

# AMC732



## KEY FEATURES

- AMC.1, AMC.2 and AMC.4
- Single-width, mid-height (full-height option available)
- Cavium OCTEON CN66xx Multi-Core MIPS64 Processor
- Options for 6 to 10 processor cores
- Options for 800Mhz to 1.5Ghz speed grade
- DDR3 with ECC memory
- 2GB of DDR-III for HFA (Hyper Finite Automata)
- Single SFP+ socket supporting 10GbE
- PCIe/SRIO x4 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 AMC732 is a 10-Gigabit Ethernet (10GbE) AdvancedMC™ (AMC) module which includes an on-board line rate multi-core packet processor based on Cavium CN66XX CPU. VadaTech offers this product in a mid-height form factor with the AMC.1, AMC.2 and AMC.4 specification (option full-height design, see ordering options).

The AMC732 is based around the Cavium OCTEON CN66xx processor which has been specifically designed to intelligently process Ethernet packets at line rate. The processor can be loaded via the PCIe/SRIO interface or via an optional flash memory. 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.

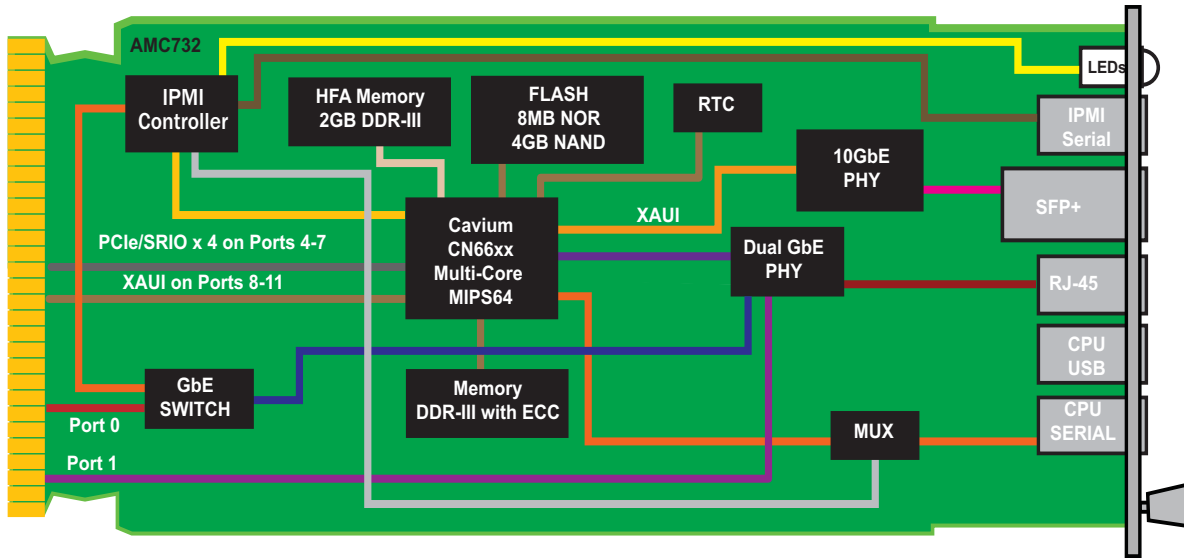
The module has 2GB of HFA for pattern matching for deep packet inspection, etc. The SDK for the processor as well as additional software stacks are available from Cavium or third party. The AMC732 has Serial Over LAN (SOL) with a true hardware Random Number Generator.

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

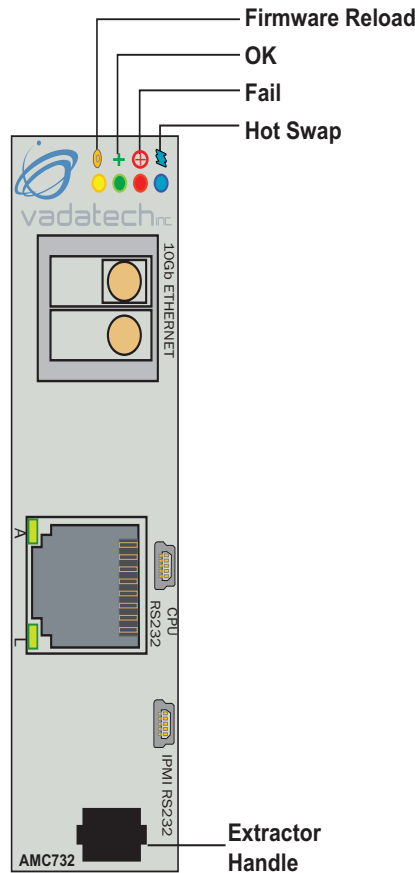
**AdvancedMC™**

## 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 CN66XX
Standards		
AMC	Type	AMC.1, AMC.2 and AMC.4
Module Management	IPMI	IPMI Version 2.0
PCIe/SRIO	Lanes	x4 on ports 4-7
Configuration		
Power	AMC732	~20W (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	Single SFP+, RJ-45. dual micro USB connectors for USB and 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.** AMC732 Functional Block Diagram



**FIGURE 2.** AMC732 Front Panel

## ORDERING OPTIONS

### AMC732 - ABC - DE0 - GHJ

#### A = CPU Cores\*

- 1 = CN6635AAP (6 Core)
- 2 = CN6635CP (6 Core)
- 3 = CN6645AAP (10 Core)
- 4 = CN6645CP (10 Core)

#### B = CPU Speed

- 0 = 800MHz
- 1 = 1GHz
- 2 = 1.1GHz
- 3 = 1.3GHz

#### 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

#### G = SFP+ Transceivers

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

#### H = PCIe/SRIO port configuration

- 0 = PCIe on ports 4-7
- 1 = SRIO on ports 4-7

#### 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

