2.5" SATA Drive, 6 Gbps RAID HBA – AMC620

KEY FEATURES

- 2.5" SATA 6.0 Gbps drive HBA (Host Bus Adapter)
- AMC.1 x2 PCIe Gen 2
- Supports SATA ports at 6.0 Gbps
- Single Mini-SAS SFF-8644 for expansion to external devices
- Independent disk or RAID 0, 1 and 10
- Single module, compact-size (mid-size, full-size options available)
- IPMI 2.0 compliant

Benefits of Choosing VadaTech

- 2x PCIe Gen 2 provides four times the back-end transfer rate as previous VadaTech modules
- 6 Gbps SATA drive provides twice the front-end transfer rate as previous VadaTech modules
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company

The AMC620 is VadaTech second generation storage product for a 2.5" SATA disk drive in a single module, compact-size AdvancedMC™ (AMC) form factor to AMC.1. The module provides 4x the back-end transfer rate and 2x the front-end rate than previous VadaTech SATA AMCs.

Drives can be SSD or Rotary with 6 Gbps SATA. It also supports SATA mix Flash/Rotary disks with encryption. The AMC620 also has a PCIe expansion connector on the front panel for expansion to an external JBOD or other VadaTech AMC storage modules.

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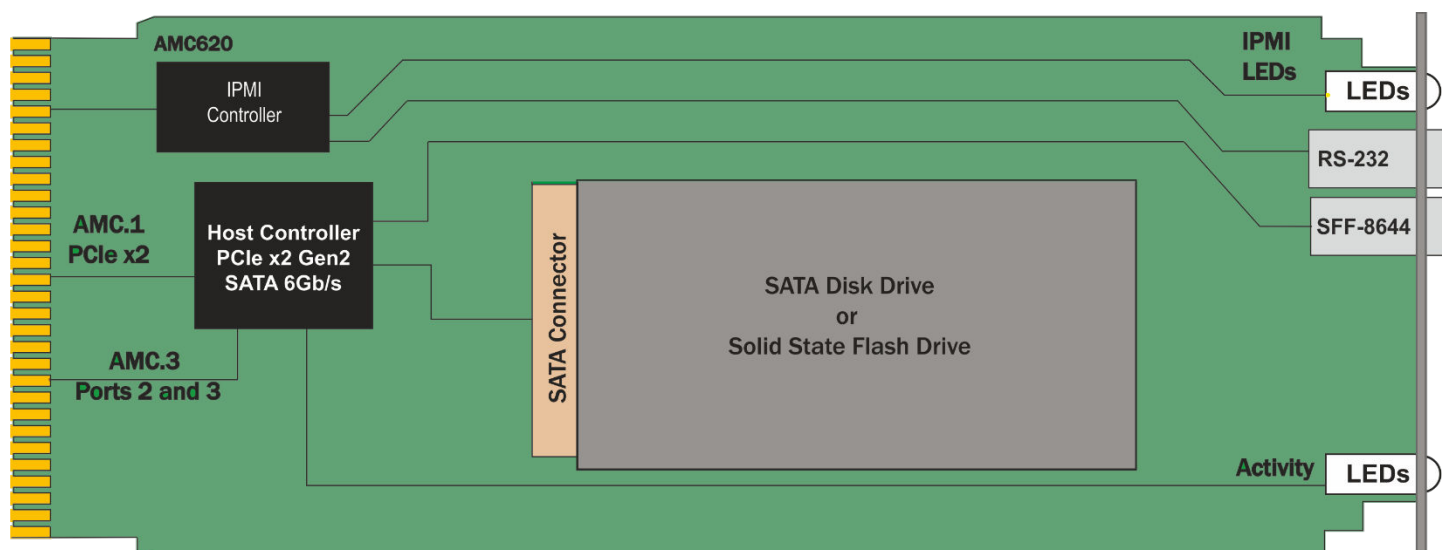
BLOCK DIAGRAM

Figure 1: Block Diagram

Figure 2: Front Panel

SPECIFICATIONS

Architecture		
Physical	Dimensions	Single module, compact-size (mid-size or full-size options)
		Width: 2.89" (73.5 mm)
		Depth: 7.11" (180.6 mm)
Type	AMC Storage	2.5" Serial ATA drive
		Optional Solid State Drive (SSD) – contact sales for availability and capacity
		7200 RPM, <11 ms average seek time
		Over 2 TB hard drive capacity, 64 Mbyte buffer
		SATA transfer rate of 6 Gbps

Standards		
AMC	Type	AMC.1
Module Management	IPMI	IPMI v2.0
PCIe	Lanes	2x PCIe Gen 2 lanes

Configuration		
Power	AMC620	2 W without the drive
Environmental	Temperature	Operating temperature: -5° to 55° C (air flow requirement of >100 LFM), industrial and military versions also available (See environmental spec sheet)
		Storage temperature: –40° to +70° C with the disk
	Vibration	SSD/Rotary disk dependent
	Shock	SD/Rotary disk dependent
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	LEDs	IPMI management control
	Interface	Single Mini-SAS SFF-8644 x4
		Activity
	Mechanical	Hot swap ejector handle

Other	
MTFB	MIL Handbook 217-F@TBD Hrs
Certifications	Designed to meet FCC, CE and UL certifications where applicable
Compliance	RoHS and NEBS.
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

ORDERING OPTIONS

AMC620 – A0C – D00 – 0HJ

A = SATA Drive Capacity
0 = None
1 = 1 TB
2 = 2 TB
3 = Reserved
4 = Reserved
5 = 2.5" Solid State Drive (SSD) or
mixed flash/rotary with encryption
(Contact sales for availability and size)

C = Front Panel Size
1 = Compact-size
2 = Mid-size
3 = Full-size

*SSD option is required for Industrial or Military grade
** Edge of module for conduction-cooled boards

D = AMC.3 Ports 2 and 3
0 = Not routed to HBA
1 = Routed to HBA

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

RELATED PRODUCTS

EXP100 1U Express Development Platform

UTC002 MCH

UTC020 Power Module

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