

VTX989

Five slots 3U VPX conduction cooled Chassis



VTX989

Key Features

- VTX989 is a five slot 3U VPX conduction cool chassis
- Base plate cooling (cold wall is in the bottom of the chassis)
- Integrated Power Module within the Chassis
- Support for VITA67.2 coaxial/RF for four of the slots (default backplane routing)
- All I/O are thru the front of the chassis
- 250W integrated Power Supply
- Horizontal mount for the four standard 3U VPX module
- The fifth slot and the Power Module dissipate heat through the skyline to the base plate

Benefits

- 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™



VTX989

The VTX989 is a five slot 3U VPX conduction cooled chassis. The chassis can accept four standard 3U VPX conduction cooled modules with 5HP pitch. The P2 connector location is populated with a 8-position VITA 67.2 coaxial/RF module for the first four modules (the backplane can be modified to meet any of the VITA specifications).

The VTX989 fifth slot is for a modified VPX 3U module allowing the hottest module within the chassis to dissipate heat directly through the skyline made on the cold wall. This allows the best heat transfer from the hottest module directly to the cold wall. All I/O are routed to the front of the chassis and the VITA67.2 can be routed through coaxial via the rear. The I/O's are customized and are based on customer requirement.

Power Supply

The VTX989 has an integrated 250W Power Module which takes a +28V input and provides the necessary powers to the 3U VPX module in accordance with VITA 46 specifications. The power module also dissipates heat directly through the cold wall.

Backplane

The backplane provides all the necessary VITA 46 signals set by the user (NVMRO, SYSRESET, SYS_CON, driver the dual clock, etc.). In most cases the backplane default routing has to be modified to fit module profiles.



Figure 1: VTX989 Chassis Front View



Figure 2: VTX989 Chassis Rear View

Backplane Connections J0-J2

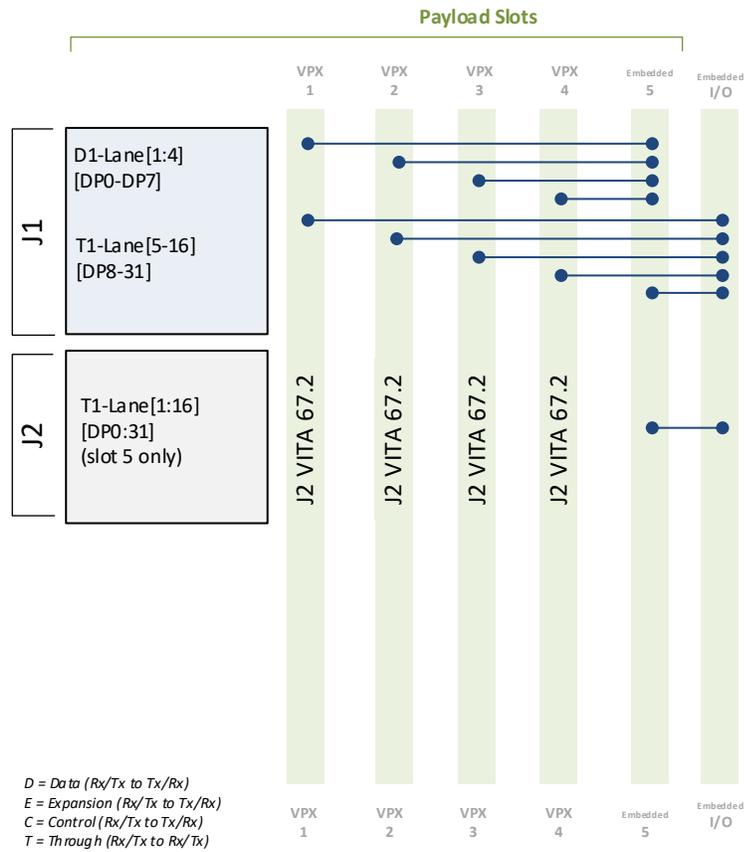


Figure 5: VTX989 Backplane Connections (option E = 0)

