

# VRT991

## Rear I/O for 3U VPX Modules



## Key Features

- 3U RTM per VITA 46
- Routes front module P1/P2 differential pairs 8-15 (P1) and 0-7 (P2) to Very High-Density Connector Interface (VHDCI)

## Benefits

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



**vadatech**  
THE POWER OF VISION



# VRT991

The VRT991 is a 3U VPX Rear Transition Module that routes the front module P1 ports 8-15 and P2 ports 0-7 to the VHDCI Connector style. The module is passive and does not have any active components.



Figure 1: VRT991

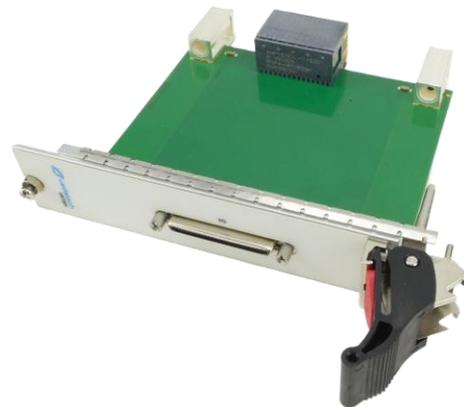


Figure 2: VRT991 Top View

# Block Diagram

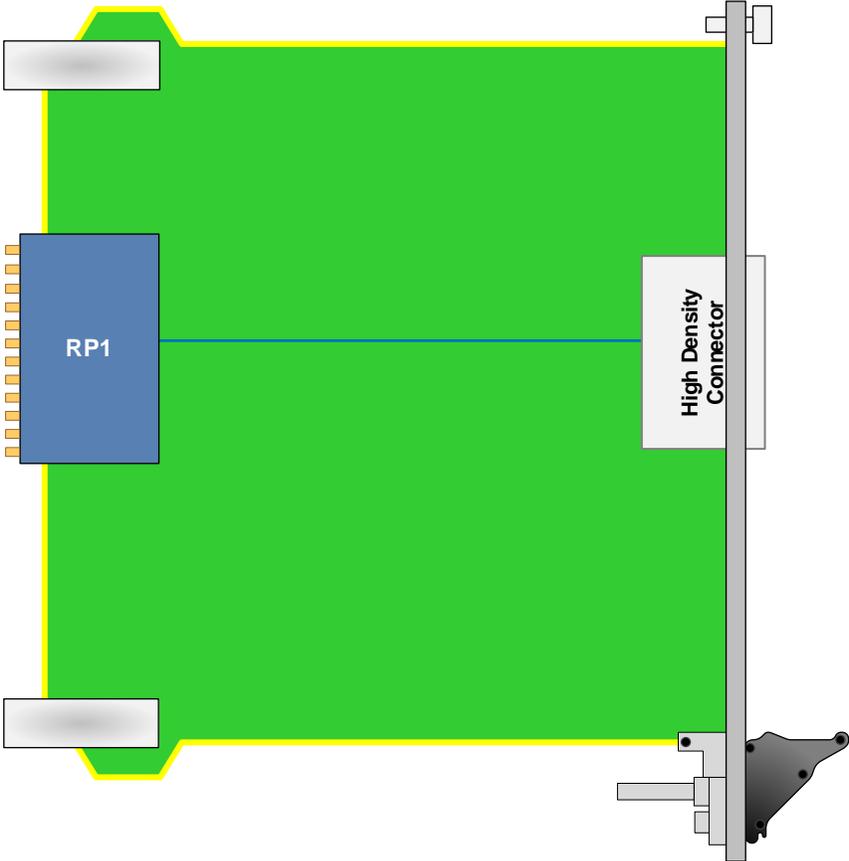


Figure 3: VRT991 Functional Block Diagram

# Specifications

<b>Architecture</b>	
<b>Physical</b>	<b>Dimensions</b> 3U RTM, 1" pitch
<b>Configuration</b>	
<b>Power</b>	0 W
<b>Rear Panel</b>	<b>Connectors</b> VHDCI
<b>VPX Interfaces</b>	
<b>Slot Profiles</b>	See ordering options
<b>Backplane</b>	RP1: Port 8-15 of the Front Board P1 and Ports 0-7 of the Front Board P2
<b>Power Supplies</b>	
<b>Other</b>	
<b>MTBF</b>	MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>	Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>	VadaTech is certified to both the ISO9001:2000 and AS9100B:2004 standards
<b>Warranty</b>	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

## VRT991 – 00C-000-GHJ

### G = Applicable Slot Profiles

0 = 5 HP

### H = Environmental

See Environmental Specification Table below

### C = Panel Type

0 = VITA 48.1  
1 = IEEE 1101.10

### 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
<b>Operating Temperature</b>	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)
<b>Storage Temperature</b>	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)
<b>Operating Vibration</b>	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)
<b>Storage Vibration</b>	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
<b>Humidity</b>	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

## VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

## Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

## VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

[info@vadatech.com](mailto:info@vadatech.com) | [www.vadatech.com](http://www.vadatech.com)

# Choose VadaTech

## We are technology leaders

- First-to-market silicon
- Constant innovation
- Open systems expertise

## We commit to our customers

- Partnerships power innovation
- Collaborative approach
- Mutual success

## We deliver complexity

- Complete signal chain
- System management
- Configurable solutions

## We manufacture in-house

- Agile production
- Accelerated deployment
- AS9100 accredited



**vadatech**  
THE POWER OF VISION

## Trademarks and Disclaimer

The VadaTech logo is a registered trademark of VadaTech, Inc. Other registered trademarks are the property of their respective owners. AdvancedTCA™ and the AdvancedMC™ logo are trademarks of the PCI Industrial Computers Manufacturers Group. All rights reserved. Specification subject to change without notice.

© 2018 VadaTech Incorporated. All rights reserved.  
DOC NO. 4FM737-12 REV 01 | VERSION 1.1 – JAN/23