

VTX661

8U VPX Chassis, Up to Twelve
3U Slots with RTM Support



VTX661

Key Features

- 8U Open VPX rackmount system platform
- Dual Dedicated Switch/management slots
- Up to ten 3U VPX payload slots (with two slots that can have up to 10 HP)
- 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

- Up to three 800W AC or 650W DC Power Input
- 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™



VTX661

The VTX661 is an 8U VPX chassis with twelve 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 VTX661 has option for conduction cool modules per VITA 48 specification.**

Power Supplies

The VTX661 has three AC input power supplies to provide 1600W with redundancy (2+1). The chassis supplies 95W/slot and AC input is universal.

Cooling and Temperature Sensors

The VTX661 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 ten 3U VPX payload slots in a star configuration, fully compliant to VITA 46.0 baseline specification with additional support to the RTMs, compliant to VITA 46.10 and OpenVPX VITA65.

JSM

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



Figure 1: VTX661 Front View



Figure 2: VTX661 Rear View

Backplane Connection Options

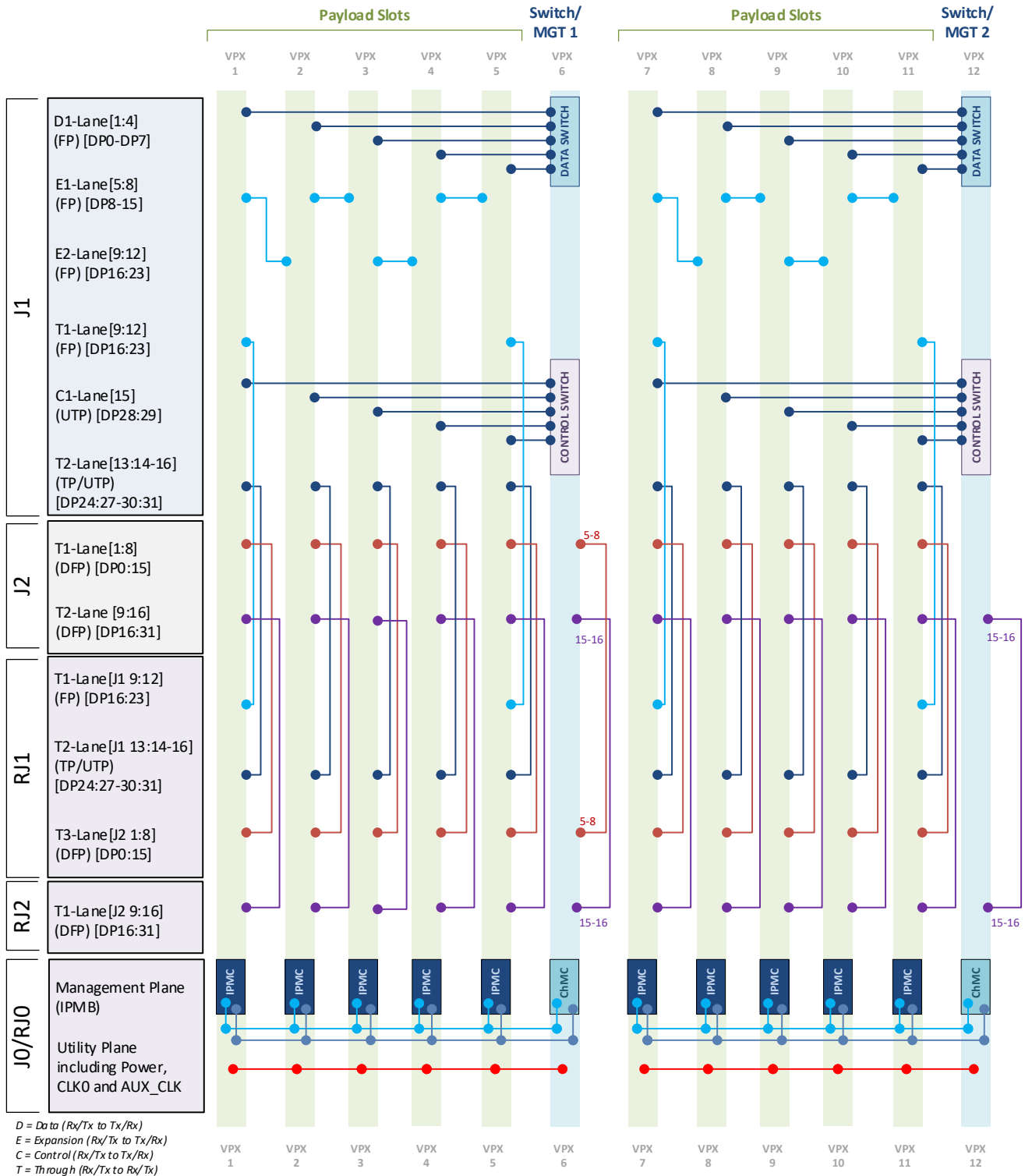


Figure 3: VTX661 Backplane Connections (option F = 0)

The initial offering on VTX661 is based on backplane profile BKP3-CEN07_15.2.3-n. VadaTech can also design additional VITA standard backplane profiles for customer specific applications. Please contact your local sales team for more information.

