

# 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

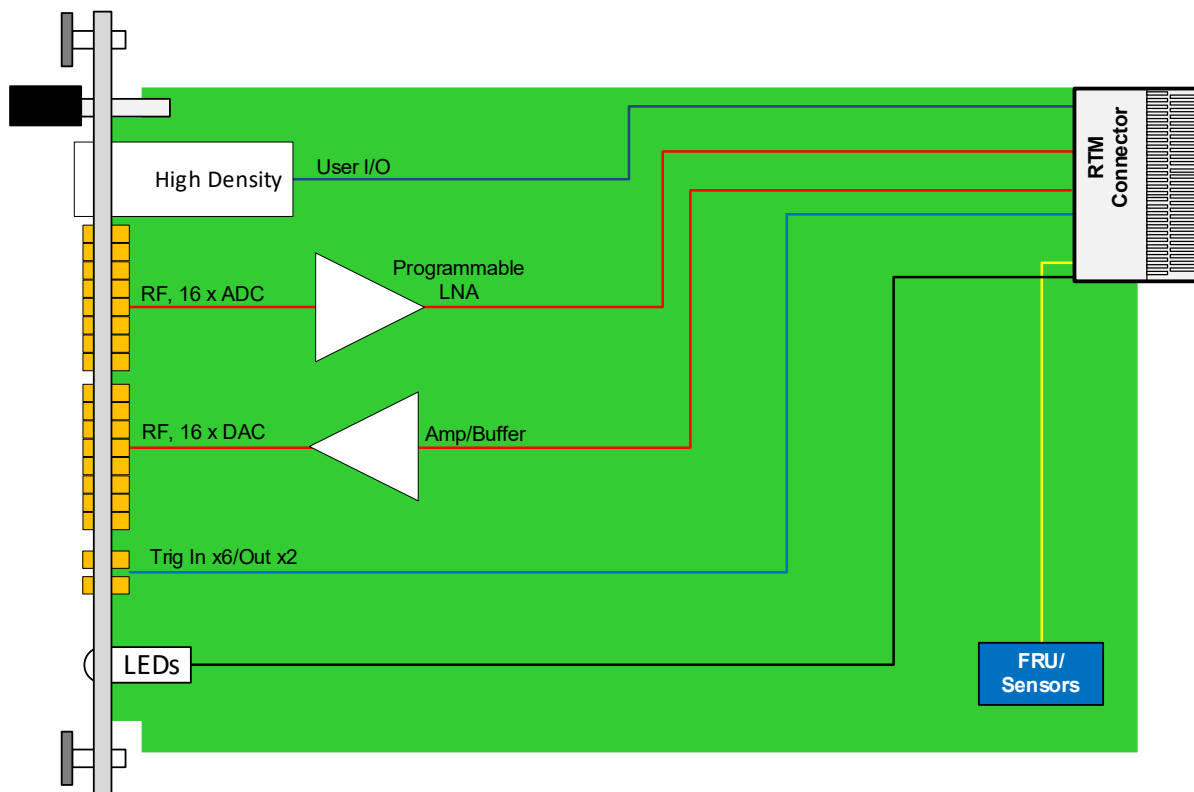


Figure 2: MRT576B Functional Block Diagram

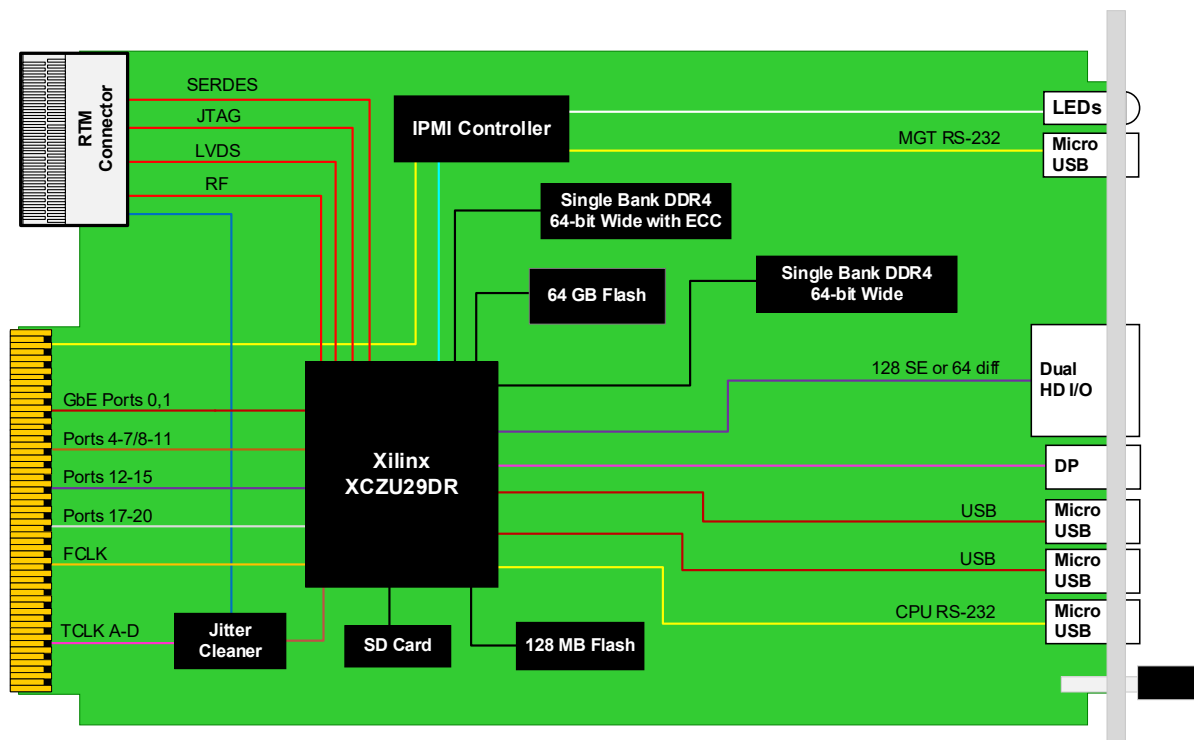


Figure 3: AMC576 Block Diagram (sold separately)

# Specifications

Architecture		
Physical	Dimensions	Double module, full-size
		Width: 5.85" (148.5 mm)
		Depth 7.18" (182.6 mm)
		Weight: TBD
Type		Analog I/O MicroRTM
		Single Mezzanine Card Slot
Standards		
MTCA	Type	MTCA.4 RTM
Module Management	IPMI	IPMI v2.0
Configuration		
Power	MRT576B	~8W
Environmental	Temperature	See <a href="#">Ordering Options</a>
		Storage Temperature: -40° to +85°C
	Vibration	Operating 9.8 m/s <sup>2</sup> (1G), 5 to 500 Hz on each axis
	Shock	30Gs each axis
	Relative Humidity	5 to 95% non-condensing
Rear Panel	Interface Connectors	RF via high density
		HD User I/O
	LEDs	User, IPMI management control
	Mechanical	Hot-swap ejector handle
Software Support	Operating System	N/A
Other		
MTBF	MIL Hand book 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 <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

<b>C = Front Panel Size</b>		<b>J = Temperature Range and Coating</b>
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

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