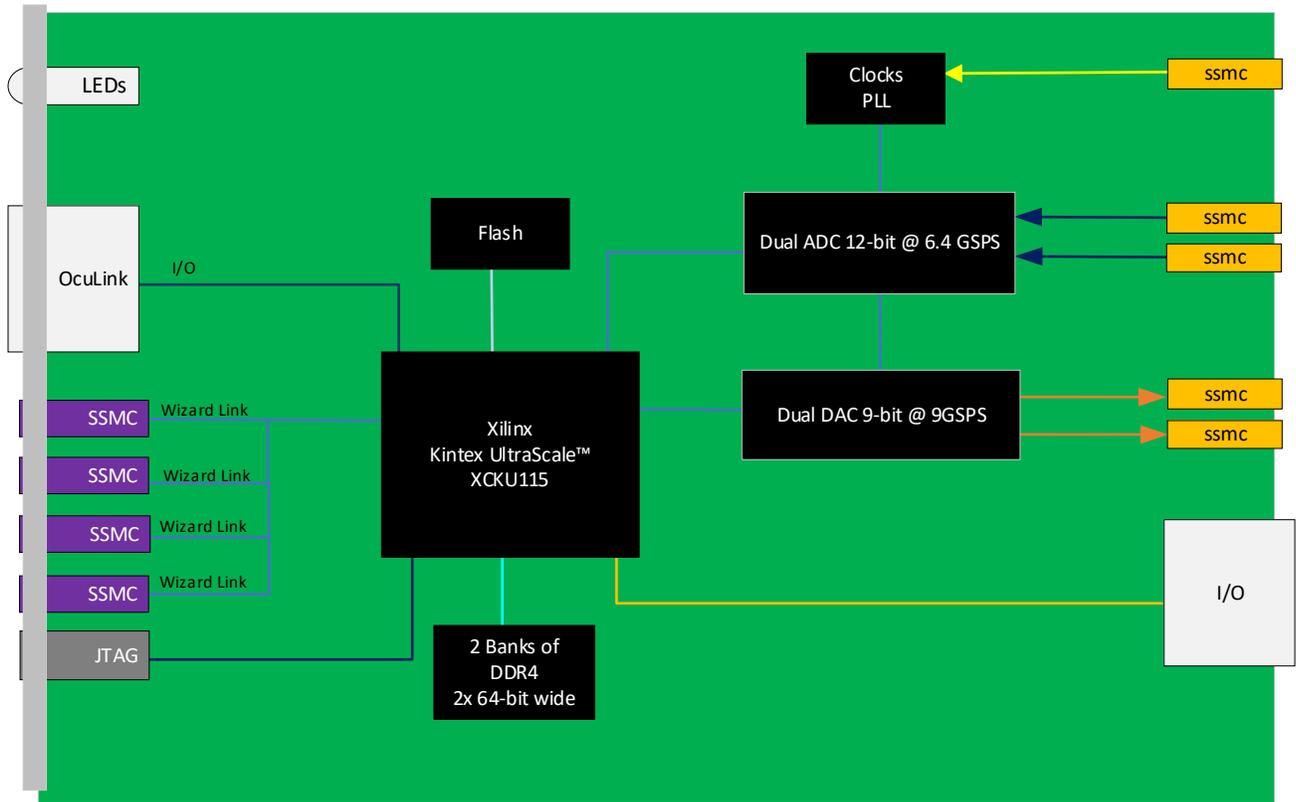


Figure 6: Integrated Base Plate Module (option B = 0)

Specifications

Architecture		
Physical	Dimensions	Height: 4.5"
		Width: 9.4"
		Depth: 9.1"
Standards		
VPX	Type	3U, VITA 46.0 and VITA 67.2
Configuration		
Power	VTX989	250W with +28V source
Environmental		See Ordering Options
Cooling		Base plate conduction cool
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

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

VTX989 – ABC-0E0-0HJ

A = Power Supply		
0 = 250W (+28V, Integrated within the chassis)		
B = Fifth slot Integrated 3U VPX module*	E = Backplane routing	H = Environmental
0 = Per figure 6 1 = Reserved 2 = Reserved 3 = Reserved	0 = Per figure 5 1 = Reserved 2 = Reserved 3 = Reserved	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: *Contact VadaTech for any other VPX module since the skyline of the Base Plate will change based on the module

Environmental Specification*

Option H	Air Cooled		Conduction Cooled		
	NA	NA	H = 2	H = 3 (**)	H = 4 (**)
Operating Temperature			CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
Storage Temperature			C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
Operating Vibration			V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
Storage Vibration			OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity			95% non-condensing	95% non-condensing	95% non-condensing

Notes:

*Nomenclature per ANSI/VITA 47.

(**) Contact local sales office for conduction cooled (H = 3, 4).

Related Products

VPX599



- 3U FPGA Xilinx Kintex UltraScale™ XCKU115 FPGA per VITA 46
- Dual ADC 12-bit @ 6.4 GSPS or quad ADC at 3.2 GSPS with TI ADC12DJ3200
- Dual DAC 16-bit @ 12 GSPS (AD9162 or AD9164) or TI DAC38RF82 14-bit @ 9GSPS

VPX703



- Processor VPX (PrVPX) with QorIQ T4241 or T4161
- Three banks of 64-bit DDR3 memory with T4241 (up to 12 GB total)
- Dual Redundant MIL-STD-1553A/B

VPX572



- Virtex UltraScale+, 3U VPX
- Dual ADC 12-bit @ 6.4 GSPS (ADC12DJ3200) or Quad ADC @ 3.2 GSPS
- Health Management through dedicated Processor

Contact

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