3U OPENVPX 2-SLOT BACKPLANE

1 VPX Power and Ground plus 1 VITA 62 power supply slot



DESCRIPTION

This 3U Open VPX backplane offers one VITA 46 PIC (Plug in Card) Power and Ground slot and one VITA 62 power supply slot to support the development and deployment of systems requiring a VITA 62 power supply.

The board has a VITA 62 compliant power supply connector, a header for various IO signals, and power studs. Power studs are used for input and output voltage rails. The power studs and other connectors can be used to feed other backplanes and can be combined with other Elma backplanes in a single chassis.

The VITA 46 compliant Pass Through Power and Ground slot provides a cost-effective way to design and test cards and systems using the VPX architecture, aligned to the SOSA Technical Standard or for custom designs. The only assigned pins on these backplanes are for 3.3V, 5V and 12V power, and both ground and utility planes are defined. The remaining pins are all user-defined. The rear connectors are all fully populated, and can be accessed with Elma's slot-to-slot or slot-to-I/O bulkhead cable assemblies for system development.

Each board includes mounting holes to secure to the chassis.



Front View



Rear View

FEATURES

Power and Ground Slot

- Compliant to the latest VITA 46 / 65 specifications
- Power and ground slot for simple and low-cost development
- 3.3V, 5V, and 12V power
- PO P2 pins are user-defined
- Backplanes have the utility plane implemented in PO and the System Management bus routed to 2 headers
- NVMRO, SYSRESET#, SYSCON# and maskable reset are routed to 3 headers
- Selectable geographical addressing via DIP switch
- Maintenance ports available via RTM
- Unrouted signals pass to the Rear Transition Module connectors and are configured to support RTMs or Meritec cables
- Up to 25GBASE-KR/100GBASE-KR4 data rates are supported on the pass-through links.

Power Interface Slot

- Complies with VITA 62.0 and VITA 62.2 (allowing separators/insulators to be installed on demand)
- PSU slot outputs and VDC inputs via #8-32 power studs
- Header for various control signals like voltage sense, current share, IPMB interface, inhibit, enable and fail, etc
- Selectable geographical addressing via a DIP switch
- 5HP width for a single power supply
- Can support insulators / fins for 270VDC operation in high altitude / harsh environments (custom assembly)

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BOARD SPECIFICATIONS

- 12- layers design, IPC Class 3
- 1 oz. copper outer layers, 2 oz. copper inner layers
- 0.212" +/-10% thick PCB, UL 94V-0 recognized FR-4

MECHANICAL SPECIFICATIONS

- For use in 3U height OpenVPX system chassis with single power supply connector
- 5.07" Tall X 2.87" Wide

RELATED PRODUCTS

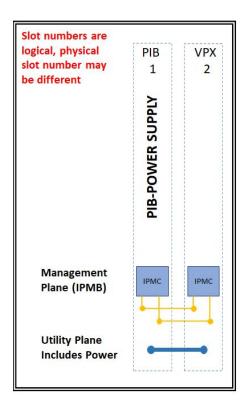






- > Rackmount, desktop, and ATR chassis platforms
- > Rear Transition Modules for I/O
- > Ruggedization programs

TOPOLOGY

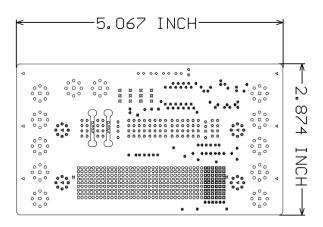


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LINE DRAWING



CN6 Input

GND	1	2	GND	
ENABLE	3	4	SM1_SDA	
INHIBIT	5	6	NED_RETURN	
SENSE_RETURN	7	8	NED	
VS3_SENSE	9	10	FAIL	
VS3_SHARE	11	12	UD1_SYNC_OUT	
VS2_SENSE	13	14	UD4	
VS2_SHARE	15	16	UD0_SYNC_IN	
VS1_SENSE	17	18	+3.3V_AUX	
VS1_SHARE	19	20	P1-VBAT	
SM3_SDA	21	22	+12V_AUX	
SM2_SCL	23	24	GND	
SM0_SCL	25	26	-12V_AUX	



ORDERING INFORMATION

Height	Total Slots	Description	Part Number
3U	2-Slot	1 VPX VITA46 Power and Ground Slot plus 1 VITA62 Power Supply slot	101VPX302P-2X13R

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