

# VPX243

3U VPX with 4 SFP+ style ports



VPX243

## Key Features

- 3U VPX form-factor
- x4 SERDES from P1 to four SFP+ style ports
- Allows for 10G down to 1G speed
- Health Management through dedicated Processor

## Benefits

- 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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# VPX243

The VPX243 is a 3U VPX module per VITA 46. The module brings four SERDES from the P1 connector to four SFP+ style ports in the front. The VPX243 allows for any protocol (Ethernet, Aurora, etc.) to run at 10G down to 1G. The VPX243 has the optical cages recessed to allow for the necessary optical bend radius in a conduction cool chassis.

The module has Clock Data Recovery on board (CDR) for better signal integrity.

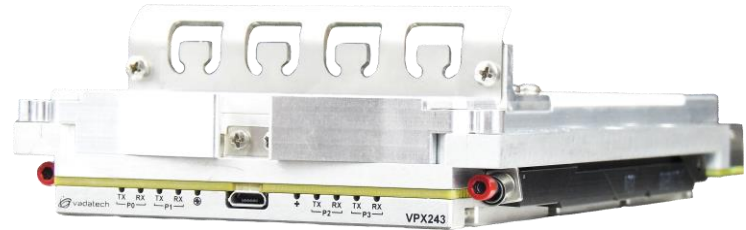


Figure 1: VPX243



Figure 2: VPX243 Front View



Figure 3: VPX243 Top View

# Block Diagram

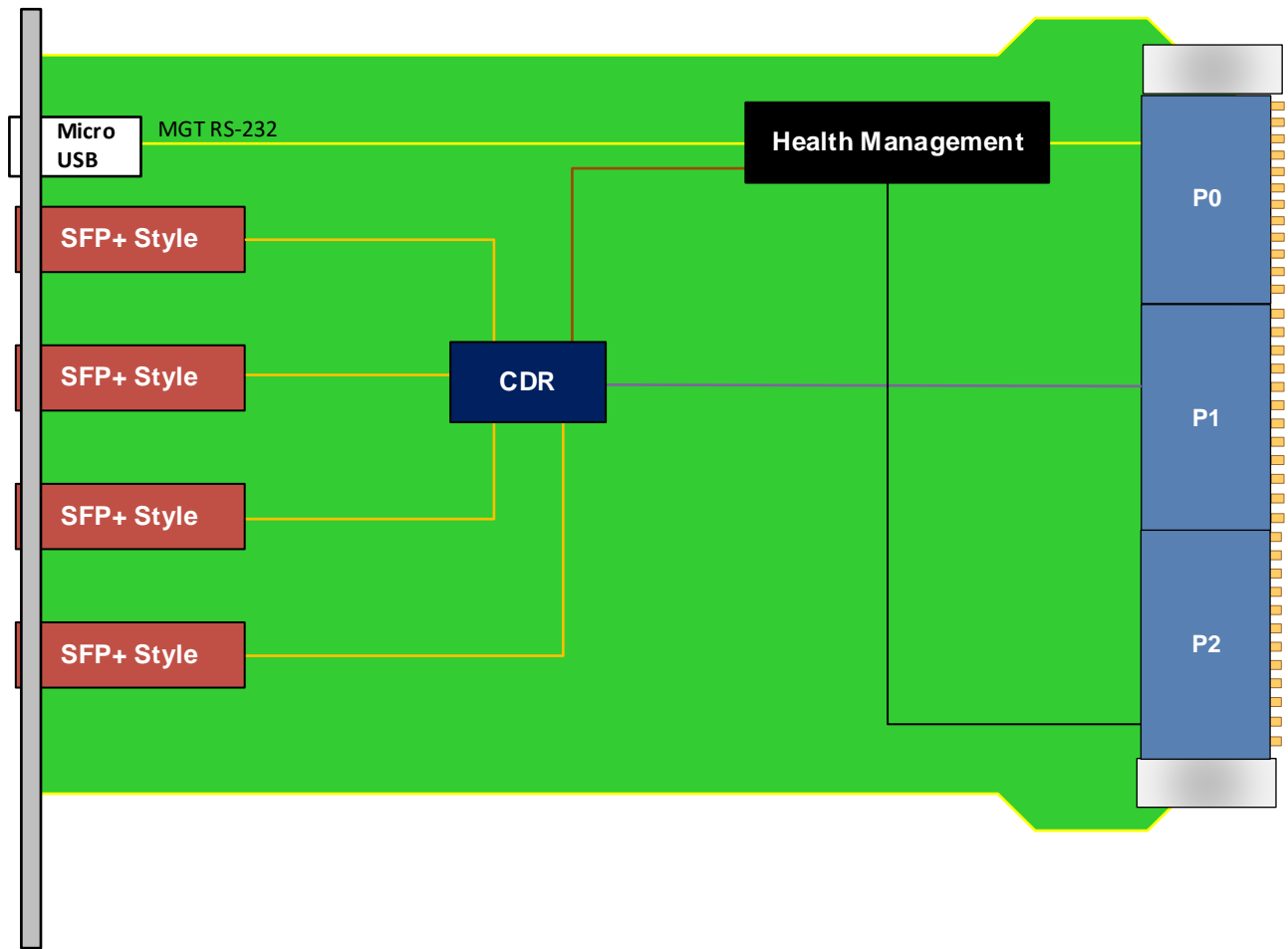


Figure 4: VPX243 Functional Block Diagram

# Specifications

Architecture		
<b>Physical</b>	<b>Dimensions</b>	3U, 1" pitch
Standards		
<b>VPX</b>	<b>Type</b>	VITA 46.x
<b>VPX</b>	<b>Type</b>	VITA 65 OpenVPX
<b>Module Management</b>	<b>IPMI</b>	IPMI v2.0
Configuration		
<b>Power</b>	<b>VPX242</b>	~6W
<b>Front Panel</b>		4x SFP+ ports
	<b>Micro USB</b>	RS-232 for Health Management
	<b>LEDs</b>	User defined by Health Management
<b>Onboard Interfaces</b>		SFP+
<b>VPX Interfaces</b>	<b>Slot Profiles</b>	See <a href="#">Ordering Options</a>
	<b>Rear IO</b>	P1 SERDES routed from ports 0-3
	<b>Power Supplies</b>	From P0
Other		
<b>MTBF</b>		MIL Hand book 217-F@ TBD hrs
<b>Certifications</b>		Designed to meet FCC, CE and UL certifications, where applicable
<b>Standards</b>		VadaTech is certified to both the ISO9001:2015 and AS9100D standards
