

VRT550B

Rear Transition Module with QSFP+ and I/O Expansion for 6U VPX



VRT550B

Key Features

- 6U RTM VITA 46
- 5x QSFP+
- 2x GbE via RJ-45
- 3x SATA Ports, 6 Gbps
- Over 100 I/O to high density connector for expansion
- Health Management

Benefits

- Versatile I/O
- Reference design with VHDL source code speeds application development
- Full System supply from industry leader
- AS9100 and ISO9001 certified company



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VRT550B

The VRT550B is a 6U VPX Rear Transition Module for use with the VPX550. The module has 5 x QSFP+, dual GbE via RJ-45 and three SATA connectors.

The VRT550B has a high-density connector which can be used to stack I/O expansion modules, supporting additional rear-panel I/O when used with a 10 HP panel. The I/O's can be customer specific such as RS485/RS422, RS-232, Isolated Input/Output, LVDS, etc.

The Module has full health Management.



Figure 1: VRT550B

Block Diagram

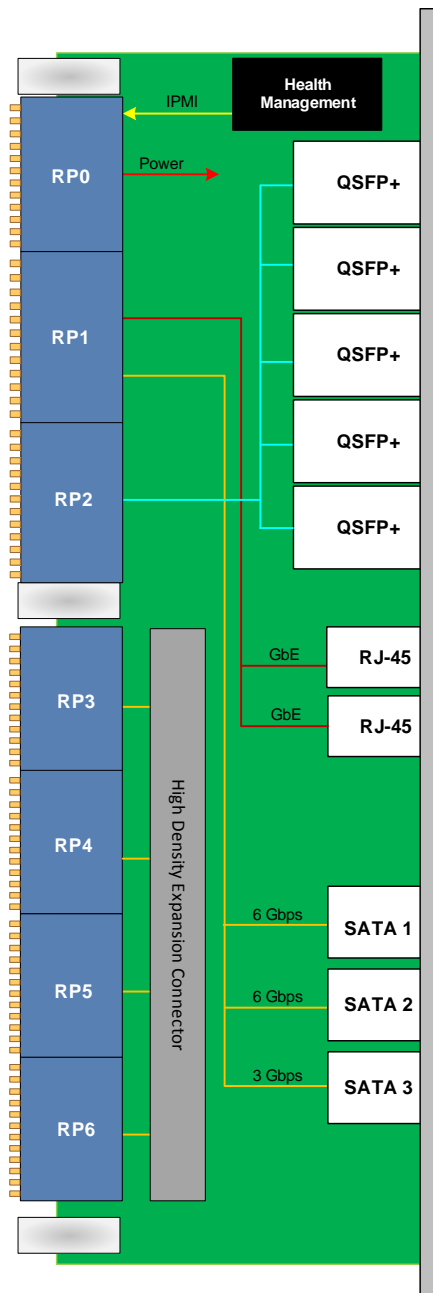


Figure 2: VRT550B Functional Block Diagram

Rear Panel

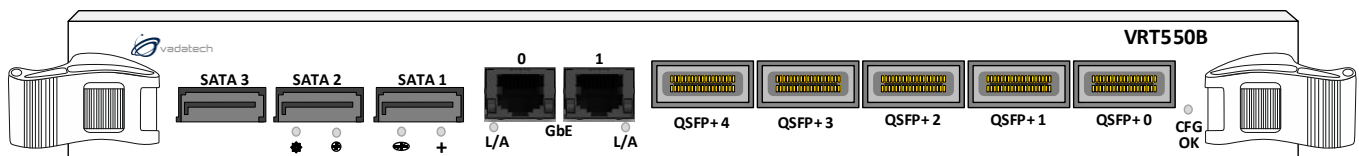


Figure 3: VRT550B (Option G=0)

Specifications

Architecture	
Physical	Dimensions 6U, 1" pitch
FPGA	VPX RTM
Configuration	
Power	4 W (without the I/O Expansion and Fibre Transceiver)
Memory	None
Rear Panel	5x QSFP+ 2x RJ-45 3x SATA 7-pole latching
On-board Interfaces	None
VPX Interfaces	Slot Profiles See ordering options
Rear IO	RP1 2x GbE 3x 6 Gbps SATA RP2 40x SerDes
	Power Supplies On RP0: 12 V and 5 V
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

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

VRT550B – A00-D00-GHJ

A = QSFP+ Transceivers**	D = I/O Expansion	G = Applicable Slot Profiles
0 = No QSFP+	0 = No I/O Expansion	0 = 5 HP
1 = SR	1 = Field I/O (DA640/DA641)	1 = 10 HP
2 = LR	2 = Reserved	
3 = LC Style CWDM (LM4 140 Meter)	3 = Reserved	
4 = LC Style CWDM (LR4 2KM)		
5 = LC Style CWDM (LR4 10KM)		

H = Environmental
See Environmental Specification Table below

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)

**All five Transceivers will be the same. Contact local sales office for mix of options.

Related Products

VPX516



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Virtex-7 690T FPGA in FFG-1761 package
- High-performance clock jitter cleaner

VPX517



- 3U FPGA carrier for FMC per VITA 46 and VITA 57
- Xilinx Kintex-7 410T FPGA in FFG-900 package
- High-performance clock jitter cleaner

Contact

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