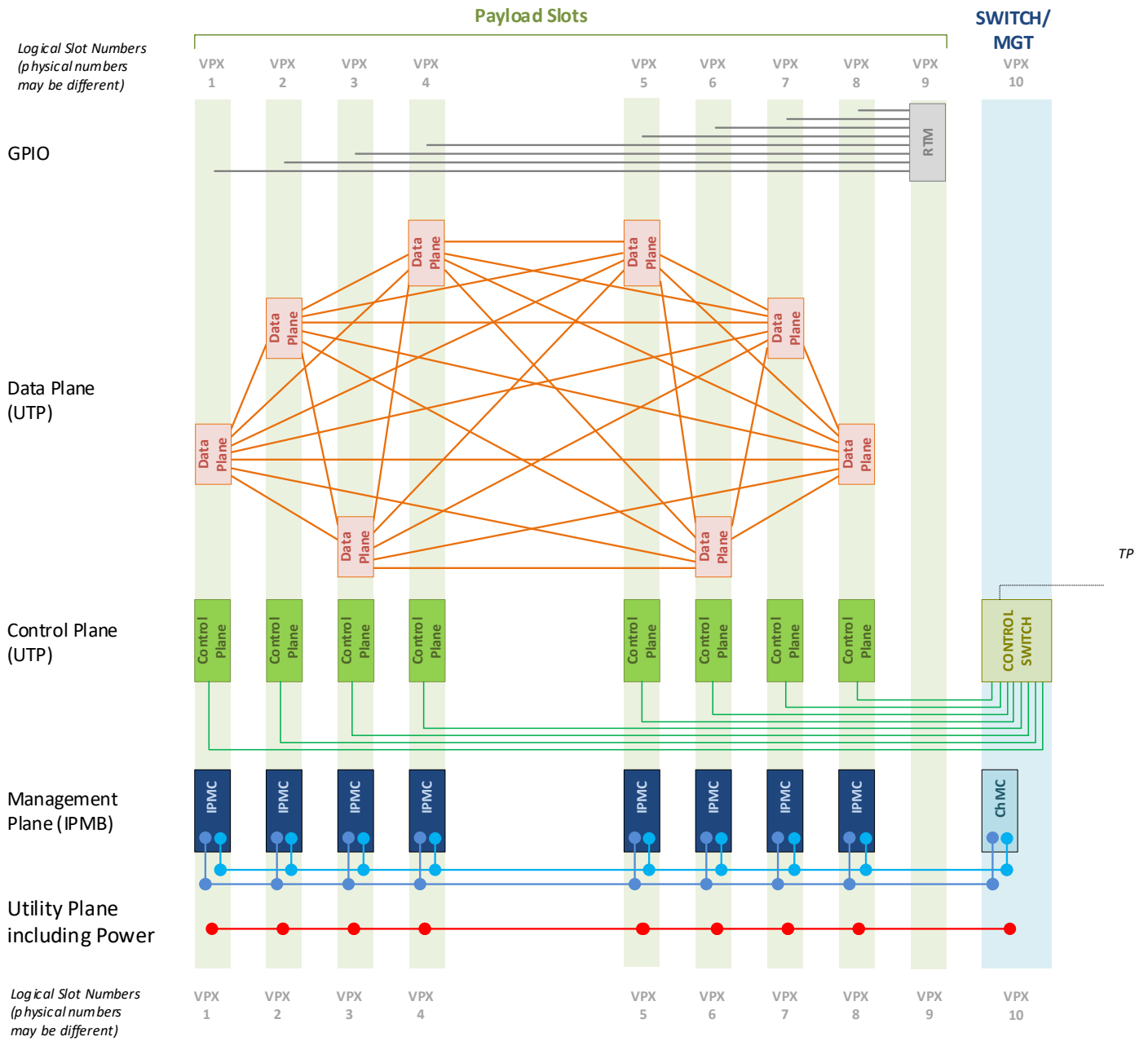


Figure 4: VTX661 Backplane Connections (option F = 1)

