

VRT581A

Rear I/O for VPX581, VPX RTM



VRT581A

Key Features

- 3U RTM per VITA 46
- mSATA and 1000Base-TX (GbE over copper)
- AUX+/- Clock
- 32 Singled ended and differential LVDS Input/Output

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™



VRT581A

The VRT581A is a 3U VPX Rear Transition Module providing I/O expansion for use with the VadaTech VPX581 3U VPX FPGA FMC Carrier.

VRT581A routes 16 LVDS input/output to a High-Density Connector (HDC), each I/O can be configured as input or output. In addition, 32 singled-ended (SE) I/O are routed to the HDC.

The module has a mSATA socket for storage/conversion of 1000BASE-BX to a 1000Baset-TX (GbE over copper).

The module also routes the AUX+/- clock signal from the backplane to the front panel via an SSMC style connector.



Figure 1: VRT581A

Block Diagram

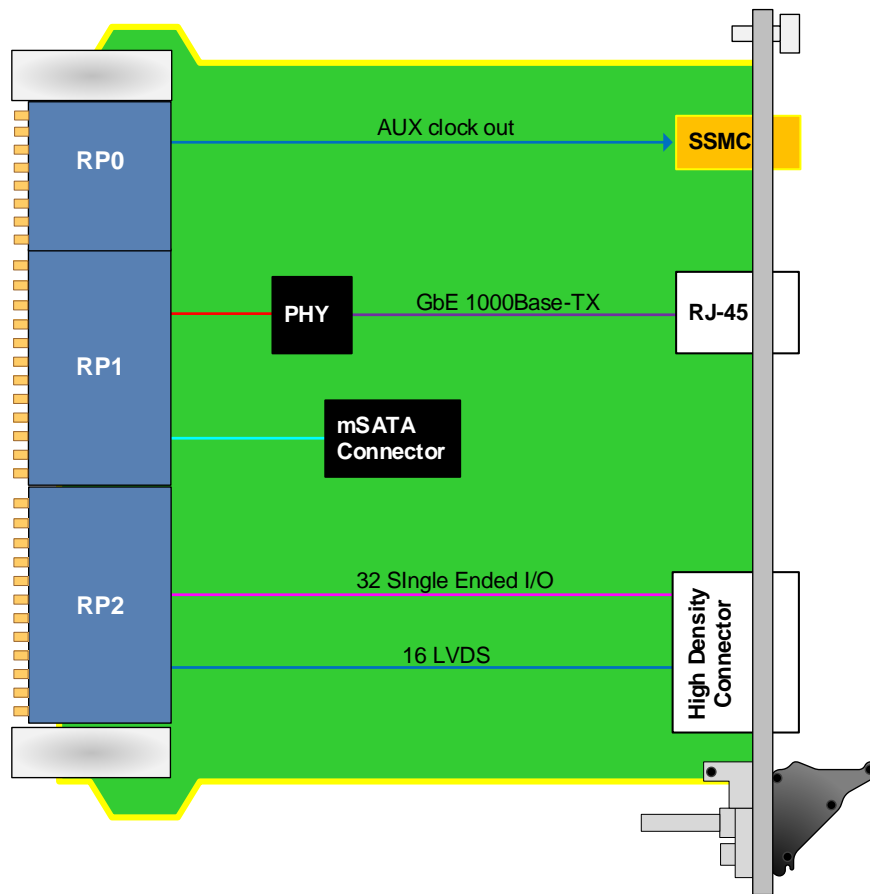


Figure 2: VRT581A Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	3U RTM, 1" pitch
Configuration		
Power	VRT581A	3W
Rear Panel	Connectors	SSMC for the AUX+/- Clock from the backplane RJ-45 for 1000BASE-TX LVDS and Singled Ended via HDC
VPX Interfaces	Slot Profiles	See Ordering Options
	Backplane	RP0: AUX+/- Clock RP1: mSATA RP1: 1000BASE-T RP2: 32 SE RP2: 16 LVDS
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

VRT581A – A00-000-GHJ

A = mSATA size

0 = No mSATA
 1 = 1 TB
 2 = 2 TB
 3 = Reserved
 4 = Reserved

G = Applicable Slot Profiles

0 = 5 HP

H = Environmental

See [Environmental Specification](#)

J = Conformal Coating

0 = No coating
 1 = Humiseal 1A33 Polyurethane
 2 = Humiseal 1B31 Acrylic

Environmental Specification

Option H	Air Cooled			Conduction Cooled	
	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

VPX581



- Xilinx UltraScale+ XCZU15EG FPGA
- 8 GB of 64-bit wide DDR4 Memory (single bank) with ECC
- MPSoC with block RAM and UltraRAM

VPX599



- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Dual ADC 12-bit @ 6.4 GSPS
- Dual DAC 16-bit @ 12 GSPS (AD9162 or AD9164)

VTX870



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

Contact

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