DC to -75 V DC input, 792 W (available in 396 W)
- Hot swappable with support for power module redundancy

VT857

- Twelve mid-size single module AMC slots or six mid-size double module AMC slots
- Cascade any number of 1U Carriers for expansion and management
- Management can run as Shelf/MCMC or MCMC

Contact

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