The AMC623 is VadaTech second generation storage product for a 1.8" SATA disk drive in a single module, mid-size or full-size AdvancedMC™ (AMC) form factor based on the AMC.1, specification.

The AMC623 supports RAID 0, 1 and 10 and can have up to 4 disks on a mid-size AMC module.

VadaTech can modify this product to meet special customer requirements. Contact us to discuss your application.
1.8” Quad SATA Drive, 6 Gbps RAID HBA – AMC623

BLOCK DIAGRAM

Figure 1: Block Diagram

Figure 2: Front Panel
## SPECIFICATIONS

### Architecture

<table>
<thead>
<tr>
<th>Physical</th>
<th>Dimensions</th>
<th>Single module, mid-size (full-size optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width</td>
<td>2.89” (73.5 mm)</td>
</tr>
<tr>
<td></td>
<td>Depth</td>
<td>7.11” (180.6 mm)</td>
</tr>
<tr>
<td>Type</td>
<td>AMC Storage</td>
<td>1.8” Serial ATA drive</td>
</tr>
<tr>
<td></td>
<td>Quad SATA drives</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

<table>
<thead>
<tr>
<th>Power</th>
<th>AMC623</th>
<th>2 W without the drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Temperature</td>
<td>Operating temperature: -5° to 55° C (air flow requirement of &gt;200 LFM), industrial and military versions also available. (See environmental spec sheet)</td>
</tr>
<tr>
<td></td>
<td>Storage</td>
<td>Temperature: -40° to +70° C with the disk</td>
</tr>
<tr>
<td></td>
<td>Vibration</td>
<td>SSD/Rotary disk dependent</td>
</tr>
<tr>
<td></td>
<td>Shock</td>
<td>SSD/Rotary disk dependent</td>
</tr>
<tr>
<td>Front Panel</td>
<td>Relative Humidity</td>
<td>5 to 95 percent, non-condensing</td>
</tr>
<tr>
<td></td>
<td>LEDs</td>
<td>IPMI management control</td>
</tr>
<tr>
<td></td>
<td>Activity</td>
<td>Hot swap ejector handle</td>
</tr>
</tbody>
</table>

### Other

<table>
<thead>
<tr>
<th>MTFB</th>
<th>MIL Handbook 217-F@TBD Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications where applicable</td>
</tr>
<tr>
<td>Compliance</td>
<td>RoHS and NEBS.</td>
</tr>
<tr>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
</tr>
<tr>
<td>Warranty</td>
<td>Two (2) years</td>
</tr>
<tr>
<td>Trademarks and Disclaimer</td>
<td>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</td>
</tr>
</tbody>
</table>
1.8” Quad SATA Drive, 6 Gbps RAID HBA – AMC623

ORDERING OPTIONS

AMC623 – ABC – DE0 – 0HJ

A = SATA Drive Capacity Disk 1
0 = None
1 = 240 GB SSD
2 = 360 GB SSD
3 = 480 GB SSD
4 = Reserved
5 = Reserved
(Contact sales for availability and size of larger drives)

B = SATA Drive Capacity Disk 2
0 = None
1 = 240 GB SSD
2 = 360 GB SSD
3 = 480 GB SSD
4 = Reserved
5 = Reserved
(Contact sales for availability and size of larger drives)

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

D = Third SATA Drive Capacity
0 = None
1 = 240 GB SSD
2 = 360 GB SSD
3 = 480 GB SSD
4 = Reserved
5 = Reserved
(Contact sales for availability and size of larger drives)

E = Fourth SATA Drive Capacity
0 = None
1 = 240 GB SSD
2 = 360 GB SSD
3 = 480 GB SSD
4 = Reserved
5 = Reserved
(Contact sales for availability and size of larger drives)

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

* Edge of module for conduction-cooled boards

RELATED PRODUCTS

| EXP100 1U Express Development Platform | UTC002 MCH | UTC020 Power Module |

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