

VPX611

U.2 NVMe Solid State Drive, PCIe Gen4 in 3U VPX

Key Features

- 3U VPX Solid State Drive (SSD) with U.2 form factor
- PCIe Gen4 x4
- Storage up to 30TB in single 2.5" 15mm height
- IPMI 2.0 compliant

Benefits

- Multi-Terabit storage capacity in a single module VPX form factor carrier
- NVMe performance
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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VPX611

The VPX611 is fully compliant to the Enterprise Solid State Disk (SSD) with the U.2 form factor. NVMe storage provides high speed and low latency read/write to the SSD devices.

The module supports one U.2 form factor NVMe storage device in 2.5" form factor. The module can accept a 15mm height disk with capacity of up to 30TB.

The VPX611 has PCIe Gen4 x4 routed to optional lanes 1-4, 5-8, 9-12 or 13-16 of the P1. This routing from P1 to the storage unit is selected by the ordering option.

Block Diagram

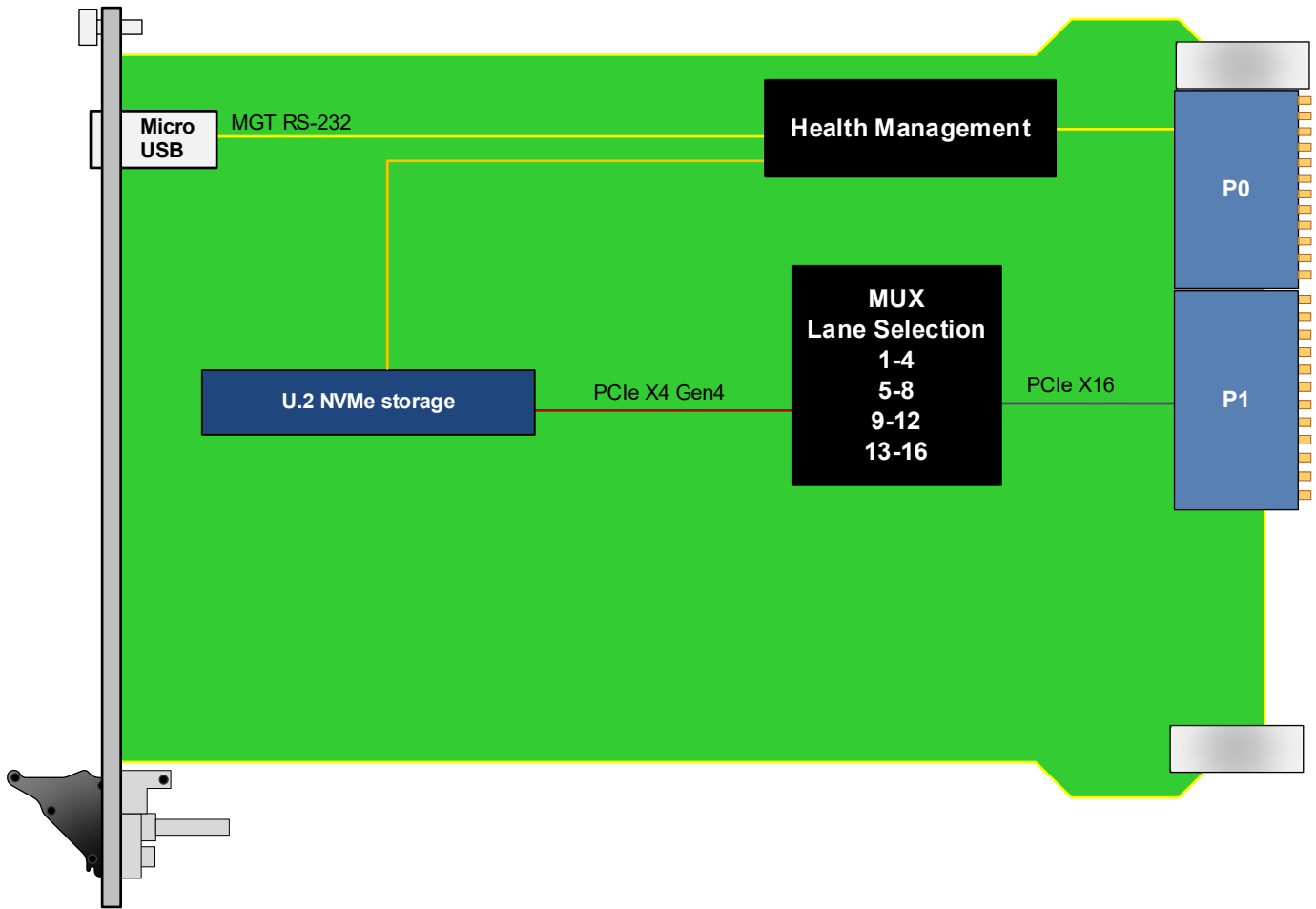


Figure 1: VPX611 Functional Block Diagram



Figure 2: VPX611 Front Panel

Backplane Pinout

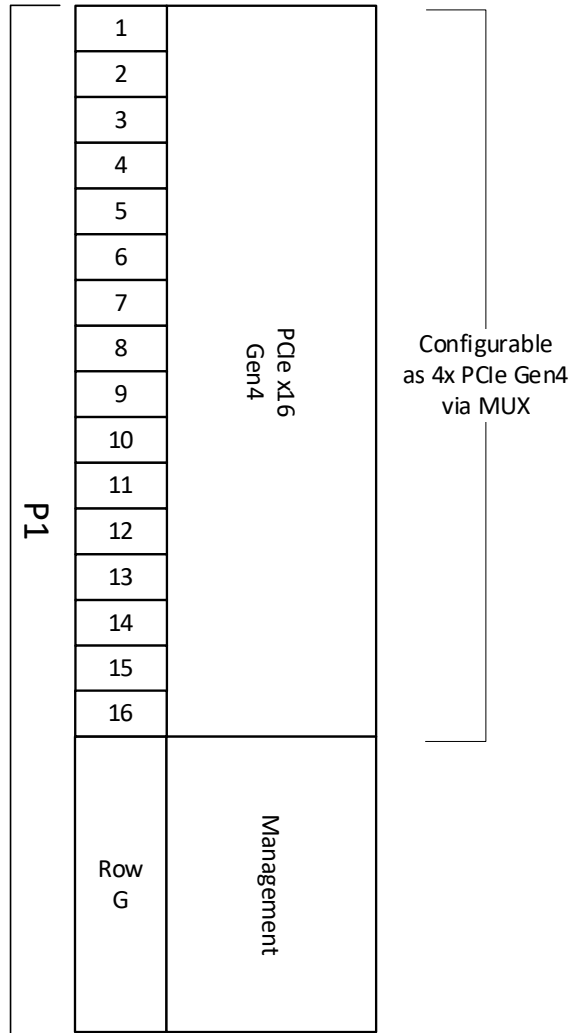


Figure 3: VPX611 Pinout Block Diagram

Specifications

Architecture	
Physical Type	Dimensions 3U, 1" Pitch
	VPX Storage U.2 NVMe SSD
Standards	
VPX	Type VITA 46.x and VITA 65 Open VPX
Module Management	IPMI IPMI v2.0
PCIe	Lanes Gen4 x4
Storage	SSD Per option A; up to 30TB
Configuration	
