AMC 24-channel Isolated Output Module – AMC097

KEY FEATURES

- 24-channel isolated output
- Single module, compact size (mid-size and full-size available)
- Front panel I/O connectivity in a half-size AMC compliant form factor
- Input voltage from 10V to 38V with 45V surge @ 500 ms
- Interrupt levels are user selectable
- AMC.1 compliant
- 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
- Full ecosystem of front and rear boards, enclosures, specialty modules, and test/dev products from one source
- AS9100 and ISO9001 certified company

The AMC097 is a single module, compact size (mid-size and full-size options are available) AdvancedMC™ (AMC) 24-Channel Isolated Output board.

The outputs are divided into two categories. The isolated output voltage is used to drive 12 ports and another set of 12 Ports is used to sink current.

Each output channel is independent and is processed separately, so activity on one channel has no effect on other channels. A key feature of the AMC097 is the capability to have multiple outputs change state with a single atomic-write transaction.

On the AMC097 the PODO is connected to the +28V Air Craft Voltage.

See Super Carrier for high-density processing platforms compatible with this product.
INTEGRATION SERVICES AND APPLICATION-READY PLATFORMS

VadaTech has a full ecosystem of ATCA and MTCA 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

![Block Diagram](image)

**Figure 1: Block Diagram**

FRONT PANEL

![Front Panel](image)

**Figure 2: Front Panel**
# AMC 24-channel Isolated Output Module – AMC097

## Specifications

### Architecture

<table>
<thead>
<tr>
<th>Physical</th>
<th>Dimensions</th>
<th>Width: 2.89&quot; (73.5 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Depth 7.11&quot; (180.6 mm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Single module, compact size (mid and full size options available)</td>
</tr>
</tbody>
</table>

### Type

| AMC Input | 24 outputs: Twelve outputs current source based on isolated output voltage, Twelve outputs current sink. Multiple outputs will change state with a single write. |

### Standards

<table>
<thead>
<tr>
<th>AMC</th>
<th>Type</th>
<th>AMC.0 and 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</td>
</tr>
</tbody>
</table>

### Configuration

<table>
<thead>
<tr>
<th>Power</th>
<th>AMC097</th>
<th>3W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating temperature: -5° to 45°C (55°C for limited time, performance restrictions may apply), (See environmental spec sheet)</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40° to +85°C</td>
<td></td>
</tr>
<tr>
<td>Vibration</td>
<td>Operating 9.8 m/s² (1G), 5 to 500 Hz on each axis</td>
<td></td>
</tr>
<tr>
<td>Shock</td>
<td>Operating 30Gs each axis</td>
<td></td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5 to 95%, non-condensing</td>
<td></td>
</tr>
</tbody>
</table>

### Front Panel

<table>
<thead>
<tr>
<th>Interface Connectors</th>
<th>51-pin Micro DIN connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEDs</td>
<td>IPMI management control</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Hot-swap ejector handle</td>
</tr>
</tbody>
</table>

### Software Support

| Operating System | Independent |

### Other

| MTBF               | MIL Handbook 217-F @ 242,000 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 |

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ORDERING OPTIONS

AMC097 – 00C – 000 – 00J

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

J = Temperature Range and Coating
0 = Commercial, No coating
1 = Commercial, Humiseal 1A33 Polyurethane
2 = Commercial, Humiseal 1B31 Acrylic
3 = Industrial, No coating
4 = Industrial, Humiseal 1A33 Polyurethane
5 = Industrial, Humiseal 1B31 Acrylic
6 = Extended, Humiseal 1A33 Polyurethane*
7 = Extended, Humiseal 1B31 Acrylic*

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

RELATED PRODUCTS

UTC008 
μTCA JTAG Switch Module (JSM)

VT866 5U 
Chassis Platform

UTC004 
MicroTCA Carrier Hub (MCH)

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