AMC612

Network Attached Storage (NAS) AMC with 2.5” NVMe/SATA Storage

AMC612

Key Features

- Network Attached Storage (NAS) AMC Module
- Quad Core ARM at 1.8GHz per core with 8GB of DDR-4 Memory
- 2.5” NVMe or SATA SSD
- Dual 10GbE to ports 4 and 8 (or 4-7 and 8-11 as XAUI)
- Dual GbE (ports 0 and 1)
- GbE to the front
- AMC.2 specification
- Single module mid-size or full-size per AMC.0
- IPMI 2.0 compliant

Benefits

- Multi-Terabit storage capacity in a single module AMC form factor carrier
- NVMe performance
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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AMC612

The AMC612 is fully compliant as a NAS (Network Attached Storage) device with Enterprise Solid State Disk (SSD) in 2.5” form factor or NVMe storage option which provides high speed and low latency read/write to the SSD devices.

The module has on board quad core ARM processor running at 1.8GHz per core with 8GB of DDR-4. The module boots from on board memory and allows the entire Storage Device to be utilized for NAS. The AMC612 routes 10GbE to ports 4 and 8 or 10GbE as XAUI to ports 4-7 and 8-11.

The module support both NVMe and SATA storage types. The NVMe 2.5” disk is available only with the **full-height panel** whilst the SATA SSD has an option for the mid-height panel as well as the full-height panel. The module can support over 30TB of storage with a single NVMe storage device, and over 7TB with the SATA SSD.

The AMC612 is available in both air-cooled (MTCA.0 and MTCA.1) and rugged conduction-cooled versions (MTCA.2 or MTCA.3, contact sales for details).

