

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

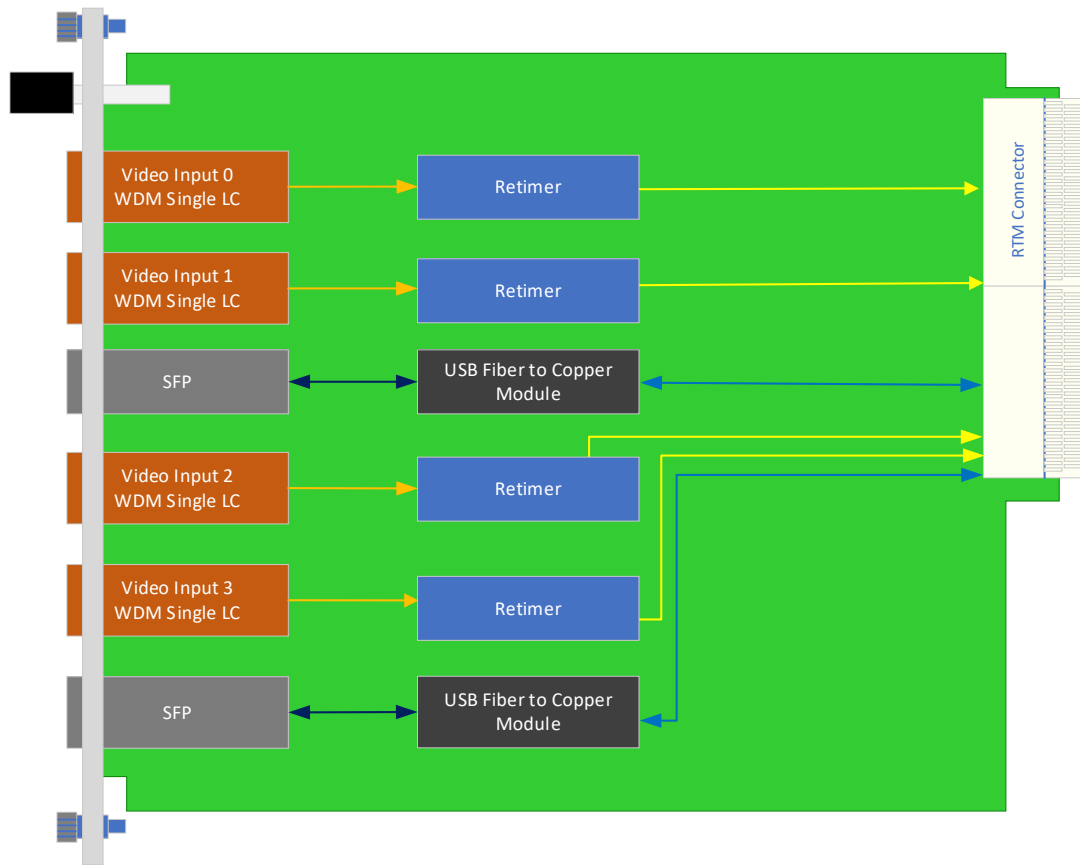


Figure 2: MRT314A Functional Block Diagram

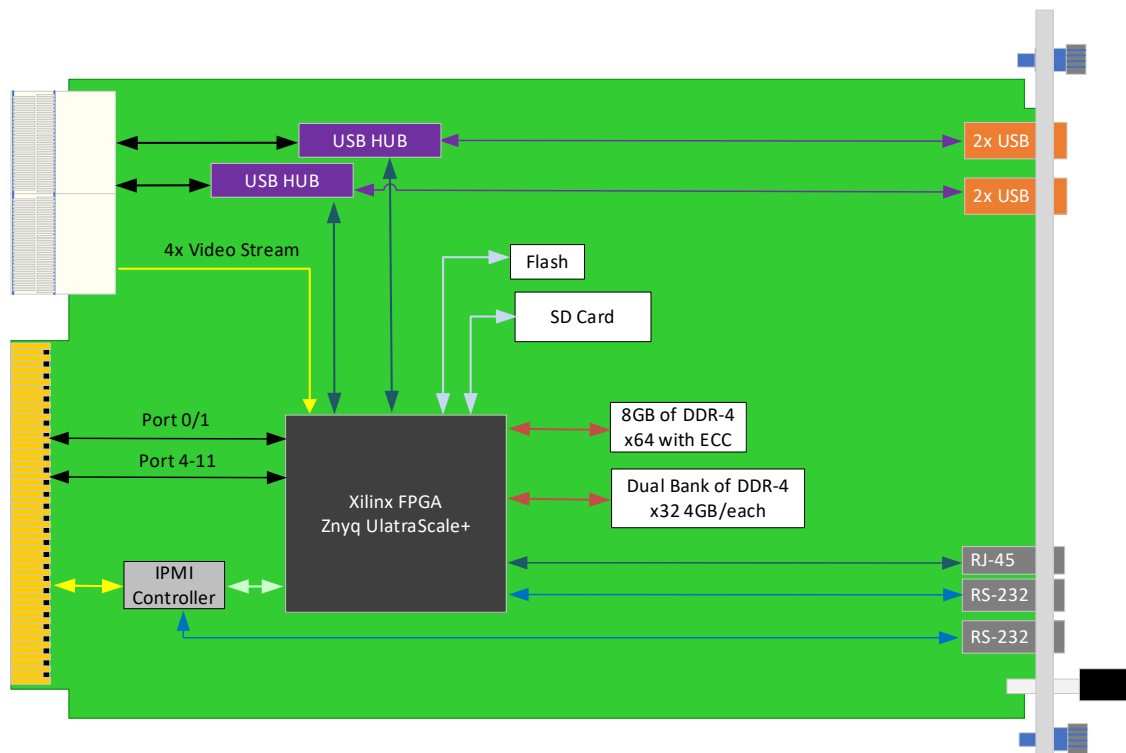


Figure 3: AMC314 Functional Block Diagram (sold separately)

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 Ordering Options Storage Temperature: -40° to +85°C Vibration Operating 9.8 m/s ² (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 VadaTech Terms and Conditions

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

C = Front Panel Size	J = Temperature Range and Coating
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



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

UTC006



- 3rd 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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