

# AMC734

## AMC734 KEY FEATURES

- AMC.2
- Single-width, mid-height (full-height option)
- Cavium OCTEON CN67xx
- Options for 8 and 16 processor cores
- Options for 800Mhz to 1.5Ghz speed grade
- DDR3 with ECC memory
- Qual SFP+ socket supporting 10GbE
  - Two ports are routed directly to ports 12-15 and 17-20 via XAUI
- XAUI to ports 4-7 and 8-11
- RTC
- 8MB NOR and 32GB of NAND Flash
- IPMI 2.0 compliant
- RoHS compliant
- OS support for:
  - Linux
  - VxWork

The AMC734 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 AMC.2 specification (option full-height design, see ordering options).

The AMC734 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.

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

**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.2
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	x4 on ports 4-7
Configuration		
Power	AMC734	~25W (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
Front Panel	Relative Humidity	5 to 95 percent, non-condensing
	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™ and the AdvancedTCA™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.	

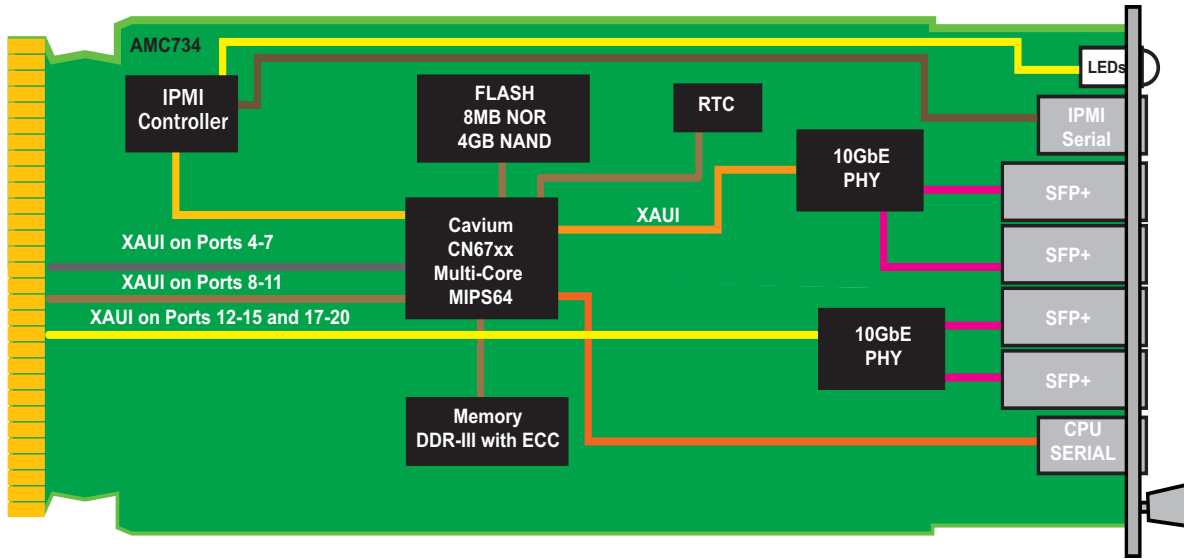


FIGURE 1. AMC734 Functional Block Diagram

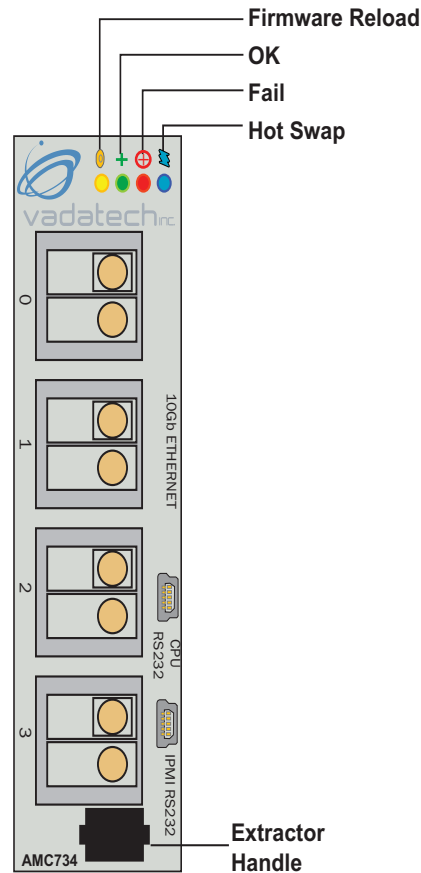


FIGURE 2. AMC734 Front Panel

## ORDERING OPTIONS

### AMC734 - ABC - DEF - GHJ

#### A = CPU Cores\*

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

#### B = CPU Speed

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

#### C = Front Panel Height

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

#### D = DDR-III Memory W/ECC

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

#### E = NAND Flash

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

#### F = SFP+ Transceivers (first port)

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

#### G = SFP+ Transceivers (second port)

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

#### H = SFP+ Transceivers (third and fourth 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

\*\*Must order with the full-height panel

