

**MODEL JI-300****I2C HOST ADAPTER****1.0 Specifications****Hardware****PC Interface**

Type:	USB 2.0
Connector:	Standard Type B Socket

**Power**

USB port:	5V @ 300mA (max) Note that all power is supplied by the USB port.
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**I2C Interface**

Connector:	Standard 9-Pin, D-sub, Female
Pin-outs:	Pin 1 = SDA Pin 4, 5 = GND Pin 6 = SCL Pin 8 = Vbus Pin 2, 3, 7, 9 = No Connection
SCL/SDA Bus Voltage (Vbus) Range:	Programmable - 1.50V to 5.25V (10mV steps) +/-2%
Input Threshold:	VIL: 0.2Vbus (typical) VIH: 0.7Vbus (typical) VTH: 0.1Vbus (typical)
Input Voltage Range:	-0.3V to 6.0V (operational) -5.0V to 10.0V (maximum rating)
SCL Frequency:	Programmable – Standard: 7.0KHz to 4.0MHz Advanced: 254Hz to 4.0MHz (20nS steps)
SCL/SDA Sink Current:	27mA (typical) short-circuit protected
SCL/SDA Pull-up Resistors:	Programmable – 273 to 4.99K ohms & Open (16 selections) +/-3%
Input Capacitance:	< 40pF without test cables
External Bus Voltage:	Switched Vbus available to power external I2C target. Current limited to 90mA (typical)

### LEDs

Power:	Power-On (USB device enumeration)
SCL/SDA Activity:	LED provides two functions: <ul style="list-style-type: none"><li>• I2C Bus activity</li><li>• Software "Open" success - Indicated by LED blinking three times when the software application successfully opens a USB connection unit.</li></ul>

### Enclosure

Dimensions:	4.1" x 1.1" x 5.5"
Material:	Vinyl-clad steel cover with an extruded aluminum base.
Weight:	0.9 lbs.

### General

#### I2C bus

Address Format:	7-bit
Bus Modes:	Master & Multi-Master
SCL Programmable Parameters:	<ul style="list-style-type: none"><li>- tSU;DAT (20nS steps)</li><li>- tHD;DAT (20nS steps)</li><li>- tHIGH (20nS steps)</li></ul>

#### Data Transfer

Tx/Rx Status Report:	<ul style="list-style-type: none"><li>- Bus not-Free condition</li><li>- Clock Stretch occurrence</li><li>- SDA signal contention (Master Mode)</li><li>- Loss of arbitration (Multi-Master mode)</li><li>- Missing ACK</li></ul>
Behavior Setup:	<ul style="list-style-type: none"><li>- Bus not Free (programmable max. time)</li><li>- Clock Stretch (programmable max. time)</li><li>- Repeated Start (Selectable)</li></ul>