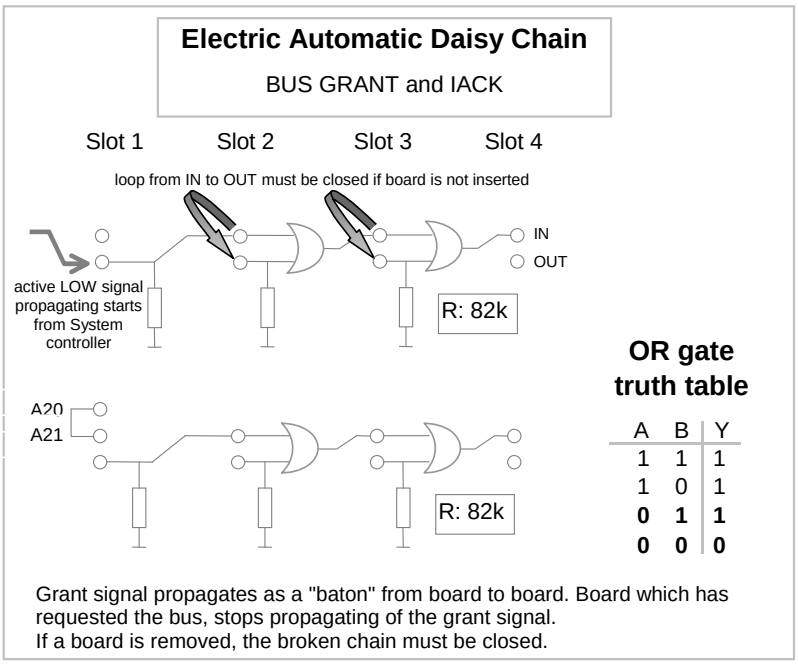
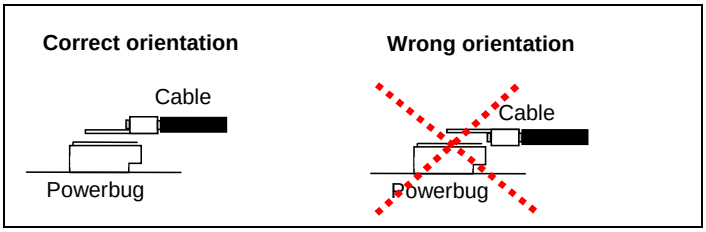
Assembly Instructions & general Information

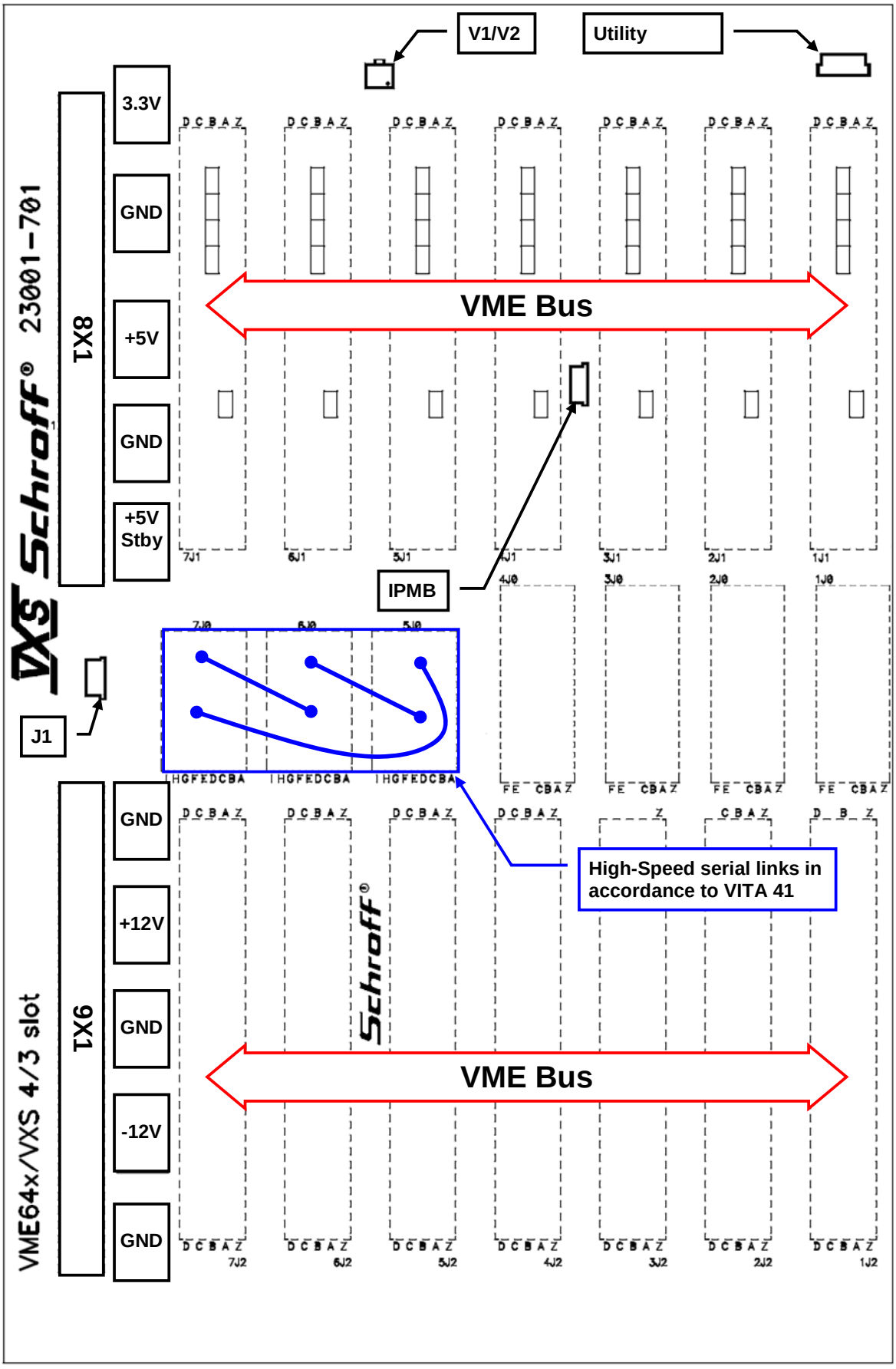
1. **Warning: Only important if V1 and V2 are used**
   If the +V1 and +V2 voltage rails are tied to ground and the +12V power is used, the nominal voltage between the +12V and the -V1 and -V2 power rails is 60 volts. With voltage tolerances, the 60 volt maximum is exceeded. Additional protection might be needed to comply with local and national regulatory agencies.
2. **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.
3. **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.
4. **Live Insertion:** Schroff VME64x backplanes fulfil the requirements of the VME Live Insertion standard VITA 1.4. The LI/I* (Live Insertion IN) is an active low input signal to a VME64x LI board that acts to enable/disable the on-board power control logic. A set of two pins per slot for LI/I* and GND spaced by 100mil is optional available to use micro-connectors to connect the signal to a radial power control module.
5. **Daisy Chain:** Schroff VME64x Backplanes are equipped with Electronic Automatic Daisy Chain.



