# AMC Module for I/O Bus Expansion







### **KEY FEATURES**

- AMC.1 compliant
- Single-width, half-height\* (mid-height and full-height options available)
  - Patent-pending design allows standard front panel I/O connectivity in a half-height AMC compliant form factor
- PCle x4 lanes
- Upstream/Downstream orientation with fiber or copper option (see ordering options)
- Fully IPMI 2.0 compliant
- RoHS compliant
- OS support for:
  - Linux
  - Windows
  - Solaris
  - VxWorks

In response to the limited number of mezzanine cards that can be placed on the typical AdvancedTCA module, VadaTech introduces the AMC103. The AMC103 is a high-speed 10Gbps bridge from the host PCle bus to VadaTech's other carrier products such as the ATC103/104/105/106/107/108 or ATC109. The different carriers host different I/O modules such as PMC/PrPMC, AMC, PCI-X and PCle edge modules. This concept allows any of the available I/O modules in these standard form factors to be integrated quickly and easily into an AdvancedTCA shelf without the need to route the different bus signals through the AdvancedTCA backplane.

The AMC103 is a single-width AdvancedMC<sup>TM</sup>(AMC) based on the AMC.1 specification. The AMC103 provides a PCIe x4 link in fiber or copper.

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



### **SPECIFICATIONS**

Architecture		
Physical	Dimensions	Single-Width, Half-Height (with Mid or Full Height-options)
		Width: 2.98 in. (73.5 mm)
		Depth: 7.8 in. (181.5 mm)
Туре	AMC Expansion Module	AMC module for I/O bus expansion
Standards		
AMC	Туре	AMC.1
Module Management	IPMI	IPMI Version 2.0
PCle	Lanes	x4
Configuration		
Power	Copper	3W maximum
	Fiber	5W maximum
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	Fiber ports with LC connectors and LX or SX transceiversrs
		Copper ports with IB-4x Infiniband style cable
	LEDs	IPMI Management Control
		Link
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Linux, Windows, Solaris and VxWorks
Other		
MTBF	MIL Spec 217-F >491,000 Hrs. (Copper)	
Certifications	Designed to meet FCC, CE and UL certifications where applicable	
Standards	VadaTech is certified to both the IS09001:2000 and AS9100B:2004 standards	
Compliance	RoHS and NEBS	
Warranty	Two (2) years	
Trademarks and Logos	The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their	
	respective owners. AdvancedMC <sup>IM</sup> and the AdvancedTCA <sup>IM</sup> logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	
Notes	The Half-Height front panel is a patent-pending design. Contact your Sales representative for more information.	







FIGURE 2. AMC103 Front Panel

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FIGURE 4. An Example of using the AMC103 with the PCIe up/down stream ports



## ORDERING OPTIONS

#### A = Interface

- 1 = LC/SX transceivers (850 nm)
- 2 = LC/LX transceivers (1310 nm)
- 3 = Copper

#### B = Front Interface Orientation

- 1 = Upstream
- 2 = Downstream
- C = Front Panel
  - 1 = Half-Height
  - 2 = Mid-Height
  - 3 = Full-Height

AMC103 - ABC - 000 - 00J

- J = Conformal Coating
  - 0 = None
  - 1 = Humiseal 1A33 Polyurethane
  - 2 = Humiseal 1B31 Acrylic



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