

VPX – Available Power & Voltage Assignments

The chart below gives maximum power per VPX slot based upon VITA 46 and profiles defined in VITA 65.

Voltage Level	3U watts/slot	6U watts/slot	per wafer due to connector limits
Only 3V	69	N/A	23 Amps†
Only 5V	115	115	23 Amps†
Only 12V*	276	384	23 Amps† (3U), 16 Amps‡ (6U)
VS1, VS2, and VS3	240	348	12 Amps§
Only 48v per VITA 46	N/A	768	16 Amps‡ (VS1 and VS2)

Note: †= 1 power wafer used, ‡=2 power wafers used, §=3 power wafers used

The assignment of voltages on VS1, VS2 and VS3 is different for 3U and 6U cards. In addition, more voltage options are allowed for VS1 and VS2 in VITA 46 than are currently defined within VITA 65.

Signal Assignments for the J0 Connector per VITA 46.0 and VITA 65

	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

3U Power Assignments for the J0 Connector per VITA 65

	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a
1	12V	12V	12V	12V	No Pad*	3V	3V	3V	3V
2	12V	12V	12V	12V	No Pad*	3V	3V	3V	3V
3	5V	5V	5V	5V	No Pad*	5V	5V	5V	5V
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

6U Power Assignments for the J0 Connector per VITA 65

	Row i	Row h	Row g	Row f	Row e	Row d	Row c	Row b	Row a
1	12V	12V	12V	12V	No Pad*	12V	12V	12V	12V
2	12V	12V	12V	12V	No Pad*	12V	12V	12V	12V
3	5V	5V	5V	5V	No Pad*	5V	5V	5V	5V
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