

VTX660

8U VPX Chassis, Six 3U Slots with RTM Support



VTX660

Key Features

- 8U Open VPX rackmount system platform
- Dedicated Switch/management slot
- Up to five 3U VPX payload slots
- Compatible with 0.8-inch, 0.85-inch and 1.0-inch modules
- Option for conduction cool modules per VITA 48
- Support for Rear Transition Modules (RTMs)
- Redundant cooling in push/pull front-to-back airflow configuration
- Optional JTAG Switch Module (JSM)

Benefits

- Dual 800W AC or 800W DC Power Supply
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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OpenVPX™



VTX660

The VTX660 is an 8U VPX chassis with six 3U VPX slots. The chassis can accept 0.8-inch, 0.85-inch and 1.0-inch pitch modules and is ideal for commercial deployment. **The VTX660 has option for conduction cool modules per VITA 48 specification.**

Power Supplies

The VTX660 has dual AC input power supplies to provide 800W with redundancy (1+1) or DC -48V input 800W. The chassis supplies 95W/slot and the AC input is universal.

Cooling and Temperature Sensors

The VTX660 is designed to meet the ANSI/VITA 65 standard. It provides front to back push/pull cooling (18 CFM per slot at 0.24 in-H₂O @ 5000 feet) to the VPX payload and RTM slots.

Backplane

The backplane provides five 3U VPX payload slots in a star configuration, fully compliant to the VITA 46.0 baseline specification with additional support to the RTMs, compliant to VITA 46.10 and OpenVPX VITA 65.

JSM

There is an optional JSM to provide JTAG access to the front.



