# VRT769A

## Rear I/O for VPX769, VPX RTM



VRT769A

## Key Features

- 3U RTM per VITA 46
- 3x 1000Base-T
- HDMI Source
- Dual 10G optical (SFP+ style)
- 2x USB 2.0/3.2
- RS-232 and RS-422
- Health Management RS-232
- When the VPX769 is mated with the VadaTech XMC501
  - Dual HDMI Sink
  - GbE
  - RS-232

## 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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# VRT769A

The VRT769A is a 3U VPX Rear Transition Module providing I/O expansion for use with the VadaTech VPX769 3U VPX Intel Tiger Lake CPU.

The module routes the VPX796 I/O to standard style connectors. The module has an HDMI Source, dual 10GbE SFP+ style optical, three 1000Base-T, Dual USB 2.0/3.2, RS-232, and RS-422.

With the VPX769 mated to the XMC501 there are dual HMDI sinks that go to the XMC501 as well a GbE and RS-232.

The module has a 10HP panel.



Figure 1: VRT769A



Figure 2: VRT769A Top View
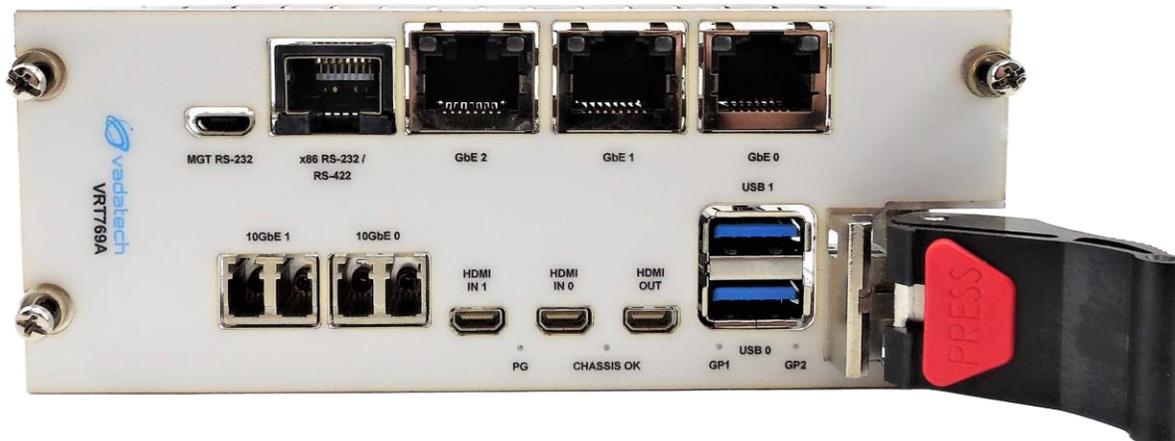


Figure 3: VRT769A Front Panel View

# Block Diagram
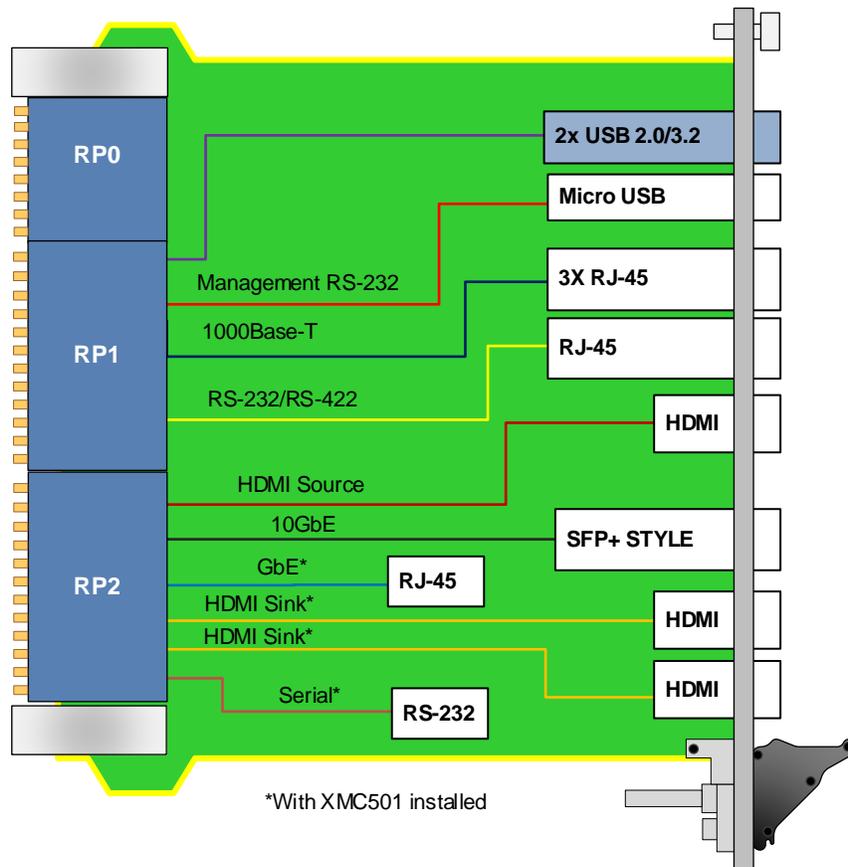


Figure 4: VRT769A Functional Block Diagram

# Specifications

| Architecture | | |
|---|---|---|
| **Physical** | **Dimensions** | 3U RTM, 1" pitch |
| **Configuration** | | |
| **Power** | **VRT769A** | 3W |
| **Rear Panel** | **Connectors** | 2x USB 3.2, 3x HDMI (Micro), Micro USB as RS-232, Dual SFP+ style |
| | | 3x RJ-45 for 1000BASE-TX |
| | | 1x RJ-45 as RS-232 and RS-422 |
| **VPX Interfaces** | **Slot Profiles** | See Ordering Options |
| | **Backplane** | RP0:  Power |
| | | RP1/RP2: I/O ports |
| **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

**VRT769A – 000-000-GHJ**

| | **G = Applicable Slot Profiles** |
|---|---|
| | 0 = 10 HP |

| | **H = Environmental** |
|---|---|
| | See Environmental Specification |

| | **J = Conformal Coating** |
|---|---|
| | 0 = No coating<br>1 = Humiseal 1A33 Polyurethane<br>2 = Humiseal 1B31 Acrylic |

## 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

### VPX765

- 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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