

AMC243

Dual High performance 40/50/100GbE Host Bus Adapter



AMC243

Key Features

- Dual 40/50/100GbE via QSFP28+
- PCIe Gen3 x16
- 32K concurrent offload connectivity capacity
- Full TCP and UDP offload
- Full iSCIS and FCOE offload
- Full NVMe over Fabrics (NVMe-oF) offload
- On board 4GB of DDR-4 with ECC

Benefits

- 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

AdvancedMC™



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AMC243

VadaTech AMC243 Host Bus Adapter (HBA) is a dual port 40/50/100Gb Ethernet Unified Wire Adapter, with a PCI Express 3.0 x16 host bus interface, optimized for storage, cloud computing, HPC, virtualization and other datacenter networking applications. The module has 4GB of DDR-4 memory with ECC.

The AMC243 offers support for integrated offload of IPsec, TLS/SSL, DTLS and SMB 3.X crypto. The AMC243 provides sub micro-second end-to-end latency, while offloading the host CPU from a variety of typical storage, networking, and cloud related protocols. This will enable savings in host CPU acquisition costs, power and operational costs, and dramatically increases system performance.

FCoE and iSCSI support in AMC243 benefit from high reliability features that include memory ECC, data path CRC and T10-DIX offload, in addition to the checksums and CRC available at different protocols layers. High performance iSCSI and FCoE provide a drop-in replacement upgrade from legacy SANs to converged networks.



Block Diagram



Figure 1: AMC243 Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	Single Module, mid-size (full-size options available)
		Width: 2.89" (73.5 mm) Depth: 7.11" (180.6 mm)
Type	AMC 40/50/100GbE	Two port 40/50/100GbE
Standards		
AMC	Type	AMC.2
Module Management	IPMI	IPMI v2.0
Configuration		
Power	AMC243	24W
Environmental	Temperature	See ordering options
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s ² (1 G), 5-500 Hz
	Shock	Operating 30 Gs each axis
Front Panel	Relative Humidity	5 to 95% non-condensing
	Interface Connectors	Dual QSFP28 connectors
		LEDs
	Mechanical	Hot swap ejector handle
Software Support	Operating System	N/A
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 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

AMC243 – A0C-D00-00J

A = QSFP+ Transceivers	D = PCIe Interface	
0 = No Transceivers 1 = 40G Dual SR 2 = 40G Dual LR 3 = 100G Dual SR 4 = 100G Dual LR 5 = Reserved	0 = x4 1 = x8 2 = x16	
C = Front Panel Size		J = Temperature Range and Coating
1 = Reserved 2 = Mid-size 3 = Full-size		0 = Commercial (–5° to +55°C), No coating 1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +55°C), Humiseal 1B31 Acrylic 3 = Industrial (–20° to +70°C), No coating 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic 6 = Extended (–40° to +85°C), Humiseal 1A33 Polyurethane* 7 = Extended (–40° to +85°C), Humiseal 1B31 Acrylic*

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

Related Products

AMC233



- Network interface board with dual QSFP+ ports
- 40GbE or (4x) 10GbE via the QSFP+ ports
- XLPPPI-to-XLAUI/XFI operation

UTC004



- Unified 1GHz quad-core CPU for MCMC (MicroTCA Carrier Management Controller), Shelf Manager, Clocking, and Fabric management
- Non-blocking PCIe Gen 3, SRIO Gen 2, 10GbE/40GbE, or Crossbar Switch option to AMC fat pipes with options for up to 40GbE uplink
- 1GbE base switch with dual 100/1000/10G uplink

VT866



- MTCA System Platform 19" x 5U x 17"
- Up to 12 AMCs in single width/full-size
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules

Contact

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