The AMC723 is a Processor AMC (PrAMC) in a single module, mid-size AdvancedMC™ (AMC) form factor based on an Intel® Core i Processor with an 8900 Series PCH.

The module follows the AMC.1, AMC.2 and the AMC.3 specifications. The module provides PCIe on ports 4-7 (AMC.1) and 10GbE on ports 8-11 per AMC.2, dual GbE on ports 0 and 1 per AMC.2, and SATA on ports 2 and 3 per AMC.3. PCIe Gen 3 is available on the Xeon E3 1125 v2 CPU option. The AMC723 also provides dual GbE to the front.

The AMC723 has option for up to 16 GB of DDR3 memory with ECC. It provides 32 GB of Flash for the OS. The AMC723 has Serial over LAN with hardware Random Number Generator (RNG) as seed generator for authentication.

The BIOS allows booting from on board Flash, off board SATA, PXE boot as well as USB.

Linux OS is standard on the AMC723, consult VadaTech for other options.
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

![AMC723 Functional Block Diagram](Figure 1: AMC723 Functional Block Diagram)

FRONT PANEL

![AMC723 Front Panel](Figure 2: AMC723 Front Panel)
# PrAMC based on Intel Xeon E3-1125, Fabric Mix – AMC723

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Physical</th>
<th>Dimensions</th>
<th>Single module, mid-size (full-size optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width</td>
<td>2.89&quot; (73.5 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depth</td>
<td>7.11&quot; (180.6 mm)</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>AMC Processor</td>
<td>Intel® Xeon™ with up to four core at 2.0 GHz and 8 MB LLC</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standards</th>
<th>AMC Type</th>
<th>AMC.0, AMC.1, AMC.2 and/or AMC.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Management</td>
<td>IPMI</td>
<td>IPMI version 2.0</td>
</tr>
<tr>
<td>PCIe Lanes</td>
<td>PCIe on ports 4-7 and XAUI on ports 8-11</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Power AMC723</th>
<th>18W to 58W (CPU dependant)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Temperature</td>
<td>Operating temperature: -5° to 55° C (air flow requirement of &gt;600 LFM), industrial and military versions also available (See <a href="#">environmental spec sheet</a>)</td>
<td></td>
</tr>
<tr>
<td>Vibration</td>
<td>Operating 9.8 m/s² (1G), 5 to 500Hz on each axis</td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>Operating 325G / 2 ms, 160G / 1 ms</td>
<td></td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95 per cent, non-condensing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Front Panel Interface Connectors</th>
<th>Dual GbE via RJ-45</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dual USB via mini USB</td>
</tr>
<tr>
<td></td>
<td>Dual RS-232 via micro USB</td>
</tr>
<tr>
<td>LEDs</td>
<td>IPMI management control</td>
</tr>
<tr>
<td>Activity / Link user LEDs</td>
<td>Hot swap ejector handle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Software Support Operating System</th>
<th>Linux, VxWorks and Windows</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Conformal Coating</th>
<th>Humiseal 1A33 Polyurethane (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Humiseal 1B31 Acrylic (Optional)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th>MTBF</th>
<th>MIL Hand book 217-F@ TBD hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications, where applicable</td>
</tr>
<tr>
<td></td>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
</tr>
<tr>
<td></td>
<td>Warranty</td>
<td>Two (2) years</td>
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</table>

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PrAMC based on Intel Xeon E3-1125, Fabric Mix – AMC723

ORDERING OPTIONS

AMC723 – ABC – D00 – 0HJ

A = CPU Core, Speed, Cache
1 = 4C, 2 GHz, 8 MB LLC (Xeon E3-1125)
2 = Reserved
3 = Reserved
4 = Reserved
5 = Reserved
6 = Reserved
7 = 4C, 2.5 GHz, 8 MB LLC (Xeon E3 1125 v2)

B = DDR3 ECC Memory
0 = 4 GB
1 = 8 GB
2 = 16 GB

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

D = Flash Memory
0 = None
1 = Reserved
2 = Reserved
3 = 32 GB*
* VadaTech reserves the right to supply larger capacity unless specifically stated otherwise on the Purchase Order

H = Temperature Range
0 = Commercial (–5 to +55° C)
1 = Industrial (–20 to +70° C)

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

COMMON CONFIGURATIONS

AMC723-12x-300-000
AMC723-322-300-000
AMC723-11x-000-002

RELATED PRODUCTS

VT811 MicroTCA.4 Chassis
AMC520 MicroTCA.4 A/D Converter
UTC018 Power Module (12HP)

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Version 6.2 – MAR/16

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