AMC232 – AMC Dual-port 10GbE, RJ-45

KEY FEATURES

- Dual 10GbE over RJ45
- PCIe Gen3 x4 lanes, AMC.1 compliant
- IEEE P802.1AE LinkSec
- IPV6 Support for IP/TCP
- 10Gb/s full duplex bandwidth
- TCP Segmentation off load: up to 256 KB
- Jumbo Frames of up to 15.5 KB
- Dynamic Interrupt moderation
- Eight VLAN L2 Filters
- 16 Flex L3 Port Filters
- Four L3 Address Filters (IPV4)
- Four L3 Address Filters (IPV6)
- IPMI 2.0 compliant
- RoHS compliant

Benefits of Choosing VadaTech

- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company

The AMC232 is a single-width, mid-height AdvancedMC™ (AMC) based on the AMC.1 specification (full-height option available). The AMC232 provides Dual 10 Gigabit Ethernet via front panel RJ-45.

The AMC232 supports IEEE802.1AE LinkSec Specifications. The module can off-load IPsec for up to 1024 Security Associations (SA) for each TX and RX.

The AMC232 provide wire speed dual-port 10GbE throughput. The module reduces end-to-end latency for high priority traffic. In order to enhance the CPU utilization, the module supports Receive Side Coalescing (RSC).

The AMC232 supports the IEEE P802.1AE LinkSec specification. It incorporates an in-line packet crypto unit, off-load IPSec for up to 1024 Security Associations (SA), AH and ESP protocols for authentication and encryption, AES-128-GMAC and AES-128-GCM.
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BLOCK DIAGRAM

Figure 1: Block Diagram

FRONT PANEL

10 GbE 0  
10 GbE 1  
MGT RS-232  
AMC232
## 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></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 Serial</td>
<td>10 GbE Dual port, 10 Gbps per port</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>x4 PCIe Gen 3 lanes</td>
</tr>
</tbody>
</table>

### Configuration

<table>
<thead>
<tr>
<th>Power</th>
<th>AMC232</th>
<th>11 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Temperature</td>
<td>Operating temperature: -5° to 65° C (air flow requirement of &gt;200 LFM), (See environmental spec sheet)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storage temperature: -40° to +90° C</td>
</tr>
<tr>
<td>Vibration</td>
<td>1 G, 50-500 Hz on each axis</td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>30 Gs on each axis</td>
<td></td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95 percent, non-condensing</td>
<td></td>
</tr>
<tr>
<td>Front Panel</td>
<td>LEDs</td>
<td>IPMI management control</td>
</tr>
<tr>
<td></td>
<td>Link/Activity</td>
<td>Dual RJ-45</td>
</tr>
<tr>
<td></td>
<td>Interface</td>
<td>Hot swap ejector handle</td>
</tr>
</tbody>
</table>

### 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                                       |

## 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.

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ORDERING OPTIONS

AMC232 – 00C – 000 – 00J

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

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

RELATED PRODUCTS

VT866 5U µTCA Chassis, 12 Full Size AMC, 40GbE
AMC211 Dual-Port 10GbE with SFP+
UTC020 Power Module

CONTACT US

VadaTech Corporate Office
198 N. Gibson Rd.
Henderson, NV 89014
Email: info@vadatech.com
Telephone: +1 702 896-3337
Fax: +1 702 896-0332

Asia Pacific Sales Office
7th Floor, No. 2, Wenhu Street, Neihu District, Taipei City, Taiwan11445
Email: info@vadatech.com
Telephone: +886-2-2627-7655
Fax: +886-2-2627-7792

VadaTech European Sales Office
Ocean Village Innovation Centre, Ocean Way,
Ocean Village, Southampton, SO14 3JZ
Email: info@vadatech.com
Telephone: +44 2380 381982
Fax: +44 2380 381983