AMC735

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™ THE POWER OF VISION

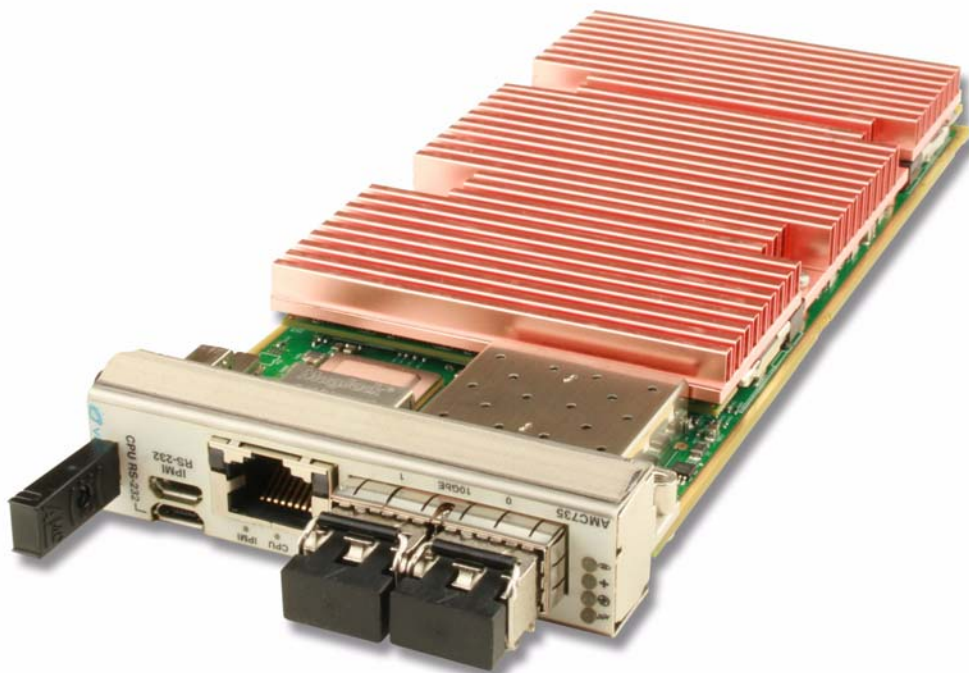## AMC735KEY FEATURES

- Per AMC.1 and AMC.2 specification
- Single-width, mid-height (full-height option)
- Cavium OCTEON CN67xx Multi-Core
- Core processors rom 8 to 16 and speeds from 800Mhz to 1.5Ghz
- DDR3 with ECC memory
- Dual SFP+ socket supporting 10GbE
- Gen2 PCIe x4 or XAUI to ports 4-7 and XAUI to ports 8-11
- RTC
- 8MB NOR and 32GB of NAND Flash
- Serial Over LAN (SOL) capabilities
- IPMI 2.0 compliant
- RoHS compliant
- OS support for:
  — Linux
  — VxWork

The AMC735 is a 10-Gigabit Ethernet (10GbE) AdvancedMC™ (AMC) module which includes an on-board line rate multi-core packet processor based on Cavium CN67XX CPU. VadaTech offers this product in a mid-height form factor with the AMC.1 and AMC.2 specification (option full-height design, see ordering options).

The AMC735 is based around the Cavium OCTEON CN67xx processor which has been specifically designed to intelligently process Ethernet packets at line rate. The number of processor cores, speed grade, and amount of DDR3 memory is customizable based on customer needs.The module has an RTC on board.

The SDK for the processor as well as additional software stacks are available from Cavium or third party. The AMC735 has Serial Over LAN (SOL) with a true hardware Random Number Generator.

