

3U Open VPX BACKPLANE BKP3-CEN03-15.2.9-4

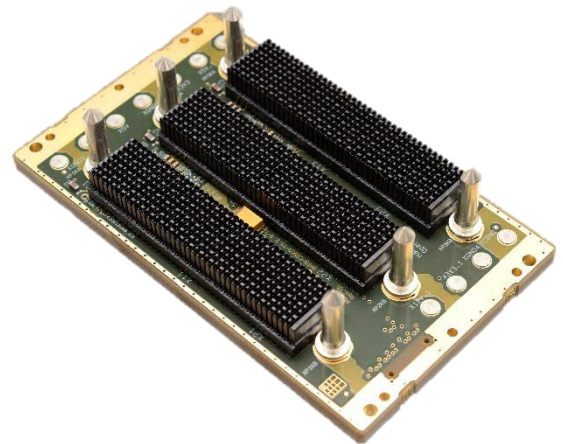
VITA 46
VITA 65



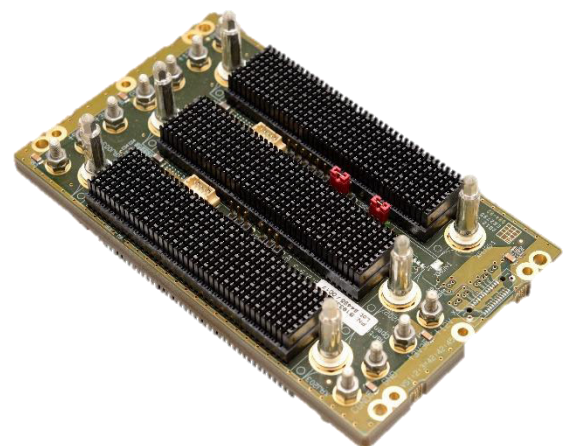
Key figures:

- Compliant to VITA 46.0 baseline specification
- Compliant to VITA 65 
- 3 Slots VPX, 1 Payload Slots , 2 Peripheral Slots
- M3 studs for powerentry
- PCB size 128.5mm x 75,76mm x 5.4 mm
- 5 HP from slot to slot (25.40 mm)
- Flexible keying and alignment mechanism
- compatible with VPX-Wafer (extern cabling system)
- with geografical address pins
- Reference clock
- Battery backup option. VBAT external or connected to 3.3 AUX
- System Management Interface on the backplane (XI2CA, XI2CB)
- Non-Volatile Memory Read Only signal set by Jumper BR1
- Power Consumption: VS1:VS2:VS3 = 42A : 42A : 45A
- System Reset
- Operating temperature: -40° - +85°C
- Storage temperature: -55°C - +85°C
- Flammability rating: UL94-V0
- Optional with: +5V termination
- Other configurations on request
- **Order number: B193301060**

Front side



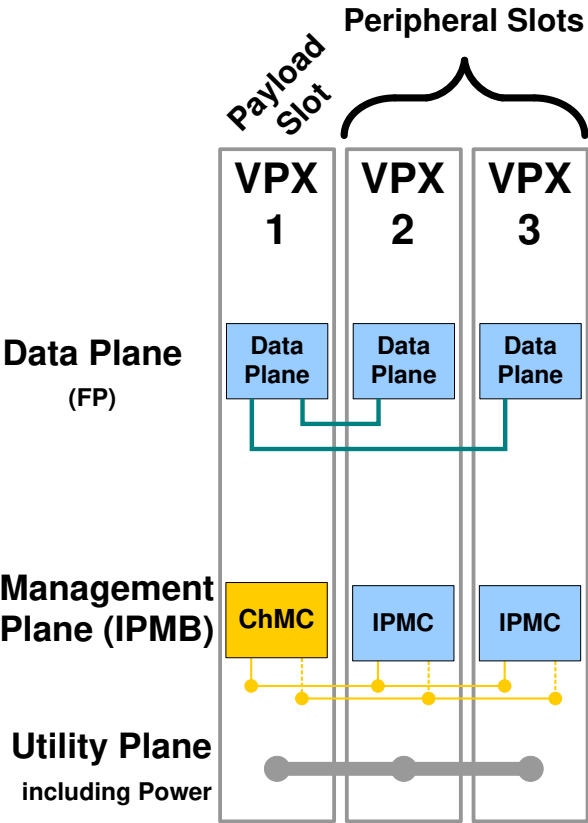
Rear side



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1) Topology: BKP3-CEN03-15.2.9-n, (1 Payload + 2 Peripheral)

Profil Payload slot 1: SLT3-PAY-2F-14.2.7
Profil Peripheral slots 2, 3: SLT3-PER-1F-14.3.2

