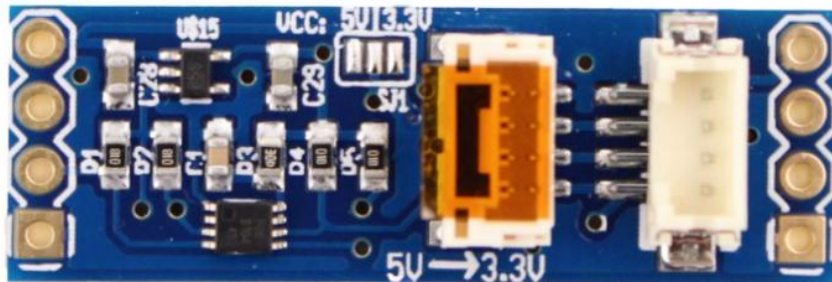




I2C Level Converter Documentation

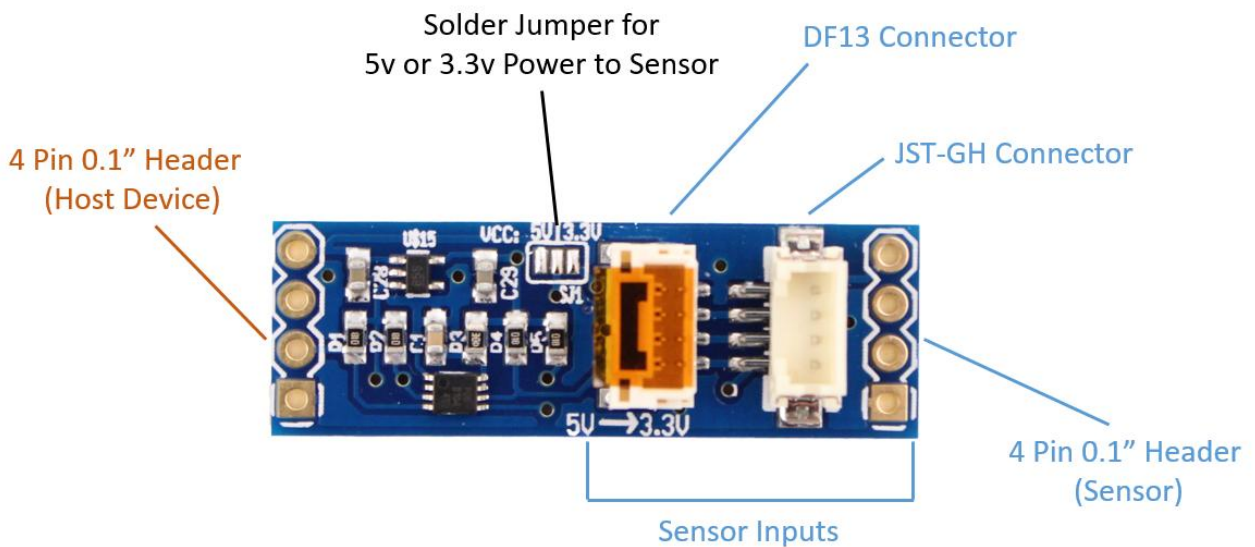


Introduction

The *I²C Level Converter* allows you to run 3.3v logic sensors like the [Bar30](#) or [Celsius](#) and other accessories off of a 5v logic device like the Arduino Uno. Attempting to run the Bar30 or Celsius off of a 5v logic device without a level converter will result in improper operation, and ultimately damage the sensor. A selectable solder jumper lets you power your instrument at 3.3v or 5v, independent of the 3.3v logic level.

Specifications

Function Diagram





Specification Table

Electrical

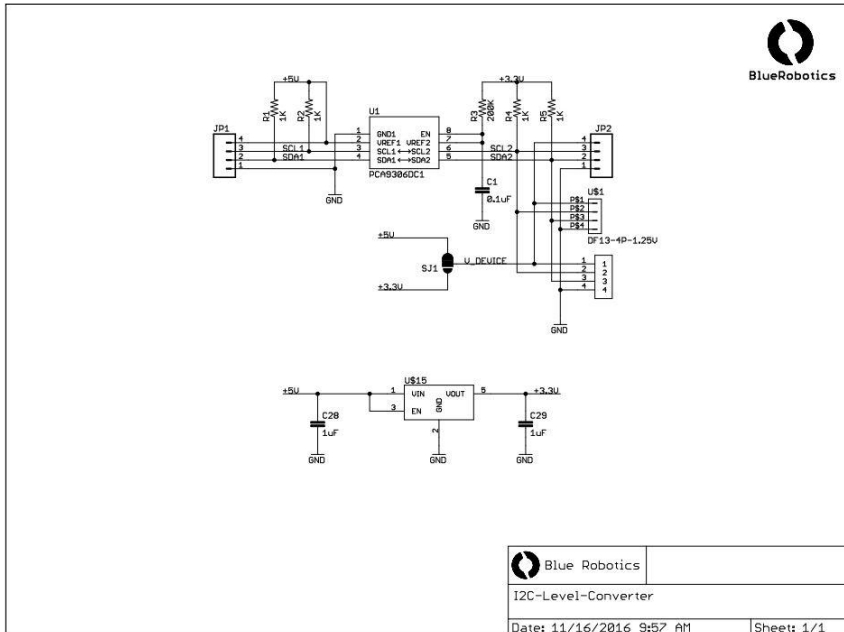
Operating Voltage	3.3-5v
Maximum Current 3.3v Vout	150mA
Output Connector	4 pin 0.1" header
Input Connector	4 pin 0.1" header, JST-GH, DF13

Physical

Length	34 mm	1.33 in
Width	11.6 mm	0.46 in
Height (without header pins)	6.5 mm	0.25 in

Schematic

The [EagleCAD files](#) for the schematic and board are available on our [GitHub page](#).



Usage

To use the *I²C Level Converter*, first determine if your 3.3v logic instrument should be powered by 3.3v or 5v. Although they are 3.3v and 5v power tolerant, we recommend that the Bar30 and Celsius are powered by 5v for best performance. The solder jumper is set to 5v by default, but it can be switched if necessary. Plug your instrument into one of the input ports (4 pin 0.1" header, JST-GH, DF13) and your 5v device to the host device output port, and your instrument is ready to be used.

