

VTX881

2U VPX Chassis, Three 6U Slots with RTM Support



VTX881

Key Features

- 2U Open VPX rackmount system platform
- Horizontal slots
- Up to three 6U VPX payload slots
- Compatible with 0.8-inch, 0.85-inch and 1.0-inch modules
- Support for Rear Transition Modules (RTMs)
- Redundant cooling in push/pull side to side airflow configuration (right to left cooling) including the Rear Transition Modules (RTM)
- Removal Fan Tray (front and rear)
- Optional JTAG Switch Module (JSM) and Chassis Manager

Benefits

- 800W/1200W AC Universal or 650W/1200W DC Power Input
- 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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VTX881

The VTX881 is a 2U VPX chassis with three 6U VPX slots. The chassis can accept 0.8-inch, 0.85-inch and 1.0-inch pitch modules.

Power Supplies

The VTX881 has a single AC input power supplies to provide 800W/1200W or -48V DC 650W/1200W to the overall system.

Cooling and Temperature Sensors

The VTX881 is designed to meet the ANSI/VITA 65 standard. It provides right to left push/pull cooling (18 CFM per payload slot at 0.24 in-H₂O @ 5000 feet) to the VPX payload and RTM slots. The Chassis has a removable Air Filter at the front. All the Fan Trays are removal.

Backplane

The backplane provides three 6U VPX payload slots in a star configuration, fully compliant to VITA 46.0 baseline specification. Also, additional support to the RTMs, compliant to VITA 46.10 and OpenVPX VITA 65. VadaTech can modify the backplane to meet customer requirement.

JSM

There is an optional JTAG Switch Module (JSM) to provide JTAG access to each module.

Chassis Manager (Health Management)

The Chassis provides option for Chassis Manager which is to VITA46.11 with Tier-2 support.



Figure 1: VTX881 Front View



Figure 2: VTX881 Rear View

Backplane Connections

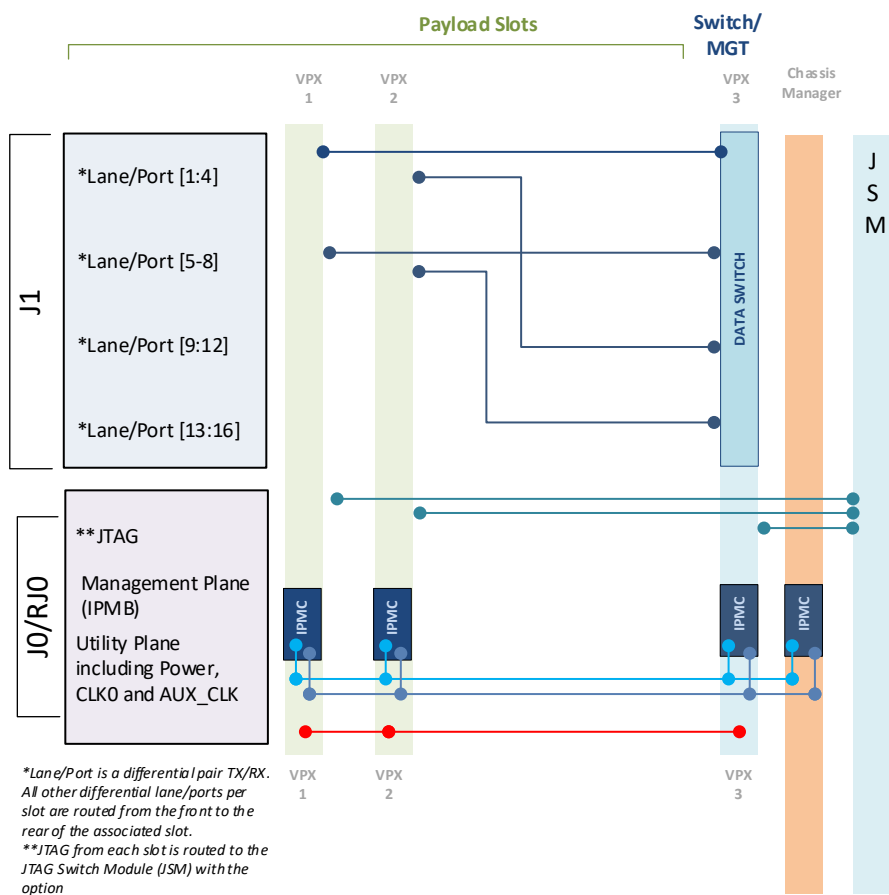


Figure 3: VTX881 Backplane Connections (J2/J3/J4/J5/J6 are pass thru to the rear)