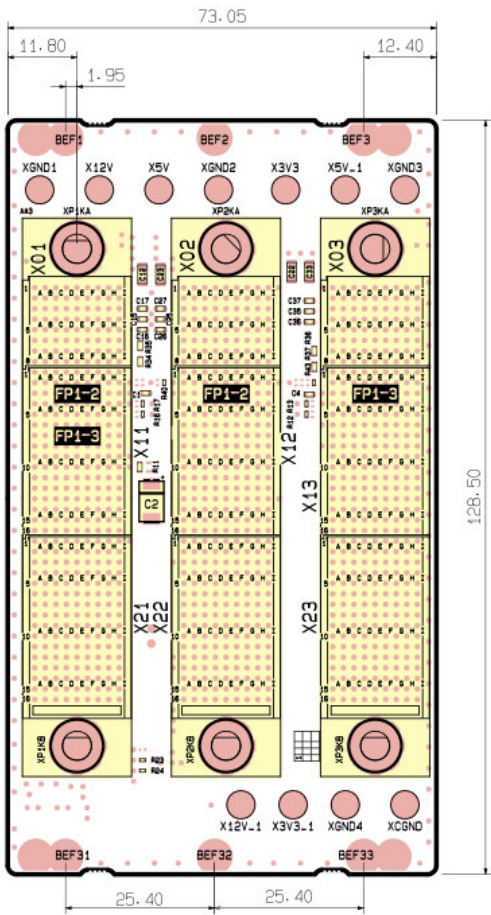


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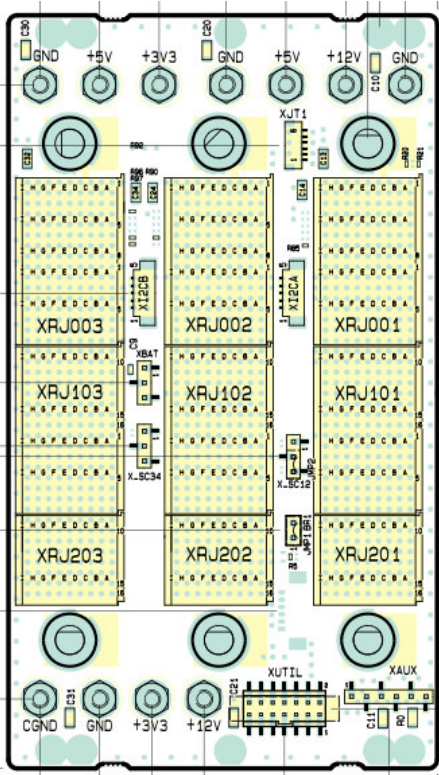
VITA 46
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2) Drawings



Front side



Rear side

3) Pin Assignment

Utility Plane Signals on J0

	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

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Payload Slot-1 Profile SLT3-PAY-2F-14.2.7 — P1 & J1

Plug-In Module P1		Row G	Row F	Row E		Row D	Row C	Row B		Row A
Bplane J1		Row i	Row h	Even	Odd	Row e	Row d	Even	Odd	Row a
1	Data Plane Port 1	GDiscrete1	GND	GND-J1	DP01-T0-	DP01-T0+	GND	GND-J1	DP01-R0-	DP01-R0+
2		GND	DP01-T1-	DP01-T1+	GND-J1	GND	DP01-R1-	DP01-R1+	GND-J1	GND
3		P1-VBAT	GND	GND-J1	DP01-T2-	DP01-T2+	GND	GND-J1	DP01-R2-	DP01-R2+
4		GND	DP01-T3-	DP01-T3+	GND-J1	GND	DP01-R3-	DP01-R3+	GND-J1	GND
5	Data Plane Port 2	SYS_CON*	GND	GND-J1	DP02-T0-	DP02-T0+	GND	GND-J1	DP02-R0-	DP02-R0+
6		GND	DP02-T1-	DP02-T1+	GND-J1	GND	DP02-R1-	DP02-R1+	GND-J1	GND
7		Reserved	GND	GND-J1	DP02-T2-	DP02-T2+	GND	GND-J1	DP02-R2-	DP02-R2+
8		GND	DP02-T3-	DP02-T3+	GND-J1	GND	DP02-R3-	DP02-R3+	GND-J1	GND
9	User defined	UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
10		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
11		UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
12		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
13		UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
14		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
15		Maskable Reset*	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
16		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND

Payload Slot-1 Profile SLT3-PAY-3F2U 14.2.13 — P2 & J2

Plug-in module P2		Row G	Row F	Row E		Row D	Row C	Row B		Row A
Backplane J2		Row i	Row h	Even	Odd	Row e	Row d	Even	Odd	Row a

This connector is all User Defined pins.

