

VRT592A

Rear I/O for VPX592, 3U VPX RTM

VRT592A

Key Features

- 3U Rear Transition Module (RTM) per VITA 46 for the VadaTech VPX592 Module
- Quad 10G Optical (can operate down to 1G)
- Quad Isolated General-Purpose Input
- Full Duplex Isolated RS-422
- JTAG Connector

Benefits

- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company

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VRT592A

The VRT592A is a 3U VPX Rear Transition Module (RTM) providing I/O expansion for use with the VadaTech VPX592.

The RTM provides four optical transceivers with the LC style connectors for up to 10Gb speed. The optical transceivers can operate down to one Gb. The optical transceivers are protocol agnostic (Aurora, Ethernet, etc.) and are configured by the FPGA.

The VRT592A provides four Isolated Input as well as having a full duplex isolated RS-422 interface.

The VRT592A has a JTAG connector.

Figure 1: VRT592A

Block Diagram

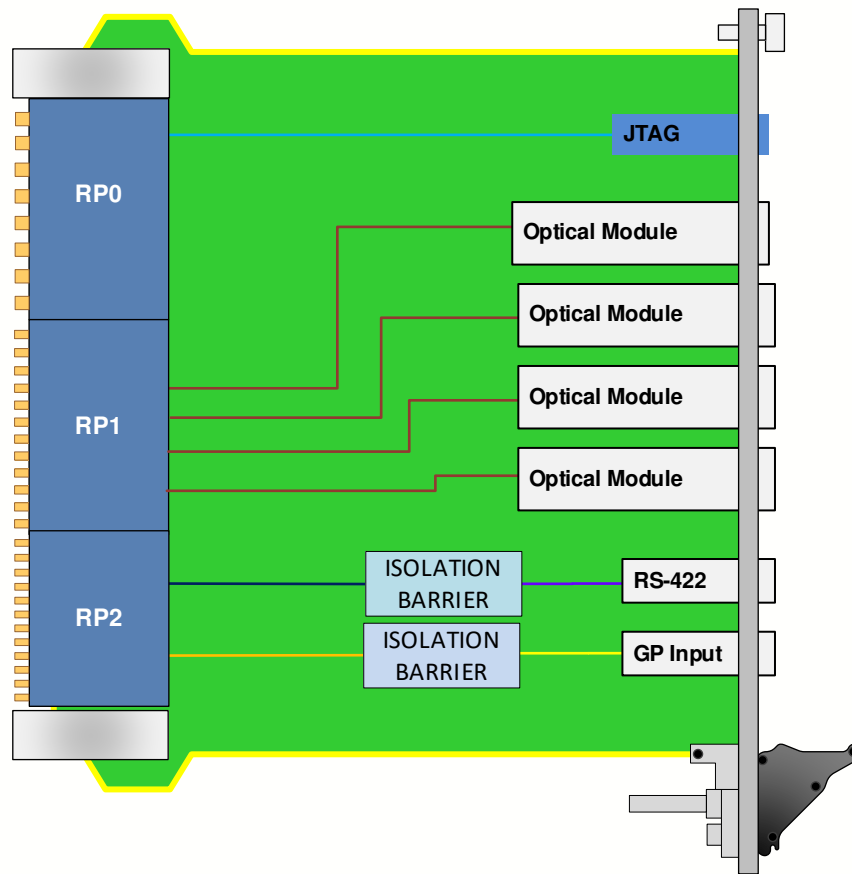


Figure 2: VRT592A Functional Block Diagram

Back Panel

Figure 3: VRT592A Back Panel

Specifications

Architecture		
Physical	Dimensions	3U RTM, 1" pitch
Configuration		
Power	VRT592A	4W
Rear Panel	Connectors	2mm JTAG
		1mm Pitch connectors for the General-Purpose Input and RS-422
		Optical LC style
VPX Interfaces	Slot Profiles	See Ordering Options
	Backplane	RP0: JTAG
		RP1: Four High speed SEREDS to Optical Modules
		RP2: General Purpose Input and RS-422
	Power Supplies	RP0: VS1 = 12V
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

VRT592A – 000-000-0HJ

		H = Environmental
		See Environmental Specification
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic 3 = Parylene

Environmental Specification

	Air Cooled			Conduction Cooled	
Option H	H = 0	H = 1	H = 2	H = 3	H = 4
Operating Temperature	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
Storage Temperature	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
Operating Vibration	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
Storage Vibration	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes: *Nomenclature per ANSI/VITA 47. Contact local sales office for conduction cooled (H = 2, 3, 4)

Related Products

VPX518



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Zynq-7000 FPGA in FFG-900 package (XC7Z100 or XC7Z045)
- Protocols such as PCIe, SRIO, 10GbE/40GbE, etc. are FPGA programmable

VPX754



- 3U VPX module Intel 5th Generation Xeon D-1577, D-1548 or D-1520 (Broadwell) System-on-Chip (SoC)
- PCIe Gen3 dual x4 or single x8
- Front-panel video out via micro HDMI

VTX870



- Open VPX benchtop development platform
- Dedicated Switch/management slot
- Up to five 3U VPX payload slots

Contact

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