

# VRT706A

Rear I/O for VPX706, VPX RTM



VRT706A

## Key Features

- 6U RTM per VITA 46
- Quad SFP+
- RS-232 and USB 3.0 to VPX706 Layerscape
- I/O from P3/P5 to VHDCI Connector
- Dual RS-485/RS-422
- Option for triple M.2 NVMe SSD

## Benefits

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

OpenVPX™



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# VRT706A

The VRT706A is a 6U VPX Rear Transition Module providing I/O expansion for use with the VPX706.

The VRT706A provides an easy access to the I/O ports routed to the P1/P2/P3 and P5 connectors of the VPX706. These includes Quad SFP+, USB, RS-232, NVMe M.2 style storage, as well as I/O expansion to P3/P5.

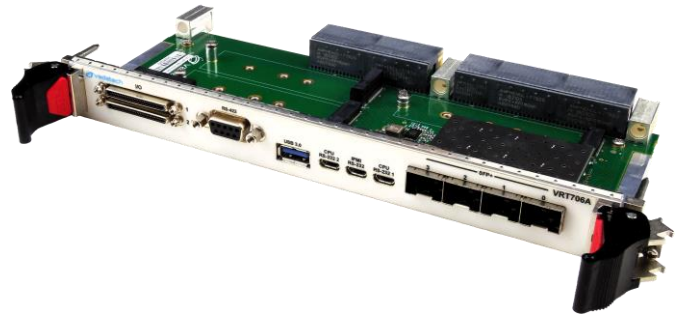


Figure 1: VRT706A



Figure 2: VRT706A Front View

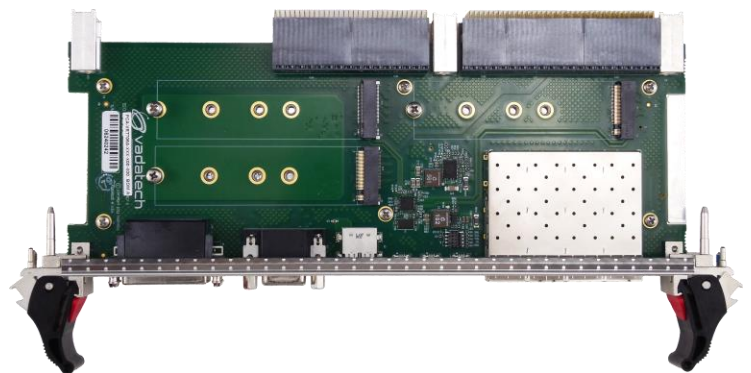


Figure 3: VRT706A Top View

# Block Diagram

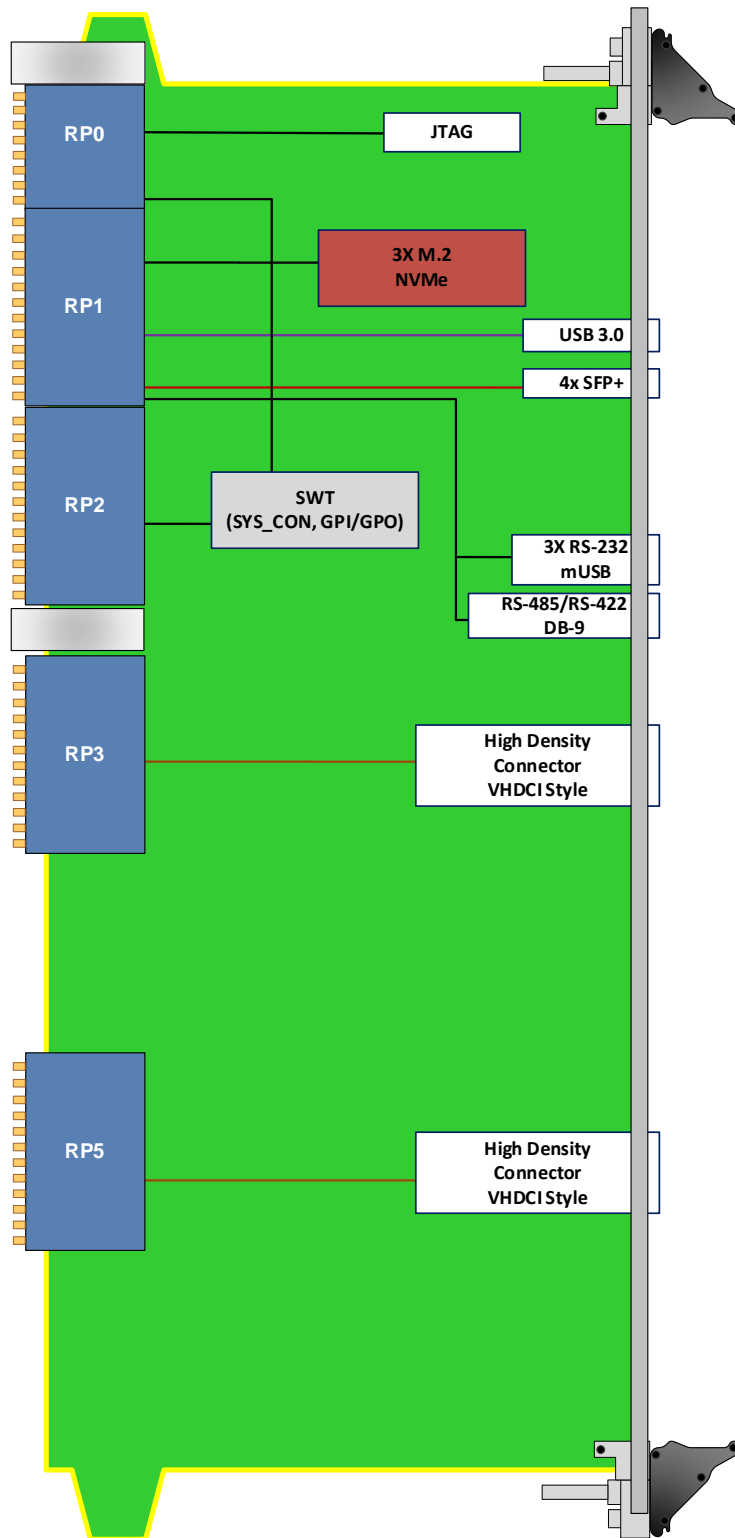


Figure 4: VRT706A Functional Block Diagram

# Specifications

| Architecture          |                       |  |
|-----------------------|-----------------------|--|
| <b>Physical</b>       | <b>Dimensions</b>     | 6U RTM, 1" pitch   |
| Configuration         |                       |  |
| <b>Power</b>          |                       | 4W (storage devices add more power)  |
| <b>Rear Panel</b>     | <b>Connectors</b>     | Quad SFP+<br>USB, VHDCI, DB-9<br>XMC I/O via miniSCSI (VHDCI style)  |
| <b>VPX Interfaces</b> | <b>Slot Profiles</b>  | See <a href="#">Ordering Options</a>   |
|                       | <b>Backplane</b>      | RP0: Power<br>RP1: Quad SFP+, RS-232, USB, RS-485/RS-422<br>RP2: I/O<br>RP3: I/O from PMC connector J4 (user I/O)<br>RP5: I/O from PMC connector J4 (user I/O) |
