AMC Dual-Port QDR InfiniBand

AMC331





KEY FEATURES

- AMC.1 compliant
- PCIe Gen2 x8 lanes
- IBTA Specification 1.2.1 compliant
- RDMA, Send/Receive semantics
- Hardware-based congestion control
- 16 million I/O channels
- 2GB messages
- 10, 20, or 40Gb/s per port
- T10 as well as Fiber Channel over InfiniBand support (FCoIB)
- CPU offload of transport operations
- End-to-End QoS and congestion control
- Hardware-based I/O virtulization
- TCP/UDP/IP stateless offload
- Dual QSFP+ InfiniBand ports
- Supports active cables & fiber adapters
- OS support for:
 - Linux
 - WindowsSolaris

The AMC331 is a single-width, mid-height AdvancedMCTM (AMC) based on the AMC.1 specification. The AMC331 provides dual port InfiniBand QDR Host Channel Adapter (HCA). Each port is selectable to run at 10, 20, or 40Gb/s Infiniband. The module utilized the Mellanox ConnectX -2 VPI chip.

The InfiniBand deliver low-latency and high-bandwidth for performance-driven storage clustering, High-Performance Computing, and Embedded environments. The AMC331 has support for hardware-based I/O virtulization which is complementary to Intel and AMD virtulization technologies.

VadaTech can modify this product to meet special customer requirements without NRE (minimum order placement is required).



SPECIFICATIONS

Architecture		
Physical	Dimensions	Single-Width, Mid-Height Front Panel
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Туре	AMC Serial	InfiniBand
		Dual-port
		10 or 20 Gb/s per port
Standards		
AMC	Туре	AMC.1
Module Management	IPMI	IPMI Version 2.0
PCle	Lanes	x4 or x8
	Gen	Gen 2 (each lane at 5.0Gb/s)
Configuration		
Power	AMC331	9W
Environmental	Temperature	Operating Temperature: 0° to 65° C (Air flow requirement is to be greater than 200 LFM)
		Storage Temperature: -40° to +90° C
	Vibration	1G, 5-500Hz each axis
	Shock	30Gs each axis
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	Interface Connectors	Dual InfiniBand x4 Connectors
	LEDs	IPMI Management Control
		Activity
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Spec 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	
Compliance	RoHS and NEBS	
Warranty	Two (2) years.	
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Trademarks and Logos	respective owners. AdvancedMC TM and the AdvancedTCA TM logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

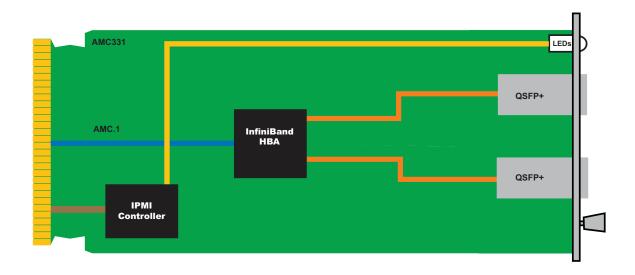


FIGURE 1. AMC331 Functional Block Diagram

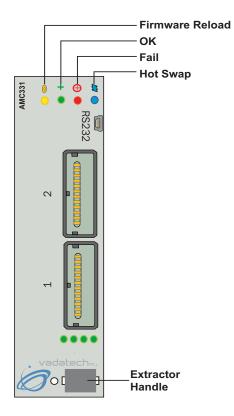


FIGURE 2. AMC331 Front Panel

ORDERING OPTIONS

AMC331 - ABC - 000 - 00J

A = PCle Gen 2

1 = x4 2 = x8

B = QSFP+ Fiber Transceiver

- 0 = None
- 1 = Single QSFP+ Transceiver installed
- 2 = Dual QSFP+ Transceiver installed

C = Front Panel Height

- 1 = Reserved
- 2 = Mid-Height
- 3 = Full-Height

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J = Conformal Coating

- 0 = None
- 1 = Humiseal 1A33 Polyurethane
- 2 = Humiseal 1B31 Acrylic

