

# VRT770A

Rear I/O for VadaTech VPX770  
and/or VPX771 Module, VPX RTM



VRT770A

## Key Features

- 3U RTM (Rear Transition Module) per VITA 46
- VRT770A mates to the VadaTech VPX770 and/or VPX771 front modules
- Dual GbE 1000Base-T
- M.2 storage
- RS-232 ports from the Payload, BMC and IPMI

## 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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# VRT770A

The VRT770A is a 3U VPX Rear Transition Module providing I/O expansion for use with the VadaTech VPX770 and/or VPX771.

VRT770A has an option for a M.2 Storage in the RTM. Dual 1000Base-T GbE are routed from RP1 to the back panel as RJ-45.

The module also allows the dual KR-4 loop back on ports from the RP1.

All three RS-232 ports payload, BMC and IPMI are accessible from the RTM as well.



Figure 1: VRT770A

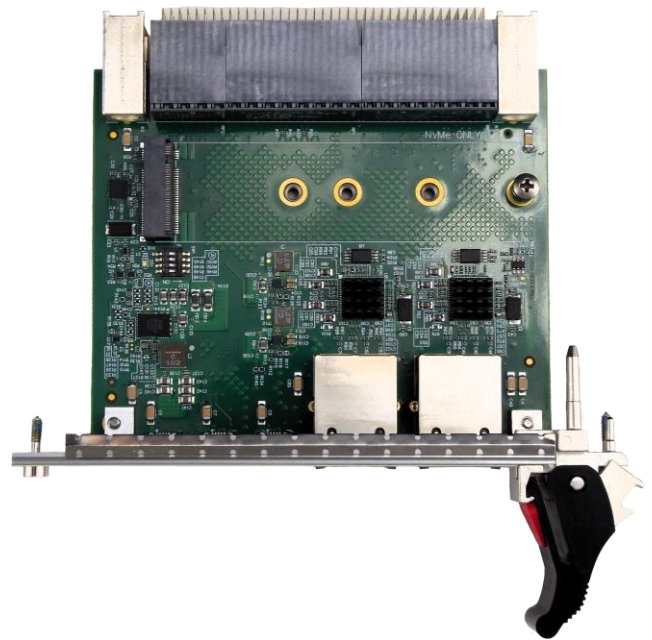


Figure 2: VRT770A Top View

## Block Diagram

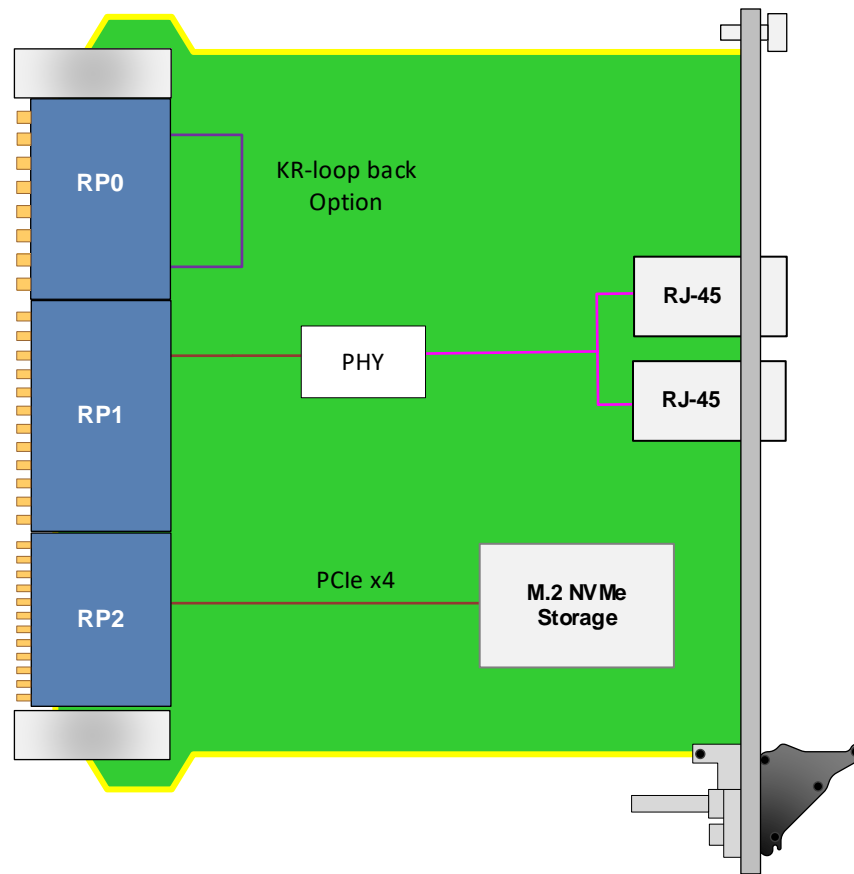


Figure 3: VRT770A Functional Block Diagram

## Back Panel

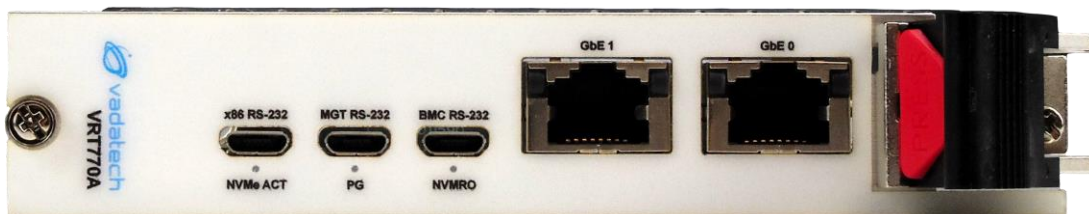


Figure 4: VRT770A Front Panel View

# Specifications

Architecture		
Physical	Dimensions	3U RTM, 1" pitch
Configuration		
Power	VRT770A	2W (without the M.2 Module)
Rear Panel	Connectors	Micro USB as RS-232 for payload
		Dual GbE, RJ-45
		Micro USB as RS-232 for BMC and IPMI
VPX Interfaces	Slot Profiles	See <a href="#">Ordering Options</a>
	Backplane	RP0: KR loop back
		RP1: Dual GbE
		RP2: PCIe to the M.2 storage
	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 <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

## VRT770A – AB0-000-GHJ

<b>A = Dual KR loop back*</b> 0 = No loop back 1 = Loop back on KR ports (for testing only)		<b>G = Applicable Slot Profiles</b> 0 = 5 HP
<b>B = M.2 Storage size</b> 0 = None 1 = 1TB 2 = 2TB		<b>H = Environmental</b> See <a href="#">Environmental Specification</a>
		<b>J = Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

\*For the VPX771 front payload module option A must equal 0 since the fabric is PCIe on these ports

## Environmental Specification

	Air Cooled		Conduction Cooled		
Option H	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

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