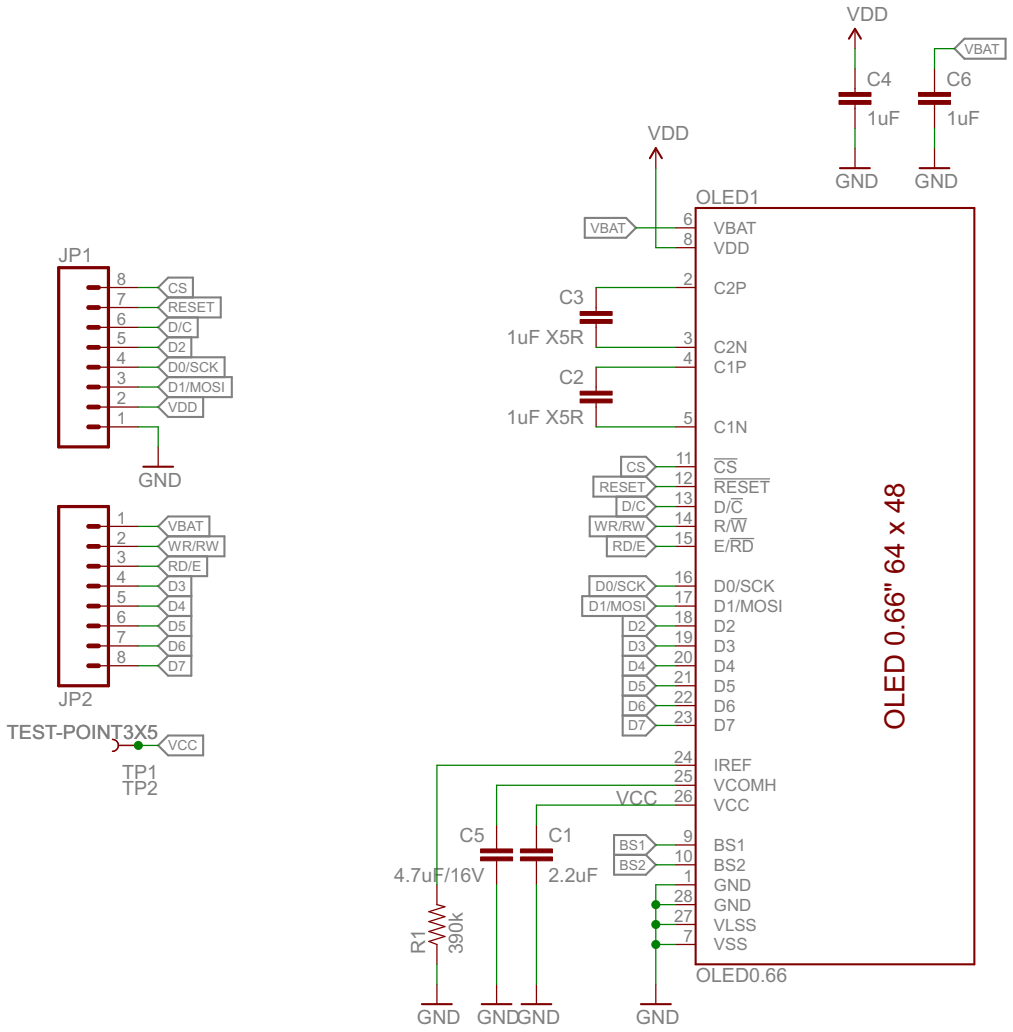
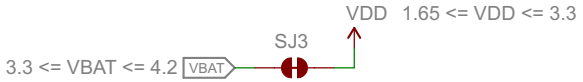


Power Supply

The OLED requires a 1.65-3.3V supply for its logic circuits (VDD) and a 7-7.5V supply for it's display circuitry (VCC). Fortunately, it features a charge-pump boost converter to generate a 7V supply (VCC) from 3.3-4.2V. The charge-pump input voltage is taken from the VBAT line.

SJ3, closed by default, shorts the VDD and VBAT lines. This way the same supply you're using to power the logic can be boosted for the VCC supply as well. In this case, your VDD supply should be around 3.3V.



VCC (7.0-7.5V) will be generated by on-board DC-DC converter, as long as C3 and C2 are present. It's boosted up from VBAT.

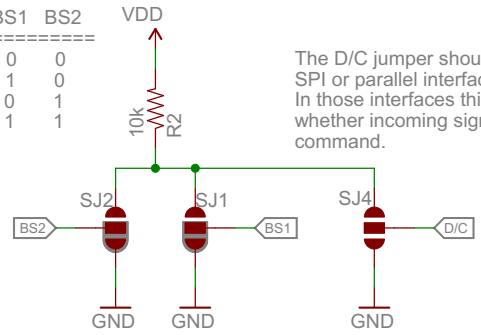
VDD current < 300 uA
VCC current (Internally generated) = 5.8-20.9mA
VCC current (Externally supplied) = 1.7-6.9mA

Interface selection

The SSD1306 can be controlled via SPI, I2C, or a parallel interface.

Use the BS1 & BS2 jumpers to select the interface. The breakout defaults to SPI (BS1 and BS2 connected to ground/0).

Interface	BS1	BS2
SPI	0	0
I2C	1	0
8-bit (6800)	0	1
8-bit (8080)	1	1

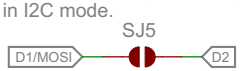


The D/C jumper should be open if SPI or parallel interfaces are used. In those interfaces this pin determines whether incoming signals are data or command.

In I2C mode, D/C sets the lower bit of the 7-bit address. Short it one way or the other.

D/C	I2C Address
0	0x3C
1	0x3D

Short D1 (SDAin) and D2 (SDAout) in I2C mode.



TITLE: Micro-OLED-Breakout

Design by: Jim Lindblom

REV: v04

Date: 10/29/2014 12:04:38 PM

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