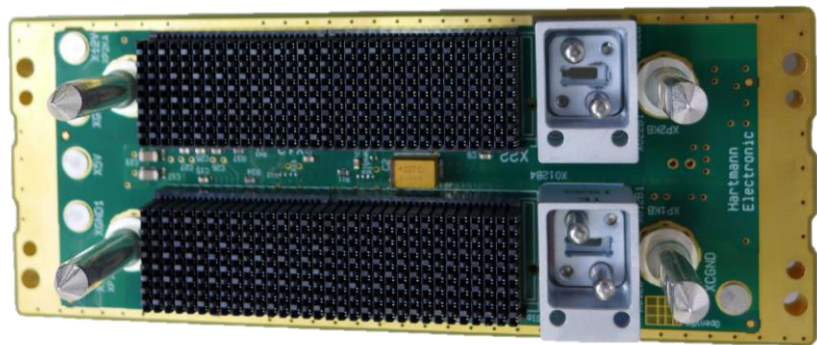


3U VPX Power & GND 2 Slot BACKPLANE VITA 66.4 in J2B	VITA 46 VITA 65 VITA 66.4	

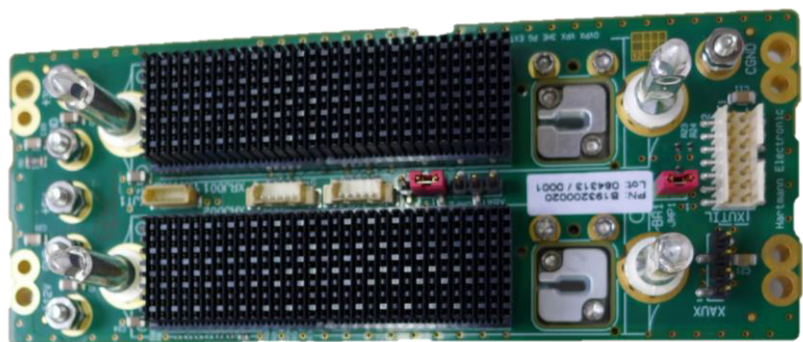
Key Features:

- Our VPX Power & Ground Backplanes - the development tool for VPX systems of your first choice
- Compliant to VITA 46.0 baseline specification
- Compliant to VITA 65 and VITA 66.4
- 2 Slots VPX, with Optical Module in J2B
- with RTM for all slots and pins
- M3 studs for power entry
- PCB size 128.50 mm x 50.36 mm x 5.4 mm
- 5 HP from slot to slot (25.40 mm)
- Flexible keying and alignment mechanism
- with geographical address pins
- Reference clock
- Auxiliary clock
- System Reset
- With JTAG connector on first slot (JT1)
- System Management Interface on the backplane (I2CA, I2CB)
- Non-Volatile Memory Read Only signal set by Jumper BR1
- Battery backup option setting by Jumper XBAT. Vbat external or connected to 3.3 VAUX.
- Max. Input current per backplane
VS1:VS2:VS3 = 28A : 28A : 30A
- Operating temperature: -40°C - +85°C
- Storage temperature: -55°C - +85°C
- Flammability rating: UL94-V0
- Custom assembly or modification on request

Front side



Back side



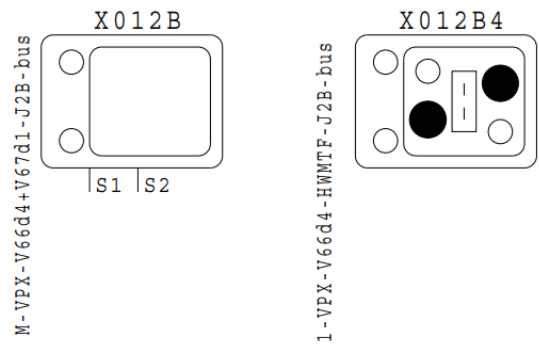
- Order number: B193200020

3U VPX Power & GND 2 Slot BACKPLANE VITA 66.4 in J2B	VITA 46 VITA 65 VITA 66.4	
---	--	--

