The AMC627 is VadaTech second generation storage product HBA single module, mid-size (option for full-size) AdvancedMC™ (AMC) form factor based on the AMC.1 specification.

The module has an on-board 2.5” disk with additional SATA/SAS ports routed to ports 2-3. The storage module also has hardware RAID 0 (striping), 1 (mirroring), 1E (enhanced mirroring), and 10 (mirroring + striping).

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

Benefits of Choosing VadaTech

- PCIe Gen 3 provides four times the back-end transfer rate as previous VadaTech modules
- 6 Gbps SATA III drive provides twice the front-end transfer rate, 12 Gbps SAS-3 option
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company

KEY FEATURES

- Host Bus Adapter (HBA) for 2.5 inch disk with SATA III (6.0 Gbps) or SAS-3 (12 Gbps)
- AMC.1 compliant
- PCIe Gen3 x4 lanes
- Independent disk or hardware RAID 0, 1, 1E and 10
- AMC mid-size (full-size options available)
- IPMI 2.0 compliant
- RoHS compliant
INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and μTCA 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

Figure 2: Front Panel
# SPECIFICATIONS

## Architecture

<table>
<thead>
<tr>
<th>Physical</th>
<th>Dimensions</th>
<th>Single module, mid-size (full-size option available)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>2.89 in. (73.5 mm)</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>7.11 in. (180.6 mm)</td>
<td></td>
</tr>
</tbody>
</table>

## Type

| AMC Storage | SAS-3 transfer rate at 12 Gbps, SATA III transfer rate at 6 Gbps |

## Standards

<table>
<thead>
<tr>
<th>AMC Type</th>
<th>AMC.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Management IPMI</td>
<td>IPMI version 2.0</td>
</tr>
<tr>
<td>PCIe Lanes</td>
<td>PCIe Gen3, x4</td>
</tr>
</tbody>
</table>

## Configuration

<table>
<thead>
<tr>
<th>Power</th>
<th>AMC627</th>
</tr>
</thead>
<tbody>
<tr>
<td>8W</td>
<td></td>
</tr>
</tbody>
</table>

## Environmental

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Operating temperature: -5° to 55° C (air flow requirement of &gt;100 LFM, industrial and military versions also available) (See <a href="#">environmental spec sheet</a>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage Temperature</td>
<td>-40° to +85° C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vibration</th>
<th>SSD/Rotary disk dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shock</td>
<td>SSD/Rotary disk dependent</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95 percent, non-condensing</td>
</tr>
</tbody>
</table>

## Front Panel

<table>
<thead>
<tr>
<th>LEDs</th>
<th>IPMI management, Activity, Host Controller UART interface via MicroUSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>Hot-swap ejector handle</td>
</tr>
</tbody>
</table>

## Conformal Coating

| Humiseal 1A33 Polyurethane (Optional) |
| Humiseal 1B31 Acrylic (Optional) |

## Other

<table>
<thead>
<tr>
<th>MTFB</th>
<th>MIL Hand book 217-F @ TBD Hrs</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Certifications</th>
<th>Designed to meet FCC, CE and UL certifications where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warranty</th>
<th>Two (2) years</th>
</tr>
</thead>
</table>

## Trademarks and Disclaimer

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2.5” SATA III/SAS-3 Drive, 12 Gbps RAID HBA – AMC627

ORDERING OPTIONS

AMC627 – 0BC – D00 – 0HJ

B = SAS Drive Capacity
0 = None
1 = 400 GB (SSD)
2 = 800 GB (SSD)
3 = Reserved
4 = 2.5” Rotary and other SAS/SATA size**

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

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

H = Operating Temperature
0 = Commercial (-5° to +55° C)
1 = Industrial (-20° to +70° C)
2 = Military (-40° to +80° C)*

J = Conformal Coating
0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic

* Edge of module for conduction-cooled
** Contact VadaTech Sales for more information

RELATED PRODUCTS

EXP100 Express Chassis Platform
MCH002 MCH
UTC020 1000W DC Power Module

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