

Open VPX 3U 2Slot Backplane

Features

- Compliant to VITA 46.0 baseline specification
- Backplane Profile : BKP3-DIS02-15.2.8-n
- OPEN VITA 65 Specification
- 1 x Double Fat Pipe(Mesh) Data Plane
- 2 Slots VPX, 1 Payload Slot , 1 Peripheral Slot
- M3 studs power entry
- Reference clock
- Aux clock
- System Management Interface(I2CA, I2CB)
- Input current per backplane

VS1 = 18A

VS2 = 18A

VS3 = 30A

- Order Number: B203202001

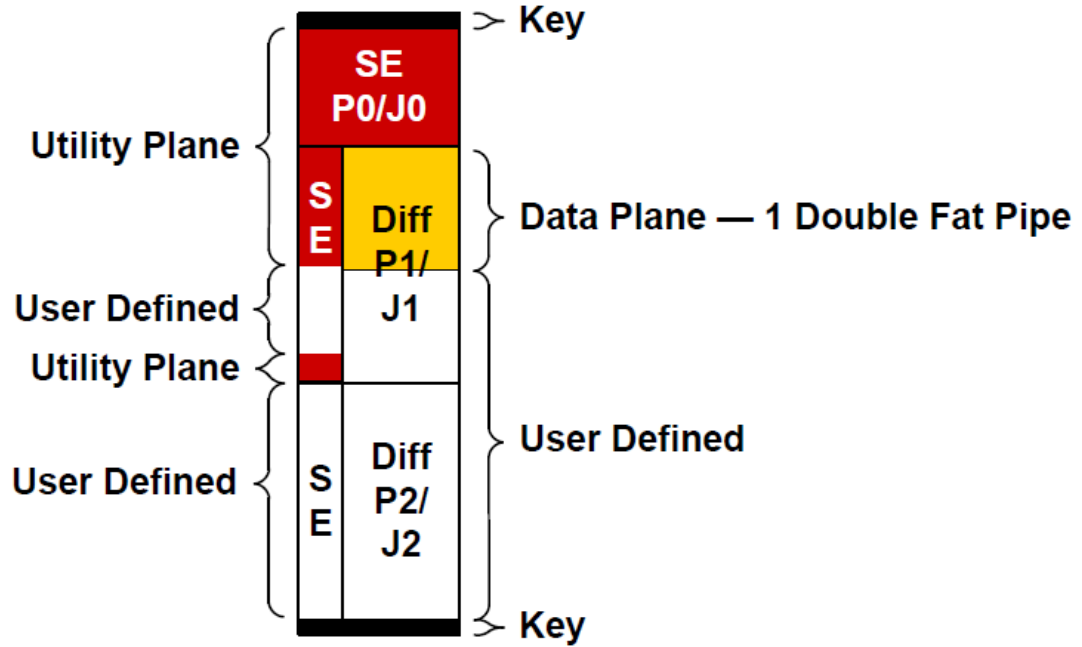
Board Specifications

- PCB size : 128.5 mm x 51.56 mm x 5.4 mm
- 5 HP(25.40 mm) from slot to slot
- Operating temperature: -40° - +85°C
- Storage temperature: -55°C - +85°C

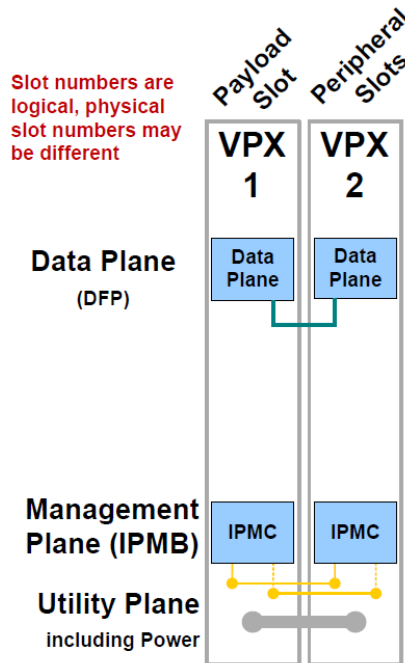
Open VPX 3U 2Slot Backplane

Slot Profiles

- Slot 1: Payload Slot (SLT3-PAY-1D-14.2.6)
- Slot 2: Peripheral Slot (SLT3-PAY-1D-14.2.6)