|                       | <b>Power Supplies</b> | RP0: VS1 +12V  |
| Other                 |                       |  |
| <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 ISO9001:2015 and AS9100D standards   |
| <b>Warranty</b>       |                       | 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

## VRT706A – ABC-D00-GHJ

|   |   |   |
|---|---|---|
| <b>A = SFP+ Transceiver *</b><br>0 = None<br>1 = SR<br>2 = LR                   | <b>D = M.2 socket three NVMe SSD</b><br>0 = None<br>1 = 1TB<br>2 = 2TB<br>3 = 4TB | <b>G = Applicable Slot Profiles</b><br>0 = 5 HP, VITA 48.1  |
| <b>B = M.2 socket one NVMe SSD</b><br>0 = None<br>1 = 1TB<br>2 = 2TB<br>3 = 4TB |   | <b>H = Environmental</b><br>See <a href="#">Environmental Specification</a>                                   |
| <b>C = M.2 socket two NVMe SSD</b><br>0 = None<br>1 = 1TB<br>2 = 2TB<br>4 = 4TB |   | <b>J = Conformal Coating</b><br>0 = No coating<br>1 = Humiseal 1A33 Polyurethane<br>2 = Humiseal 1B31 Acrylic |

\*Four transceivers loaded

## 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

VPX706



- Processor VPX with Layerscape LX2160A (16-core)
- PCIe/40G/10G/1G
- Protocols such as PCIe, SRIO, 10GbE/40Gbe, etc. are FPGA programmable

VPX754



- 6U 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
- XMC module with PCIe Gen3 x4

VTX870



- Open VPX benchtop development platform
- Dedicated Switch/management slot
- Up to five 6U VPX payload slots

# Contact

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