

# AMC233

## AMC XLAUI/XFI to QSFP+ Interface for 40G/10G



AMC233

## Key Features

- Network interface board with dual QSFP+ Ports
- AMC.2 compliant
- 40GbE or (4x) 10GbE via the QSFP+ Ports
- XLPP1-to-XLAUI/XFI operation
- EDC supporting SR4, LR4 and copper CR4
- Optional PCS 64B/66B scrambler/descrambler (in 4x 10G Mode)
- PRBS loopback
- OS independent

## Benefits

- Dual QSFP+ ports on the front panel for 40GbE
- 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



**vadatech**  
THE POWER OF VISION

**AdvancedMC™**



# AMC233

The AMC233 is a single-module, mid-size AdvancedMC™ (AMC) based on the AMC.2 specification (full-size option available). The AMC233 provides 40GbE or quad 10GbE via each of the two QSFP+ Ports.

The unit converts Ports 4-7 and 8-11 from XLAUI or XFI to Fiber/Copper. This allows the ports to be uplinked to other systems via front panel. The module allows a mix of 40GbE and 10GbE mode per port.

The PRBS feature allows testing frequency-offset crosstalk between input path and output path.



Figure 1: AMC233

# Block Diagram

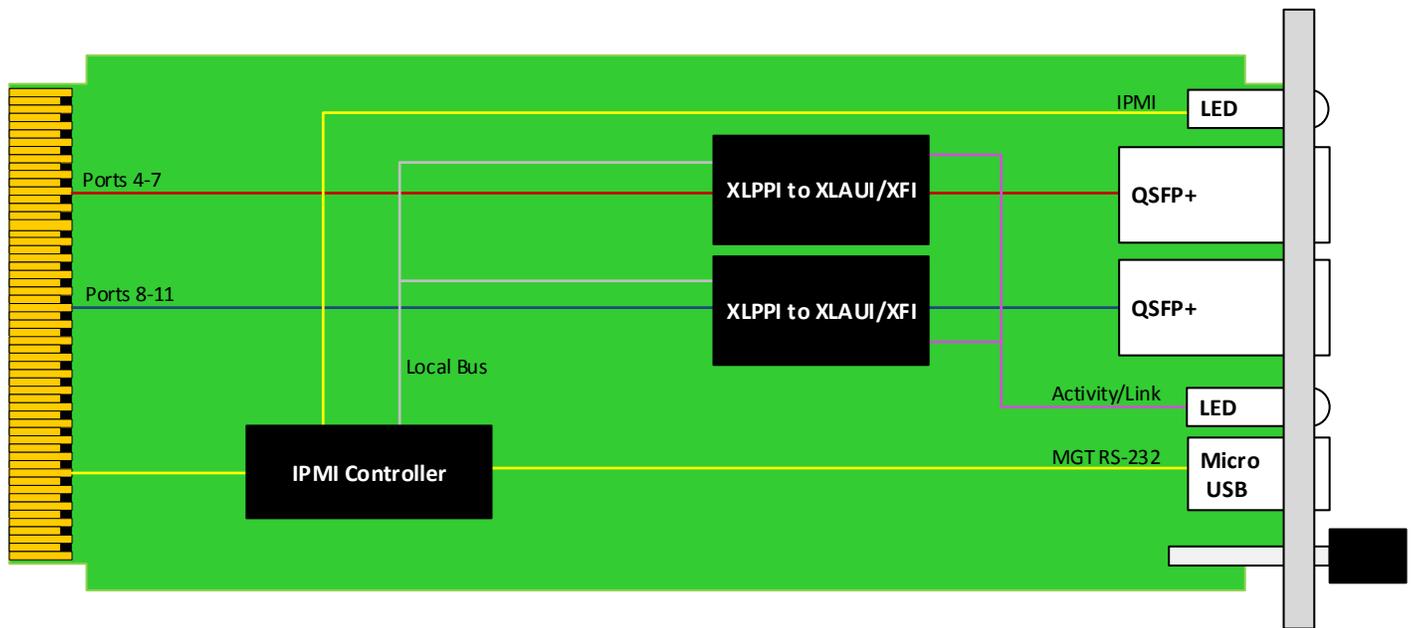


Figure 2: AMC233 Functional Block Diagram

# Front Panel

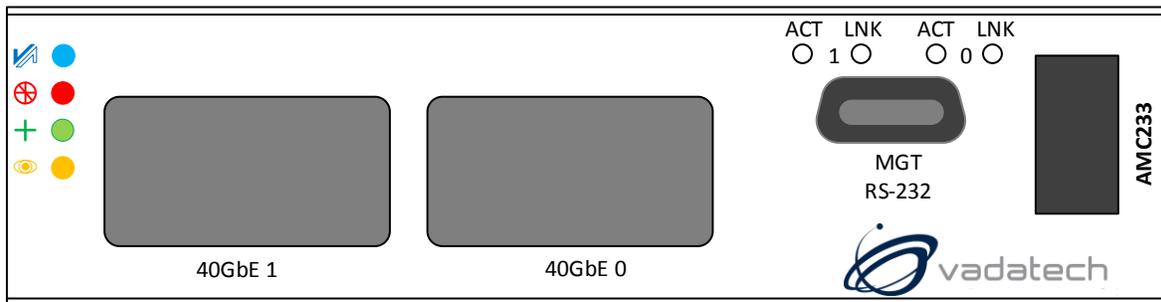


Figure 3: AMC233 Front Panel

# Specifications

Architecture		
<b>Physical</b>	<b>Dimensions</b>	Single module, mid-size (full-size options available) Width: 2.89" (73.5 mm) Depth 7.11" (180.6 mm)
<b>Type</b>		Ethernet XLPPI-to XLAUI/XFI
Standards		
<b>AMC</b>	<b>Type</b>	AMC.2
<b>Module Management</b>	<b>IPMI</b>	IPMI v2.0
Configuration		
<b>Power</b>	<b>AMC233</b>	6W
<b>Environmental</b>	<b>Temperature</b>	See <a href="#">Ordering Options</a> and <a href="#">Environmental Spec Sheet</a> Storage Temperature: -40° to +85°C
	<b>Vibration</b>	Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500 Hz on each axis
	<b>Shock</b>	Operating 30G on each axis
	<b>Relative Humidity</b>	5 to 95% non-condensing
<b>Front Panel</b>	<b>Interface Connectors</b>	Dual QSFP+ Micro USB for RS-232 (Management)
	<b>LEDs</b>	IPMI management control Activity and Link
