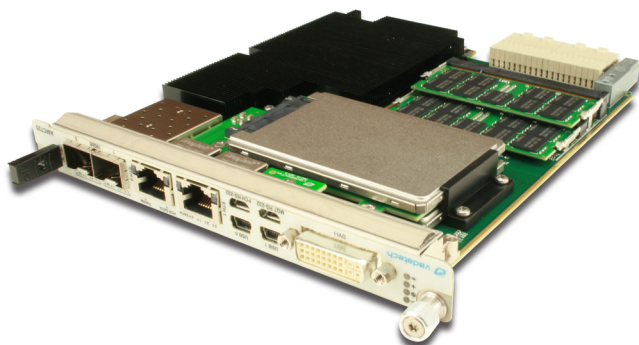


## μTCA.4 PrAMC based on Intel Xeon E3– AMC725

μTCA.4 PrAMC, Xeon E3



**AdvancedMC™**

### KEY FEATURES

- Double-width, mid-height per AMC.0 and MTCA.4
- Intel® Xeon E3 (Gladden) 4C, 2 GHz, 8 MB LLC processor and Cave Creek PCH
- DVI graphics (SM750 w/ 16 MB DDR), up to 1920x1440 resolution
- Optional up to 256 GB SSD with RAID option
- PCIe Gen3 on ports 4-7 and 8-11 or single PCIe x8 on ports 4-11 (AMC.1)
- GbE on ports 0 and 1 (AMC.2) and SATA on ports 2 and 3 (AMC.3)
- PCIe Gen3 x8, dual SATA and quad USB to RTM
- Dual 10GbE via SPF+ and dual GbE via RJ-45 to front panel
- Up to 16 GB DDR3 w/ ECC and up to 32 GB Flash memory
- IPMI 2.0 compliant
- Serial over LAN (SOL) with hardware RNG

### Benefits of Choosing VadaTech

- High-performance Xeon E3 processor with dual 10 GbE ports to the front panel
- Highly versatile combination of distributed processing, storage options, and RTM routing configurations
- Two optional 1.8" disks provide RAID 0, 1 on-board
- 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 AMC725 is a Processor AMC (PrAMC) in a μTCA.4 double-module, mid-size AMC form factor. It features an Intel® Xeon E3 Processor with Cave Creek PCH, and on-board dual RAID options. The module provides PCIe Gen2 x4 or single x8 on ports 4-11 per AMC.1, dual GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3. Dual 10 GbE ports are included on the front panel.

The AMC725 comes with 16 GB of DDR3 memory with ECC. The AMC725 allows for up to 32 GB of Flash for the OS. It routes PCIe, USB and SATA signals to the RTM connector for further expansion. The Serial over LAN with hardware RNG (Random Number Generator) acts as a seed generator for authentication. The BIOS allows booting from on-board Flash, off-board SATA, PXE boot, and USB.

*VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.*

# μTCA.4 PrAMC based on Intel Xeon E3– **AMC725**

## SSD RAID

The Solid State Drives (SSD) with no moving parts allows for high speed data storage and retrieval. When the SSD are used in RAID configuration they provide greater reliability and power efficiency.

## INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μTCA 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

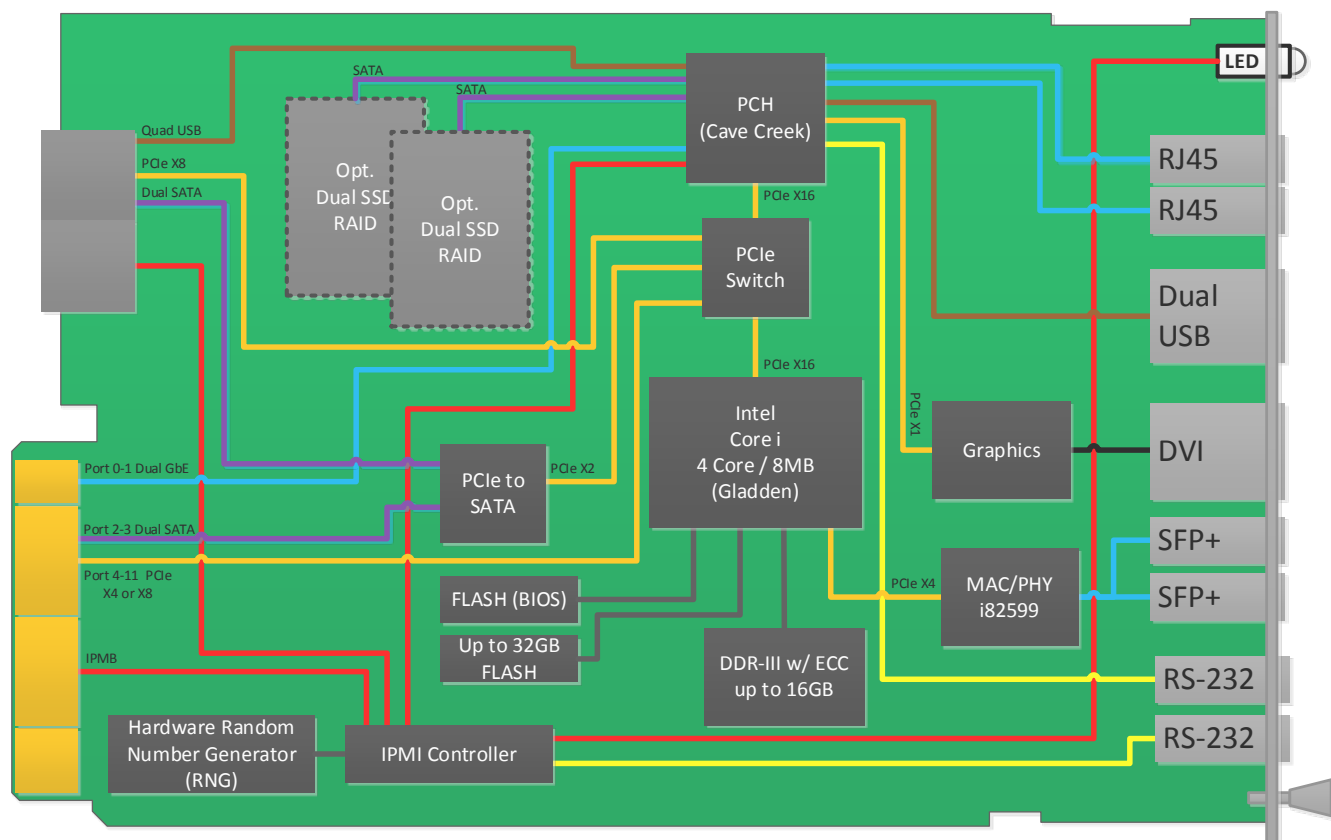


Figure 1: AMC725 Functional Block Diagram

# μTCA.4 PrAMC based on Intel Xeon E3– AMC725

## SPECIFICATIONS

Architecture		
Physical	Dimensions	Width: 5.85" (148.5 mm)
		Depth 7.11" (180.6 mm)
Type	AMC Processor	Four AMC.0 slots plus four μTCA.4 slots
Standards		
AMC	Type	AMC.0, AMC.1, AMC.2 and AMC.3
Module Management	IPMI	IPMI version 2.0
PCIe	Lanes	Dual x4 or single x8 as PCIe
Configuration		
Power	AMC725	~40W
Environmental	Temperature	Operating temperature: -5° to 55° C (air flow requirement of >200 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 micro USB
	LEDs	Single DVI
		Dual 10GbE via SFP+
		Dual RS-232 via micro USB
Software Support	Operating System	IPMI management control
		Activity / Link user LEDs
		Mechanical
Conformal Coating		Hot swap ejector handle
		Linux, VxWorks and Windows
Other		Humiseal 1A33 Polyurethane (Optional)
		Humiseal 1B31 Acrylic (Optional)
MTFB	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	

# μTCA.4 PrAMC based on Intel Xeon E3– AMC725

## ORDERING OPTIONS

### AMC725 – ABC – DEF – GHJ

#### A = SFP+ Transceivers

- 0 = None
- 1 = 10GBASE-SR
- 2 = 10GBASE-LR

#### B = DDR3 ECC Memory

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

#### C = Front Panel Size

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

#### D = Flash Memory

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

#### E = Number of SSD

- 0 = None
- 1 = 1
- 2 = 2

#### F = SSD Size (both same, if dual SSD)

- 0 = None
- 1 = 120GB
- 2 = 240GB
- 3 = 360GB
- 4 = 480GB
- 5 = Reserved
- 6 = Reserved

#### G = Front Panel Type

- 0 = MicroTCA.0
- 1 = MicroTCA.1/MicroTCA.4\*\*

#### H = Temperature Range

- 0 = Commercial (–5 to +55° C)
- 1 = Industrial (–20 to +70° C)
- 2 = Military (–40 to +85° C)\*

#### J = Conformal Coating

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

\*Edge of module for conduction cooled

\*\*Includes captive screws

## RELATED PRODUCTS



VT811 MicroTCA.4  
Chassis



AMC520 MicroTCA.4  
A/D Converter



UTC0018 Power  
Module (12HP)

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