# AMC245

Dual High performance 50/100GbE, Quad 25GbE or Octal 10GbE Host Bus Adapter, AMC



### Key Features

- Dual 50/100GbE, 4 x 25GbE or 8 x 10GbE
- Dual QSFP28
- PCle Gen3 x16

### 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





# **AMC245**

VadaTech AMC245 Host Bus Adapter (HBA) is a dual port 50/100Gb Ethernet. The module could be configured as 4 x25GbE or 8 x10GbE.

The100GbE is configurable as 100GBASE-CR4 (5m twinax), 100GBASE-SR4/CWDM4/PSM4 optical or as 100GBASE-CR2 (3m twinax).

The 50GbE is configurable as 50GBASE-CR2 (5m twinax), 50GBASE-CR (802.3cd, 3m twinax) or as 50GBASE-SR/FR/LR (optical 802.3cd).

The 25GbE is configurable as (IEEE 802.3 by/cc), 25GBASE-CR (5m reach), 25GBASE-SR/LR (optical).

The 10GbE is configurable as octal 10GbE utilizing 7m twinax or optical 10BASE-SR/LR.

The module allows mix of 100G, 50G, 25G and 10G. Please contact VadaTech.



Figure 1: AMC245

### Block Diagram

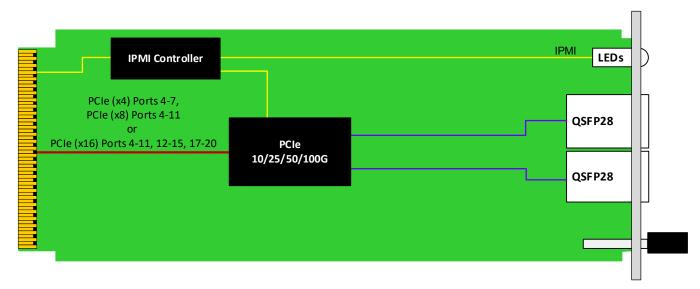


Figure 2: AMC245 Functional Block Diagram

### Front Panel



Figure 2: AMC245 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)	
Туре	AMC 10/25/50/100GbE	Dual 50/100GbE, Quad 25GbE or Octal 10GbE	
Standards			
AMC	Туре	AMC.2	
Module Management	IPMI	IPMI v2.0	
Configuration			
Power	AMC245	20W	
Environmental	Temperature	See Ordering Options and Environmental Spec Sheet	
		Storage Temperature: -40° to +85°C	
	Vibration	Operating 9.8 m/s2 (1 G), 5-500 Hz	
	Shock	Operating 30Gs each axis	
	Relative Humidity	5 to 95% non-condensing	
Front Panel	Interface Connectors	Dual QSFP28 connectors	
	LEDs	IPMI management	
		Activity and Link	
	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, see <u>VadaTech Terms and Conditions</u>		

### 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 preconfigured Application-Ready Platforms. Please contact VadaTech Sales for more information.

### **Ordering Options**

### AMC245 - ABC-D00-00J

A = QSFP+ TXCVR A	D = PCle Interface	
0 = No TXCVRs 1 = 40G Dual SR (quad 10GbE) 2 = 40G Dual LR (quad 10GbE) 3 = 100G Dual SR 4 = 100G Dual LR 5 = Reserved	0 = PCIe (x4) on Ports 4-7 1 = PCIe (x8) on Ports 8-11 2 = PCIe (x16) Ports 4-11, 12-15, 17-20	
B = QSFP+ TXCVR B		
0 = No Transceivers 1 = 40G Dual SR (quad 10GbE) 2 = 40G Dual LR (quad 10GbE) 3 = 100G Dual SR 4 = 100G Dual LR 5 = Reserved		
C = Front Panel Size		J = Temperature Range and Coating
1 = Reserved 2 = Mid-size 3 = Full-size		0 = Commercial ( $-5^{\circ}$ to +55°C), No coating 1 = Commercial ( $-5^{\circ}$ to +55°C), Humiseal 1A33 Polyurethane 2 = Commercial ( $-5^{\circ}$ to +55°C), Humiseal 1B31 Acrylic 3 = Industrial ( $-20^{\circ}$ to +70°C), No coating 4 = Industrial ( $-20^{\circ}$ to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial ( $-20^{\circ}$ to +70°C), Humiseal 1B31 Acrylic 6 = Extended ( $-40^{\circ}$ to +85°C), Humiseal 1A33 Polyurethane* 7 = Extended ( $-40^{\circ}$ to +85°C), Humiseal 1B31 Acrylic*

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

### **Related Products**

#### AMC233



40GbE or (x4) 10GbE via the QSFP+ PortsXLPPI-to-XLAUI/XFI operation

and Fabric management

options for up to 40GbE uplink

Network interface board with dual QSFP+ Ports

• 1GbE base switch with dual 100/1000/10G uplink

UTC004



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

Unified 1 GHz quad-core CPU for MicroTCA Carrier Management Controller (MCMC), Shelf Manager, Clocking,

Non-blocking PCIe Gen 3, SRIO Gen 2, 10GbE/40GbE, or Crossbar Switch option to AMC fat pipes with

## Contact

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- Partnerships power innovation
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- Mutual success

#### We deliver complexity

- · Complete signal chain
- System management
- · Configurable solutions

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- · Agile production
- · Accelerated deployment
- AS9100 accredited



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