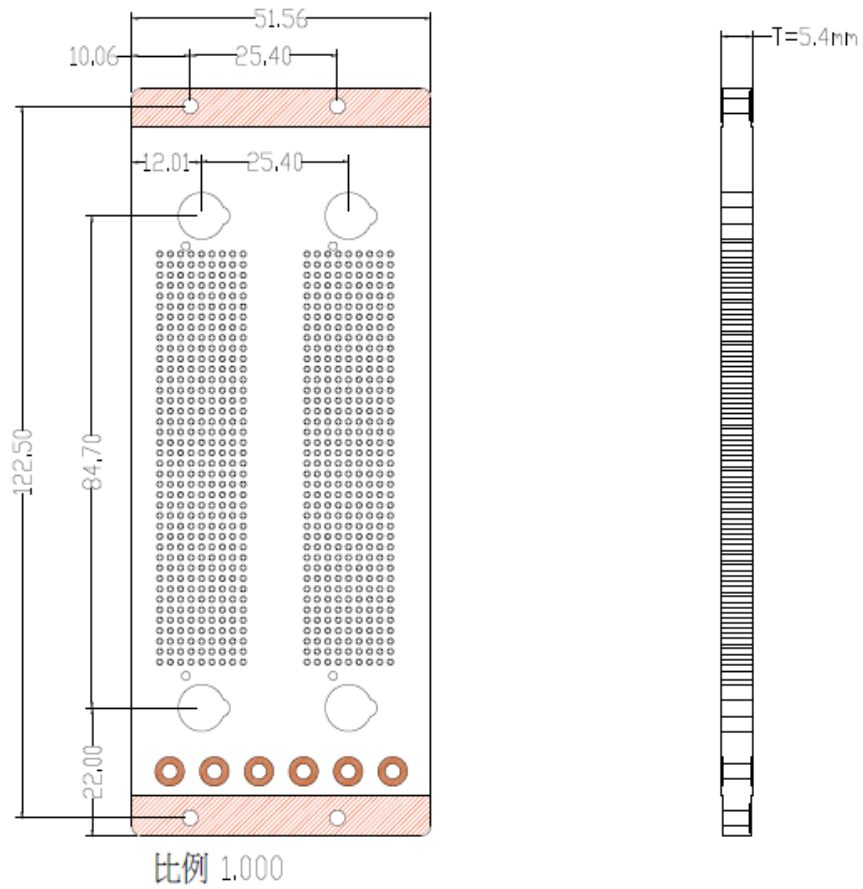


Backplane Topology



Open VPX 3U 2Slot Backplane

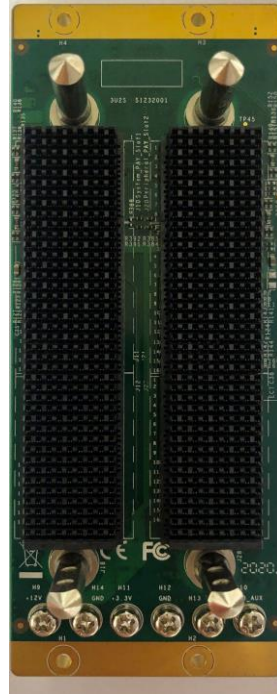
Mechanical Draw



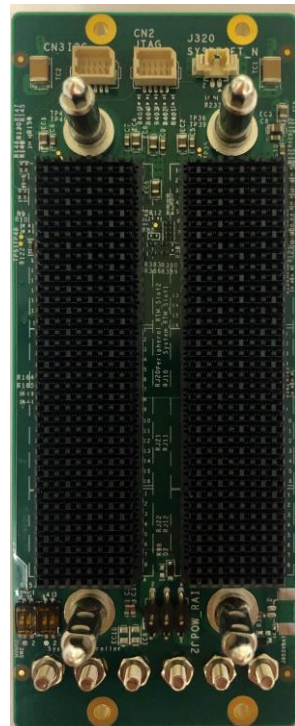
Open VPX 3U 2Slot Backplane

Photos

✧ Front Side



✧ Rear Side



Open VPX 3U 2Slot Backplane

Pin Assignment

Utility Plane Signals on J0

VS1=12V , VS2=3.3V , VS3=5V

	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	GA4*	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

