

PIBV62



PIBV62 KEY FEATURES

- Compliant to latest VITA 62 power supply specifications for OpenVPX Backplanes
- IEEE 1101.10 compliant
- 3U and 6U versions, single or dual
- Breakaway 1/2 U section for optional airflow blockage
- 3U power interface board comes in 5HP (less power taps) and 7HP (more power taps) versions
- Header for Sense, Share, and IPMB signals
- Customization available
- Conformal coating optional



The Pixus VITA 62 Power Interface Boards (PIB) come in 3U and 6U heights in either single PSU or dual PSU formats. They have a header for the voltage sense and IPMB for VITA 46.11 system management or other IPMI-based options. The PIBs have several power bugs for 3.3V, 5V, and 12V power. A 26-pin header accommodates all of the general purpose IO signals from the PSUs.

Conformal coating and customization is also available. Pixus is ISO9001:2015 and ITAR registered.

Pixus Technologies can modify this product to meet special customer requirements without NRE (minimum order placement is required).



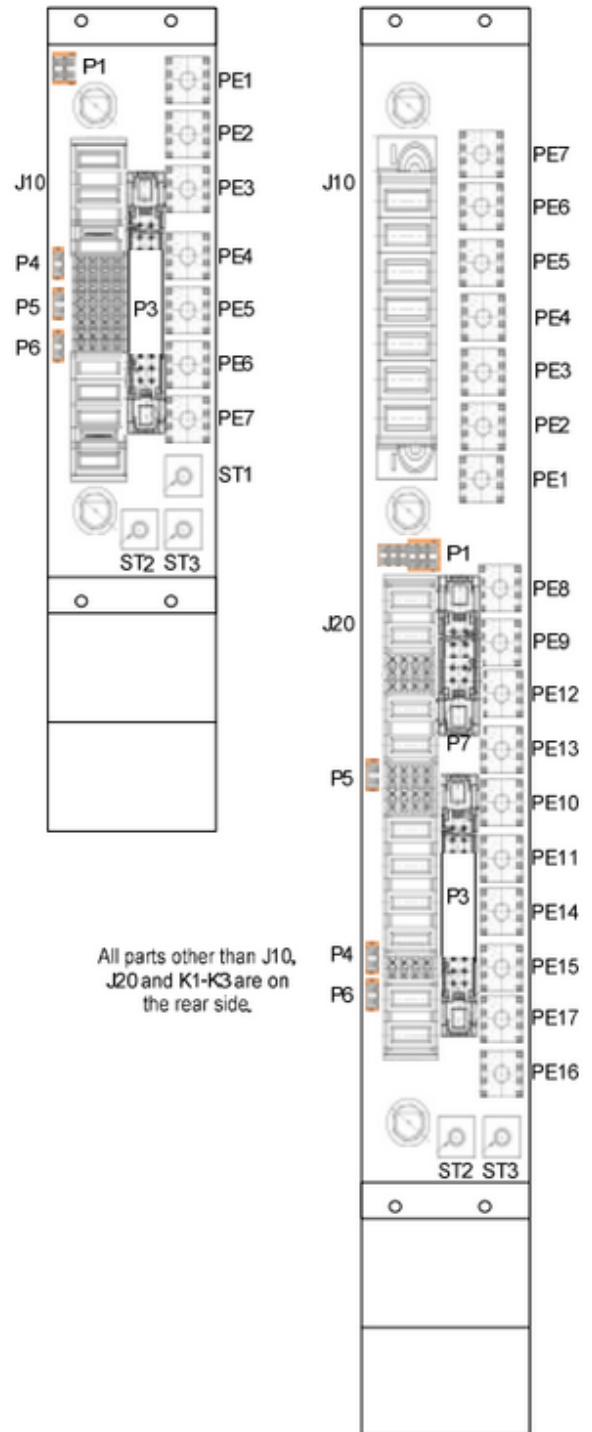
3U Pinout

PIN #	Rated Current (A)	Description
P1	40	-DC_IN/ACN
P2	40	+DC_IN/ACL
LP1	20	CHASSIS
A1	<1	UD1
B1	<1	UD2
C1	<1	UD3