Figure 1: AMC612

Figure 2: AMC612 Top View

Block Diagram

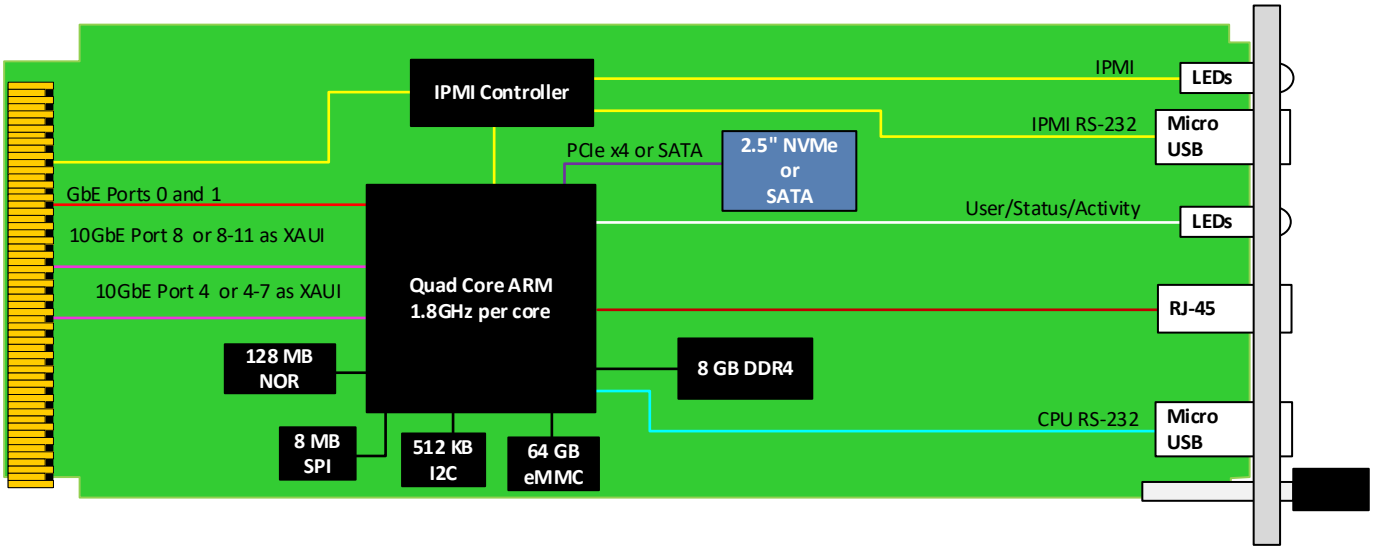

Figure 3: AMC612 Functional Block Diagram

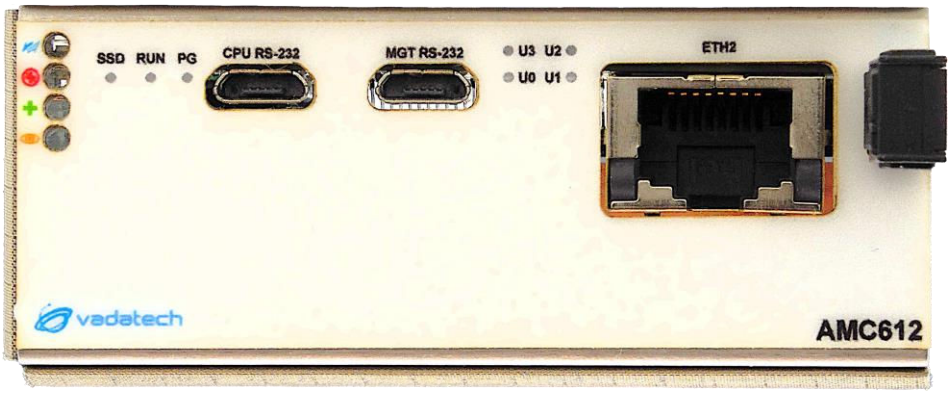

Figure 4: AMC612 Front Panel View

Specifications

Architecture		
Physical	**Dimensions**	Single module, mid-size or full-size optional
		Width: 2.89” (73.5 mm)
		Depth 7.11” (180.6 mm)
Type	**AMC Storage**	NAS NVMe or SATA SSD
Standards		
AMC	**Type**	AMC.2
Module Management	**IPMI**	IPMI v2.0
10GbE	**Lanes**	2X 10GbE
Storage	**SSD**	Over 30TB with NVMe
Configuration		
Power		7W with no Storage
Environmental	**Temperature**	See Ordering Options and Environmental Spec Sheet
		Storage Temperature: –40° to +85°C
	Vibration	Operating 9.8 m/s^2 (1G), 5 to 500 Hz on each axis
	Shock	Operating 325 G/2 ms, 160 G/1 ms
	Relative Humidity	5 to 95% non-condensing
Front Panel	**Interface Connectors**	Micro USB connector for MGT RS-232
		2.5” socket for NVMe or SATA
	LEDs	IPMI Management Control
		Activity
	Mechanical	Hot-swap ejector handle
Software Support	**Operating System**	Linux, Windows, Solaris and VxWorks
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 ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, see VadaTech Terms and Conditions	

INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), 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.

Ordering Options

AMC612 – ABC-DE0-00J

A = NVMe total Storage Capacity*†	D = SATA SSD Storage Capacity*†	
0 = None 1 = 1.5 TB 2 = 3 TB 3 = 6 TB 4 = 15 TB 5 = 30 TB 6 = Reserved 7 = Reserved	0 = None 1 = 1.5 TB 2 = 3 TB 3 = 7.6 TB 4 = 15 TB 5 = Reserved	
B = Ports 4-7/8-11	**E = NVMe/SATA option**	
0 = 10GbE on ports 4 and 8 1 = XAUI (ports 4-7 and 8-11) 2 = No connections on ports	0 = NVMe (for A option select this) 1 = SATA (for D option select this)	
C = Front Panel		**J = Temperature Range and Coating**
1 = Reserved 2 = Mid-size 3 = Full-size 4 = Reserved 5 = Mid-size, MTCA.1 (captive screw) 6 = Full-size, MTCA.1 (captive screw)		0 = Commercial (–5° to +45°C), No coating 1 = Commercial (–5° to +45°C), Humiseal 1A33 Polyurethane 2 = Commercial (–5° to +45°C), Humiseal 1B31 Acrylic 3 = Reserved 4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic

Note: *Option A or D should be chosen but not both
†Note: All NVMe (option A) are 15mm which requires full-height panel and SATA drives over 7.6TB

Related Products

VT950

- MicroTCA rugged 1U 19” rackmount chassis platform
- Meets MIL-STD-810F, MIL-STD-901D for shock/vibration
- Meets MIL-STD-461E for EMI

AMC626

- HBA for external SATA 3 (6.0 Gbps) or SAS-3 (12 Gbps) drives
- AMC.1 compliant, PCIe Gen3 x8 or x4
- Support for 8 SAS/SATA Ports

AMC629

- HBA for external SATA 3 (6.0 Gbps) or SAS-3 (12 Gbps) drives
- Conduction cooled version available
- Integrated RAID 0, 1, 1E, and 10

Contact

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