

**3U VPX Power & GND
4 Slot BACKPLANE**
VITA 67.1 in J2B

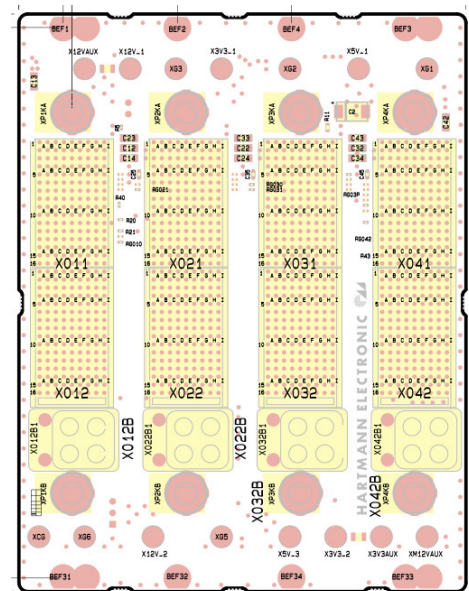
**VITA 46
VITA 65
VITA 67.1**



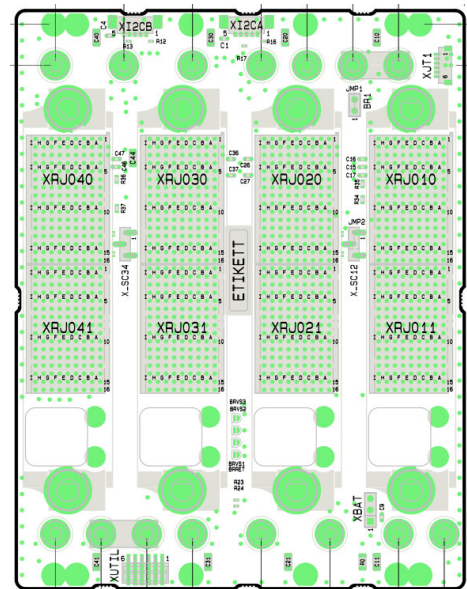
Key Features:

- 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 67.1
- 4 Slots VPX, with Coax 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 = 50A : 50A : 50A
- 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



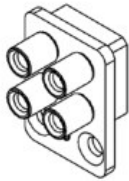
Order number: B193400030

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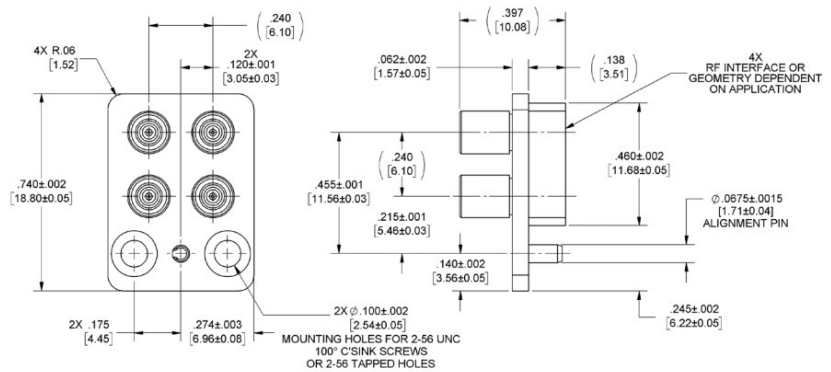
1) Coaxial/RF Extension

This Backplane features VITA 67.1 RT Connector Modules in two of the slots.

Coaxial Backplane Module by Tyco (item number 1996884-1)

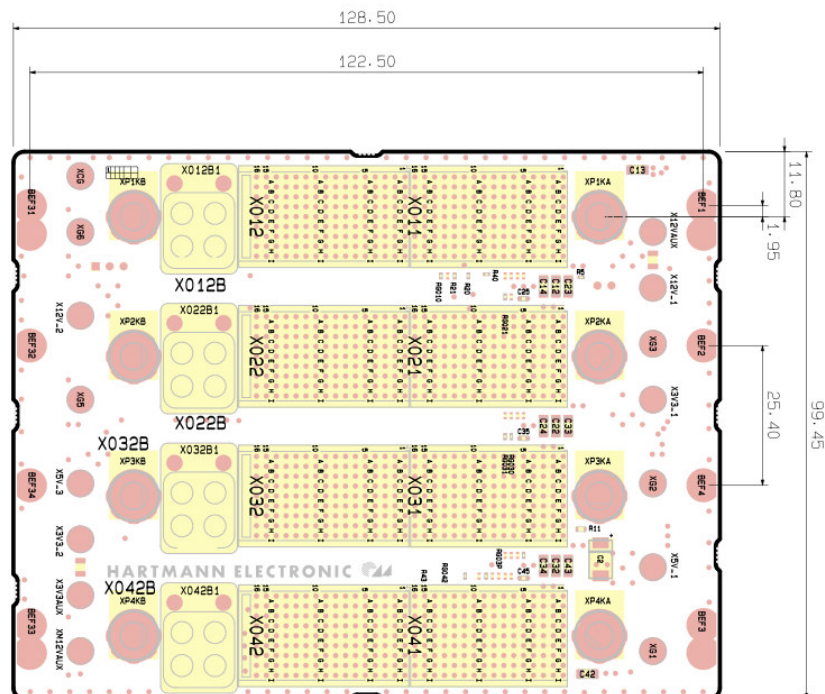


DIMENSIONS ARE IN INCHES [mm]
 ANGULAR: X" $\pm 1^{\circ}$
 X"X" $\pm 15^{\circ}$
 DECIMAL: X ± 0.030
 .XX ± 0.010
 .XXX ± 0.005

