AMC612

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



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





THE POWER OF VISION

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 <u>full-height panel</u> 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

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Block Diagram

		l.	IPMI	
в г	IPMI Controller			LEDs
	PC	e x4 or SATA 2.5" NVMe or	IPMI RS-232	USB
GbE Ports 0 and 1	_	SATA	User/Status/Activity	LEDs
10GbE Port 8 or 8-11 as XAUI				1200
10GbE Port 4 or 4-7 as XAUI	Quad Core ARM 1.8GHz per core			RJ-45
128 MB NOR		8 GB DDR4		
8 MB	513 1/0		CPU RS-232	Micro USB
SPI	512 KB 64 GB 12C eMIMC		-	038

Figure 3: AMC612 Functional Block Diagram

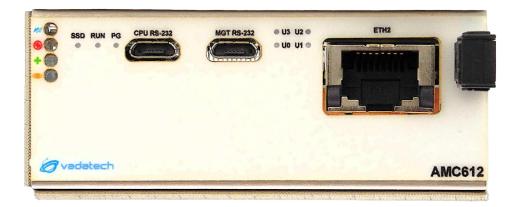


Figure 4: AMC612 Front Panel View

Specifications

Architecture			
Physical	Dimensions	Single module, mid-size or full-size optional	
		Width: 2.89" (73.5 mm)	
		Depth 7.11" (180.6 mm)	
Туре	AMC Storage	NAS NVMe or SATA SSD	
Standards			
AMC	Туре	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 <u>VadaTech Terms and Conditions</u>		

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 preconfigured 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



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- 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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