AdvancedMC™

SPECIFICATIONS

| Architecture		
Physical	Dimensions	Mid-Height (Full-Height option)
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Type	AMC 10 GbE	PrAMC based on CN67XX
Standards		
AMC	Type	AMC.1 and AMC.2
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	Gen2 x4 on ports 4-7
Configuration		
Power	AMC735	~30W (CPU Dependent)
Environmental	Temperature	Operating Temperature: 0° to 60° C
		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 SFP+, RJ-45. dual micro USB connectors RS-232, IPMI RS-232
	LEDs	IPMI Management Control
		Activity/Link and two user defined
	Mechanical	Hot Swap Ejector Handle
Software Support	Operating Systems	Linux and VxWorks
Other		
MTBF	MIL Handbook 217-F >TBD	
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^{TM} and the AdvancedTCA^{TM} logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	
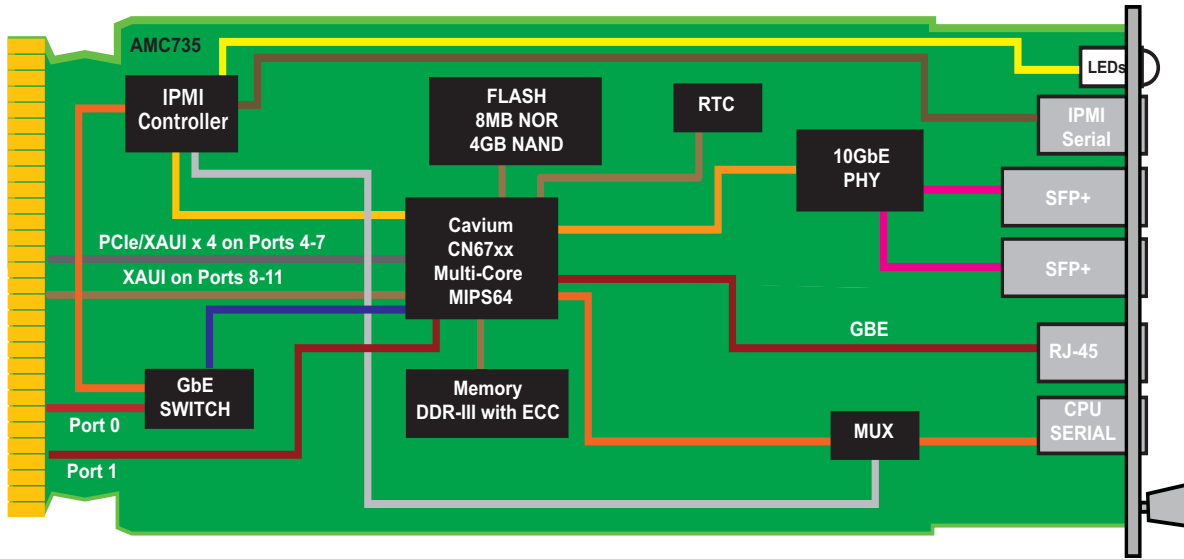
FIGURE 1. AMC735 Functional Block Diagram
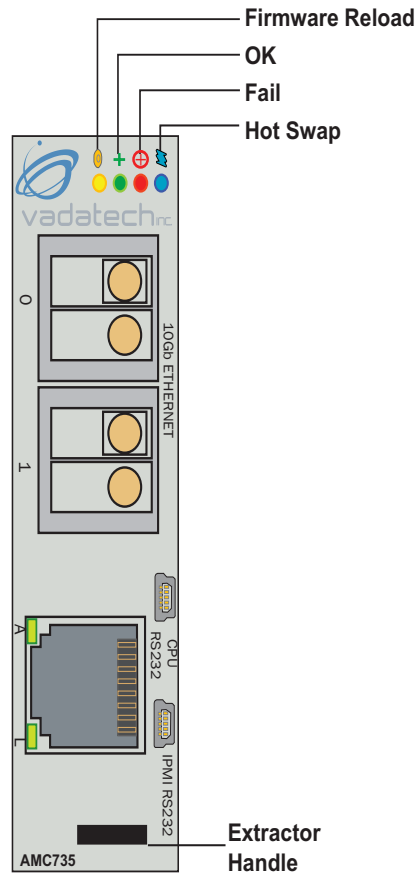
FIGURE 2. AMC735 Front Panel

ORDERING OPTIONS

AMC735 - ABC - DEF - GHJ

A = CPU Cores*

1 = CN6740AAP (8 Core)
2 = CN6740CP (8 Core)
3 = CN6760AAP (16 Core)**
4 = CN6760CP (16 Core)**

D = DDR-III Memory W/ECC

0 = 4GB
1 = 8GB
2 = 16GB

G = SFP+ Transceivers (second port)

0 = None
1= 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR

B = CPU Speed

0 = 800MHz
1 = 1GHz
2 = 1.2GHz
3 = 1.5GHz

E = NAND Flash

0 = None
1 = Reserved
2 = Reserved
3 = 16GB
4 = 32GB

H = PCIe/XAUI port configuration

0 = XAUI
1 = PCIe on ports 4-7

C = Front Panel Height

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

F = SFP+ Transceivers (first port)

0 = None
1= 10GBASE-SR
2 = Reserved
3 = 10GBASE-LRM
4 = 10GBASE-LR

J = Conformal Coating

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

*AAP = Application Acceleration Processor: Includes RAID, encryption, RegEx acceleration, compression/decompression, networking, TCP acceleration, and QoS

CP = Communication Processor: Includes networking, TCP acceleration, and QoS
**Depending on the chassis air flow VadaTech recommends the full-height panel