

VTX882

2U VPX Chassis, Three 6U Slots with Optical modules



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
- Supports a custom RTM to convert 20 SERDES from the three VPX modules to the optical
- Redundant cooling in push/pull
- Front to back cooling
- Optional JTAG Switch Module (JSM) and Chassis Manger

Benefits

- 900W DC Power Input
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader

OpenVPX™



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VTX882

The VTX882 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 VTX882 has a single DC 28V input power that provides up to 900W to the chassis.

Cooling and Temperature Sensors

The VTX882 is designed to meet the ANSI/VITA 65 standard. It provides front to back cooling (18 CFM per payload slot at 0.24 in-H₂O @ 5000 feet). The Chassis has a removable Air Filter at the front.

Backplane

The backplane provides three 6U VPX payload slots in a star configuration, fully compliant to VITA 46.0 baseline specification. Also, additional I/O support to the rear, 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.

Optical Module

The VTX882 has a custom optical module that converts 20 SERDES from the three VPX modules into optical utilizing LC or custom optical interfaces.



Figure 1: VTX882 Front View



Figure 2: VTX882 Rear View with LC Style

Backplane Connections

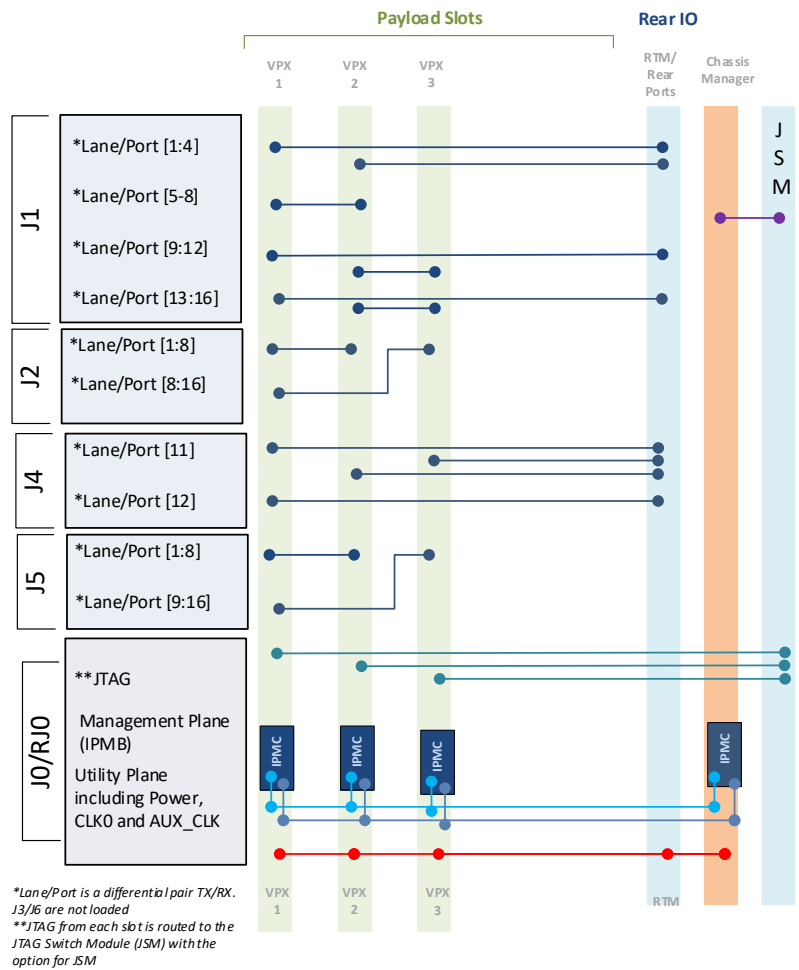


Figure 3: VTX882 Backplane Connections

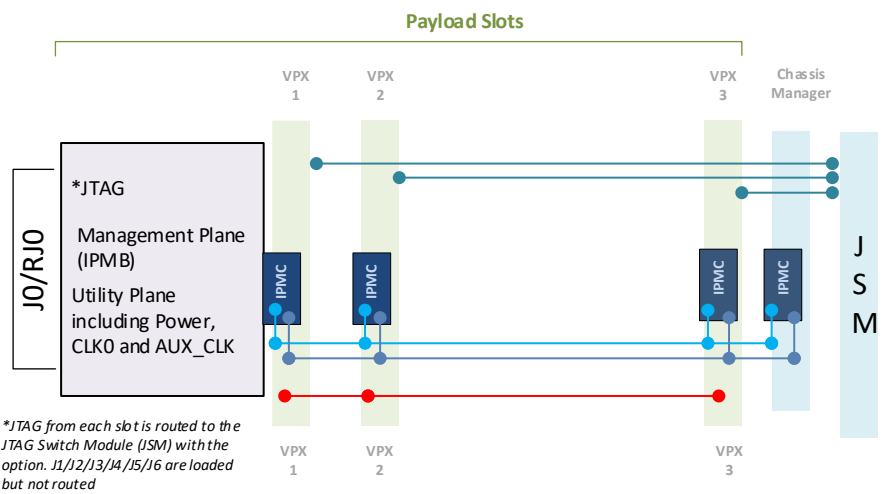


Figure 3A: VTX882 Backplane Connections

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: VTX882 Chassis Layout - Front View with the Chassis Manager and JSM



Figure 6: VTX882 Chassis Layout - Rear View with LC Style (four WDM transceivers and one MTP/MPO)

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	VTX882	900W DC +28V input
Environmental		See Ordering Options
Cooling		Front to back
Power Limit	Payload for three slots	600W
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

VTX882 – ABC-DE0-GHJ

A = Power Supply 0 = +16V to +38V (typical +28V) DC 900W 1 = Reserved 2 = Reserved	D = JSM 0 = No JSM 1 = JSM	G = Module Type 0 = Reserved 1 = VITA 48.1
B = Backplane routing 0 = Figure 3 1 = Figure 3A (independent) 2 = Reserved 3 = Reserved 4 = Reserved	E = Chassis Manager 0 = Not included 1 = With VITA 46.11 Tier two support 2 = With VITA 46.11 Tier two and Virtual Probe*	H = Environmental See Environmental Specification
C = VPX Connector Type 0 = Standard 50u Gold Rugged 1 = KVPX Connectors 2 = High speed 50u Gold Rugged (>16G)	F = Rear IO Connections 0 = Falcon Mini (Mil spec) with 4 WDM and one MPT/MPO 1 = LC Connectors (Commercial) with 4 WDM and one MTP/MPO	J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 polyurethane 2 = Humiseal 1B31 acrylic

*JSM option must be ordered with E = 2 option

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

Contact

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