PXI-XJLink2 Datasheet

Technical Specifications

Absolute Maximum Ratings

DC input voltage	–0.5 V to 5.5 V
DC input current	±10 mA
DC output current	(Pins 1, 11 with power on) +50 mA
	(NB capacitors > 10 µF connected to these pins should have current limiting circuitry fitted)
DC output current	–50 mA, +50 mA including power and ground pins
Temperature Range	+5 °C to +45 °C (operational)
Humidity	< 95% (non-condensing)

DC Electrical Characteristics

Output voltage programmable range: 1.1 V to 3.3 V in 0.1 V steps

Output voltage tolerance: ±5% of set value, typically ±3%

Bank Voltage	V_{IL} Max	V_{IH} Min	V_{OL} Max	V_{OH} Min	Load conditions
3.3	0.8	2.0	0.4	2.4	100 Ω
2.5	0.7	1.7	0.4	2.0	100 Ω
1.8	0.4	0.9	0.4	1.35	100 Ω
1.5	0.4	0.85	0.4	1.0	100 Ω
1.2	0.4	0.75	0.4	0.8	133 Ω

Variable Input threshold:

V_{IL} (Max) = V_{THRESH} – 0.14 V

V_{IH} (Min) = V_{THRESH} + 0.14 V

External V_{REF}:

$$V_{IL}\ (\text{Max}) = \frac{V_{REF}}{2} - 0.14\ \text{V}$$

$$V_{IH}\ (\text{Min}) = \frac{V_{REF}}{2} + 0.14\ \text{V}$$

TCK Frequency

10 kHz to 166 MHz in steps of 0.05 MHz.
Autoskew compensates for the delay introduced by the cable and the JTAG devices by up to 3 TCK periods.

Visual Indication

Red light:	Test FAILED
Yellow flashing light:	Test RUNNING
Green light:	Test PASSED



Frequency Counter

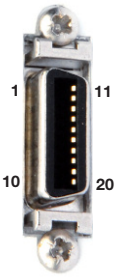
	Min	Max
Frequency Input	1 Hz	200 MHz
Accuracy	±10 ppm	

Selectable measurement period: 1 ms, 10 ms, 100 ms, 1 s, 10 s

Voltage Measurement

	Min	Max
Voltage Input	0	5 V
Accuracy	±(0.2% + 10 mV) @ 15 °C to 35 °C	
Input impedance	> 900 Ω	

JTAG Connector

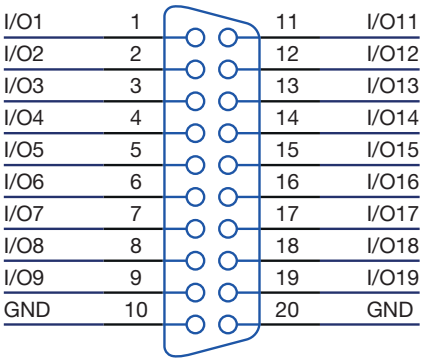


3M 20-way MDR Receptacle.
Manufacturer's part number: 10220-5212PL.

The cable supplied with the XJLink2-PXI is made from the following Farnell components:
Part No. 929-2675, 929-2969, 109-9239, 117-0221.

Example supplier part codes for mating IDC plug:
Digikey MPB20A-ND, RS 163-3285, Farnell 9292675.

Configurable JTAG Connector Pin-out



Each of the 18 interface pins can be configured to be any one of the JTAG signals that make up the IEEE 1149.1 TAP controller interface.

Dimensions: 1 PXI slot