

AMC231

Quad Port 10 GbE with SFP+, AMC



AMC231

Key Features

- AMC.1 compliant, PCIe Gen2 x8 lanes
- Quad SFP+
- 10Gb/s full duplex bandwidth
- TCP Segmentation off load: up to 256KB
- Jumbo Frames of up to 15.5KB
- IPV6 Support for IP/TCP
- Dynamic Interrupt moderation
- IEEE P802.1AE LinkSec

Benefits

- 8 VLAN L2 Filters
- 16 Flex L3 Port Filters
- 4 L3 Address Filters (IPv4)
- 4 L3 Address Filters (IPv6)
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house

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AMC231

The AMC231 is a single-module, mid-size AdvancedMC (AMC) based on the AMC.1 specification (full-size option available). The AMC231 provides Quad 10 Gigabit Ethernet via front panel SFP+.

The AMC231 supports IEEE802.1AE LinkSec Specifications. The module can off-load IPsec for up to 1024 Security Associations (SA) for each TX and RX.

The AMC231 provide wire speed Quad-port 10GbE throughput. The module reduces end-to-end latency for high priority traffic. In order to enhance the CPU utilization, the module supports Receive Side Coalescing (RSC).

The AMC231 supports the IEEE P802.1AE LinkSec specification. It incorporates an in-line packet crypto unit, off-load IPsec for up to 1024 Security Associations (SA), AH and ESP protocols for authentication and encryption, AES-128-GMAC and AES-128-GCM.



Block Diagram

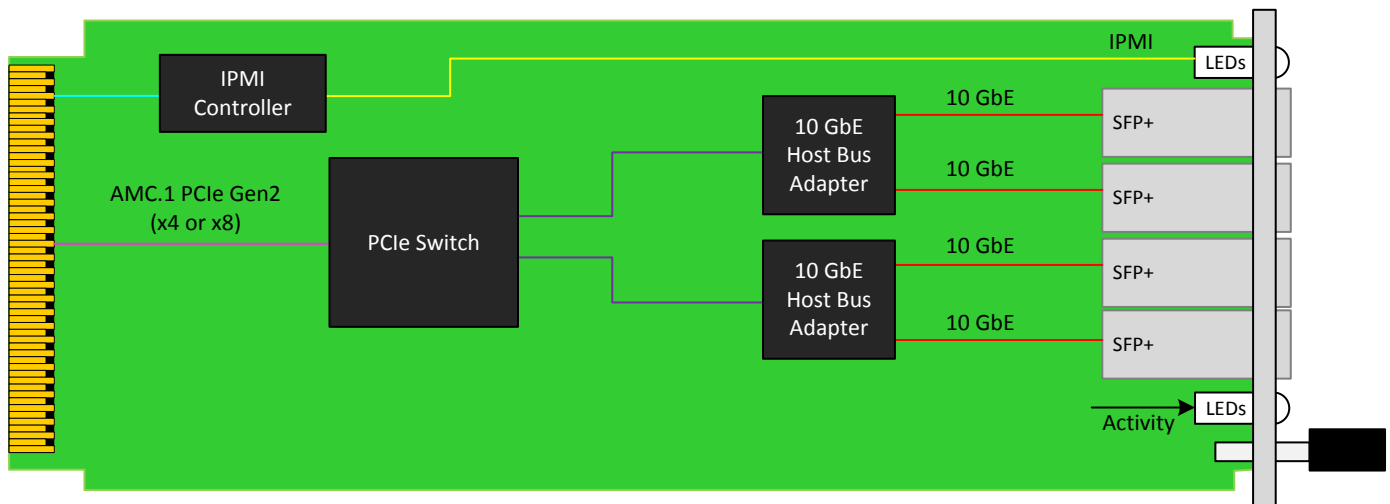


Figure 1: Functional Block Diagram

Front Panel

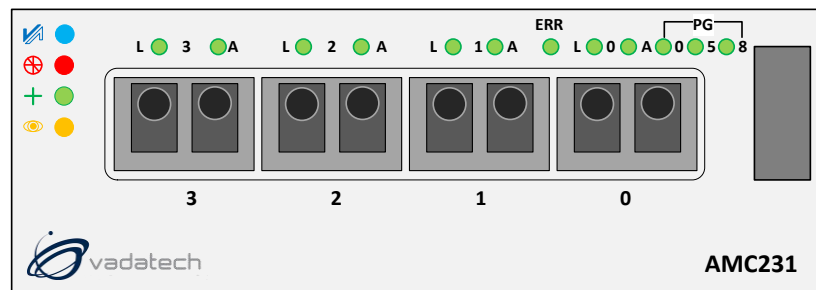


Figure 2: AMC231 Front Panel

Specifications

Architecture		
Physical	Dimensions	Single module, mid-size (full-size optional)
		Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC 10 GbE	Quad port 10 GbE via SFP+
Standards		
AMC	Type	AMC.0 and AMC.1
Module Management	IPMI	IPMI version 2.0
PCIe	Lanes	x4 or x8 (Gen2, each lane @ 5 Gbps)
Configuration		
Power	AMC231	14W
Environmental	Temperature	Operating temperature: -5° to 45° C (55°C for limited time, performance restrictions may apply), industrial and extended versions also available (See environmental spec sheet)
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500Hz on each axis
	Shock	Operating 30G on each axis
Front Panel	Relative Humidity	5 to 95 per cent, non-condensing
	Interface Connectors	4 SFP+
	LEDs	IPMI management control Activity and Status
Other	Mechanical	Hot swap ejector handle
	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	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

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Ordering Options

AMC231 – ABC-000-0HJ

A = PCIe Gen 2		
1 = x4		
2 = x8		
B = SFP+ Transceivers		H = Temperature Range (in °C)
0 = None		0 = Commercial (0° to +65°)
1 = 10GBASE-SR		1 = Industrial (-20° to +70°)
2 = Reserved		2 = Extended (-40° to +80°)*
3 = 10GBASE-LRM		
4 = 10GBASE-LR		
C = Front Panel		J = Conformal Coating
1 = Reserved		0 = None
2 = Mid-size, MTCA.0		1 = Humiseal 1A33 Polyurethane
3 = Full-size, MTCA.0		2 = Humiseal 1B31 Acrylic
4 = Reserved		
5 = Mid-size, MTCA.1 (captive screws)		
6 = Full-size, MTCA.1 (captive screws)		

* Conduction cooled, temperature is at edge of module. Consult factory for availability.

Related Products

UTC004



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

UTC020



- Single module, full-size per AMC.0
- Dual -36V DC to -75V DC input, 936 W (available in 468 W)
- Hot swappable with support for power module redundancy

VT841



- MicroTCA 1U 19" rack mount chassis platform
- Six mid-size AMC slots per 1U Carrier or two double module mid-size with two mid-size AMC slots
- Management can run as Shelf/MCMC (MicroTCA Carrier Management Controller) or MCMC

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