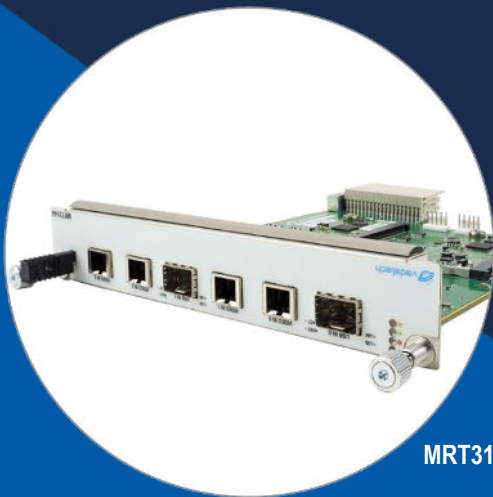


# MRT314A

Four Video input via Optics with  
dual USB 2.0 over Optics MTCA.4  
RTM for AMC314



MRT314A

## Key Features

- MicroTCA.4 RTM for the AMC314 Module
- Four Video Input over Optics
- Dual USB 2.0 over Optics (as end points)

## 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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# MRT314A

The MRT314A is a Rear Transition Module (RTM) for VadaTech's AMC314 which provides four optical video inputs as well as dual USB2.0 optical endpoint device inputs to the front module FPGA.

The video input comes in as single strand LC optical cable which carry four wave length (Wave Division Multiplex, WDM).