1) Fibre Optic Extension

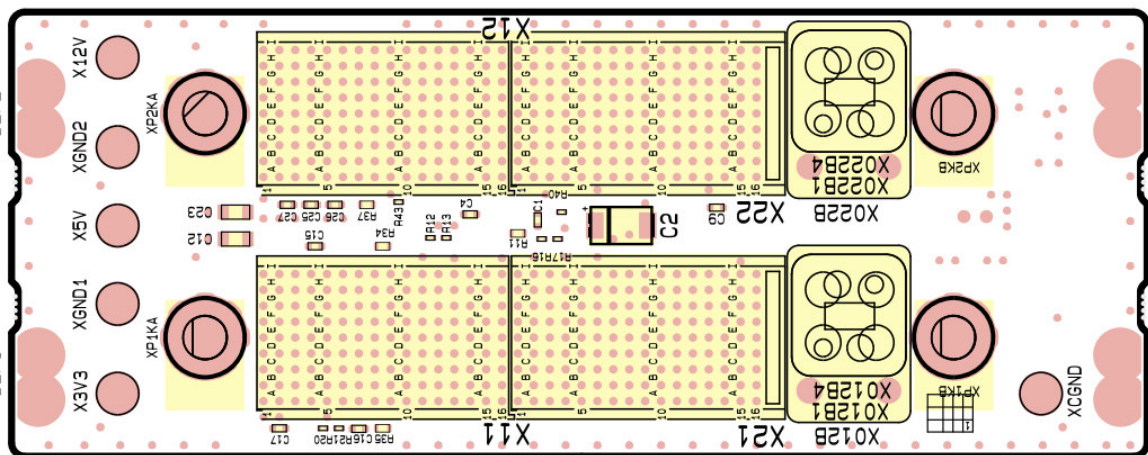
This Backplane features VITA 66.4 fibre Connector Modules in two of the slots (J2B).

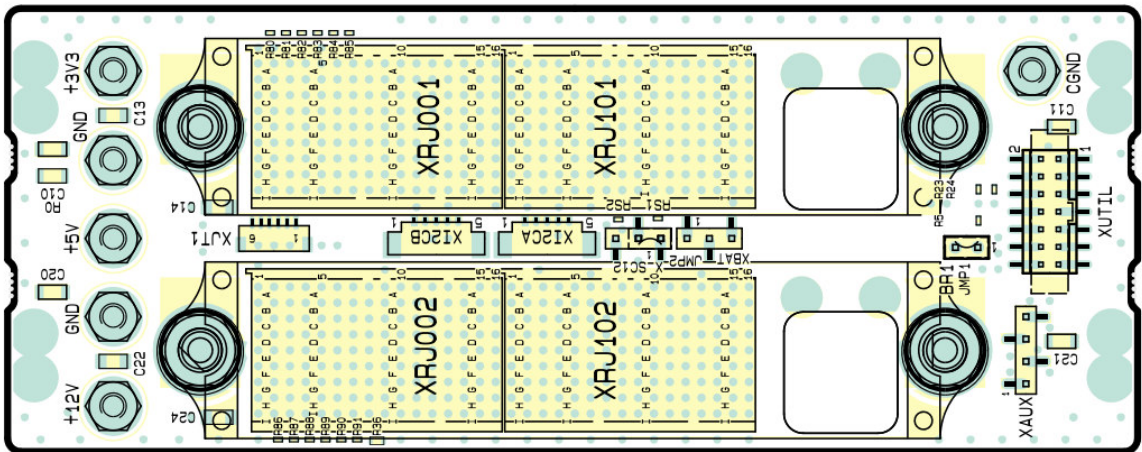
Optical Backplane Module by Tyco (item number 2226880-1)



2) Drawings

Front side



Back side

Pin Assignment P1 & J1

	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a
1	Vs1	Vs1	Vs1	Vs1	No Pad*	Vs2	Vs2	Vs2	Vs2
2	Vs1	Vs1	Vs1	Vs1	No Pad*	Vs2	Vs2	Vs2	Vs2
3	Vs3	Vs3	Vs3	Vs3	No Pad*	Vs3	Vs3	Vs3	Vs3
4	GND	SM2	SM3	GND	-12V_Aux	GND	SYSRESET*	NVMRO	GND
5	GND	GAP*	GA4*	GND	3.3V_Aux	GND	SM0	SM1	GND
6	GND	GA3*	GA2*	GND	+12V_Aux	GND	GA1*	GA0*	GND
7	TCK	GND	GND	TDO	TDI	GND	GND	TMS	TRST*
8	GND	REF_CLK-	REF_CLK+	GND	GND	AUX_CLK-	AUX_CLK+	GND	GND
9	SEwafer9	GND	GND-J2	LN8-TD-	LN8-TD+	GND	GND-J2	LN8-RD-	LN8-RD+
10	GND	LN9-TD-	LN9-TD+	GND-J2	GND	LN9-RD-	LN9-RD+	GND-J2	GND
11	SEwafer11	GND	GND-J2	LN10-TD-	LN10-TD+	GND	GND-J2	LN10-RD-	LN10-RD+
12	GND	LN11-TD-	LN11-TD+	GND-J2	GND	LN11-RD-	LN11-RD+	GND-J2	GND
13	SEwafer13	GND	GND-J2	LN12-TD-	LN12-TD+	GND	GND-J2	LN12-RD-	LN12-RD+
14	GND	LN13-TD-	LN13-TD+	GND-J2	GND	LN13-RD-	LN13-RD+	GND-J2	GND
15	SEwafer15	GND	GND-J2	LN14-TD-	LN14-TD+	GND	GND-J2	LN14-RD-	LN14-RD+
16	GND	LN15-TD-	LN15-TD+	GND-J2	GND	LN15-RD-	LN15-RD+	GND-J2	GND