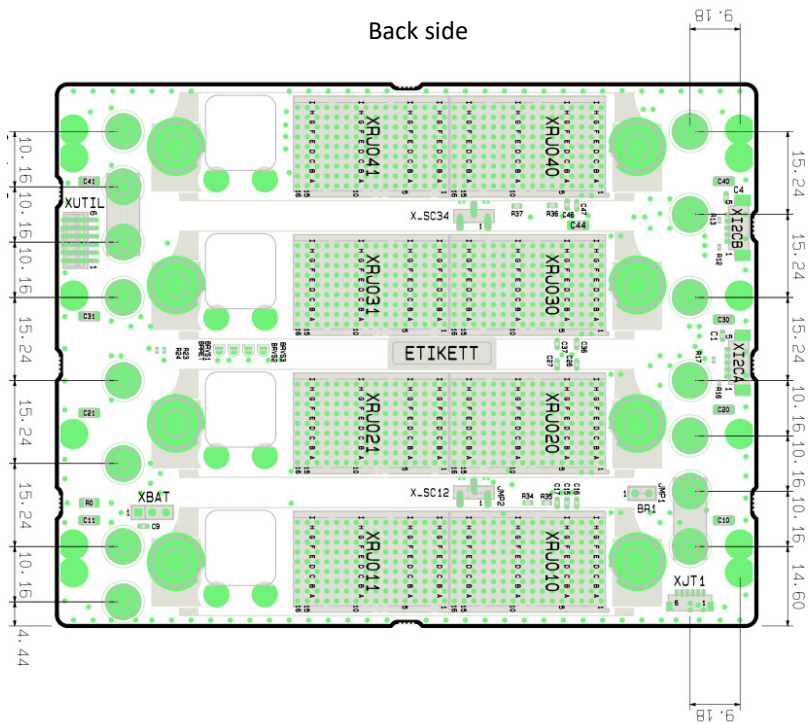


2) Drawings

Front side



VITA 46
VITA 65
VITA 67.1



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

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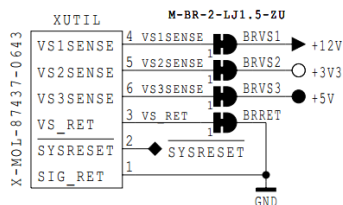
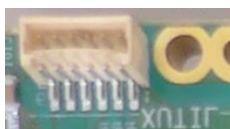
Pin Assignment P2 & J2

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	50 A
▪ +3.3V	50 A
▪ +5V	50 A
▪ -12V AUX	2 A
▪ +12V AUX	2 A
▪ +3.3V AUX	2 A

5) UTILITY (Connector XUTIL)



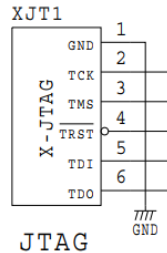
Connector Molex Art. Nr. 87437-0643

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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.

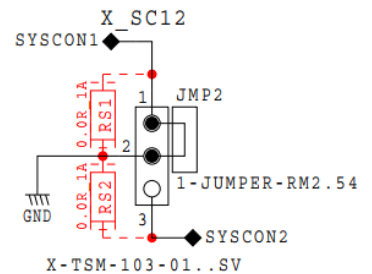
There is an additional connector X_SC34 so as you can select any slot as system slot

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

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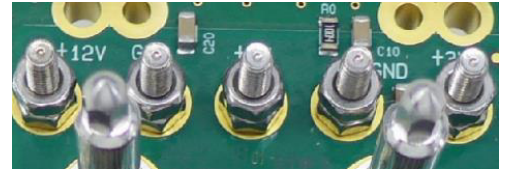
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9) Power Connections M3 screws

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

The auxiliary operating voltages are supplied via M3 screw. Optimal daughter board supply and trouble-free operation are ensured by the arrangement of the feed modules on the backplane.

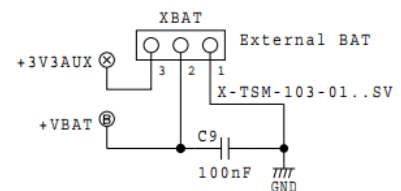


10) XBAT

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

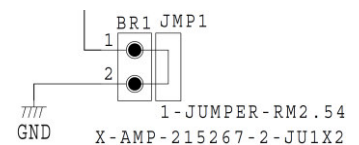


11) NVMRO

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

BR1

1	NVMRO
2	GND



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