Figure 1: VTX660 Front View



Figure 2: VTX660 Rear View

Backplane Connections

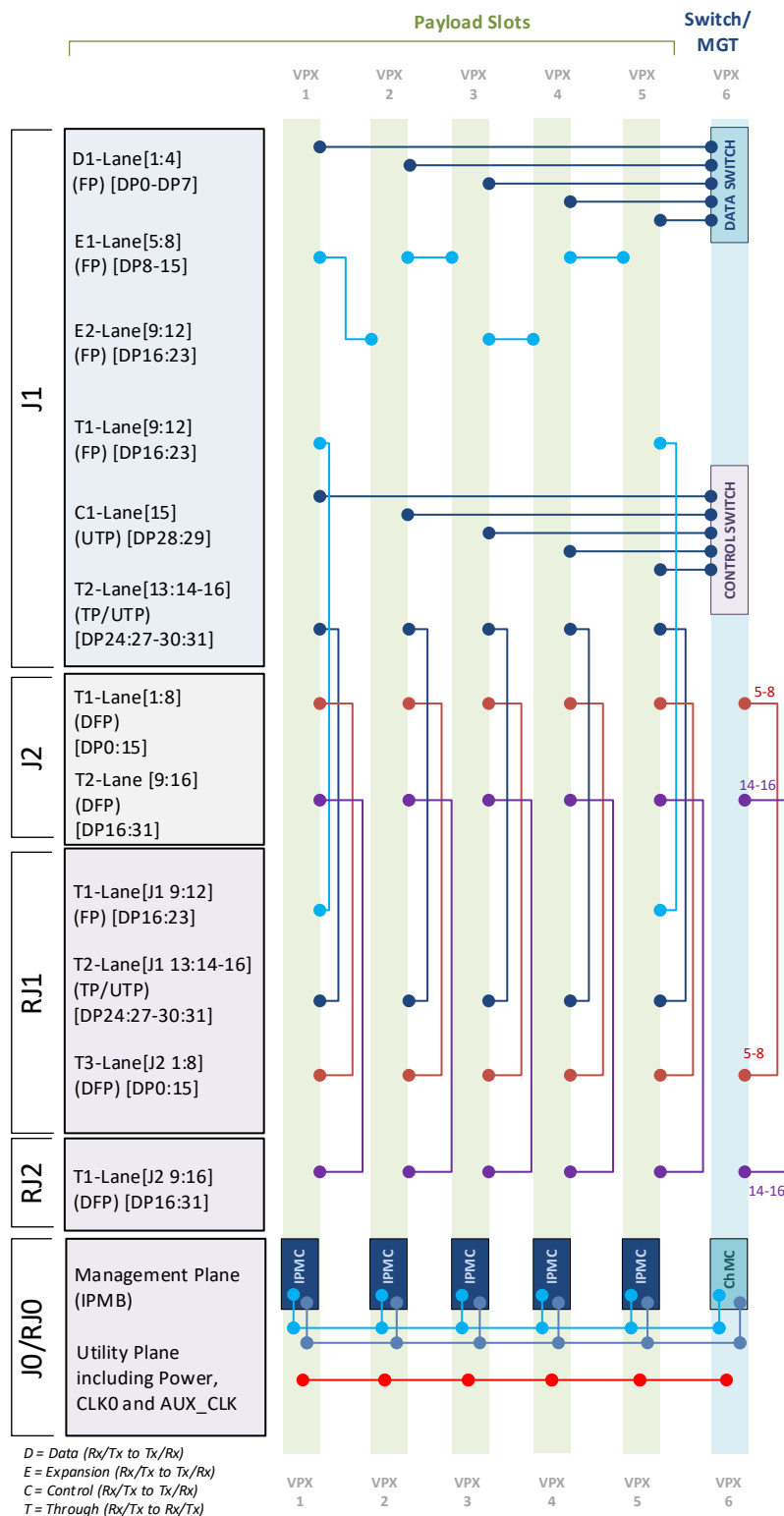


Figure 3: VTX660 Backplane Connections

The initial offering on VTX660 is based on backplane profile BKP3-CEN06_15.2.2-n. VadaTech can also design additional VITA standard backplane profiles for customer specific applications. Please contact your local sales team for more information.