6. **Dimensions** Height 262.05 mm, Width 171,72mm
7. **Assembling of Power Cables:** If an open frame power supply is used instead of pluggable PSU´s, please pay attention by connection the power cables to the power bugs. M4 cable lugs should be used to connect the cables from the PSU to the powerbugs on the backplane. Maximum 2 cables are allowed per powerbug. Please assemble the cable lugs with the flat side to the power bug to ensure the correct isolation distance between unisolated part of the power cable and unisolated parts of the backplane.



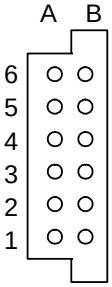
Customer Drawing (Rear View)



Electrical Interface

Utility Connector

Top view on connector



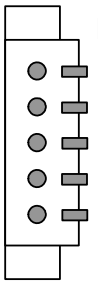
	A	B
6	nc	nc
5	nc	-12V
4	+12V	3,3V
3	GND	+5V
2	nc.	ACFAIL*
1	SYSFAIL*	SYSRESET*

Cable assy:

Schroff part #:	23204 – 115	(350mm)
Schroff part #:	23204 – 116	(600mm)
free connector:	ERNI part #:	044663

IPMB Connector

Top view on connector



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

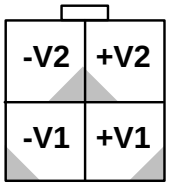
Molex part#:

board connector:	53398-0590
free connector:	51021-0500
crimp contact:	50079-8100
(AWG 26-28, bag)	

Vsm (Power) is connected to +5V standby

Cable assy 750mm, other end without terminals:
Schroff part#: 23204 - 113

V1/V2 Connector pinout



V1/V2 auxiliary power supplied to the VME64x backplanes shall remain within the limits of 38V to 75V, including regulation variation, noise and ripple frequencies to 20 MHz.

Molex part#:

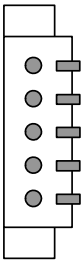
board connector:	43045-0418
free connector:	43025-0400
crimp contact:	43030-0007
(AWG 20-24, tin plated, bag)	

P47 connectors (8X1, 9X1)

Pin#	Signal Name	Pin#	Signal Name
1	+5V	**25**	GA0
2	+5V	**26**	RESERVED
3	+5V	**27**	GND (EN#)
4	+5V	**28**	GA1
5	GND	**29**	nc
5	GND	**30**	+5V (V1 SENSE)
7	GND	**31**	GA2
8	GND	**32**	nc
9	GND	**33**	+3,3V (V2 SENSE)
10	GND	**34**	GND (GND Return)
11	GND	**35**	V1 SHARE
12	GND	**36**	+12V (V3 SENSE)
13	+3,3V	**37**	IPMB_SCL
14	+3,3V	**38**	PSU (1-4) DEG#
15	+3,3V	**39**	INH#
16	+3,3V	**40**	IPMB_SDA
17	+3,3V	**41**	V2 SHARE
18	+3,3V	**42**	PSU (1-4) FAL#
19	GND	**43**	IPMB_PWR
20	+12V	**44**	V3 SHARE
21	-12V	**45**	PE
22	GND (Signal return)	**46**	AC Input neutral
23	nc	**47**	AC Input line
24	GND		

J1 Connector

Top view on connector



Pin	Signal
1	+5V
2	GND
3	nc
4	INH#
5	FAL#

Molex part#:

board connector:	53398-0590
free connector:	51021-0500
crimp contact:	50079-8100
(AWG 26-28, bag)	

Vsm (Power) is connected to +5V standby