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

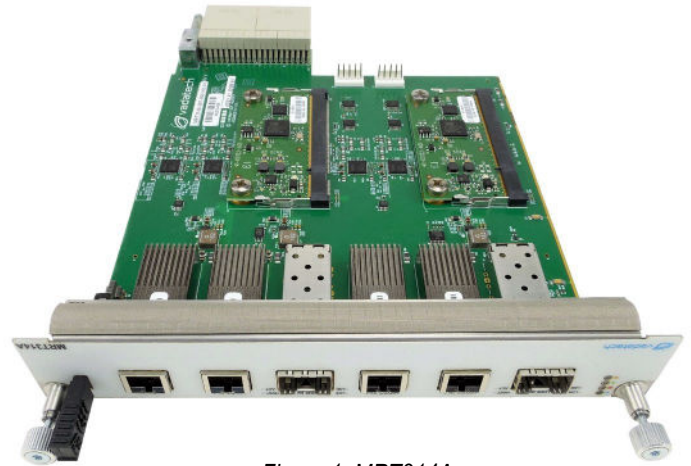


Figure 1: MRT314A

## Block Diagram

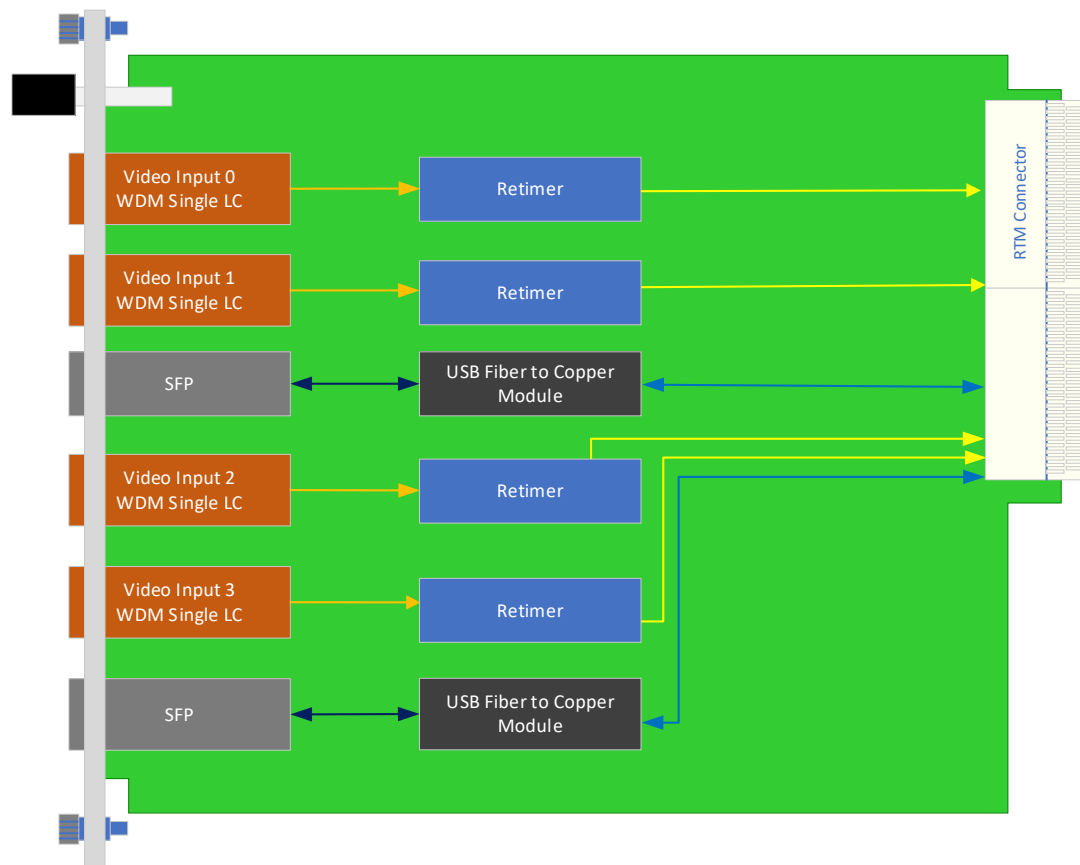


Figure 2: MRT314A Functional Block Diagram

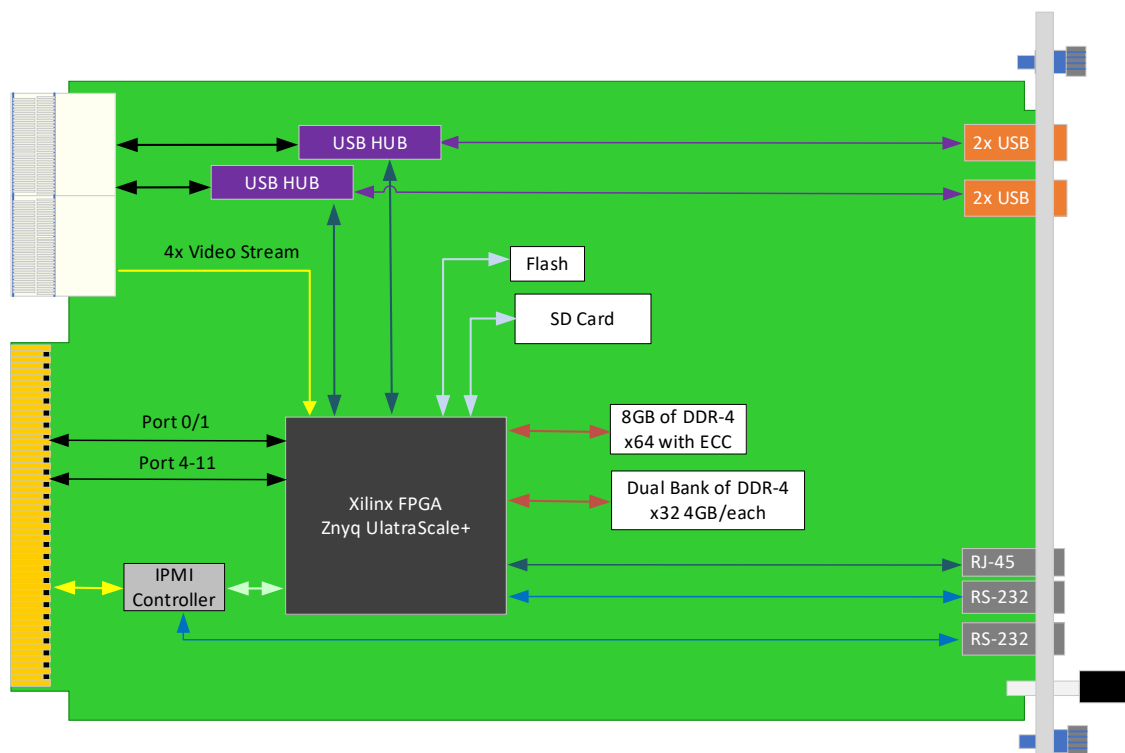


Figure 3: AMC314 Functional Block Diagram (sold separately)

# Specifications

Architecture		
Physical	Dimensions	Double module, mid-size (full-size optional)
		Width: 5.85" (148.5 mm)
		Depth 7.18" (182.6 mm)
Type		Optical video and USB
Standards		
MTCA	Type	MTCA.4 RTM
Module Management	IPMI	IPMI v2.0
Configuration		
Power	MRT314A	9W
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	WDM (four wave length) thru single strand LC optical cable for the video input
		Dual SFP ports for the USB optical
	LEDs	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 ISO9001:2000 and AS9100B:2004 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

## MRT314A – 00C-000-00J

<b>C = Front Panel Size</b>		<b>J = Temperature Range and Coating</b>
1 = Reserved 2 = Reserved 3 = Full-size 4 = Reserved 5 = Reserved 6 = Reserved 7 = Full-size, MTCA.1 (captive screw) 8 = Reserved		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

Notes: \*ADC inputs are only routed to rear panel when full-size panel selected.

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

VT813



- MTCA.4 Chassis Platform with rear I/O
- 19" x 8U x 14.9" deep (with handles 16.23" deep)
- Full redundancy with dual MicroTCA Carrier Hubs

AMC314



- Xilinx UltraScale+ XCZU7EV FPGA
- 4x Video Stream from the RTM
- Dual USB 2.0 from the RTM to FPGA

UTC006



- 3<sup>rd</sup> Gen MicroTCA Carrier Hub (MCH)
- Double module, full size per AMC.0 and MTCA.4
- Multiple Fabric Options (PCIe Gen3, 40G and others) and Full Layer 3 managed Ethernet switch

# Contact

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- Constant innovation
- Open systems expertise

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- 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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