

VTX981

One Slot 3U VPX Benchtop
Development Chassis with RTM
(P2 with two VITA 66.5/66.4)



VTX981

Key Features

- One slot benchtop 3U VPX development platform
- P2 with two VITA 66.5 or VITA 66.4 connectors option
- Variable fan speed control for front and rear
- Support for conduction cooled modules
- Removable panels for ease of access for probing
- Support for Rear Transition Modules (RTMs)
- Allows for a shelf manager to do health monitoring
- JTAG connector
- User setting of SYSRESET, NVMRO, etc.
- Onboard battery pack to provide the VBAT
- Vertical or Horizontal positioning on bench

Benefits

- Optional shelf manager supporting Tier 2 Health Management
- 750W AC Power supply
- Ease of access to board under development
- 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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VTX981

The VTX981 is a single slot 3U VPX chassis for board bring-up and testing of 3U VPX modules. The chassis can accept a front and a rear module (5 HP or 10 HP). The panels on both the front and rear slots are removable for ease of probing and debugging. The P2 connector has option for VITA 66.5 or VITA 66.4. **The VTX981 can support conduction cooled modules per VITA 48.**

The VTX981 can be placed on bench in both horizontal and vertical positioning for ease of access.

Power Supply

The VTX981 Universal AC power supply provides 750W to the chassis. The chassis supplies all the necessary power (+12V, -12V, +5V, etc.) to the module in accordance with VITA 46 specifications.

The unit also comes with a battery pack which provides the VBAT to the module. The power to VBAT can be switched between the onboard battery pack and the power supply. A sense resistor is fitted to each rail so that a voltmeter can measure power consumption.

Cooling

Variable speed fans provide front and rear cooling to the module.

Backplane

The backplane provides all the necessary VITA 46 signals set by the user (NVMRO, SYSRESET, SYS_CON, driver the dual clock, etc.). All the connectors are installed P0 thru P2 and are routed from the front to the rear.

Health Monitoring

The dual IPMI bus is routed to an external VT007 bench-top shelf manager that monitors the VPX board sensors in compliance to VITA 46.11. The VT007 supports Tier 2 Health Management and can be ordered separately or as an option with VTX981.

JTAG

The backplane breaks-out the JTAG signals via a header connector to enable external connection of a JTAG probe.



Figure 1: VTX981 Chassis Front View



Figure 2: VTX981 Chassis Rear View

Chassis Layout



Figure 3: Chassis Layout – Front



Figure 4: Chassis Layout – Rear



Figure 5: Chassis Layout – Front Vertical



Figure 6: Chassis Layout – Rear Vertical

Specifications

Architecture		
Physical	Dimensions	Height: 3U
Standards		
VPX	Type	VITA 46.0 and VITA 66.5 or 66.4 Baseline Specification
Configuration		
Power	VTX981	750W AC universal
Environmental		See Ordering Options
Cooling		Right to left
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	One (1) year, 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

VTX981 – ABC-D00-GHJ

A = Power supply 0 = 750W AC	D = Card guide type * 0 = Standard (air cooled) 1 = Conduction cooled	G = VPX Connector Type 0 = Standard 50u Gold Rugged 1 = KVPX Connectors 2 = High Speed 50u Gold Rugged (>16G)
B = Shelf Manager (health monitoring) 0 = No VT007 1 = VT007		H = Environmental See Environmental Specification
C = P2 VITA 66.5 or VITA 66.4 0 = No VITA 66.5 or VITA 66.4 1 = VITA 66.5 on P2 2 = VITA 66.4 on P2		J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

Notes: *Applies only to VPX module, RTM card guide is always standard/air-cooled

Environmental Specification*

Option H	H = 0
Operating Temperature	-5°C to +55°C
Storage Temperature	-40°C to +85°C
Operating Vibration	0.04 g2/Hz max
Storage Vibration	20g
Humidity	95% non-condensing

*Please contact VadaTech Sales for other specification

Related Products

VPX551



- Dual Kintex UltraScale™ XCKU115
- 16 GB of 64-bit wide DDR4 Memory to each FPGA
- Rear fibre I/O via VITA 66.5

VPX645



- 3U VPX NVMe Host Bus Adapter with Full support for RAID
- Dual Core ARM A15 RAID on Chip (ROC)
- On board 8 GB of DDR4 Memory with ECC

VPX752



- 6U VPX module Intel 5th Generation Xeon-D SoC
- PCIe Gen3 x16 (dual x8 or quad x4)
- Quad 10GbE XAU1

Contact

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