

### KEY FEATURES

- AMC.1 compliant
- Single-width, mid-height (full-height options available)
- PCIe x4 lanes Gen2
- Upstream/Downstream orientation
- Dual Fiber or copper option utilizing QSFP connectors (mix of Fiber/Copper across the two ports is allowed)
- The upstream port could have spread spectrum clock
- Fully IPMI 2.0 compliant
- RoHS compliant
- OS support for:
  - Linux
  - Windows
  - Solaris
  - VxWorks

AMC113 is VadaTech second generation PCIe expansion module. The AMC113 is a high-speed 20Gbps bridge from the host PCIe bus to VadaTech's other carrier and Rear Transition Module (RTM) products such as the ATC104/114/118/117/119, ART114,  $\mu$ TCA chassis, etc.. The different carriers host different I/O modules such as PMC/PrPMC, AMC, PCI-X and PCIe 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 or  $\mu$ TCA subsystem.

The AMC113 allows expansion among multiple  $\mu$ TCA chassis or expansion into other chassis that are not ATCA or  $\mu$ TCA based.

The AMC113 is a single-width AdvancedMC™(AMC) based on the AMC.1 specification. The AMC113 provides a PCIe x4 link in fiber/copper via front panel QSFP. The dual front I/O allows expansion into two separate system independently. The upstream port could have spread spectrum PCIe clock.

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

**AdvancedMC™**

# AMC Module for PCIe Bus Expansion

## 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)
Type	AMC Expansion Module	AMC module for I/O bus expansion
Standards		
AMC	Type	AMC.1
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	x4
Configuration		
Power	Copper QSFP cable	3W maximum
	Fiber QSFP cable	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	Dual QSFP
		RS-232
	LEDs	IPMI Management Control
		Link
Software Support	Mechanical	Hot Swap Ejector Handle
	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 ISO9001:2000 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™ and the AdvancedTCA™ 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.	

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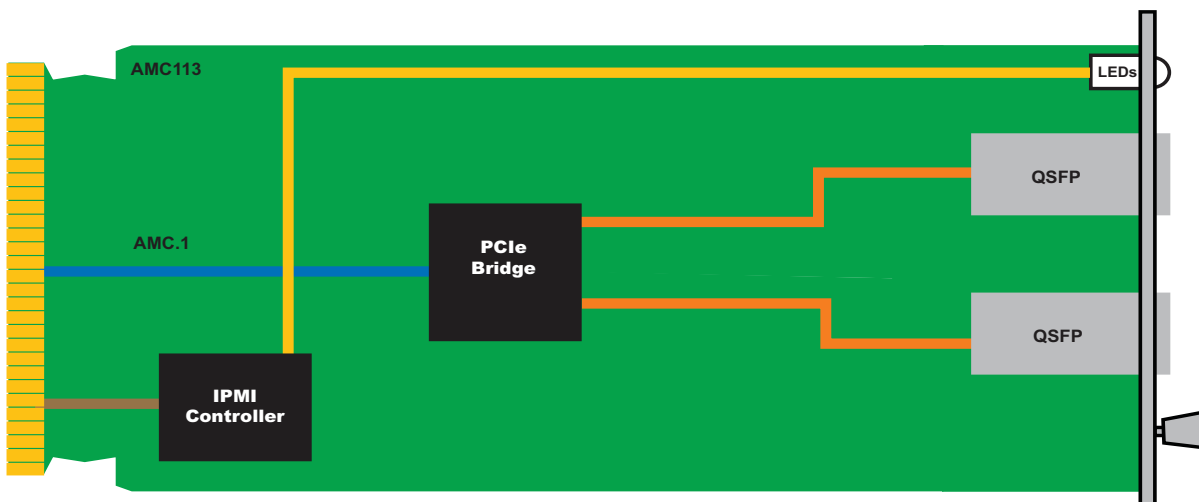


