

## PrAMC based on Intel Xeon E3-1125, Fabric Mix – AMC723

PrAMC, Fabric Mix



### KEY FEATURES

- Single module, mid-size (option for full-size) per AMC.0
- Processor AMC with Intel® Xeon™ with PCH
- PCIe Gen2 x4 on ports 4-7 (AMC.1)
- PCIe Gen3 is available on Xeon E3 1125 v2 CPU option
- 10 GbE (XAU1) on ports 8-11 (AMC.2)
- GbE to ports 0 and 1 (AMC.2)
- SATA to ports 2 and 3 (AMC.3)
- Dual GbE to the front panel
- Up to 16 GB of DDR3 memory with ECC
- Option for up to 32 GB Flash
- Serial over LAN
- IPMI 2.0 compliant
- RoHS compliant

### AdvancedMC™

#### Benefits of Choosing VadaTech

- High performance processor with various chipset options
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC723 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC™ (AMC) form factor based on an Intel® Core i Processor with an 8900 Series PCH.

The module follows the AMC.1, 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. PCIe Gen 3 is available on the Xeon E3 1125 v2 CPU option. The AMC723 also provides dual GbE to the front.

The AMC723 has option for up to 16 GB of DDR3 memory with ECC. It provides 32 GB of Flash for the 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 Flash, off board SATA, PXE boot as well as USB.

Linux OS is standard on the AMC723, consult VadaTech for other options.

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and  $\mu$ TCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTM), 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.

## BLOCK DIAGRAM

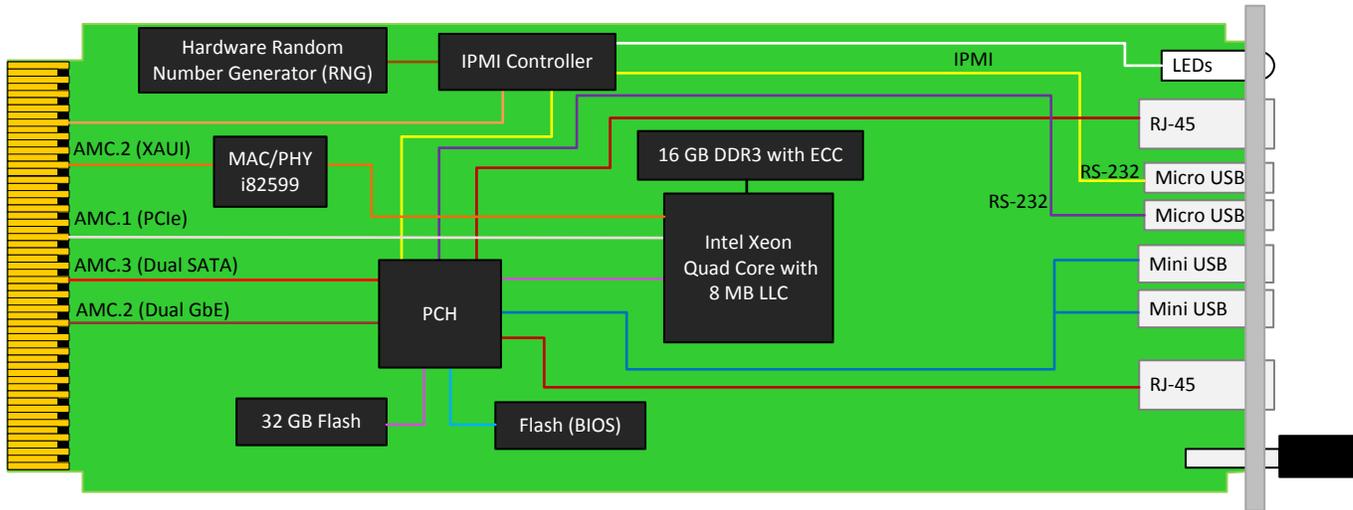


Figure 1: AMC723 Functional Block Diagram

## FRONT PANEL

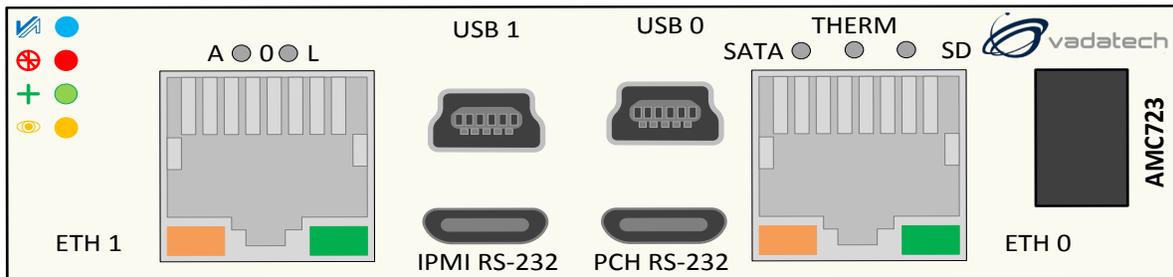


Figure 2: AMC723 Front Panel

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Single module, mid-size (full-size optional)
		Width: 2.89" (73.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC Processor	Intel® Xeon™ with up to four core at 2.0 GHz and 8 MB LLC
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2 and/or AMC.3
Module Management	IPMI	IPMI version 2.0
PCIe	Lanes	PCIe on ports 4-7 and XAUI on ports 8-11
Configuration		
Power	AMC723	18W to 58W (CPU dependant)
Environmental	Temperature	Operating temperature: -5° to 55° C (air flow requirement of >600 LFM), industrial and military versions also available (See <a href="#">environmental spec sheet</a> )
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500Hz on each axis
	Shock	Operating 325G / 2 ms, 160G / 1 ms
	Relative Humidity	5 to 95 per cent, non-condensing
Front Panel	Interface Connectors	Dual GbE via RJ-45
		Dual USB via mini USB
		Dual RS-232 via micro USB
	LEDs	IPMI management control
		Activity / Link user LEDs
Mechanical	Hot swap ejector handle	
Software Support	Operating System	Linux, VxWorks and Windows
Conformal Coating		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)
Other		
MTBF		MIL Hand book 217-F@ TBD 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
Warranty		Two (2) years
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

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## ORDERING OPTIONS

### AMC723 – ABC – D00 – 0HJ

#### A = CPU Core, Speed, Cache

- 1 = 4C, 2 GHz, 8 MB LLC (Xeon E3-1125)
- 2 = Reserved
- 3 = Reserved
- 4 = Reserved
- 5 = Reserved
- 6 = Reserved
- 7 = 4C, 2.5 GHz, 8 MB LLC (Xeon E3 1125 v2)

#### B = DDR3 ECC Memory

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

#### C = Front Panel Size

- 0 = Reserved
- 1 = Reserved
- 2 = Mid-size
- 3 = Full-size

#### D = Flash Memory

- 0 = None
  - 1 = Reserved
  - 2 = Reserved
  - 3 = 32 GB\*
- \* VadaTech reserves the right to supply larger capacity unless specifically stated otherwise on the Purchase Order

## COMMON CONFIGURATIONS

- AMC723-12x-300-000
- AMC723-322-300-000
- AMC723-11x-000-002

#### H = Temperature Range

- 0 = Commercial (-5 to +55° C)
- 1 = Industrial (-20 to +70° C)

#### J = Conformal Coating

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

## RELATED PRODUCTS



VT811 MicroTCA.4  
Chassis



AMC520 MicroTCA.4  
A/D Converter



UTC018 Power  
Module (12HP)

## CONTACT US

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