

Assembly Instructions & general Information

1. **Mechanical Mounting:** Attach the backplane through the mounting holes in at least every second connector position at top and bottom using M2,5 screws and isolating washers.
2. **Chassis GND:** If noise reduction shall be achieved by connecting digital GND to Chassis GND, use conductive washers instead of isolating ones. Spring washers are recommended instead of flat washers. Creepage and clearance between screw and GND are in accordance with EN60950 is maintained by layout when using isolating washers.
3. **VI/O:** Check VI/O coding and VI/O (power) bridge, default assembly is +5V (blue key at connector P1). If VI/O shall be set to 3,3V, use conversion kit (order# 21101-658, including keys and tool) to change keys and move the bridge on rear. For position of the bridge see drawing #1.
4. **M66MHz Operation:** Schroff PXI backplanes are designed in accordance with the requirements of PXI Core Specification, Revision 3.0 (PICMG 2.0 R3.0). Up to 5 Slots 66MHz operation is possible, signal M66 is HIGH (open). Backplanes of higher slot count also fulfil the 66MHz operation requirements in terms of clock trace length and skew, but M66 is tied to GND to disable 66MHz operation by default. This link is made by a removable copper link. For test purposes it can be opened and closed again by using a zero Ohm resistor of size 0603. For position of the link see drawing #1.
5. **Hot Swap:** Schroff PXI backplanes fulfil the requirements for Basic Hot Swap of the Hot Swap Specification PICMG 2.1 R2.0. The signal BD_SEL# is tied to GND by a removable copper link. It can be replaced by a resistor-capacitor combination, both of package size 0603. Position is labelled "nB" where "n" stands for slot# , see drawing #1.
6. **Bridging & Termination:** Backplanes of slot numbers between 4 to 7 can be bridged. Schroff has developed a very flat bridge that fits underneath rear I/O boards. In case of a 8 slot backplane at the same connectors, a termination board can be assembled. Termination is recommended in some very few cases if strong buffers are used and only the system and adjacent slots are occupied and all others are empty.

Utility / SENSE Connector pinout (X7, X8)

	A	B
6	6	nc
5	5	-12V
4	4	+12V
3	3	GND
2	2	DEG#
1	1	PRST#

Sense

Voltage rails +5V; 3,3V; +12V and GND of these connectors can be used for sense purposes. Than they should be connected to the power backplane or PSU.

Some Power Supplies need at least a connection between GND_Sense and GND, otherwise the outputs overrun

FAL#: Signal driven by intelligent PSU's, at least one output has failed (is out of range)

DEG#: Signal driven by intelligent PSU's, PSU indicates that the supply is beginning to derate its power output

cable assy (350mm): Schroff part#: 43204 – 115, free connector: ERNI part#: 124 260

cable assy (600mm): Schroff part#: 43204 – 116

IPMB Connector

Top view on connector

Pin	Signal
1	SCL
2	GND
3	SDA
4	Vsm
5	nc

Molex part#:

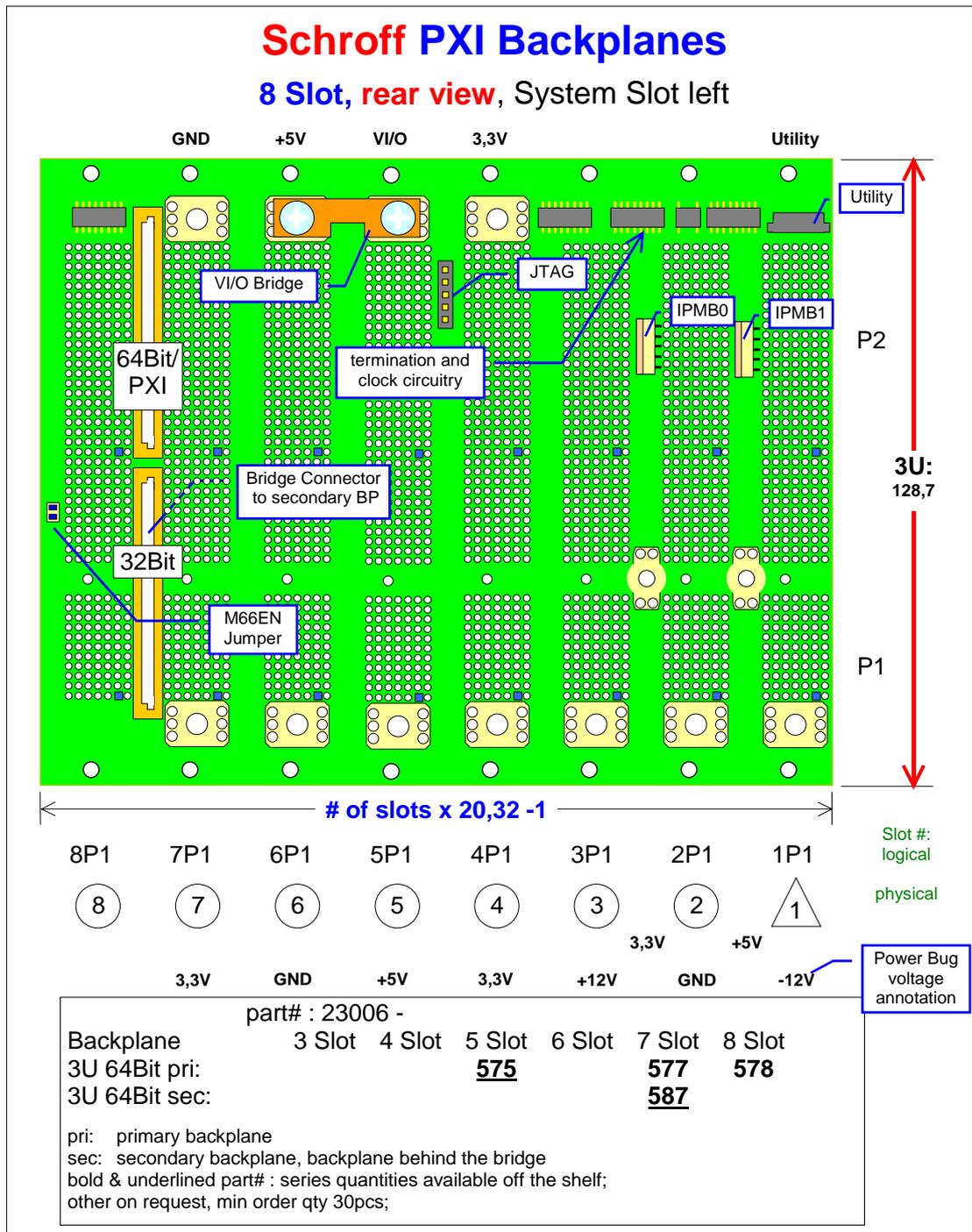
board connector: 53398-0590

free connector: 51021-0500

crimp contact: 50079-8100

(AWG 26-28, bag)

Vsm (Power) can be connected to +5V by using zero Ohm resistor of size 0603 (R100)



Mechanical and electrical interface