

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	V_{IL}	V_{IH}	V_{OL}	V_{OH}	Load conditions
Voltage	Max	Min	Max	Min	
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:

$$V_{IL} (\text{Max}) = V_{\text{THRESH}} - 0.14 \text{ V}$$

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

External V_{REF} :

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

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

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.

Dimensions

Size: 60 mm x 103 mm x 29 mm



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	

PC Interface

USB 2.0 High speed (480 Mbps) Type B connector

XJLink2 USB load current up to 500 mA
Typically 180 mA + any target load

JTAG Connector

0.1" pitch 20-way connector with pinout configurable in software for 18 pins.

Example supplier part codes for mating IDC plug
(20-way ribbon cable will be required):

Digikey: 2-215882-0-ND
Farnell: 1200505
RS: 681-1780

Visual Indication

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