FIGURE 1. AMC113 Functional Block Diagram

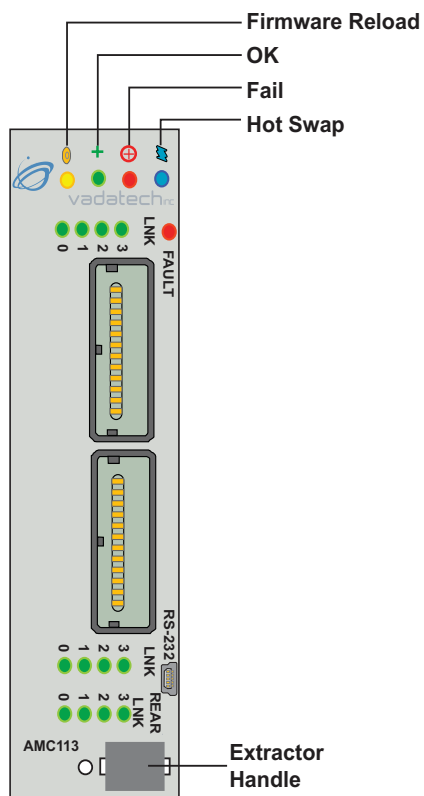
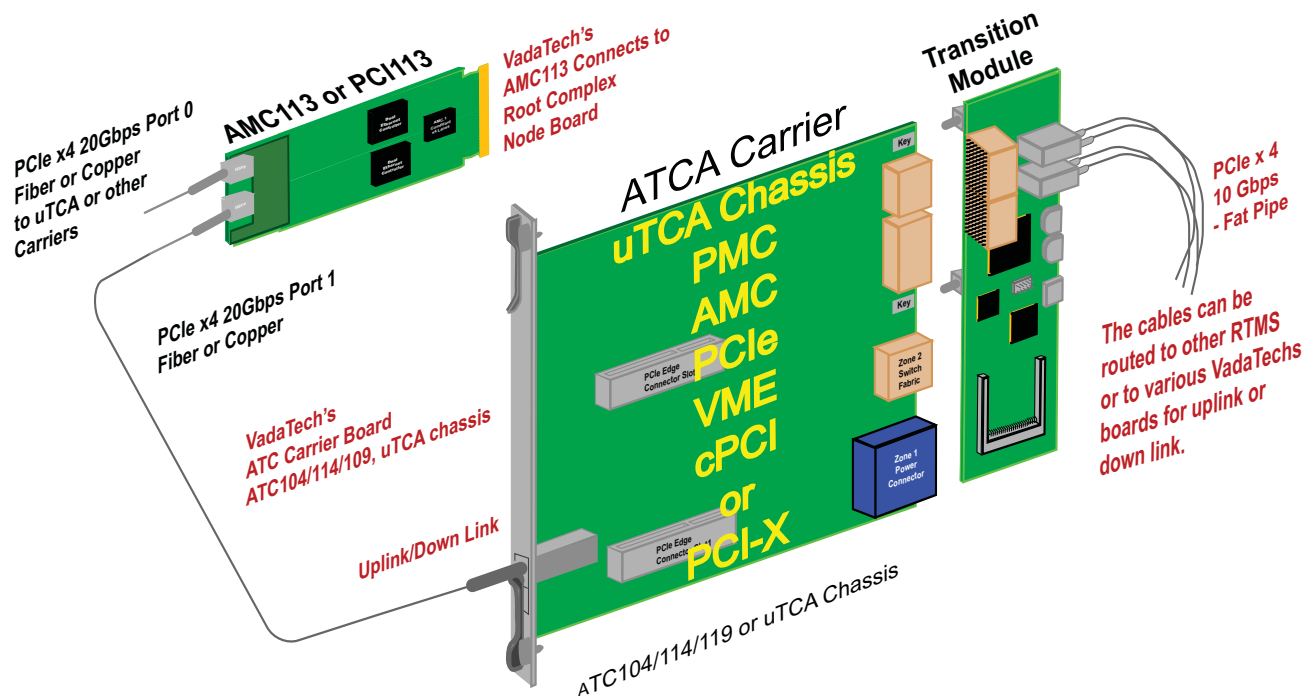


FIGURE 2. AMC113 Front Panel

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**FIGURE 4.** An Example of using the AMC113 with the PCIe up/down stream ports



## ORDERING OPTIONS

AMC113 - 00C - 000 - 00J

J = Conformal Coating

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

C = Front Panel

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

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