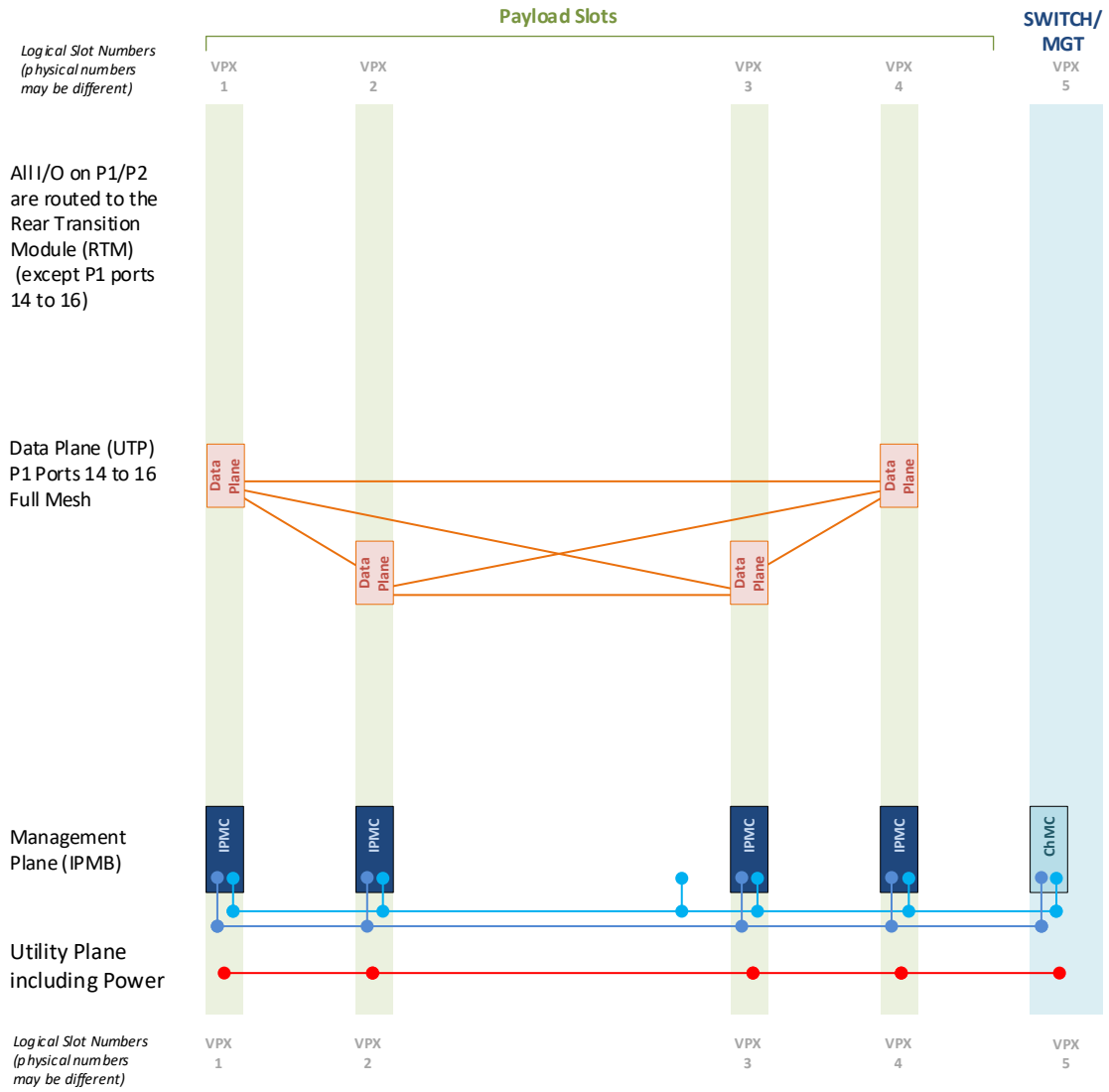


Figure 5: VTX661 Backplane Connections (option F = 2)

