

VRT582A

Rear I/O for VPX582, 3U VPX RTM



VRT582A

Key Features

- 3U Rear Transition Module (RTM) per VITA 46 for the VPX582 Module
- M.2 Socket
- Dual GbE, Clock input/output, I/O and SERDES loopback

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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OpenVPX



VRT582A

The VRT582A is a 3U VPX Rear Transition Module (RTM) providing I/O expansion for use with the [VPX582](#) for testing and validation.

Dual GbE 1000BASE-T are routed from RP1 to back panel RJ-45 connectors. The REF_CLK and AUX_CLK are routed to the SSMC connectors.

The high speed SERDES and single-ended I/O are looped back. The JTAG is routed to the rear panel. The module has an M.2 socket.



Figure 1: VRT582A

Block Diagram

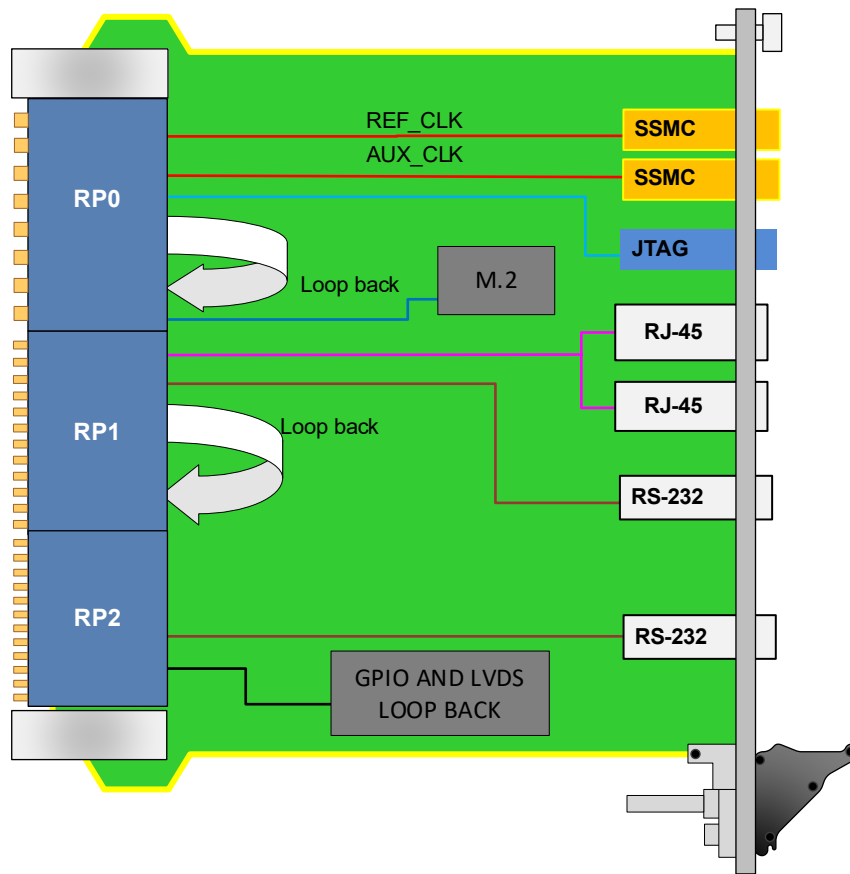


Figure 2: VRT582A Functional Block Diagram

Back Panel

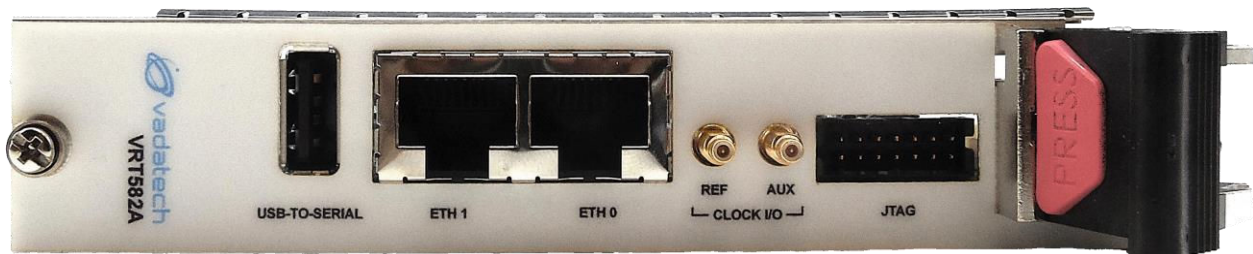


Figure 3: VRT582A Back Panel

Specifications

Architecture		
Physical	Dimensions	3U RTM, 1" pitch
Configuration		
Power	VRT582A	3W with M.2 module installed
Rear Panel	Connectors	Dual SSMC for AUX_CLK, REF_CLK; JTAG
		Dual GbE RJ-45; Loopback on GPIO and LVDS
		Loopback on ports P1 1-4 to 5-8; 15 to 16
VPX Interfaces	Slot Profiles	See Ordering Options
	Backplane	RP0: JTAG; clocks
		RP1: Dual GbE
		RP1/RP2: I/O
	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

VRT582A – A00-000-GHJ

A = RS-232 Level Shifter from the PS serial port		G = Applicable Slot Profiles
0 = CMOS to RS-232 level shifter 1 = Direct (VPX582 has the level shifter)		0 = 5 HP
B = M.2 size		H = Environmental
0 = None 1 = 1TB 2 = 2TB		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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DOC NO. 4FM737-12 REV 01 | VERSION 1.2 – AUG/25