<b>Warranty</b>		Two (2) years, see <a href="#">VadaTech Terms and Conditions</a>

## 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

## VPX243 – A0C-000-GHJ

<b>A = P2 Connector Load Option</b> 0 = Installed 1 = Not Installed	<b>G = Applicable Slot Profile</b> 0 = 5 HP, VITA 48.1 1 = Reserved
<b>C = VPX Connector Type</b> 0 = Standard 50u Gold Rugged 1 = KVPX Connectors	<b>H = Environmental</b> See <a href="#">Environmental Specification</a>
	<b>J = Conformal Coating</b> 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes:

## Environmental Specification

	Air Cooled		Conduction Cooled		
Option H	H = 0	H = 1	H = 2	H = 3	H = 4
<b>Operating Temperature</b>	AC1* (0°C to +55°C)	AC3* (-40°C to +70°C)	CC1* (0°C to +55°C)	CC3* (-40°C to +70°C)	CC4* (-40°C to +85°C)
<b>Storage Temperature</b>	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C1* (-40°C to +85°C)	C3* (-50°C to +100°C)	C3* (-50°C to +100°C)
<b>Operating Vibration</b>	V2* (0.04 g2/Hz max)	V2* (0.04 g2/Hz max)	V3* (0.1 g2/Hz max)	V3* (0.1 g2/Hz max)	V3 (0.1 g2/Hz max)
<b>Storage Vibration</b>	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
<b>Humidity</b>	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing	95% non-condensing

Notes:

\*Nomenclature per ANSI/VITA 47. Contact local sales office for conduction cooled (H = 2, 3, 4).

## Related Products

VPX516



- 3U FPGA carrier for FPGA Mezzanine Card (FMC) per VITA 46 and VITA 57
- Xilinx Virtex-7 690T FPGA in FFG-1761 package
- High-performance clock jitter cleaner

VPX592



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

VPX599



- Xilinx Kintex UltraScale™ XCKU115 FPGA
- Dual ADC 12-bit @ 6.4 GSPS
- Dual DAC 16-bit @ 12 GSPS (AD9162 or AD9164)

# Contact

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