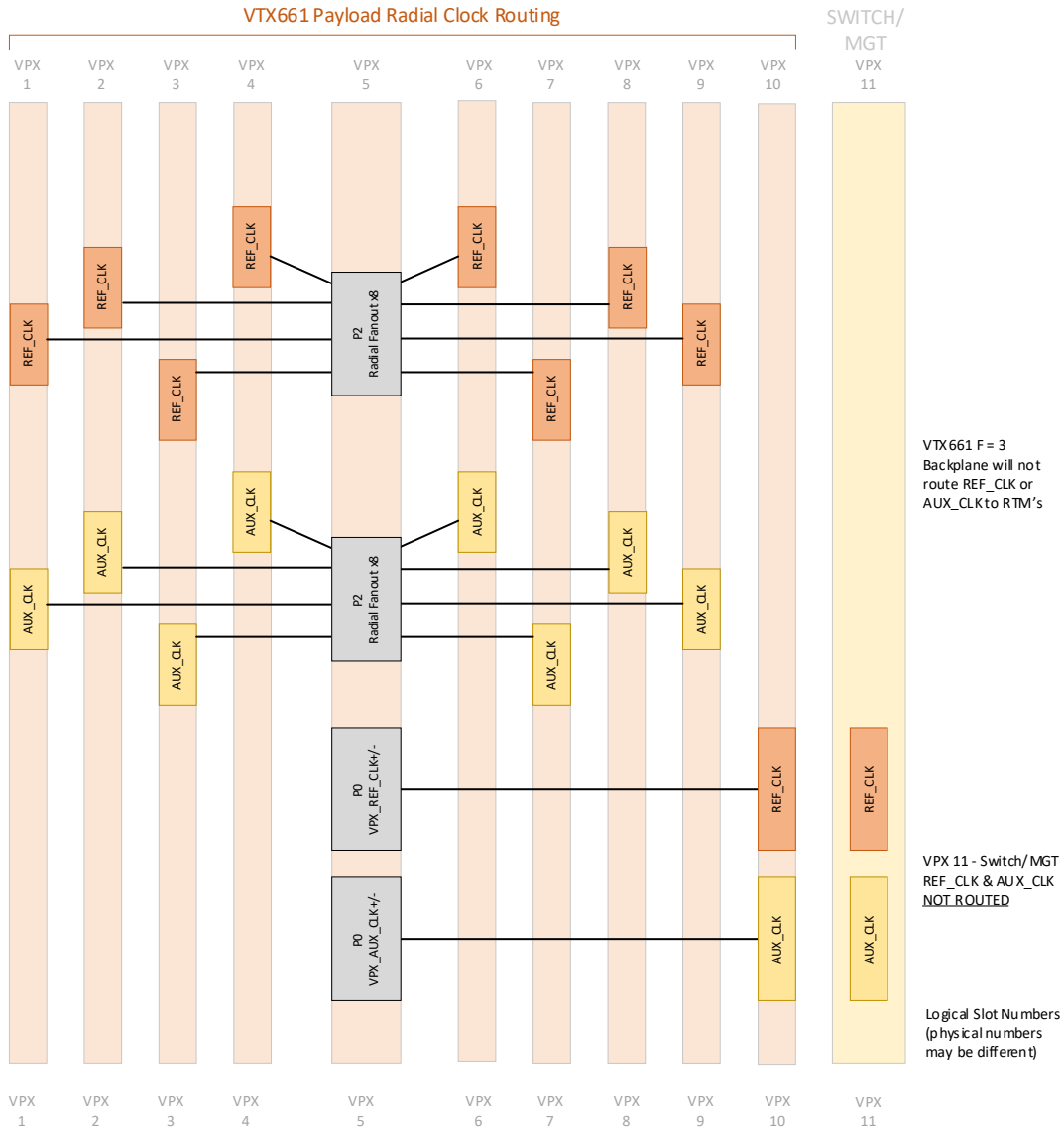


Figure 5A: VTX661 Backplane Connections (option F = 3)

