

2.5" SATA Drive, 6 Gbps RAID HBA, DVI-I – AMC638

2.5" SATA, 6 Gbps HBA, DVI-I



KEY FEATURES

- 2.5" SATA 6.0 Gbps drive HBA (Host Bus Adapter)
- AMC.1 x1 PCIe Gen 2
- Supports SATA ports at 6.0 Gbps
- DVI-I for graphics interface
- 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

- Combination of storage and graphics in single AMC
- RAID solution with Host Bus Adapter providing higher transport speeds
- 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 AMC638 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. Ports 2 and 3 are routed to the backplane connector per AMC.3 specification. The module provides 2x 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 AMC638 also has a DVI-I front panel interface for graphics module access.

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

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INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μ 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

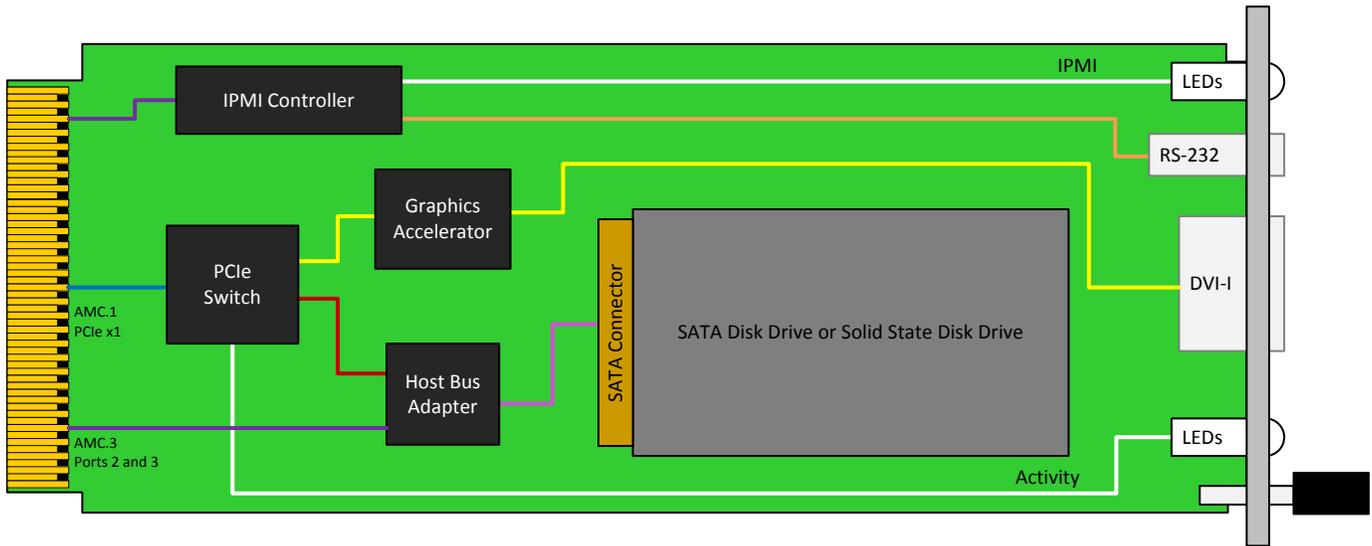


Figure 1: Block Diagram

SPECIFICATIONS

Architecture		
Physical	Dimensions	Single module, compact-size (mid-size or full-size option available) Width: 2.89" (73.5 mm) Depth: 7.11" (180.6 mm)
	Type	AMC Storage
Type	AMC Storage	2.5" Serial ATA drive and RAID 0, 1, 10 Optional Solid State Drive (SSD) – contact sales for availability and capacity
	Speed	7200 rpm, <11 ms, average seek time
	Capacity	Over 2 TB hard drive capacity, 64 Mb buffer
	Transfer	SATA transfer rate of 6 Gbps
Standards		
AMC	Type	AMC.1 and AMC.3
Module Management	IPMI	IPMI Version 2.0
PCIe	Lanes	PCIe Gen 2, x1
Configuration		
Power	AMC638	~2W without the drive
Environmental	Temperature	Operating temperature: -5° to 55° C (air flow requirement of >200 LFM, industrial and military versions also available (See environmental spec sheet) Storage temperature: -40° to +85° C with the disk
	Vibration	Operating 9.8 m/s ² (1G), 5 to 500 Hz
	Shock	Operating 325G/2 ms, 160G/1 ms
	Relative Humidity	5 to 95 percent, non-condensing
Front Panel	LEDs	IPMI management control Activity
	Interface	RS-232, DVI-I
	Mechanical	Hot swap ejector handle
Software Support	Operating System	Linux, Windows, Solaris and VxWorks
Other		
MTBF	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	
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ORDERING OPTIONS

AMC638 – A0C – D00 – 00J*

A = SATA Drive Capacity

- 0 = None
 - 1 = 256 GB SSD
 - 2 = 512 GB SSD
 - 3 = 1TB SSD
 - 4 = Reserved
- (Contact sales for other drive sizes)

C = Front Panel Size

- 1 = Reserved
- 2 = Mid-size
- 3 = Full-size
- 4 = Reserved
- 5 = Mid-size, MTCA.1 (captive screw)
- 6 = Full-size, MTCA.1 (captive screw)

D = AMC.3 Ports 2 and 3

- 0 = Not routed to HBA
- 1 = Routed to HBA

J = Temperature Range and Coating

- 0 = Commercial (–5° to +55° C), No coating
- 1 = Commercial (–5° to +55° C), Humiseal 1A33 Polyurethane
- 2 = Commercial (–5° to +55° C), Humiseal 1B31 Acrylic
- 3 = Industrial (–20° to +70° C), No coating
- 4 = Industrial (–20° to +70° C), Humiseal 1A33 Polyurethane
- 5 = Industrial (–20° to +70° C), Humiseal 1B31 Acrylic
- 6 = Military (–40° to +85° C), Humiseal 1A33 Polyurethane**^
- 7 = Military (–40° to +85° C), Humiseal 1B31 Acrylic**^

* Contact VadaTech for more information on SSD drive size and availability

** Available only for SSD option

^ Edge of module for conduction-cooled

RELATED PRODUCTS



EXP100 Express
Chassis Platform



UTC002 MCH



UTC020 1000W
DC Power Module

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