Payload Slot Profile SLT3-PAY-1D-14.2.6 — 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	
Data Plane Port 1	1	GD iscrete1	GND	GND-J1	D P 01-T 0-	D P 01-T 0+	GND	GND-J1	D P 01-R 0-	D P 01-R 0+
	2	GND	D P 01-T 1-	DP01-T1+	GND-J1	GND	D P 01-R 1-	D P 01-R 1+	GND-J1	GND
	3	P 1-VB A T	GND	GND-J1	D P 01-T 2-	D P 01-T 2+	GND	GND-J1	D P 01-R 2-	D P 01-R 2+
	4	GND	D P 01-T 3-	DP01-T3+	GND-J1	GND	D P 01-R 3-	D P 01-R 3+	GND-J1	GND
	5	SYS_C ON *	GND	GND-J1	D P 01-T 4-	D P 01-T 4+	GND	GND-J1	D P 01-R 4-	D P 01-R 4+
	6	GND	D P 01-T 5-	DP01-T5+	GND-J1	GND	D P 01-R 5-	D P 01-R 5+	GND-J1	GND
	7	R eserved	GND	GND-J1	D P 01-T 6-	D P 01-T 6+	GND	GND-J1	D P 01-R 6-	D P 01-R 6+
	8	GND	D P 01-T 7-	DP01-T7+	GND-J1	GND	D P 01-R 7-	D P 01-R 7+	GND-J1	GND
User Defined	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	D P 04-T 0+	GND	GND-J1	UD	UD
	14	GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND
	15	Maskable	GND	GND-J1	UD	UD	GND	GND-J1	UD	UD
	16	GND	UD	UD	GND-J1	GND	UD	UD	GND-J1	GND


Payload Slot Profile SLT3-PAY-1D-14.2.6 — P2 & J2

Plug-In Module P2	Row G	Row F	Row E		Row D	Row C	Row B		Row A	
			Even	Odd			Even	Odd		
Bplane J2	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a	
User Defined	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

Open VPX 3U 2Slot Backplane

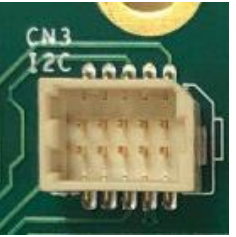
JTAG

Position	Pin Number	Description
CN2	1	3V3_AUX
	2	TMS
	3	GND
	4	TCK
	5	GND
	6	TDO
	7	GND
	8	TDI
	9	GND
	10	TRST



I2C Connector


Position	Pin Number	Description
CN3	1	I2C_A_CLK
	2	I2C_B_CLK
	3	GND
	4	GND
	5	I2C_A_SDA
	6	I2C_B_SDA
	7	3V3_AUX
	8	3V3_AUX
	9	GND
	10	GND



Open VPX 3U 2Slot Backplane


NVMRO

Position	Pin Number	Description
SW2	1	Empty
	2	GND
	3	NVMRO
	4	Empty




SYSCON

Position	Pin Number	Description
SW3	1	GND
	2	GND
	3	Slot1_SYSCON
	4	Slot2_SYSCON




SYS Reset

Position	Pin Number	Description
J320	1	SYSRESET
	2	GND
	3	GND
	4	GND

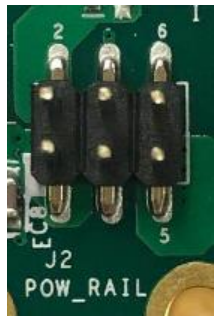


Open VPX 3U 2Slot Backplane

Power Stubs M3

Position	Pin Number	Description	
Stubs M3	H9	+12V	
	H10	3V3_AUX	
	H11	+3.3V	
	H12	GND	
	H13	+5V	
	H14	GND	

Power Rail

Position	Pin Number	Description	
J2	1	P12V_AUX	
	2	VBAT	
	3	GND	
	4	VBAT_GND	
	5	N12V_AUX	
	6	Empty	