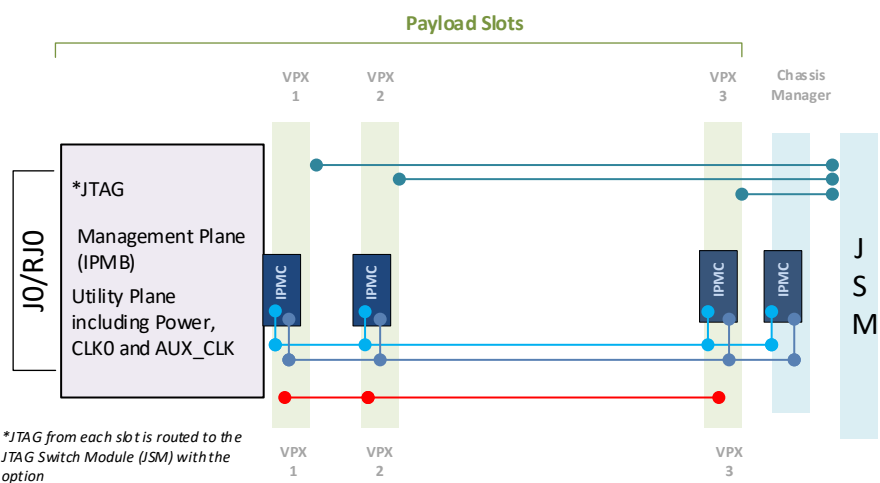


Figure 3A: VTX881 Backplane Connections (J1/J2/J3/J4/J5/J6 are pass thru to the rear)

VadaTech can also design additional VITA standard backplane profiles for customer specific applications. Please contact your local sales team for more information.

Chassis Layout



Figure 5: VTX881 Chassis Layout - Front View without the Chassis Manager



Figure 6: VTX881 Chassis Layout - Rear View with the JSM module include

Specifications

Architecture		
Physical	Dimensions	Height: 2U
		Width: 19"
		Depth: 12.5"
		Weight: TBD
Type	VPX	3 Payload Slot up to 1.0" pitch
Standards		
VPX	Type	VITA 46.0 Baseline Specification
Configuration		
Power	VTX881	800W/1200W Universal AC Input or -48V DC 650W/1200W
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

OpenVPX allows for a wide range of pin assignments and use cases. Prior to purchasing VadaTech products as standalone items (i.e., not part of an integrated platform) please consult with VadaTech on the system architecture to ensure compatibility.

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

VTX881 – ABC-DE0-GHJ

A = Power Supply	D = JSM	G = Module Type
0 = AC 800W 1 = -48V DC 650W 2 = AC 1200W 3 = -48V DC 1200W 4 = +16V to +38V (typical +28) DC 600W	0 = No JSM 1 = JSM	0 = Reserved 1 = VITA 48.1
B = Backplane routing	E = Chassis Manager	H = Environmental
0 = Figure 3 1 = Figure 3A (pass thru front to rear)	0 = Not included 1 = With VITA 46.11 Tier two support 2 = With VITA 46.11 Tier two and Virtual Probe*	See Environmental Specification
C = VPX Connector Type		J = Conformal Coating
0 = Standard 50u Gold Rugged 1 = KVPX Connectors 2 = High speed 50u Gold Rugged (>16G)		0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

Environmental Specification*

Option H	H = 0	H = 1
Operating Temperature	AC1* (-5°C to +55°C)	AC3* (-40°C to +70°C)
Storage Temperature	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)
Operating Vibration	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)
Storage Vibration	OS1* (20 g)	OS1* (20 g)
Humidity	95% non-condensing	95% non-condensing

Notes:

*Please contact VadaTech Sales for other specification

Related Products

VPX518



- AMC FPGA carrier for FMC per VITA 57
- Xilinx Zynq-7000 FPGA in FFG-900 package (XC7Z100 or XC7Z045) with embedded ARM®
- Supported by DAQ Series™ data

VPX592



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- High-performance clock jitter cleaner

VPX599



- 3U FPGA Dual DAC and dual ADC per VITA 46
- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Dual ADC 12-bit @ 6.4 GSPS

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