## 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

| <b>-</b> | ІРМВ                | IPMI Controller |       | IPMI<br>RS-232 | LE Ds )<br>Micro USB | 1 |
|----------|---------------------|-----------------|-------|----------------|----------------------|---|
|          |                     |                 |       | <br>           | DP                   |   |
|          | AMC.1 PCle x4 or x8 |                 | E9171 |                | DP                   |   |
|          |                     | - I             |       |                | DP                   |   |
|          |                     |                 | L     |                | DP                   |   |
|          |                     |                 |       |                |                      |   |

Figure 2: AMC344 Functional Block Diagram

## Front Panel



### Specifications

| Architecture           |  |   |  |  |
|------------------------|--|---|--|--|
| Physical Dimensions    |  | Single-Width, Mid-Size or Full-Size                           |  |  |
|                        |  | Width: 2.89" (73.5mm)   |  |  |
|                        |  | Depth 7.11" (180.6mm)   |  |  |
| Туре АМС               |  | AMC.1 Graphics board  |  |  |
|                        | Ports  | 4 Mini Display Ports  |  |  |
| Video Resolution       |  | 4096x2160 @ 60 Hz (4K Display)                                |  |  |
|                        | Memory   | 4 GB GDDR-5   |  |  |
| PCle                   | Lanes  | x4 or x8 (ports 4-7 or 4-11)                                  |  |  |
| Standards              |  |   |  |  |
| CompactPCI Type        |  | AMC.0 and AMC.1   |  |  |
| Module Management IPMI |  | Version 2.0   |  |  |
| Configuration          |  |   |  |  |
| Power                  | AMC  | 40 W  |  |  |
| Environmental Tempe    |  | e See Ordering Options  |  |  |
|                        |  | Storage Temperature: -40° to +90°C                            |  |  |
|                        | Vibration  | Operating 9.8 m/s <sup>2</sup> (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               | arranty Two (2) years, see <u>VadaTech Terms and Conditions</u>      |   |  |  |
| -                      | · · ·  |   |  |  |

#### 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 preconfigured Application-Ready Platforms. Please contact VadaTech Sales for more information.

### **Ordering Options**

#### AMC344 – A0C-000-00J

| A = PCle Lanes   |   |
|--|---|
| 0 = x4<br>1 = x8   |   |
|  |   |
|  |   |
| C = Front Panel  | J = Temperature range and Conformal Coating   |
| 1 = Reserved<br>2 = Mid-size<br>3 = Full-size<br>4 = Reserved<br>5 = Mid-size, MTCA.1 (captive screw)<br>6 = Full-size, MTCA.1 (captive screw) | 0 = Commercial ( $-5^{\circ}$ to +55° C), No coating<br>1 = Commercial ( $-5^{\circ}$ to +55° C), Humiseal 1A33 Polyurethane<br>2 = Commercial ( $-5^{\circ}$ to +55° C), Humiseal 1B31 Acrylic<br>3 = Industrial ( $-20^{\circ}$ to +70° C), No coating<br>4 = Industrial ( $-20^{\circ}$ to +70° C), Humiseal 1A33 Polyurethane<br>5 = Industrial ( $-20^{\circ}$ to +70° C), Humiseal 1B31 Acrylic<br>6 = Extended ( $-40^{\circ}$ to +85° C), Humiseal 1A33 Polyurethane **<br>7 = Extended ( $-40^{\circ}$ 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



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- 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

## Contact

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