D1	<1	UD4
A2	<1	VBAT
B2	<1	FAIL*
C2	<1	INHIBIT*
D2	<1	ENABLE*
A3	<1	UD0
B3	<1.5	+12V_AUX
C3	<1	NED
D3	<1	NED_RETURN
A4	<1.5	3.3V_AUX
B4	<1.5	3.3V_AUX
C4	<1.5	3.3V_AUX
D4	<1.5	3.3V_AUX
A5	<1	GA0*
B5	<1	GA1*
C5	<1	SM0
D5	<1	SM1
A6	<1	SM2
B6	<1	SM3
C6	<1.5	-12V_AUX
D6	<1	SYSRESET*
A7	<1	PO1_SHARE
B7	<1	PO2_SHARE
C7	<1	PO3_SHARE
D7	<1	SIGNAL_RETURN
A8	<1	PO1_SENSE
B8	<1	PO2_SENSE
C8	<1	PO3_SENSE
D8	<1	SENSE_RETURN
P3	40	PO3
P4	40	POWER_RETURN
P5	40	POWER_RETURN
LP2	20	PO2
P6	40	PO1

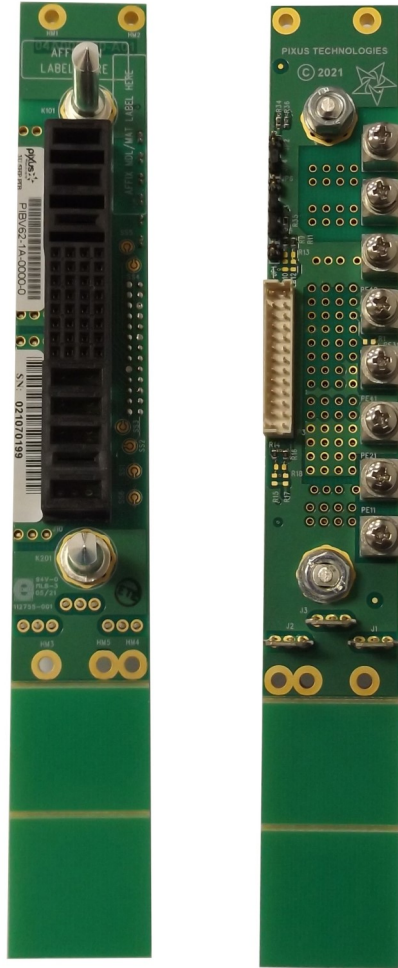
6U Pinout

PIN #	Rated Current (A)	Description
P10	40	PO1
P9	40	PO2
A9	<1	PO1_SENSE
B9	<1	PO2_SENSE
C9	<1	PO3_SENSE
D9	<1	UD0
A8	<1	PO1_SENSE_RTN
B8	<1	PO2_SENSE_RTN
C8	<1	PO3_SENSE_RTN
D8	<1	UD1
A7	<1	PO1_SHARE
B7	<1	PO2_SHARE
C7	<1	PO3_SHARE
D7	<1	SIGNAL_RETURN
P8	40	POWER_RETURN
P7	40	POWER_RETURN
A6	<1	SM2
B6	<1	SM3
C6	<1.5	-12V_AUX
D6	<1	SYSRESET*
A5	<1	GAP*
B5	<1	GA4*
C5	<1	SM0
D5	<1	SM1
A4	<1	GA3*
B4	<1	GA2*
C4	<1	GA1*
D4	<1	GA0*
A3	<1	UD2
B3	<1.5	+12V_AUX
C3	<1	NED
D3	<1	NED_RETURN
P6	40	PO3
P5	40	PO3
P4	40	POWER_RETURN
P3	40	POWER_RETURN
A2	<1	VBAT
B2	<1	FAIL*
C2	<1	INHIBIT*
D2	<1	ENABLE*
A1	<1	UD3
B1	<1	UD4
C1	<1	UD5
D1	<1	UD6
P2	40	3.3V_AUX
P1	40	POWER_RETURN