Page 3 of 6

3U VPX Power & GND
2 Slot BACKPLANE
VITA 66.4 in J2B

VITA 46
VITA 65
VITA 66.4



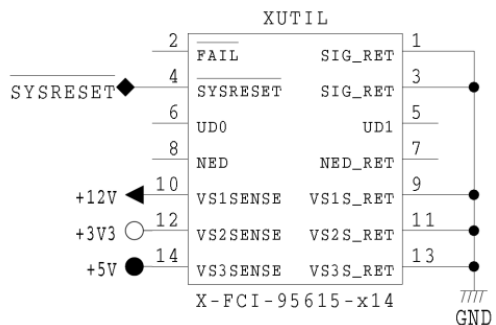
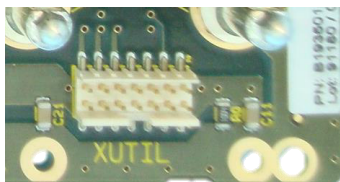
Pin Assignment P2 & J2

Backplane J2	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a
1	SEwafer1	GND	GND-J2	LN0-TD-	LN0-TD+	GND	GND-J2	LN0-RD-	LN0-RD+
2	GND	LN1-TD-	LN1-TD+	GND-J2	GND	LN1-RD-	LN1-RD+	GND-J2	GND
3	SEwafer3	GND	GND-J2	LN2-TD-	LN2-TD+	GND	GND-J2	LN2-RD-	LN2-RD+
4	GND	LN3-TD-	LN3-TD+	GND-J2	GND	LN3-RD-	LN3-RD+	GND-J2	GND
5	SEwafer5	GND	GND-J2	LN4-TD-	LN4-TD+	GND	GND-J2	LN4-RD-	LN4-RD+
6	GND	LN5-TD-	LN5-TD+	GND-J2	GND	LN5-RD-	LN5-RD+	GND-J2	GND
7	SEwafer7	GND	GND-J2	LN6-TD-	LN6-TD+	GND	GND-J2	LN6-RD-	LN6-RD+
8	GND	LN7-TD-	LN7-TD+	GND-J2	GND	LN7-RD-	LN7-RD+	GND-J2	GND
9	SEwafer9	GND	GND-J2	LN8-TD-	LN8-TD+	GND	GND-J2	LN8-RD-	LN8-RD+
10	GND	LN9-TD-	LN9-TD+	GND-J2	GND	LN9-RD-	LN9-RD+	GND-J2	GND
11	SEwafer11	GND	GND-J2	LN10-TD-	LN10-TD+	GND	GND-J2	LN10-RD-	LN10-RD+
12	GND	LN11-TD-	LN11-TD+	GND-J2	GND	LN11-RD-	LN11-RD+	GND-J2	GND
13	SEwafer13	GND	GND-J2	LN12-TD-	LN12-TD+	GND	GND-J2	LN12-RD-	LN12-RD+
14	GND	LN13-TD-	LN13-TD+	GND-J2	GND	LN13-RD-	LN13-RD+	GND-J2	GND
15	SEwafer15	GND	GND-J2	LN14-TD-	LN14-TD+	GND	GND-J2	LN14-RD-	LN14-RD+
16	GND	LN15-TD-	LN15-TD+	GND-J2	GND	LN15-RD-	LN15-RD+	GND-J2	GND

4) Current Capability:

▪ +12V	28 A
▪ +3.3V	28 A
▪ +5V	30 A
▪ -12V AUX	2 A
▪ +12V AUX	2 A
▪ +3.3V AUX	2 A

5) UTILITY (Connector XUTIL)



