2.5" Dual SATA Drive, 6 Gbps RAID HBA – AMC621

KEY FEATURES

- 2.5" SATA 6.0 Gbps drive HBA (Host Bus Adapter)
- AMC.1 x2 PCIe Gen 2
- Supports two SATA disks on a single AMC module
- Independent disk or hardware RAID 0, 1 and 10
- Single module, full-size
- 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 AMC621 is VadaTech second generation storage product for a 2.5" SATA disk drive in a single module, full-size AdvancedMC™ (AMC) form factor based on the AMC.1 specification. Dual SATA disks or solid state Flash drives can be implemented on the module.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.
**2.5” Dual SATA Drive, 6 Gbps RAID HBA – AMC621**

**BLOCK DIAGRAM**

Figure 1: Block Diagram

Figure 2: Front Panel
## SPECIFICATIONS

### Architecture

<table>
<thead>
<tr>
<th>Physical</th>
<th>Dimensions</th>
<th>Single module, full-size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width: 2.89” (73.5 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depth: 7.11” (180.6 mm)</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>AMC Storage</td>
<td>2.5” Dual Serial ATA drive</td>
</tr>
<tr>
<td></td>
<td>Optional Solid State Drive (SSD) – contact sales for availability and capacity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7200 RPM, &lt;11 ms average seek time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 2 TB hard drive capacity per disk, 64 Mbyte buffer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SATA transfer rate of 6 Gbps</td>
<td></td>
</tr>
</tbody>
</table>

### Standards

<table>
<thead>
<tr>
<th>AMC</th>
<th>Type</th>
<th>AMC.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Management</td>
<td>IPMI</td>
<td>IPMI v2.0</td>
</tr>
<tr>
<td>PCIe</td>
<td>Lanes</td>
<td>2x PCIe Gen 2 lanes</td>
</tr>
</tbody>
</table>

### Configuration

| Power      | AMC621 | 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 |
|           | 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 |
2.5” Dual SATA Drive, 6 Gbps RAID HBA – AMC621

ORDERING OPTIONS

AMC621 – ABC – D00 – 0HJ

A = SATA Drive Capacity Disk 1
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)

B = SATA Drive Capacity Disk 2
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 Height
1 = Reserved
2 = Reserved
3 = Full-size

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

* Available with the SSD option only

RELATED PRODUCTS

EXP100 1U Express Development Platform
UTC002 MCH
UTC020 Power Module

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