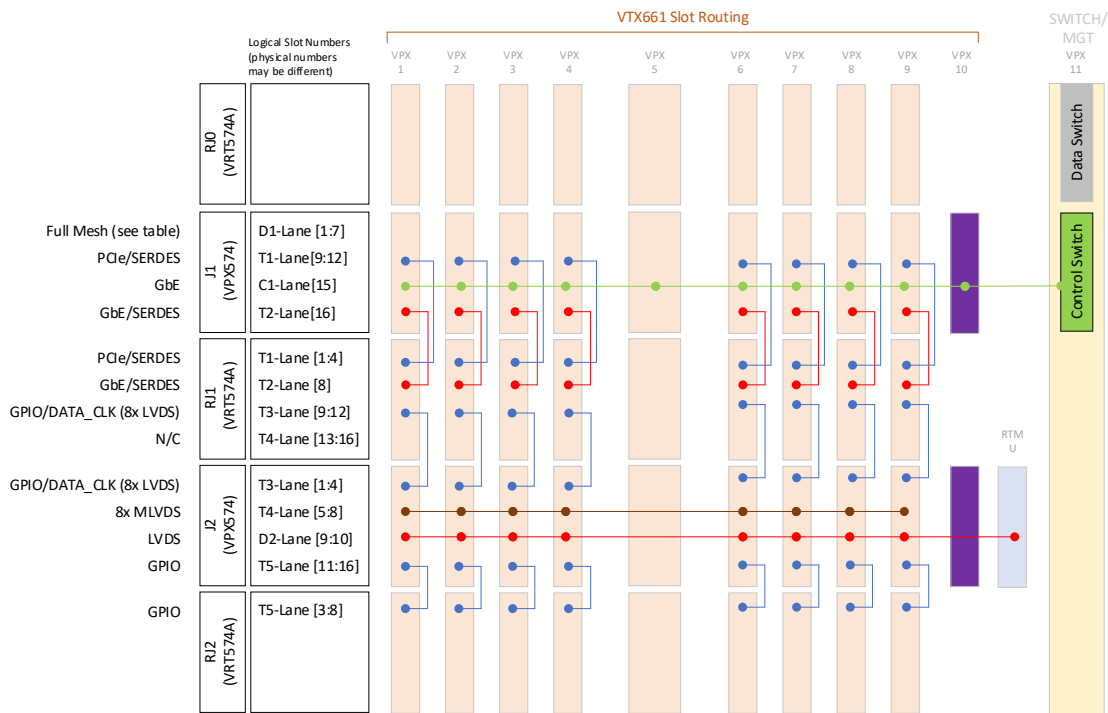


Figure 5B: VTX661 Backplane Connections (option F = 3)