	<b>Mechanical</b>	Hot-swap ejector handle
<b>Software Support</b>	<b>Operating System</b>	None
Other		
<b>MTBF</b>		MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>		Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>		VadaTech is certified to both the ISO9001:2015 and AS9100D standards
<b>Warranty</b>		Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>

## 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

## AMC233 – A0C-000-0HJ

<b>A = QSFP+ TXCVRs</b> 0 = No TXCVRs 1 = Dual SR TXCVRs 2 = Dual LR TXCVRs		
		<b>H = Operating Temperature</b> 0 = Commercial (–5° to +55°C) 1 = Industrial (–20° to +70°C) 2 = Extended (–40° to +85°C)*
<b>C = Front Panel</b> 1 = Reserved 2 = Mid-size 3 = Full-size 4 = Extended (8 HP) 5 = Reserved 6 = Mid-size, MTCA.1/4 7 = Full-size, MTCA.1/4 8 = Extended (8 HP), MTCA.1/4		<b>J = Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

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

## Related Products

AMC517



- AMC FPGA carrier for FMC per VITA 57
- Xilinx Kintex-7 410T FPGA in FFG-900 package with optional P2040
- Supported by DAQ Series™ data acquisition software

UTC004



- 1GbE base switch with dual 100/1000/10 G uplink
- Automatic fail-over with redundant UTC004s
- Full Layer 2 or 3 managed Ethernet switches

VT866



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

# Contact

## VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

## Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

## VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://www.vadatech.com)

# Choose VadaTech

## We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

## We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

## We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

## We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



### Trademarks and Disclaimer

The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

© 2019 VadaTech Incorporated. All rights reserved.  
DOC NO. 4FM737-12 REV 01 | VERSION 3.1 – DEC/19



**vadatech**  
THE POWER OF VISION