

VPX242

3U VPX with 4 SFP+ ports



VPX242

Key Features

- 3U VPX form factor
- x4 SERDES from P1 (any lane from 1 to 16) to four SFP+ 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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VPX242

The VPX242 is a 3U VPX module per VITA 46. The modules bring four SERDES from the P1 connector to four SFP+ ports in the front. The VPX242 allows for any protocol (Ethernet, Aurora, etc.) to run at 10G down to 1G.

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

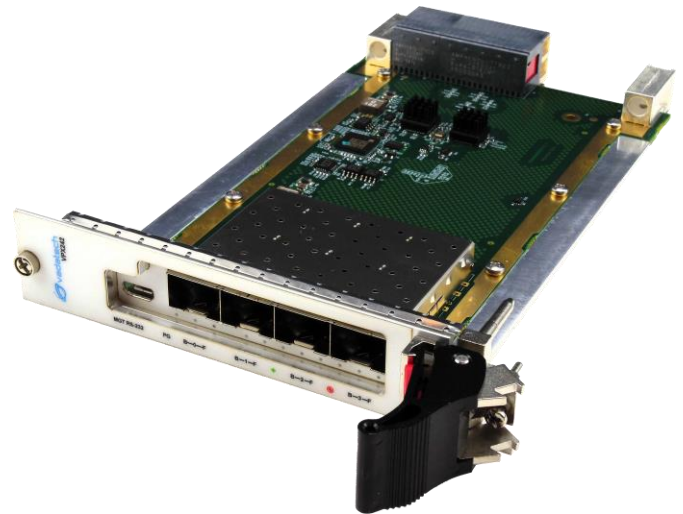


Figure 1: VPX242



Figure 2: VPX242 Front View

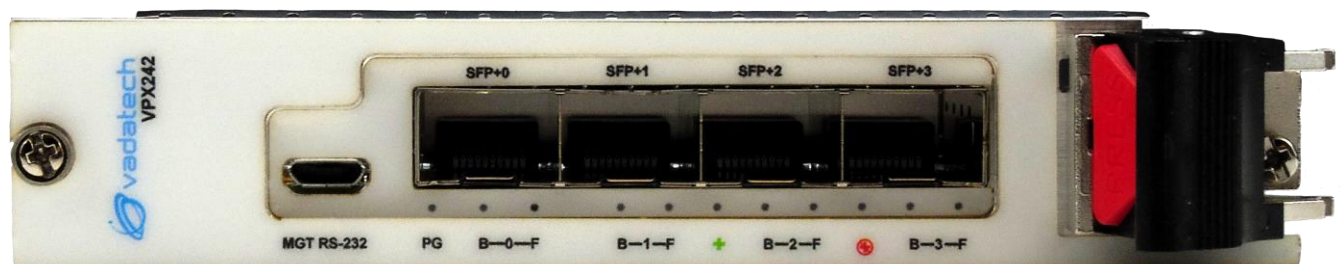


Figure 3: VPX242 Front Panel View

Block Diagram

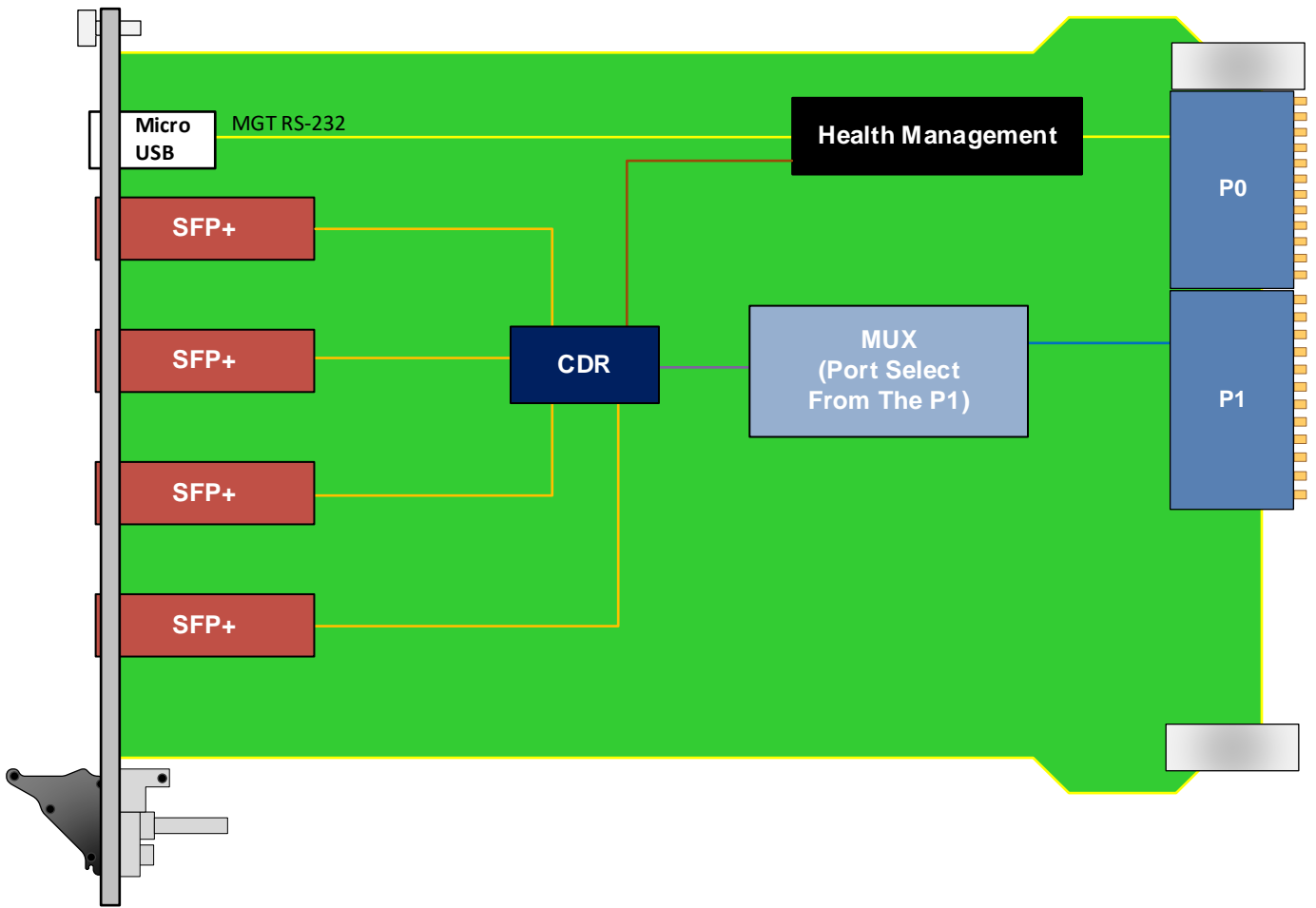


Figure 4: VPX242 Functional Block Diagram

Specifications

Architecture		
Physical	Dimensions	3U, 1" pitch
Standards		
VPX	Type	VITA 46.x
VPX	Type	VITA 65 OpenVPX
Module Management	IPMI	IPMI v2.0
Configuration		
Power	VPX242	~6W
Front Panel		4x SFP+ ports
	Micro USB	RS-232 for Health Management
	LEDs	User defined by Health Management
Onboard Interfaces		SFP+
VPX Interfaces	Slot Profiles	See Ordering Options
	Rear IO	P1 SERDES route
	Power Supplies	From P0
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		Two (2) years, 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

VPX242 – A0C-D00-GHJ

A = Optical Transceivers (comes with four) 0 = None 1 = 10G SR 2 = 10G LR (1KM) 3 = 10G LR (10KM) 4 = 10G ER (40KM) 5 = 10G Copper	D = P1 Ports routed to the SFP+ 0 = Ports 1-4 1 = Ports 5-8 2 = Ports 9-12 3 = Ports 13-16 4 = Ports 1, 5, 9 and 13 5 = Ports 2, 6, 10 and 14 6 = Ports 3, 7, 11 and 15 7 = Ports 4, 8, 12 and 16 8 = Reserved	G = Applicable Slot Profile 0 = 5 HP, VITA 48.1 1 = Reserved
		H = Environmental See Environmental Specification
C = VPX Connector Type 0 = Standard 50u Gold Rugged 1 = KVPX Connectors		J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

Notes:

Environmental Specification

Option H	Air Cooled			Conduction Cooled	
	H = 0	H = 1	H = 2	H = 3	H = 4
Operating Temperature	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)
Storage Temperature	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)
Operating Vibration	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)
Storage Vibration	OS1* (20g)	OS1* (20g)	OS2* (40g)	OS2* (40g)	OS2* (40g)
Humidity	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)

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