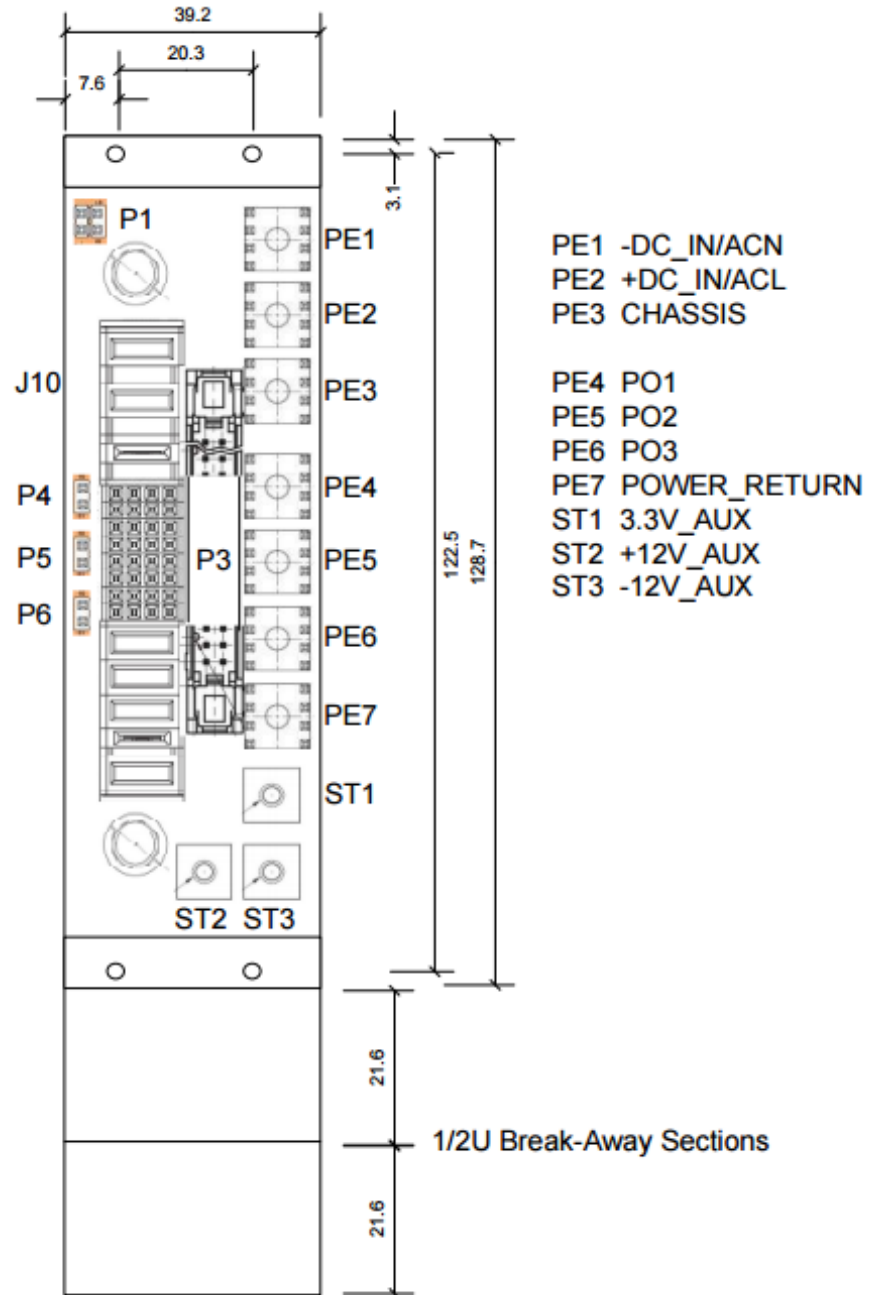
Board Layout



3U Photos—5HP version



3U Drawing —7HP version



The 3U power interface board drawing shows the 7HP wide version. The 5HP version in the photos offers less power taps.

