

# VRT586A

Rear I/O for VPX586, VPX RTM



VRT586A

## Key Features

- Rear Transition Module (RTM) for VadaTech VPX586
- ESATA (External SATA)
- 1000Base-TX via RJ-45
- Dual QSFP+

## 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

**OpenVPX™**



# VRT586A

The VRT586A is a 3U VPX Rear Transition Module (RTM) providing I/O expansion for use with the VadaTech VPX586 3U VPX FPGA FMC+ Carrier.

VRT586A routes x8 SERDES input/output to dual QSFP+ connectors, each I/O can be configured as input or output. Control and GPIO signals are routed from P2 to QSFP+ for monitoring and control.

The module has a single RJ-45 supporting 1000Base-TX and an ESATA for external storage

The VRT586A has a JTAG header as well as 2mm Header for GPIO.

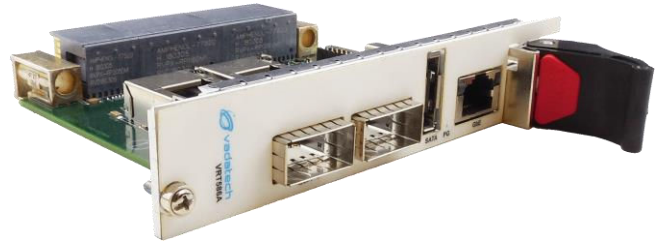


Figure 1: VRT586A

## Block Diagram

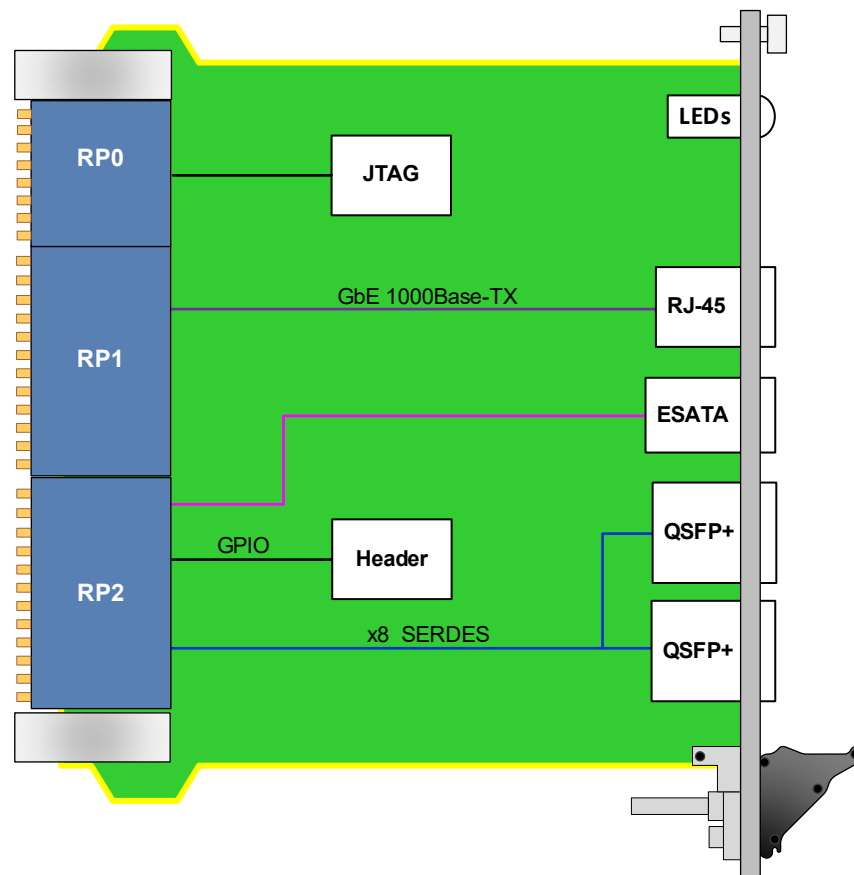


Figure 2: VRT586A Functional Block Diagram

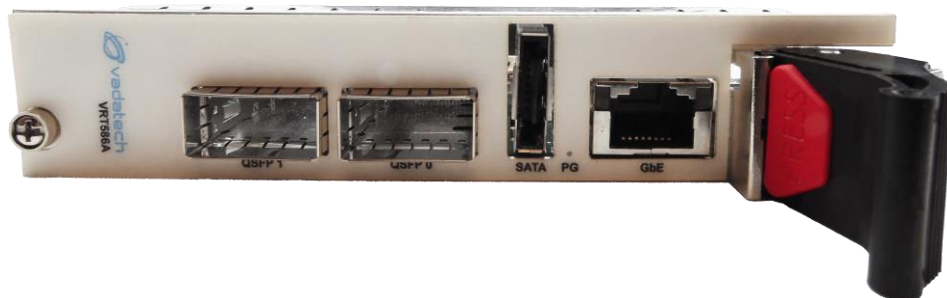


Figure 3: VRT586A Front Panel View

# Specifications

Architecture		
Physical	Dimensions	3U RTM, 1" pitch
Configuration		
Power	VRT586A	4W with QSFP+ Optical Transceivers
Rear Panel	Connectors	RJ-45 for 1000BASE-TX
		Dual QSFP+
		ESATA
VPX Interfaces	Slot Profiles	See <a href="#">Ordering Options</a>
	Backplane	RP1: GbE1000BASE-T
		RP2: x8 SERDES
		RP2: SATA
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 ISO9001:2015 and AS9100D standards	
Warranty	Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>	

## 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

## VRT586A – A00-000-GHJ

A = QSFP+ Transceivers*		G = Applicable Slot Profiles
0 = None 1 = 40G MTP/MPO (SR) 2 = 40G MTP/MPO (LR, 1km) 3 = 40G WDM (SR) 4 = Reserved		0 = 5 HP
		H = Environmental
		See <a href="#">Environmental Specification</a>
		J = Conformal Coating
		0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

\*Note: Two is delivered

## 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

VPX586



- Xilinx UltraScale+ XCZU19EG FPGA
- Single FMC+ (VITA 57.4) site
- 8 GB of 64-bit wide DDR4 Memory (single bank) with ECC (CPU)

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

## 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, Wenhui 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.

© 2019 VadaTech Incorporated. All rights reserved.  
DOC NO. 4FM737-12 REV 01 | VERSION 1.3 – AUG/25