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Peripheral Slot-2, 3, Profile SLT3-PER-1F-14.3.2 — P1 & J1

Plug-In Module P1		Row G	Row F	Row E		Row D	Row C	Row B		Row A
				Even	Odd			Even	Odd	
Bplane J1		Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a
1	Data Plane Port 1	GDiscrete1	GND	GND-J1	DP01-T0-	DP01-T0+	GND	GND-J1	DP01-R0-	DP01-R0+
2		GND	DP01-T1-	DP01-T1+	GND-J1	GND	DP01-R1-	DP01-R1+	GND-J1	GND
3		P1-VBAT	GND	GND-J1	DP01-T2-	DP01-T2+	GND	GND-J1	DP01-R2-	DP01-R2+
4		GND	DP01-T3-	DP01-T3+	GND-J1	GND	DP01-R3-	DP01-R3+	GND-J1	GND
5	User defined	SYS_CON*	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
6		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
7		Reserved	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
8		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
9		UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
10		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
11		UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
12		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
13		UD	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
14		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
15		Maskable Reset*	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
16		GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND

Peripheral Slot-2, 3, Profile SLT3-PER-1F-14.3.2 — P2 & J2

Plug-in module P2	Row G	Row F	Row E		Row D	Row C	Row B		Row A
			Even	Odd			Even	Odd	
Backplane J2	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a

This connector is all User Defined pins.

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4) I2C connector

There are 2 connectors for system- management XI2CA and XI2CB.
Part.Nb: X-MOL-53398-0510
For customer specific board assembly are Zero-Ohm resistors available.
Usable voltages for I2C are 3.3V-AUX

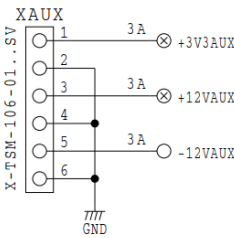
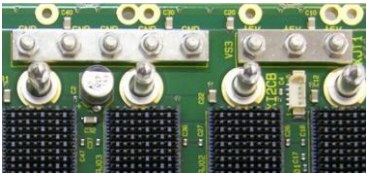
XI2CA / B

1	IPMB_SCL
2	GND
3	IPMBSDA
4	IPMB_PWR
5	NC

Connector Molex 53398-0571

5) Power Studs M3

The main operating voltages (+12V, +3.3V, +5V) and GND are supplied with M3 screw terminals.
The auxiliary operating voltages are supplied via single row vertical terminals. Optimal daughter board supply and trouble-free operation are ensured by the arrangement of the feed modules on the backplane.



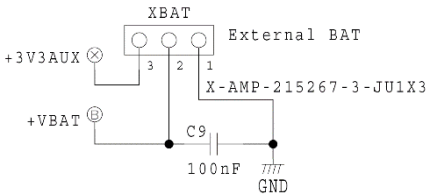
Connector Samtec
TSM-106-01-L-SV

6) VBAT

Normally a battery voltage with approximately 3V is available at Pin VBAT of connector VPX-J1.
The voltage is externally accessible with connector X5 or internally using 3.3V_AUX by closing Jumper BR1.

VBAT

1	GND
2	+VBAT
2	+3.3V_AUX



7) NVMRO

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

BR1

1	NVMRO
2	GND

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8) SYSCON

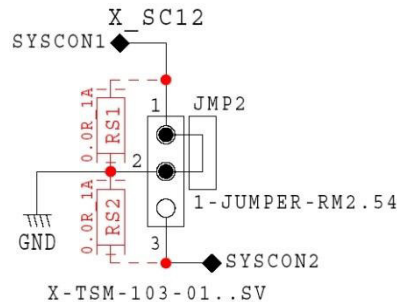
By setting the signal Syscon to GND the system slot is defined. In general the system slot is slot 1.

We offer 2 options for setting:

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

JMP2

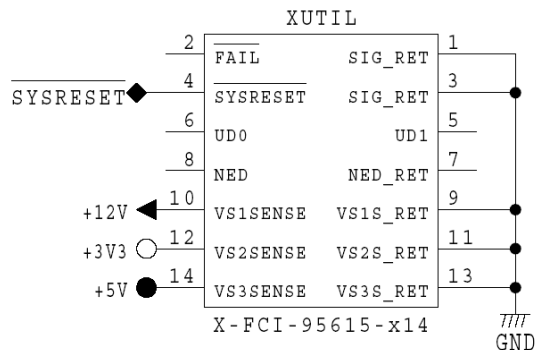
1	SYSCON1
2	GND
3	SYSCON2



9) Utility

Special signals like sense signals for connection to the power supply are at the connector XUTIL.

Connector Amphenol/FCI 95615-014TRLF



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