3U Keying

Key Position	Voltage Range
0°	18V to 36V
45°	0V to 18V
90°	36V to 85V
270°	85V to 265V
315°	265V to 500V

Key Position	Input AC vs. DC	Intended Use of Output	Nominal Output Voltage for each Output Pin		
			PO1	PO2	PO3
0°	DC Input	Final Power Out	12 VDC (VS1)	3.3 VDC (VS2)	5 VDC (VS3)
45°	AC Input		12 VDC (VS1)	3.3 VDC (VS2)	5 VDC (VS3)
90°	If nominal input < 85V then input is DC If nominal input ≥ 85V then input is AC	Intermediate Power Out	18 to 36 VDC	Return for PO1	N/C
270°			36 to 72 VDC	Return for PO1	N/C
315°			200 to 400 VDC	Return for PO1	N/C

6U Keying

Key Position	Voltage Range
0°	18V to 36V
45°	0V to 18V
90°	36V to 85V
270°	85V to 265V
315°	265V to 500V

Key Position	DC vs. AC & Number of Phases
0°	DC
45°	Single-phase AC
90°	Three-phase AC
270°	Reserved
315°	Reserved

Key Position	Intended Use	Nominal Output Voltage for each Output Pin		
		PO1	PO2	PO3
0°	Final Power with Both 12V & 5V	12 VDC (VS1, VS2)	12 VDC (VS1, VS2)	5 VDC (VS3)
45°	Final Power with More 12V & no 5V	12 VDC (VS1, VS2)	12 VDC (VS1, VS2)	12 VDC (VS1, VS2) or N/C
90°	Intermediate Power	18 to 36 VDC	18 to 36 VDC	18 to 36 VDC or N/C
270°	Final with Both 48V & 5V or Intermediate Power	36 to 72 VDC (VS1 for 48VDC)	Return for PO1 (VS2 for 48VDC)	5 VDC (VS3)
315°	Intermediate Power	200 to 400 VDC	Return for PO1	N/C

Specifications

Architecture		
Physical	Dimensions	Height: 3U or 6U with 1/2U breakaway section to block airflow
		Width: 5HP, 7HP, 8HP, 10HP options
	Connectors	VITA 62
Standards		
VITA	Type	VITA 62 for OpenVPX Power Supplies
	Type	VITA 46 for VPX base specification
Configuration		
Power		3.3V, 3.3V AUX, 5V, 12V options
Environmental	Temperature	Operating temperature: -40° to +85°C
		Storage temperature: -55° to +90°C
	PCB	FR-4 or equivalent
	PCB traces	2 oz. power and ground standard
Conformal coating		Upon request (See page 6 selection "J" for available options)
Other		
MTBF	MIL Handbook 217-F @ TBD Hrs.	
Certifications	Designed to meet FCC, CE and EN/UL/TUV certifications where applicable	
Warranty	Two years	
Trademarks and logos	The Pixus Logo is a registered trademark of Pixus Technologies Inc. other registered trademarks are the property of their respective owners. Specs. subject to change without notice.	

Ordering Options PIBV62=VITA 62 Power Interface Board

PIBV62-AB-0000-J

A = Height

1 = 3U
2 = 6U

B = Width

A = 5HP (1.0"), single (limited power taps available in 3U version, standard size for 6U)
B = 7HP (1.4"), single (standard for 3U)
C = 8HP (1.6"), double
D = 10HP (2.0"), double

J = Conformal Coating

0 = None
1 = Humiseal 1A33 Polyurethane
2 = Humiseal 1B31 Acrylic