AMC756

Intel Xeon E3 Processor AMC, PCIe Gen3

Key Features
- Processor AMC Intel® Xeon® Processor E3-1505M v6 (Kaby Lake)
- PCIe Gen3 x4 on Ports 4-7 and 8-11 or single PCIe x8 on Ports 4-11 (AMC.1)
- Serial Over LAN (SOL)
- 16 GB of DDR4 memory with ECC
- 64 GB of Flash memory
- Single module, mid-size (option for full-size) per AMC.0

Benefits
- High performance Xeon E3-1505M processor with CM238 PCH
- Graphics output via Mini Display Port
- 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
AMC756

The AMC756 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC (AMC) form factor based on the Intel® Xeon® Processor E3-1505M v6 (Kaby Lake) with CM238 PCH. The processor base frequency is 3.0 GHz with max turbo frequency of 4.0 GHz. The module follows the AMC.1, AMC.2 and the AMC.3 specifications.

The unit provides dual PCIe Gen3 x4 or single x8 on Ports 4-11 per AMC.1, GbE on Ports 0 and 1 per AMC.2, and SATA on Ports 2 and 3 per AMC.3. It also provides GbE to the front panel.

The AMC756 provides up to 16 GB of DDR4 memory with ECC and 64 GB of Flash for the OS. It also has Serial over LAN (SoL).

The BIOS allows booting from onboard Flash, offboard SATA, PXE boot and USB. There are dual USB 3.0 type C connectors for extended storage or peripherals.

Linux OS is standard on the AMC756, consult VadaTech for other options.

Figure 1: AMC756
Block Diagram

Figure 2: AMC756 Functional Block Diagram

Front Panel

Figure 3: AMC756 Front Panel
### Specifications

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Dimensions Width: 2.89” (73.5 mm) Depth: 7.11” (180.6 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>AMC Processor Intel Xeon E3 Processor AMC, Quad Core, 4.0 GHz</td>
</tr>
</tbody>
</table>
| Standards    | **AMC Type** AMC.0, AMC.1, AMC.2 and/or AMC.3  
**Module Management** IPMI IPMI v2.0  
**PCIe Lanes** Single x8 or dual x4 as PCIe Gen3 |
| Configuration| **Power** AMC756 ~53W  
**Environmental Temperature** See [Ordering Options](#) and [Environmental Spec Sheet](#)  
Storage Temperature: -40° to +90°C  
**Altitude** Chassis dependent  
**Relative Humidity** 5 to 95% non-condensing |
| Front Panel  | **Interface Connectors** 1x RJ-45 for GbE  
2x USB type C connectors for USB 3.0  
2x Micro USB for RS-232  
1x Mini DisplayPort for graphics |
| Software Support | **Operating System** Linux (consult VadaTech for other options) |
| Other        | **MTBF** MIL Handbook 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

### AMC756 – ABC-000-00J

<table>
<thead>
<tr>
<th>A = DDR4 Memory</th>
<th>B = Flash Storage</th>
<th>C = Front Panel Size</th>
<th>J = Temperature Range and Conformal Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Reserved</td>
<td>0 = Reserved</td>
<td>1 = Reserved</td>
<td>0 = Commercial (−5°C to +55°C), No coating</td>
</tr>
<tr>
<td>1 = 16 GB</td>
<td>1 = 64 GB</td>
<td>2 = Mid-size</td>
<td>1 = Commercial (−5°C to +55°C), Humiseal 1A33 Polyurethane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Full-size</td>
<td>2 = Commercial (−5°C to +55°C), Humiseal 1B31 Acrylic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Extended-size (8 HP)</td>
<td>3 = Industrial (−20°C to +70°C), No coating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 = Mid-size, MTCA.1 (captive screws)</td>
<td>4 = Industrial (−20°C to +70°C), Humiseal 1A33 Polyurethane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 = Full-size, MTCA.1 (captive screws)</td>
<td>5 = Industrial (−20°C to +70°C), Humiseal 1B31 Acrylic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 = Extended-size (8 HP), MTCA.1 (captive screws)</td>
<td>6 = Extended (−40°C to +85°C), Humiseal 1A33 Polyurethane*</td>
</tr>
</tbody>
</table>

**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

- **VT853**
  - MicroTCA 1U 19” rack mount chassis platform
  - Six mid-size AMC slots per 1U Carrier or two double module mid-size with two mid-size AMC slots
  - Front to back cooling
Choose VadaTech

We are technology leaders
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• Constant innovation
• Open systems expertise

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

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• AS9100 accredited

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DOC NO. 4FM737-12 REV 01 | VERSION 1.2 – FEB/20