AMC344
AMC Graphic Board with 4 Mini Display Ports

Key Features
- AMC Mid-size or Full-size option
- AMC.1 PCIe Gen3 x8 or x4
- Based on AMD graphics processor E9171
- Support for four displays 4096x2160 (4K display)
- Support for one 5120x2880 @ 60 Hz single cable
- Support for two 5120x2880 @ 60 Hz dual-cable
- 4 GB of GDDR5 Memory
- Optimized for DirectX 12

Benefits
- Uses high performance graphics processor
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company
AMC344

The AMC344 is a third generation VadaTech graphics module designed to meet the high-performance needs of Military, Industrial and Telecom applications. The mid-size board is one of the fastest and most advanced, high-performance 2D and 3D graphics processors available for the ATCA/uTCA embedded market.

The module is compliant to the AMC.1 specification with PCIe x4 or x8.

The module offers 4 GB of GDDR5 memory and supports up to four independent displays with resolutions of 4096x2160 @ 60 Hz (4K Display). The module could also support one 5120x2880 @ 60 Hz single-cable or dual 5120x2880 @ 60 Hz dual-cable.

Figure 1: AMC344
Block Diagram

Figure 2: AMC344 Functional Block Diagram

Front Panel
## Specifications

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Dimensions</th>
<th>Single-Width, Mid-Size or Full-Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Width</td>
<td>2.89&quot; (73.5mm)</td>
</tr>
<tr>
<td></td>
<td>Depth</td>
<td>7.11&quot; (180.6mm)</td>
</tr>
<tr>
<td>Type</td>
<td>AMC</td>
<td>AMC.1 Graphics board</td>
</tr>
<tr>
<td>Ports</td>
<td>4</td>
<td>Mini Display Ports</td>
</tr>
<tr>
<td>Video Resolution</td>
<td>4096x2160 @ 60 Hz (4K Display)</td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>4 GB GDDR-5</td>
<td></td>
</tr>
<tr>
<td>PCIe Lanes</td>
<td>x4 or x8</td>
<td>(ports 4-7 or 4-11)</td>
</tr>
</tbody>
</table>

### Standards

- CompactPCI Type AMC.0 and AMC.1
- Module Management IPMI Version 2.0

### Configuration

- Power AMC 40 W
- Temperature See Ordering Options
  - Storage Temperature: −40° to +90°C
  - Vibration Operating 9.8 m/s² (1G), 5 to 500 Hz on each axis
  - Shock Operating 30G on each axis
  - Relative Humidity 5 to 95% non-condensing

### Front Panel

- Interface Connectors Mini Display Port
- LEDs DP detect and power fail
- Mechanical Hot-swap ejector handle

### Software Support

- Operating System Linux and Windows

### Other

- MTBF MIL Hand book 217-F@ TBD hrs
- Certifications Designed to meet FCC, CE and UL certifications, where applicable
- Standards VadaTech is certified to both the ISO9001:2015 and AS9100D standards
- Warranty Two (2) years, see VadaTech Terms and Conditions

### INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of OpenVPX, ATCA and MTCA products including chassis platforms, shelf managers, AMC modules, Switch and Payload Boards, Rear Transition Modules (RTMs), 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.
Ordering Options

AMC344 – A0C-000-00J

A = PCIe Lanes
0 = x4
1 = x8

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

J = Temperature range and Conformal 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 = Extended (–40° to +85° C), Humiseal 1A33 Polyurethane
7 = Extended (–40° to +85° C), Humiseal 1B31 Acrylic

Notes: ** Conduction cooled temperature is at edge of module. Consult factory for availability

Related Products

UTC004
- Unified 1 GHz quad-core CPU for MCMC, Shelf Manager, Clocking, and Fabric management
- Automatic fail-over with redundant UTC004s
- Full Layer 2 or 3 managed Ethernet switches

UTC020
- Single module, full-size per AMC.0
- Dual -36V DC to -75V DC input, 936W (available in 468W)
- Hot swappable with support for power module redundancy

VT866
- MTCA System Platform 19” x 5U x 10.5” deep (with handles 12” deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and dual Power Modules
- Up to 12 AMCs in single width/full-size
Choose VadaTech

We are technology leaders
• First-to-market silicon
• Constant innovation
• Open systems expertise

We commit to our customers
• Partnerships power innovation
• Collaborative approach
• Mutual success

We deliver complexity
• Complete signal chain
• System management
• Configurable solutions

We manufacture in-house
• Agile production
• Accelerated deployment
• AS9100 accredited