MRT580A

MTCA.4 RTM for AMC580

Key Features

- MicroTCA.4 RTM for the AMC580
- Rear Access Digital Input/Out
- Quad GbE
- Dual USB 2.0
- RS-232

Benefits

- Expertise in RTM and MTCA.4 board design
- Full ecosystem of MicroTCA.4 AMCs, PMs, MCH, RTMs, chassis, and application-ready systems
- Design utilizes proven VadaTech subcomponents and engineering techniques
- Electrical, mechanical, software, and system-level expertise in house
- AS9100 and ISO9001 certified company
**MRT580A**

The MRT580A is a Rear Transition Module (RTM) for VadaTech's AMC580, routing I/O signals to the rear panel. The module has quad GbE ports via RJ-45 with dual USB 2.0.

VadaTech offers a wide range of MicroTCA.4 products, including full systems. Contact your local salesperson or representative for details.

*Figure 1: MRT580A*
**Figure 2: MRT580A Functional Block Diagram**

- **GBE Ports**: 0, 1, 4-7/8-11, 12-15, 17-20
- **FCLK**: Single Bank DDR4 64-bit Wide with ECC
- **Jitter Cleaner**: Class D1.2
- **I/O Translation**: PCIe to Quad GbE
- **USB**: 2.0

**Figure 3: AMC580 Functional Block Diagram (sold separately)**

- **GbE Ports**: 0, 1, 4-7/8-11, 12-15, 17-20
- **FCLK**: Single Bank DDR4 64-bit Wide with ECC
- **Jitter Cleaner**: Class D1.2
- **128 MB FLASH**: SD CARD
- **64 GB FLASH**: MGT RS-232
- **Xilinx XCZU19EG**: IPMI Controller
- **Micro USB**: LEDs
- **Micro USB**: DP
- **Micro USB**: USB
- **Micro USB**: CPU RS-232
- **Micro USB**: USB
## Specifications

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Dimensions</th>
<th>Physical Type</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Double module full-size</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Width: 5.85&quot; (148.5 mm)</td>
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</tr>
<tr>
<td></td>
<td>Depth 7.18&quot; (182.6 mm)</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTCA</td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>Module Management</td>
<td>IPMI v2.0</td>
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<tr>
<td>Power</td>
<td>MRT580A</td>
<td>4W</td>
</tr>
<tr>
<td>Environmental</td>
<td>Temperature</td>
<td>See Ordering Options</td>
</tr>
<tr>
<td></td>
<td>Storage Temperature: −40° C to +85°C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vibration</td>
<td>Operating 9.8 m/s² (1G), 5 to 500 Hz on each axis</td>
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<tr>
<td></td>
<td>Shock</td>
<td>30Gs each axis</td>
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<tr>
<td>Rear Panel</td>
<td>Interface Connectors</td>
<td>Four 9-way Nanonic coax</td>
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<tr>
<td></td>
<td></td>
<td>MicroUSB for IPMI</td>
</tr>
<tr>
<td></td>
<td>LEDs</td>
<td>IPMI management control</td>
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<tr>
<td></td>
<td>Mechanical</td>
<td>Hot swap ejector handle</td>
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<tr>
<td>Software Support</td>
<td>Operating System</td>
<td>N/A</td>
</tr>
<tr>
<td>Other</td>
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</tr>
<tr>
<td>MTBF</td>
<td>MIL Handbook 217-F@ TBD hrs</td>
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<tr>
<td>Certifications</td>
<td>Designed to meet FCC, CE and UL certifications, where applicable</td>
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<tr>
<td>Standards</td>
<td>VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards</td>
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<tr>
<td>Warranty</td>
<td>Two (2) years, see VadaTech Terms and Conditions</td>
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### 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

MRT580A – 00C-000-00J

C = Front Panel Size          J = Temperature Range and Coating
1 = Reserved                   0 = Commercial (–5° to +55°C), No coating
2 = Reserved                   1 = Commercial (–5° to +55°C), Humiseal 1A33 Polyurethane
3 = Reserved                   2 = Commercial (–5° to +55°C), Humiseal 1B31 Acrylic
4 = Reserved                   3 = Industrial (–20° to +70°C), No coating
5 = Reserved                   4 = Industrial (–20° to +70°C), Humiseal 1A33 Polyurethane
6 = Full-size, MTCA.4 (captive screws) 5 = Industrial (–20° to +70°C), Humiseal 1B31 Acrylic

For operational reasons VadaTech reserves the right to supply a higher speed FPGA device than specified on any particular order/delivery at no additional cost, unless the customer has entered into a Revision Lock agreement with respect to this product.

Related Products

AMC523

- Dual DAC 16-bit @ 250 MSPS utilizing MAX5878 device (user programmable for lower sampling rate)
- Xilinx Kintex-7 FPGA XC7K410T in FFG900 package
- Supported by DAQ Series™ data acquisition software

VT811

- MTCA System Platform 19” x 8U x 14.9” deep (with handles 16.23” deep)
- Full redundancy with dual MicroTCA Carrier Hub (MCH), dual Cooling Units and quad Power Modules
- Up to twelve AMCs: 12 front mid-size double module slots and RTM slots

UTC018

- Double-module, 12 HP height module per AMC.0
- Universal AC input (85 to 265V), 1000W
- Provides power up to 12 AMCs, 2 MCHs and Cooling Units
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

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