DATA SHEET

POWER INTERFACE BOARD (PIB)

3U, OpenVPX™ Backplanes

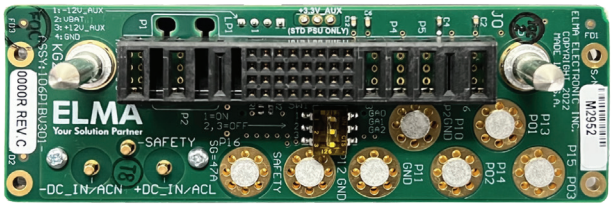
ELMA
Your Solution Partner

DESCRIPTION

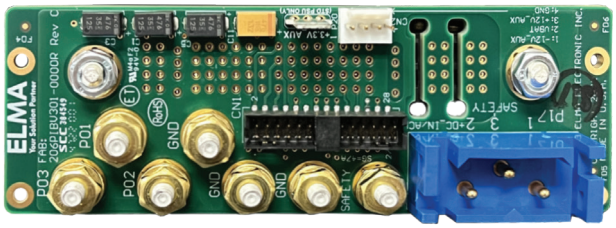
Power Interface Boards (PIBs) facilitate the use of pluggable VITA 62.x power supplies in systems that require such type of power units. Elma's standard backplanes use power studs which are typically wired to standalone (frame) power supplies. With PIBs, customers can now choose between Elma's standalone (frame) power supplies and pluggable VITA 62.x supplies.

Power Interface Boards are available for conduction or convection cooled 3U VPX systems; the conduction cooled version is slightly shorter.

The board has one VITA 62 compliant power supply connector, a header for various IO signals and power studs. A dedicated 3 pins header is used for the input voltage to the power supply, power studs are used for the output voltages PO1, PO2, PO3 and ground, a faston blade is used for the auxiliary output +3.3V_AUX, and a locking header for +12V_AUX, -12V_AUX and P1-VBAT. Each board includes mounting holes to secure to the chassis.



Front View



Rear View

FEATURES

- Complies with VITA 62 and IEEE 1101.10
- Interface to backplane 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
- 3U height with connector for a single supply (ask about a dual supply version)
- Available for use in conduction or convection cooled chassis

BOARD SPECIFICATIONS

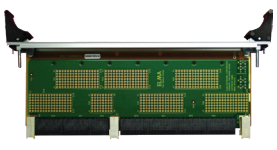
- 12- layers design, IPC Class 3
- 1 oz. copper outer layers, 2 oz. copper inner layers
- .135" +/-10% thick PCB, UL 94V-0 recognized FR-4

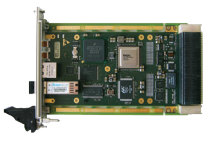
MECHANICAL SPECIFICATIONS

- For use in 3U height OpenVPX system chassis with single power supply connector
- 5.07" X 1.55"

RELATED PRODUCTS

- Rear Transition Modules for I/O
- Intel & Freescale Single Board Computers
- Blade level networking boards (Ethernet, PCI Express)
- Rackmount, desktop, and ATR chassis platforms
- Ruggedization programs





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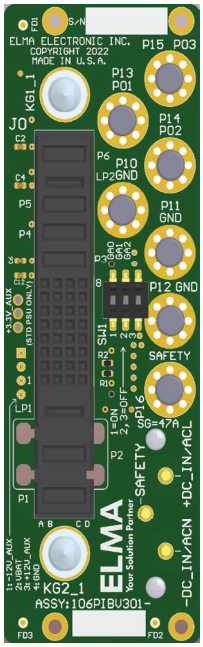
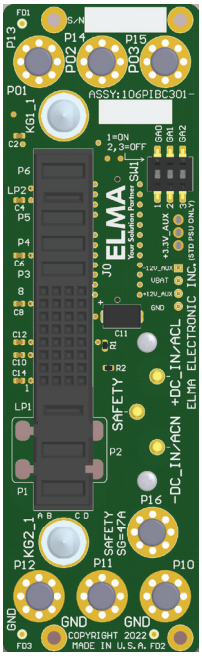
LINE DRAWING

I/O Connector pinout (CN1)
Molex 0878326322

Signal	Pin #	Pin #	Signal
PO1_SHARE	1	2	PO1_SENSE
PO2_SHARE	3	4	PO2_SENSE
PO3_SHARE	5	6	SENSE_RETURN
SM2	7	8	PO3_SENSE
SM3	9	10	-12V_AUX
SYSRESET#	11	12	GND
SM0	13	14	UD0 / SYNC_IN
SM1	15	16	+3.3V_AUX_STDONLY
NED	17	18	+12V_AUX
INHIBIT	19	20	NED_RETURN
UD4 / 3.3V_AUX_SENSE	21	22	ENABLE
VBAT	23	24	FAIL
UD1_SYNC_OUT	25	26	UD2 / NVMRO
GND	27	28	GND





Power Entry Connector pinout (P17)

Signal	Pin #
-DC_IN/CAN	1
SAFETY_GND	3
+DC_IN/ACL	2

AUX Voltages Connector
pinout (CN2)
Molex 0022112046

Signal	Pin #
-12V_AUX	1
VBAT	2
+12V_AUX	3
GND	4

ORDERING INFORMATION

Height	Description	Part Number
3U	Conduction Cooled Power Interface Board, according to VITA 62 Standards	106PIBV301-0000R
3U	Convection Cooled Power Interface Board, according to VITA 62 Standards	106PIBC301-0000R

Please contact our sales team for more details.

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