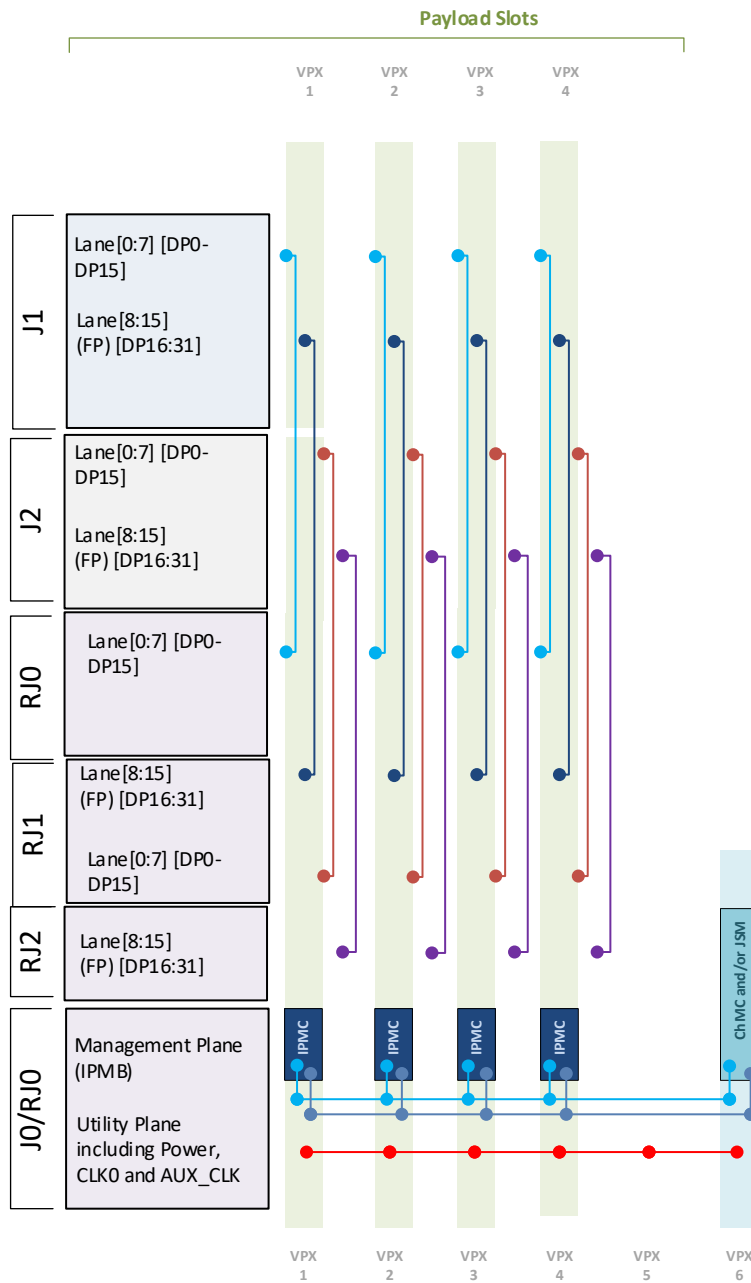


Figure 3A: VTX660 Backplane Connections (four slots front to rear with no interconnect between the slots)

Chassis Layout



Figure 4: VTX660 Chassis Layout - Front



Figure 5: VTX660 Chassis Layout - Rear

VPX 1	VPX 2	VPX 3	VPX 4	VPX 5	MGT	JSM
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Figure 6: VTX660 Chassis Slots Figure 3 routing slots

VPX 1	VPX 2	VPX 3	VPX 4	Health Manager and/or JSM
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Figure 7: VTX660 Chassis Slots Figure 3A routing slots

3U VPX Power	VPX 1	VPX 2	VPX 3	VPX 4	Health Manager and/or JSM
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Figure 8: VTX660 Chassis Slots Figure 3A routing slots with standard 3U VPX Power Modules

Specifications

Architecture		
Physical	Dimensions	Height: 8U
		Width: 8.5"
		Depth: 12.5"
		Weight: TBD
Type	VPX Shelf	5 Payload Slot up to 1.0" pitch and a dedicated Switch/management slot
Standards		
VPX	Type	VITA 46.0 Baseline Specification; slot profile per option G
Configuration		
Power	VTX660	800W AC universal input, dual power supply with redundancy (or -48V DC 800W)
Environmental		See Ordering Options
Cooling		Front to Back
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

VTX660 – ABC-DE0-GHJ

A = Power Supply	D = JSM	G = Applicable Slot Profile
0 = Single AC (800W) 1 = Dual AC (1+1, 1600W) 2 = Single DC -48V (800W) 3 = Dual DC -48V (1+1, 1600W) 4 = 3U VPX Power Module slot**	0 = No JSM 1 = JSM	0 = Reserved 1 = 5HP, VITA 48.1
B = Card Guide Type*	E = Back plane routing	H = Environmental
0 = Air Cool 1 = Conduction Cool (four slots only, E = 1) 2 = Reserved	0 = Figure 3 1 = Figure 3A (4 slots)	See Environmental Specification
C = VPX Connector Type		J = Conformal Coating
0 = Standard 50u Gold Rugged 1 = KVPX Connectors		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

** Power Module is not included and only four slots are allowed

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

VadaTech Corporate Office

198 N. Gibson Road, Henderson, NV 89014

Phone: +1 702 896-3337 | Fax: +1 702 896-0332

Asia Pacific Sales Office

7 Floor, No. 2, Wenhua Street, Neihu District, Taipei 114, Taiwan

Phone: +886-2-2627-7655 | Fax: +886-2-2627-7792

VadaTech European Sales Office

VadaTech House, Bulls Copse Road, Southampton, SO40 9LR

Phone: +44 2380 016403

info@vadatech.com | www.vadatech.com

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