

AMC230 – AMC Dual Port 40 GbE with QSFP+

AMC 40 GbE with Dual QSFP+



KEY FEATURES

- AMC.1 compliant
- PCIe Gen3 (x4 or x8)
- Dual QSFP+
- 40Gbps 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
- RoHS compliant
- IPMI 2.0 compliant

AdvancedMC™

Benefits of Choosing VadaTech

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC230 is a single width, mid-size AdvancedMC™ (AMC) based on the AMC.1 specification (full-size option available). The AMC230 provides dual 40 Gigabit Ethernet via front panel QSFP+.

The AMC230 supports IEEE802.1AE LinkSec Specifications. The module can off-load IPsec for up to 1024 Security Associations (SA) for each TX and RX. The AMC230 provide wire speed dual-port 40GbE 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 AMC230 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

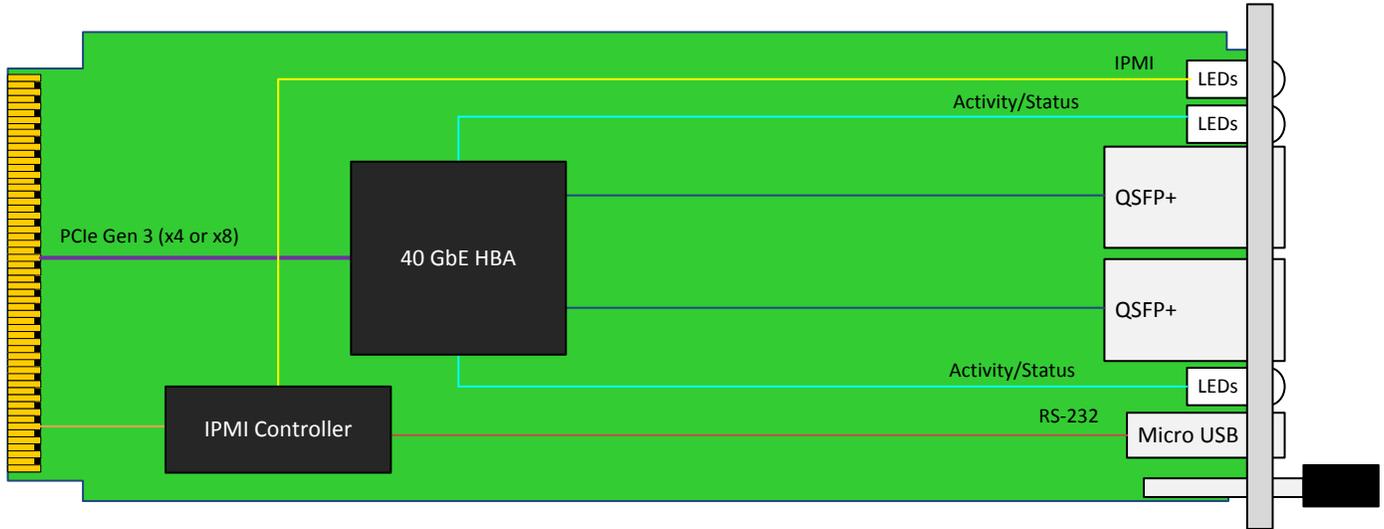


Figure 1: Functional Block Diagram

FRONT PANEL

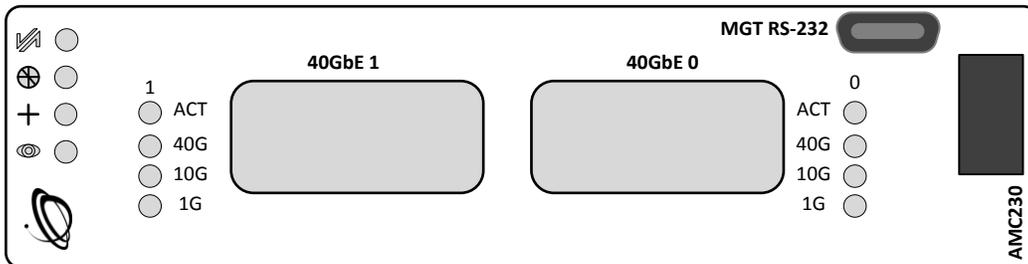


Figure 2: AMC230 Front Panel

SPECIFICATIONS

Architecture		
Physical	Dimensions	Single module, mid-size
		Width: 2.89" (73.5 mm) Depth 7.11" (180.6 mm)
Type	AMC 40 GbE	40 GbE via dual front panel QSFP+
Standards		
AMC	Type	AMC.1
Module Management	IPMI	IPMI version 2.0
PCIe	Lanes	x4 or x8 Gen3
Configuration		
Power	AMC230	Application specific
Environmental	Temperature	Operating temperature: -5° to 45°C (55°C for limited time, performance restrictions may apply), (See environmental spec sheet)
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s ² (1.0 G), 5 to 500Hz
	Shock	30Gs on each axis
Front Panel	Relative Humidity	5 to 95 per cent, non-condensing
	Interface Connectors	Dual QSFP+ Connectors
	LEDs	IPMI management control Activity/Status LEDs
Software Support	Mechanical	Hot swap ejector handle
	Operating System	Linux, VxWorks and Windows
Conformal Coating		Humiseal 1A33 Polyurethane (Optional) Humiseal 1B31 Acrylic (Optional)
	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 ISO9001:2000 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

COMMON CONFIGURATIONS

AMC230 – ABC – 000 – 00J

A = PCIe Gen 3

0 = x4

1 = x8

B = QSFP+ Transceivers

0 = No transceivers

1 = Dual SR transceivers

2 = Dual LR transceivers

C = Front Panel

1 = Reserved

2 = Mid-size

3 = Full-size

4 = Reserved

5 = Mid-size, MTCA.1 (captive screw)

6 = Full-size, MTCA.1 (captive screw)

J = Temperature Range and Coating

0 = Commercial, No coating

1 = Commercial, Humiseal 1A33 Polyurethane

2 = Commercial, Humiseal 1B31 Acrylic

3 = Industrial, No coating

4 = Industrial, Humiseal 1A33 Polyurethane

5 = Industrial, Humiseal 1B31 Acrylic

RELATED PRODUCTS



VT899 Cube Chassis



AMC249 40GbE
Switch



UTC020 1000W Power
Module

CONTACT US

VadaTech Corporate Office

198 N. Gibson Rd.
Henderson, NV 89014
Email: info@vadatech.com
Telephone: +1 702 896-3337
Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District,
Taipei 114, Taiwan
Email: info@vadatech.com
Telephone: +886-2-2627-7655
Fax: +886-2-2627-7792

VadaTech European Sales Office

Ocean Village Innovation Centre, Ocean Way,
Ocean Village, Southampton, SO14 3JZ
Email: info@vadatech.com
Telephone: +44 2380 381982
Fax: +44 2380 381983