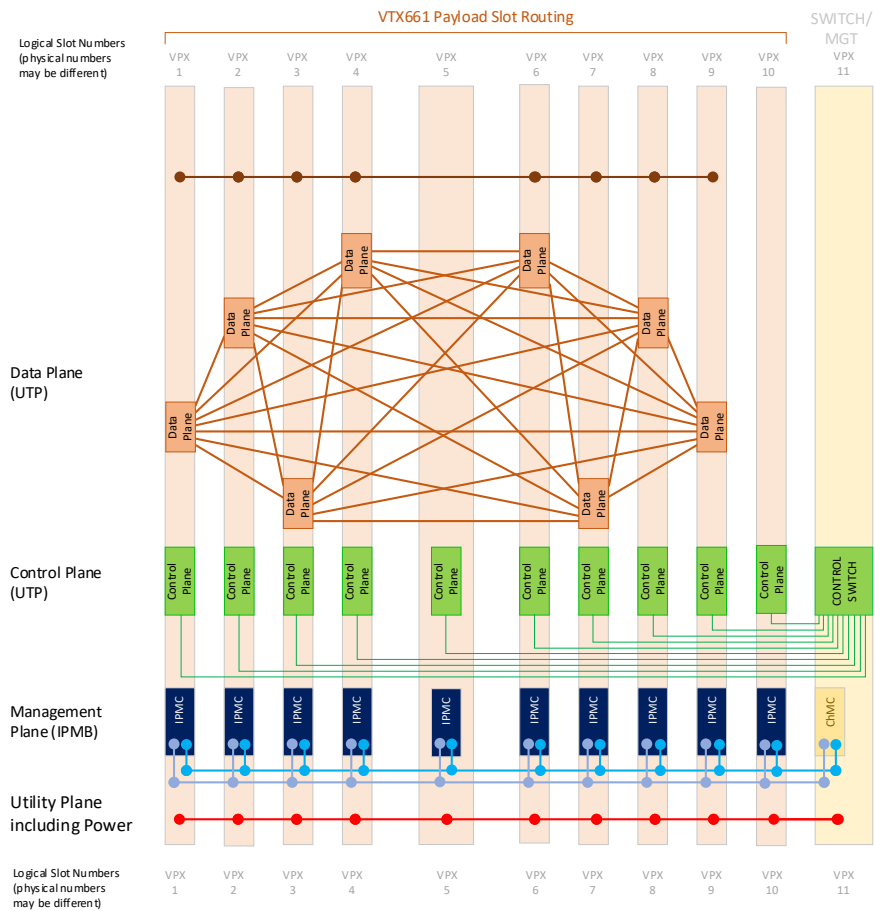


Figure 5C: VTX661 Backplane Connections (option F = 3)

Chassis Layout

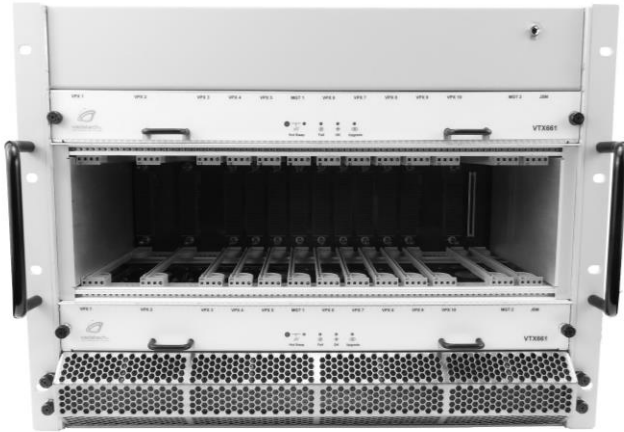


Figure 6: VTX661 Chassis Layout - Front



Figure 7: VTX661 Chassis Layout – Rear

VPX 1	VPX 2	VPX 3	VPX 4	VPX 5	MGT 1	VPX 6	VPX 7	VPX 8	VPX 9	VPX 10	MGT 2	JSM
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Figure 8: VTX661 Chassis Slots

Specifications

Architecture		
Physical	Dimensions	Height: 8U
		Width: 19"
		Depth: 12.5"
		Weight: TBD
Type	VPX Shelf	10 Payload Slots up to 1.0" pitch and dual dedicated Switch/management slots
Standards		
VPX	Type	VITA-46.0 Baseline Specification
Configuration		
Power	VTX661	3 x 800W AC input with redundancy (or -48V DC 650W)
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

VTX661 – ABC-D0F-GHJ

A = Power Supply 0 = Single AC (800W) 1 = Dual AC (1+1, 1600W) 2 = Triple AC (2+1, 2400W) 3 = Single DC -48V (800W) 4 = Dual DC (1+1, 1600W) 5 = Triple DC (2+1, 2400W)	D = JSM 0 = No JSM 1 = JSM	G = Applicable Slot Profile 0 = 5HP, IEEE 1101.10 1 = 5HP, VITA 48.1
B = Card Guide Type* 0 = Air Cool 1 = Conduction Cool (VITA 48) 2 = Reserved		H = Environmental See Environmental Specification
C = VPX Connector Type 0 = Standard 50u Gold Rugged 1 = KVPX Connectors	F = Backplane Routing 0 = Per Fig 3 1 = Per Fig 4 2 = Per Fig 5 3 = Per Fig 5A, 5B and 5C 4 = Reserved	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	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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