VTX991

One Slot 6U VPX Benchtop Development Chassis with RTM (P5 to P6 with six VITA 66.5/66.4)

VTX991

Key Features

- One slot benchtop 6U VPX development platform
- P5 to P6 with six VITA 66.5 or 66.4 connectors option
- Variable fan speed control for front and rear
- 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.
- On board battery pack to provide the VBAT
- Vertical or Horizontal positioning on bench

Benefits

- Optional shelf manager supporting Tier 2 Health Management
- 400 W 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

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VTX991

The VTX991 is a single slot 6U VPX chassis for board bring-up and testing of 6U VPX modules. The chassis can accept a front and a rear module (5HP or 10HP). The panels on both the front and rear slots are removable for ease of probing and debugging.

The VTX991 can be placed on bench in both horizontal and vertical positioning for ease of access.

Power Supply

The VTX991 comes with a Universal AC power supply which provides 400 W to the chassis. The chassis supplies all the necessary power (+12 V, -12 V, +5 V, etc.) to the module in accordance with VITA 46 specifications.

VTX991 also comes with a battery pack which provides the VBAT to the module. The VTX991 allows the power to VBAT to be switched between the on-board battery pack and the power supply. Each of the rails have a sense resistor to allow the user to monitor how much power is being drawn from each rail using a simple voltmeter.

Cooling

The VTX991 provides cooling to the module via a variable fan speed for both front and rear.

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 P6 and are routed from the front to the rear.

Health Monitoring

The dual IPMI bus is routed to a connector compatible with an external VadaTech VT007 bench top shelf manager for monitoring the VPX board sensors, compliance to VITA 46.11, etc. The VT007 supports Tier 2 Health Management and can be ordered separately or as an option with VTX991.

JTAG

The backplane brings out the JTAG signals to a header to allow connection to an external JTAG probe.

Figure 1: VTX991 Chassis Front View

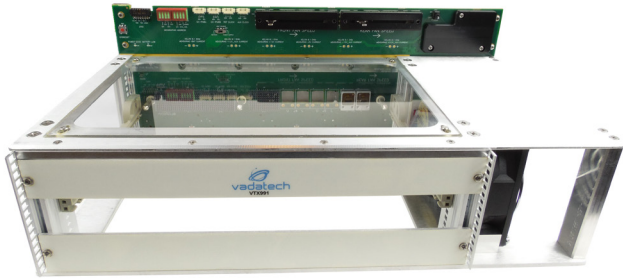*Figure 2: VTX991 Chassis Rear View*

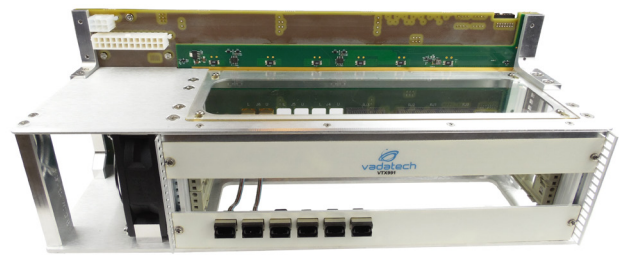# Chassis Layout

Figure 3: Chassis Layout - Front

Figure 4: Chassis Layout - Rear
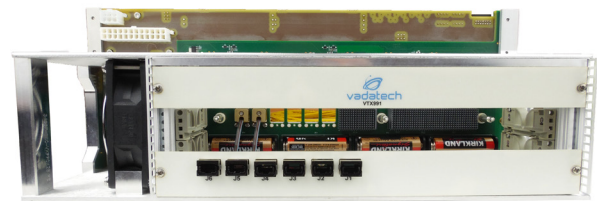

Figure 5: Chassis Layout – Front Vertical

Figure 6: Chassis Layout – Rear Vertical

VTX – 6U VPX Benchtop Development Chassis with RTM

Specifications

Architecture			
Physical	**Dimensions**	Height: 3U	
Standards			
VPX	**Type**	VITA 46.0 and VITA 66.5 or 66.4 Baseline Specification	
Configuration			
Power	**VTX991**	400 W 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 ISO9001:2000 and AS9100B:2004 standards		
Warranty	Two (2) years		

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

VTX991 – ABC-DE0-0HJ

A = Power supply	D = P5 VITA 66.5 or 66.4	
0 = 400 W (AC)	0 = Not installed 1 = Install 66.5 2 = Install 66.4	
B = Shelf Manager (health monitoring)	**E = P6 VITA 66.5 or 66.4**	**H = Environmental**
0 = No VT007 1 = VT007 included	0 = Not installed 1 = Install 66.5 2 = Install 66.4	See Environmental Specification Table below
C = P4 VITA 66.5 or 66.4		**J = Conformal Coating**
0 = Not installed 1 = Install 66.5 2 = Install 66.4		0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

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

VPX646

- 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 XAUI

Contact

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