



## KEY FEATURES

- Single-width, mid-height (option for full-height) per AMC.0
- Processor AMC with Intel® Next Generation Core™ i (Gladden) with Cave Creek PCH
- PCIe x4 on ports 4-7 (AMC.1)
- 10GbE XAUI on ports 8-11 (AMC.2)
- GbE to port 0 and 1 (AMC.2)
- SATA to port 2 and 3 (AMC.3)
- Dual GbE to the front panel
- Up to 16GB of DDR-III memory with ECC
- Option for up to 32GB of Flash
- Serial over LAN
- IPMI 2.0 compliant
- RoHS compliant

The AMC723 is a Processor AMC (PrAMC) in a single-width, mid-height AdvancedMC™ (AMC) form factor based on the Intel® next generation Core™ i Processor (Gladden) with Cave Creek PCH. The module follows the AMC.2 and the AMC.3 specifications.

The module provides PCIe on ports 4-7 (AMC.1) and 10GbE on ports 8-11 per AMC.2, dual GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3. It also provides dual GbE to the front.

The AMC723 has option for up to 16 GB of DDR-III memory with ECC. Further the AMC723 allows for up to 32 GB of Flash for OS.

The AMC723 has serial over LAN with hardware Random Number Generator (RNG) as seed generator for authentication.

The BIOS allows booting from on board NAND, off board SATA, PXE boot as well as USB.

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

**AdvancedMC™**

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Single-Width, Mid-Height (Full-Height options)
		Width: 2.89 in. (73.5 mm)
		Depth: 7.11 in. (180.6 mm)
Product Type	AMC Processor	Intel® Next Generation Core™ i with up to four core at 2.0GHz and 8MMB LLC
Standards		
AMC	Type	AMC.1, AMC.2 and/or AMC.3
Module Management	IPMI	IPMI Version 2.0
XAUI	Lanes	PCIe on ports 4-7 and XAUI on ports 8-11
Configuration		
Power	AMC723	18 to 58 Watt (CPU dependent)
Environmental	Temperature	Operating Temperature: 0° to 55° C (Air flow >600 LFM for mid-height)
		Storage Temperature: -40° to +90° C
	Vibration	Operating 9.8 m/s <sup>2</sup> (1.0G), 5-500Hz
	Shock	Operating 325G/2ms, 160G/1ms
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	LEDs	IPMI Management Control
		Activity and User defined
	I/O	Dual GbE via RJ-45
		Dual USB via micro USB
Dual RS-232 via micro USB		
Mechanical	Hot Swap Ejector Handle	
Software Support	Operating Systems	Linux, VxWorks and Windows
Other		
MTBF	Per MIL-217F Handbook > TBD MTTF Hrs.	
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.	

# Processor AMC based on Intel® Next Generation Core™ i (Gladden)

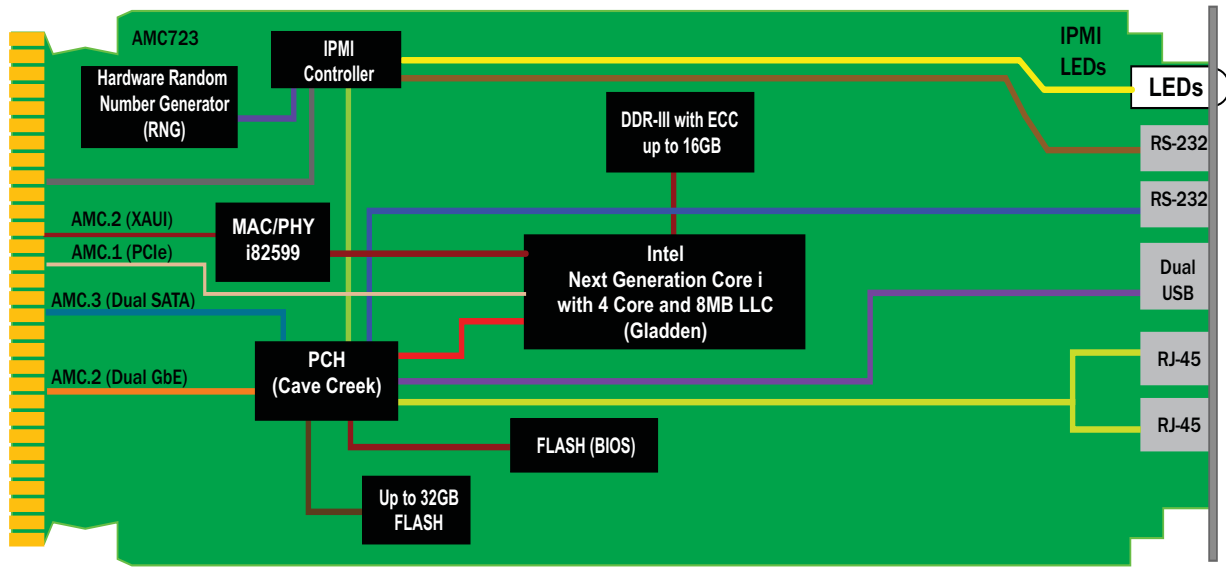
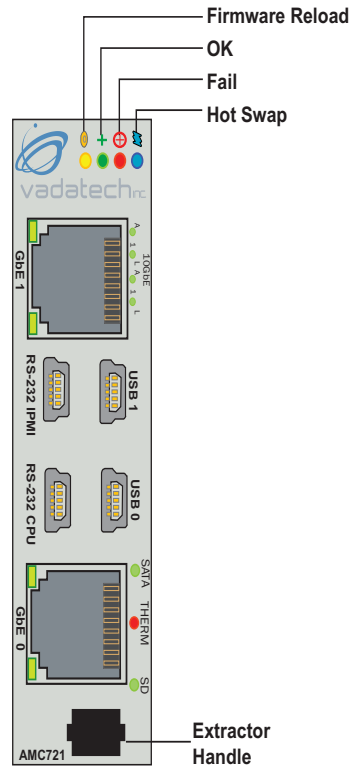


FIGURE 1. AMC723 Functional Block Diagram

FIGURE 2. AMC723 Front Panel



## ORDERING OPTIONS

### A = CPU Core, Speed, Cache

- 1 = 4C, 2GHz, 8MB LLC (Xeon E3 1125)\*
- 2 = 4C, 1GHz, 6MB LLC (Xeon E3 1105)
- 3 = 2C, 2GHz, 3MB LLC (Core i3-2115)
- 4 = Reserved
- 5 = 2C, 1.5GHz, 3MB LLC (Pentium B915)
- 6 = 1C, 1.3GHz, 1.5MB LLC (Celeron 725)

### B = DDR-III ECC memory

- 0 = 4GByte
- 1 = 8GByte
- 2 = 16G Byte

### C = Front Panel\*

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

### AMC723 - ABC - D00 - OHJ

### D = Flash

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

### H = Operating Temp

- 0 = Commercial Temp
- 1 = Industrial Temp

### J = Conformal Coating

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

\* VadaTech recommends the full-height option for this ordering option so the larger heat sink would accommodate the heat dissipation

