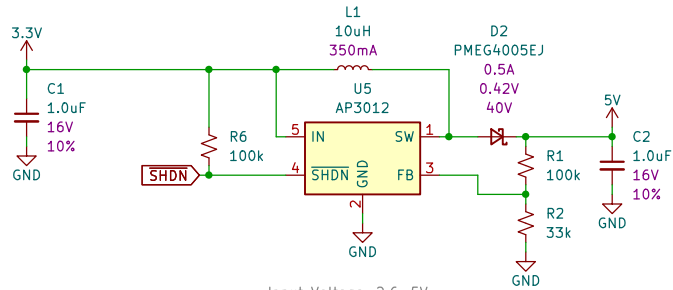


5V Boost – AP3012

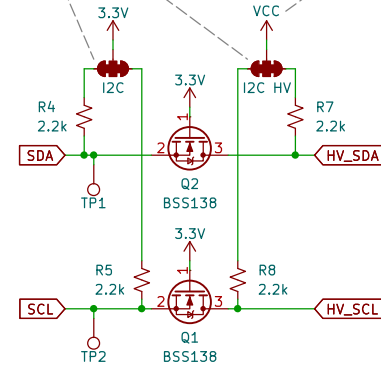


Input Voltage: 2.6–5V
 Max Current: 100mA
 $V_{out} = 1.25 * (1 + R1/R2)$
 $R1 = (V_{out} * 0.8 - 1) * R2$
 $R1 = 100k, R2 = 33k$

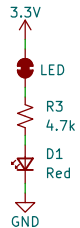
I²C Logic Level Conversion

Cut "I2C" and/or "I2C HV" jumpers to remove pullups from bus

PTH Headers are converted from 3.3V to user selected VCC (3.3V or 5V)

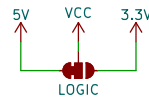


Power LED



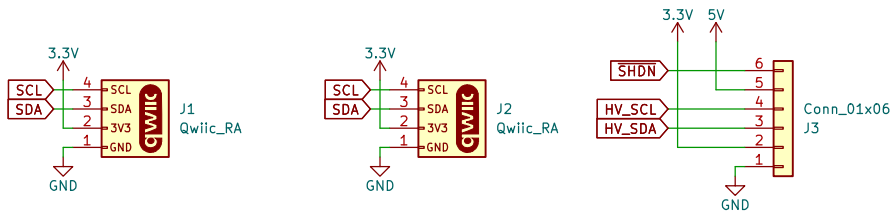
Cut jumper to turn off power LED

PTH I²C Logic Level Select



Default: I2C is 5V
 Cut LOGIC jumper and solder to 3.3V to change I2C signals on PTH headers to 3.3V.

Connectors



Designed by: P. Lewis
 Based off the Indoor Air Quality Combo and the SparkX Qwiic Boost by N. Seidle



Sheet: /
 File: SparkFun_Qwiic_5V_Boost_AP3012K.kicad_sch

Title: SparkFun Qwiic 5V Boost AP3012K

Size: USLetter Date: 2025-02-27
 KiCad E.D.A. 9.0.0

Rev: v10
 Id: 1/1