

# MRT576B

## MTCA.4 RTM for AMC576



MRT576B

## Key Features

- MicroTCA.4 RTM for the AMC576
- 16 ADC and 16 DAC signals to rear (Zone three)
- DC-coupled ADC inputs have low noise and programmable amplifiers.
- DC-coupled DAC have output amplifiers
- Trigger routed to rear panel (four trig in and two trig out)
- 16 Programmable LED with 8 LVDS Input/Output

## 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

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# MRT576B

The MRT576B is a Rear Transition Module (RTM) for VadaTech's AMC576, routing analog and user I/O signals to the rear panel.

The 16 ADC/DAC are DC coupled to the ADC/DAC. The 16 RF Input channels are routed via programmable and low-noise amplifiers. The 16 DAC output go thru a Differential-to-Single-Ended Amplifier. The 16 ADC channels have the same front end as well as the 16 DAC channels.

Four Trig in and two Trig out signals are also supported.

The module has 16 LEDs (user defined) as well as a High Density (HD) connector for user I/O.

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

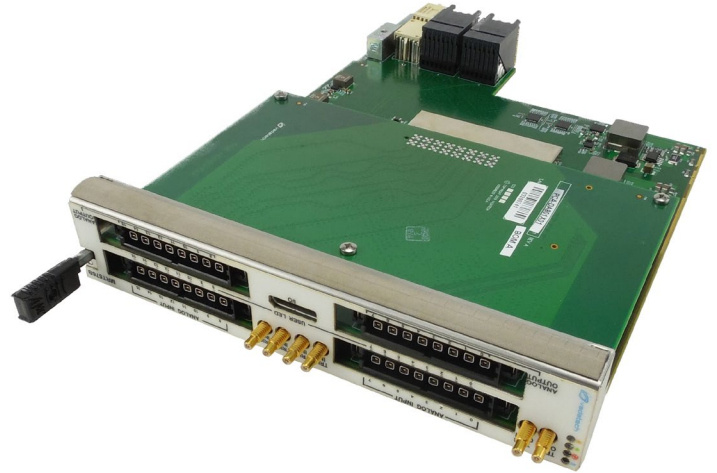


Figure 1: MRT576B

# Block Diagram

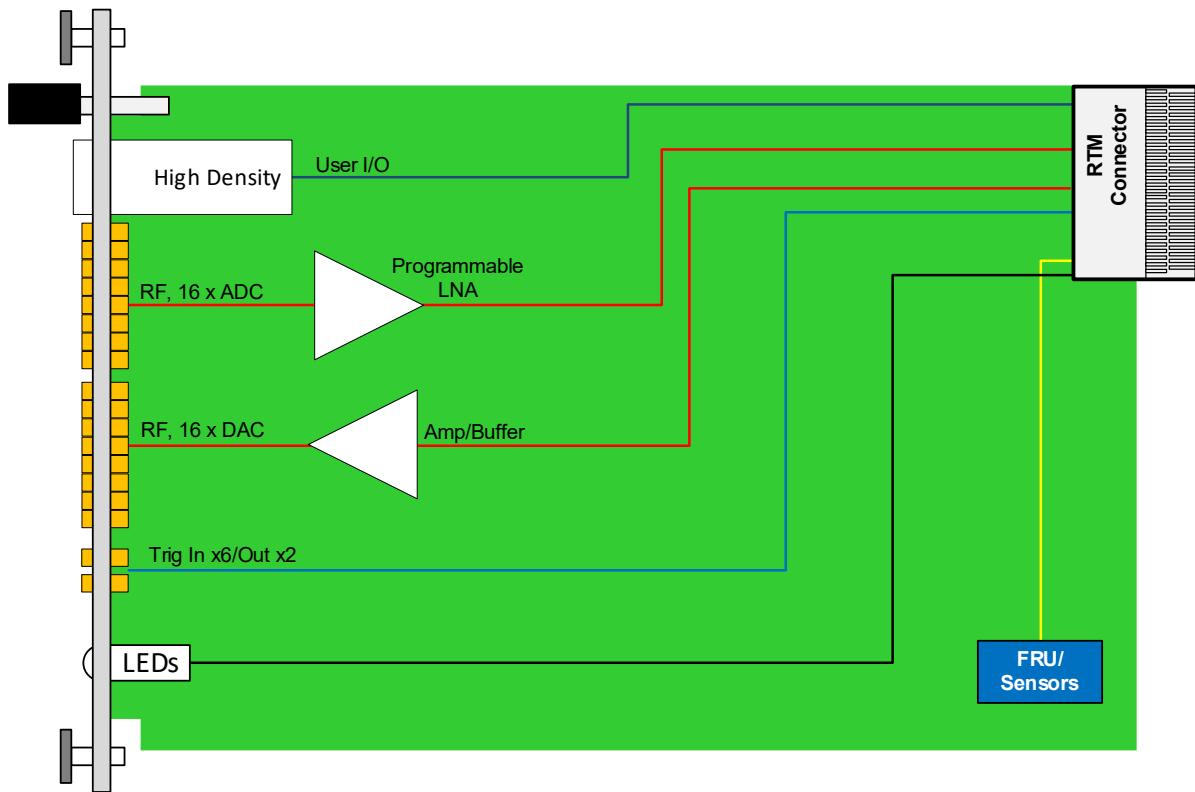


Figure 2: MRT576B Functional Block Diagram

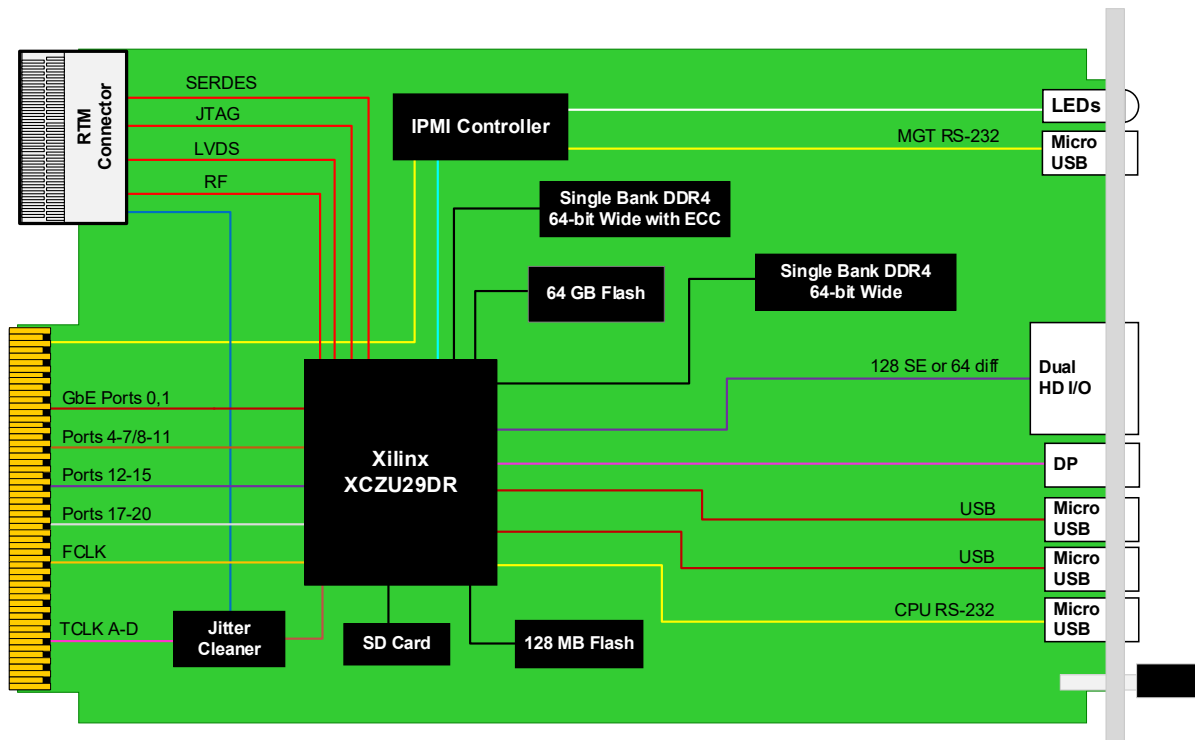


Figure 3: AMC576 Block Diagram (sold separately)

# Specifications

Architecture	
<b>Physical</b>	<b>Dimensions</b> Double module, full-size Width: 5.85" (148.5 mm) Depth 7.18" (182.6 mm) Weight: TBD
<b>Type</b>	Analog I/O MicroRTM Single Mezzanine Card Slot
Standards	
<b>MTCA</b>	<b>Type</b> MTCA.4 RTM
<b>Module Management</b>	<b>IPMI</b> IPMI v2.0
Configuration	
<b>Power</b>	<b>MRT576B</b> ~8W
<b>Environmental</b>	<b>Temperature</b> See <a href="#">Ordering Options</a> Storage Temperature: -40° to +85°C <b>Vibration</b> Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500 Hz on each axis <b>Shock</b> 30Gs each axis <b>Relative Humidity</b> 5 to 95% non-condensing
<b>Rear Panel</b>	<b>Interface Connectors</b> RF via high density HD User I/O <b>LEDs</b> User, IPMI management control <b>Mechanical</b> Hot-swap ejector handle
<b>Software Support</b>	<b>Operating System</b> N/A
Other	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2015 and AS9100D standards
<b>Warranty</b>	Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>

## 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

MRT576B – 00C-000-00J

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

## 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

# Contact

## VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

## Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

## VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://www.vadatech.com)

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- Mutual success

## We deliver complexity

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- System management
- Configurable solutions

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- Accelerated deployment
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