VPX344

VPX Graphic Board with 5 Mini Display Ports

VPX344

Key Features

- 3U VPX form factor
- PCIe Gen3 x8 or x4 per VITA 46 and OpenVPX VITA 65
- Based on AMD graphics processor E9171
- Support for five displays 4096x2160 (4K display)
- Support for one 5120x2880 @ 60 Hz single cable
- Support for two 5120x2880 @ 60 Hz dual-cable
- 4 GB of GDDR5 Memory
- Optimized for DirectX 12
- Health Management through dedicated Processor

Benefits

- Uses high performance graphics processor
- Design utilizes proven VadaTech subcomponents and engineering techniques
- 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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VPX344

The VPX344 is a third generation VadaTech graphics module designed to meet the high-performance needs of Military, Industrial and Telecom applications. The mid-size board is one of the fastest and most advanced, high-performance 2D and 3D graphics processors available for the VPX embedded market.

The module is compliant to the VITA 46 and open VPX VITA 65 specification with PCIe x4 or x8.

The module offers 4 GB of GDDR5 memory and supports up to five independent displays with resolutions of 4096x2160 @ 60 Hz (4K Display). The module could also support one 5120x2880 @ 60 Hz single-cable or dual 5120x2880 @ 60 Hz dual-cable.

Figure 1: VPX344

Block Diagram

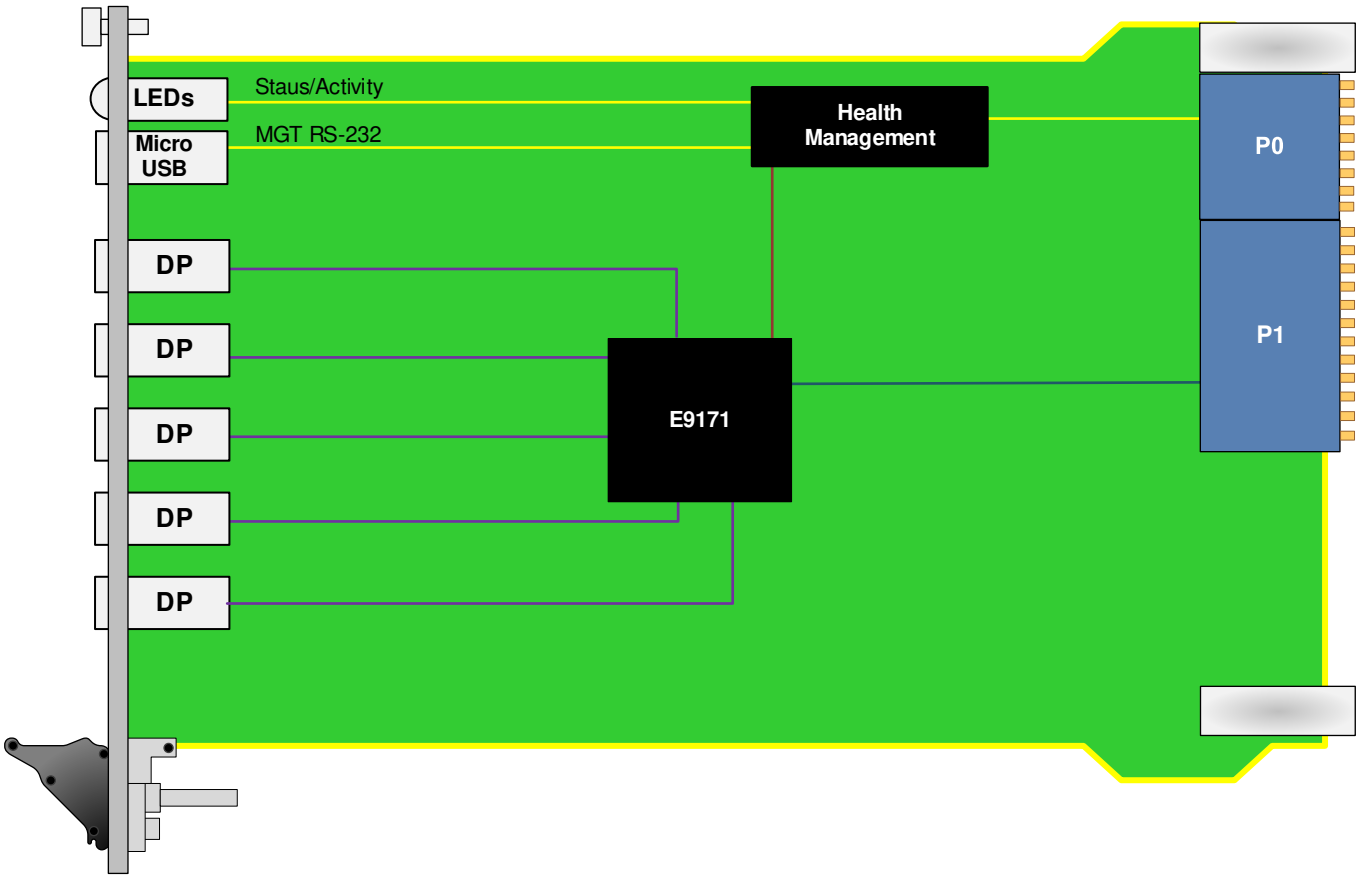

Figure 2: VPX344 Functional Block Diagram

Front Panel

