

# VPX028

## 6U VPX Universal AC Power Module



VPX028

### Key Features

- Power Module for Open VPX VITA 62
- 6U VPX Systems
- 500W Output Power
- AC Universal input (85-265 VAC)
- Available in Conduction Cooled
- Meets Mil-STD-704F, MIL-STD-461G, MIL-STD-810G MIL-STD-1275E
- Health Management through dedicated Processor

### Benefits

- Most comprehensive VPX products in the market
- Electrical, mechanical, software, and system-level expertise in house
- Full system supply from industry leader
- AS9100 and ISO9001 certified company



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# VPX028

The VPX028 is a power module per VITA 62. The VPX028 is designed for 6U VPX systems and provides +12V and +3.3V\_AUX to the backplane (note the module does not provide +5V, -12V\_AUX and +12V\_AUX). The module takes AC universal input.

The module has dedicated health management per VITA46.11 and interfaces to the backplane using dual IPMI buses. The module has ENABLE, INHBIT, FAIL, Geographic address, and SYSRESET connections to the backplane.

The module is designed to meet the following MIL-STDs:

- MIL-STD-704F
- MIL-STD-461G
- MIL-STD-810G
- MIL-STD-1275E



Figure 1: VPX028 Front View

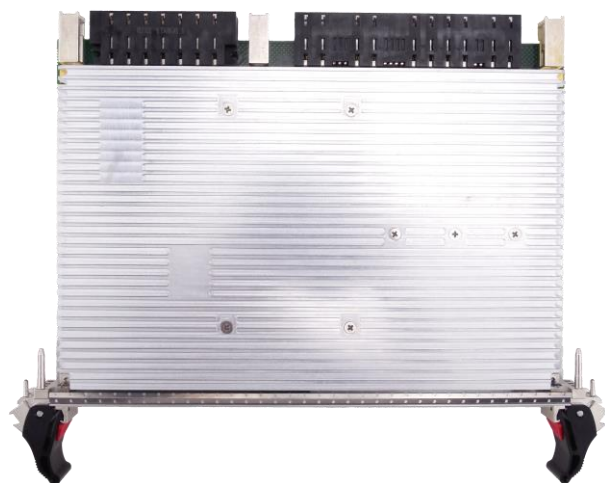


Figure 2: VPX028 Top View



Figure 3: VPX028 Front Panel View

## Block Diagram

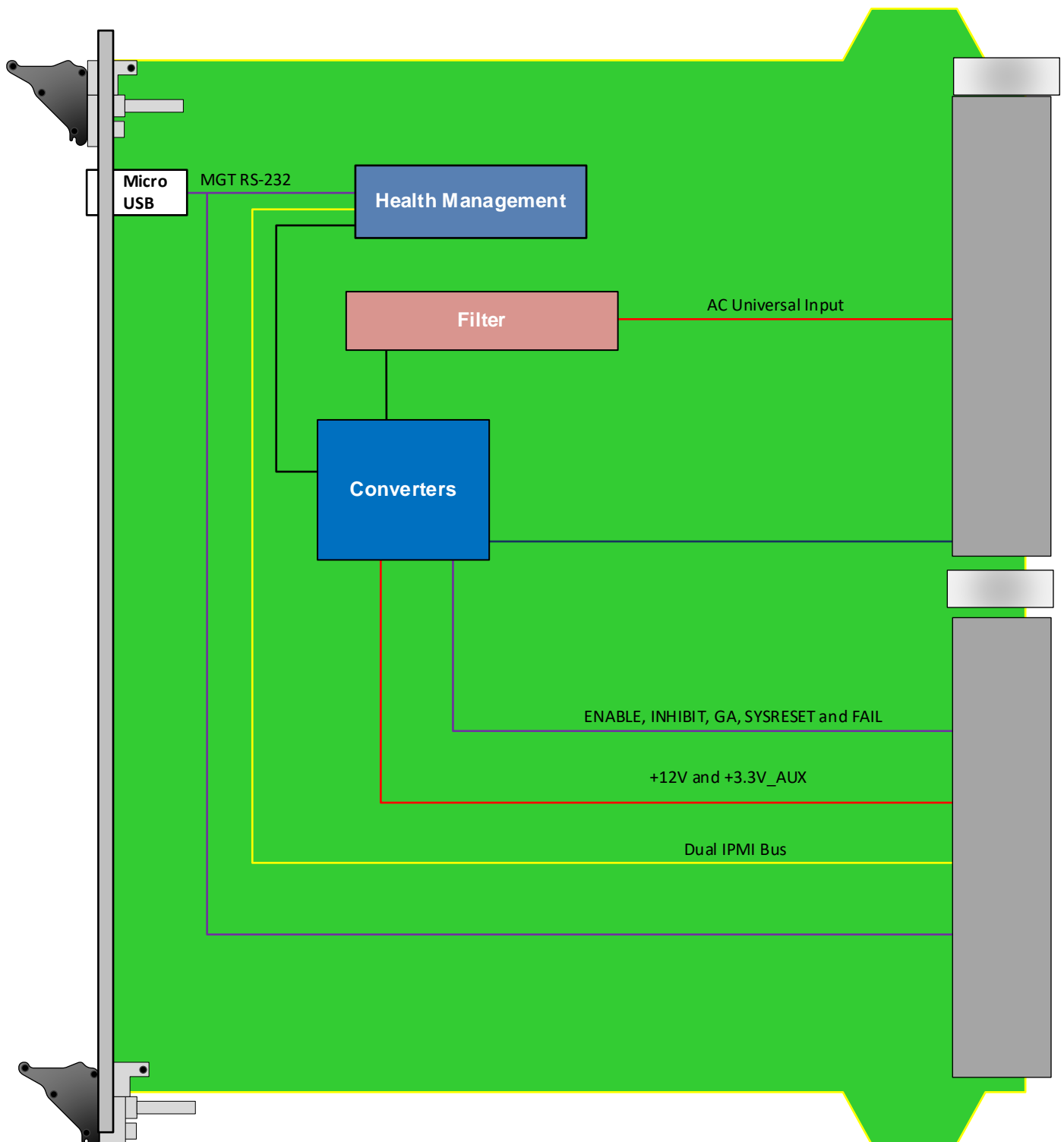


Figure 4: VPX028 Functional Block Diagram

# Specifications

Architecture		
<b>Physical</b>	<b>Dimensions</b>	6U, 1" pitch
Standards		
<b>VPX</b>	<b>Type</b>	VITA 46.0
<b>VPX</b>	<b>Type</b>	VITA 65 OpenVPX
<b>Module Management</b>	<b>IPMI</b>	IPMI v2.0
Configuration		
<b>Power</b>	<b>VPX028</b>	500W Power Entry Module with universal AC input 85-265 VAC Freq 47-63 Hz
<b>Front Panel</b>	<b>Micro USB</b>	RS-232 for Health Management
	<b>LEDs</b>	User defined by Health Management
<b>Onboard Interfaces</b>		Dual IPMI Buses
<b>VPX Interfaces</b>	<b>Slot Profiles</b>	See <a href="#">Ordering Options</a>
	<b>Rear IO</b>	Per VITA62 (Fail, Inhibit, Geographic address, etc.)
	<b>Backplane</b>	Connector per VITA 62
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

## VPX028\* – 000-000-GHJ

		<b>G = Applicable Slot Profile</b> 0 = 5 HP, VITA 48.1 1 = Reserved
		<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:

\*Per VITA specification +5V, -12V\_AUX and +12V\_AUX is required. The VPX028 provides only +12V and +3.3V+\_AUX to the backplane.

## 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

VPX516



- 6U 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



- 6U 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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