Power	VPX611 25W with 15 TB of NVMe Storage
Front Panel	Interface Connectors RS-232 from Health Management
VPX Interfaces	Slot Profiles See Ordering Options
Software Support	Operating System Linux, Windows and VxWorks
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

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, VPX 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

VPX611-A00-D00-GHJ

A = NVMe Storage Capacity	D = PCIe Port selection	G = Slot Profile
0 = None 1 = Reserved 2 = 6 TB 3 = 15 TB 4 = 30 TB 5 = Reserved 6 = Resaved	0 = Ports 0-3 1 = Ports 4-7 2 = Ports 8-11 3 = Ports 12-15	0 = 5 HP, VITA 48.1
		H = Environmental See Environmental Specification
		J = Conformal Coating 0 = No coating 1 = Humiseal 1A33 Polyurethane 2 = Humiseal 1B31 Acrylic

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

VPX765



- 3U VPX Processor Intel® Core™ Processor i7-1185GRE (Tiger Lake)
- PCIe x4 Gen4 and PCIe x4 Gen3 to P1
- XMC with PCIe x4 Gen3

VTX955



- 1U Open VPX Rackmount platform with two 3U VPX payload slots
- Support for conduction cooled modules
- Support for Rear Transition Modules (RTMs)

VPX339



- Comprehensive multi-protocol support
- Support for MIL-STD-1553A/B, MIL-STD-1760
- Support for ARINC 429, ARINC 575, ARINC 717, ARINC 825

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, Wenhui 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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