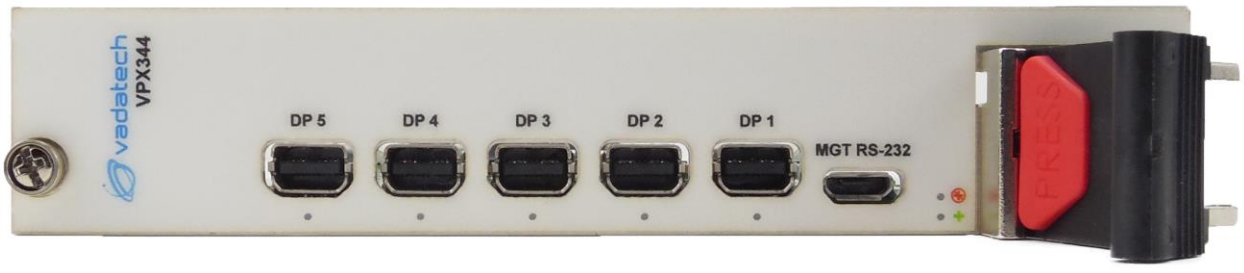

Figure 3: VPX344 Front Panel

Specifications

Architecture		
Physical	**Dimensions**	3U, 1” pitch
Type	**GPGPU**	Based on AMD E9171
	Channels	5 Mini-Display port
		OpenVPX Health Management
Standards		
VPX	**Type**	VITA 46.x
VPX	**Type**	VITA 65 OpenVPX
Module Management	**IPMI**	IPMI v2.0
PCIe	**Lanes**	x4 or x8
Configuration		
Power		40 W
Front Panel	**Interface Connectors**	Mini-DP
	Micro USB	RS-232 from Health Management
	LEDs	DP detect and power fail
Software Support	**Operating System**	Linux and Windows
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 ISO9001:2000 and AS9100B:2004 standards	
Warranty	Two (2) years	

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

VPX344 – A0C-000-GHJ

A = PCIe		G = Applicable Slot Profiles
0 = x4 Lanes 1 = x8 Lanes		0 = 5HP, VITA 48.1 1 = Reserved
		H = Environmental
		See Environmental Specification Table below
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

Environmental Specification

	Air Cooled		Conduction Cooled		
Option H	**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

VPX756

- Processor VPX (PrVPX) Intel® Xeon® Processor E3-1505M v6 (Kaby Lake)
- Dual PCIe Gen3 x4 or single PCIe x8
- 16 GB of DDR4 memory with ECC

VPX599

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

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, Wenhu 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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