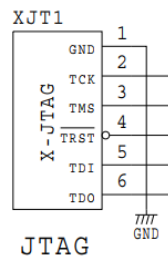
Connector FCI/Berg Art. Nr. 95615-014TRLF

3U VPX Power & GND 2 Slot BACKPLANE VITA 66.4 in J2B	VITA 46 VITA 65 VITA 66.4	
---	--	--

6) JTAG (Connector XJT1)



Consider: JTAG only at Slot 1



Connector J.S.T.
BM06B-SRSS-TB(LF)(SN)

7) SYSCON

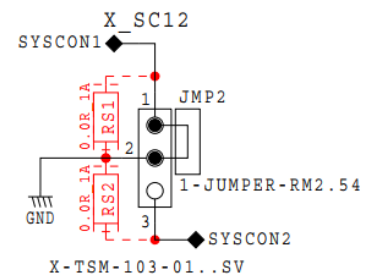
By setting the signal Syscon to GND the system slot is defined. In general the system slot is slot 1.

We offer 2 options for setting:

- Jumper (standard)
- 0 Ohm Resistor for rugged applications

X_SC12

1	SYSCON1
2	GND
3	SYSCON2



8) I2C Connector

There are 2 connectors for system-management I2CA and I2CB.

For customer specific board assembly Zero-Ohm resistors available.

Usable voltages for I2C are 3.3V-AUX

I2CA

1	I2CA_SCL
2	GND
3	I2CA_SDA
4	I2CA_PWR
5	NC

I2CB

1	I2CB_SCL
2	GND
3	I2CB_SDA
4	I2CB_PWR
5	NC

Connector Molex Art. Nr. 53398-0571

3U VPX Power & GND
2 Slot BACKPLANE
VITA 66.4 in J2B

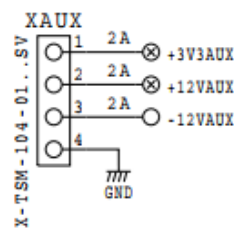
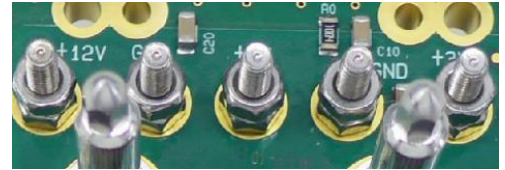
VITA 46
VITA 65
VITA 66.4



9) Power Connections M3 screws

The main operating voltages and GND are supplied with M3 screw.

The auxiliary operating voltages are supplied via 4-pole pin strip XAUX. Optimal daughter board supply and trouble-free operation are ensured by the arrangement of the feed modules on the backplane.



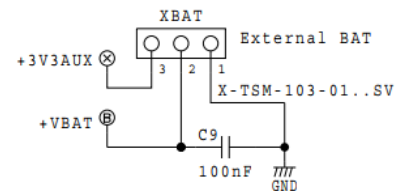
Connector Samtec
 Art. Nr. TSM-104-01-L-SV

10) XBAT

Normally a battery voltage with approximately 3V is available at Pin VBAT of connector VPX-J1. The voltage is externally accessible with connector XBAT, Pin2 **or** internally using 3.3V_AUX by setting a Jumper between Pin2 and Pin3.

VBAT X5

1	GND
2	+VBAT
3	+3.3V_AUX

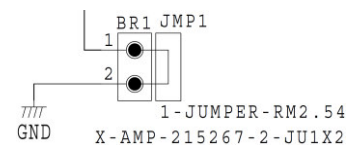


11) NVMRO

If Jumper BR1 is closed NVRMO is set to memory writeable.

BR1

1	NVMRO
2	GND



Germany

Hartmann Electronic GmbH
 Phone: +49 711 13 98 90
 Fax: +49 711 8 66 11 91
vertrieb.he@kontron.com
www.hartmann-electronic.com

USA

Kontron
 Fabian Hemmann
 Phone: +1 937-324-2420
 Mobile: +1 937 346 7878
fabian.hemmann@us.kontron.com
www.hartmann-electronic.com

France

Kontron Modular Computers S.A.S.
 Serge Pichat
 Phone: +33 (0)9 66 44 03 15
 Mobile: +33 (0)6 82 62 16 00
Serge.pichat@kontron.com
www.hartmann-electronic.com

India

Hartmann Electronic GmbH
 Vivek Deshpande
 Phone: +1 91 20 66 74 51 23
Vivek.Deshpande@kontron.com
www.hartmann-electronic.com