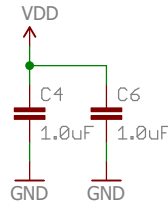
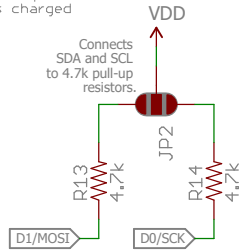
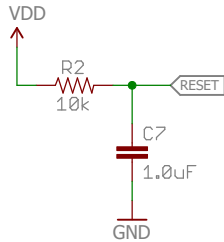


RC delay circuit for RESET line.  
Used to keep pinout to standard 4-pin I2C headers and JST connectors.  
Pulls RESET LOW momentarily at startup then pulls HIGH once capacitor is charged after 10ms



## Power Supply

The OLED requires a 1.65-3.3V supply for its logic circuits (VDD) and a 7-7.5V supply for its 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.

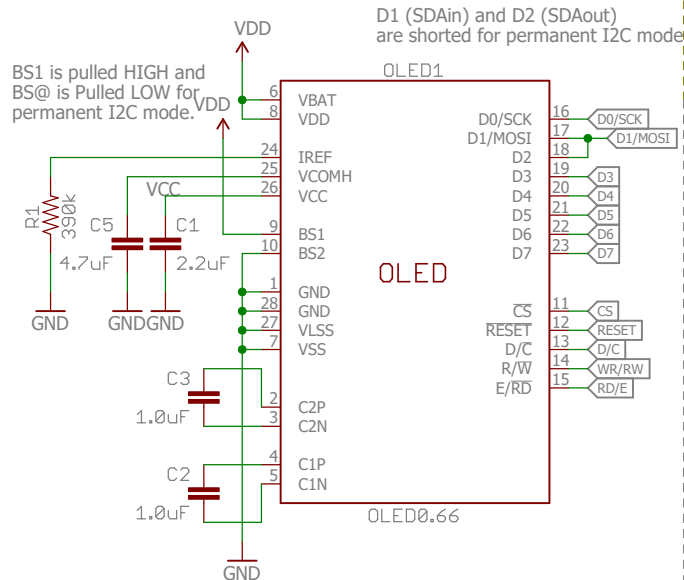
SJ3, closed by default, shorts the VDD and VBAT lines. This way the same supply you're using to power the logic can be boosted for the VCC supply as well. In this case, your VDD supply should be around 3.3V.

$$1.65 \leq VDD \leq 3.3$$

$$3.3 \leq VBAT \leq 4.2$$

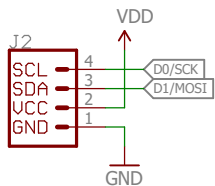
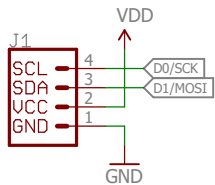
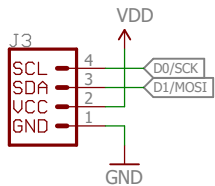
VCC (7.0-7.5V) will be generated by on-board DC-DC converter, as long as C3 and C2 are present. It's boosted up from VBAT.

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



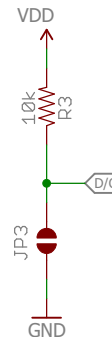
D1 (SDAin) and D2 (SDAout) are shorted for permanent I2C mode.

BS1 is pulled HIGH and BS@ is Pulled LOW for permanent I2C mode.



## Interface selection

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 (Default)

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TITLE: Qwiic\_OLED\_Breakout

Design by: Joel Bartlett  
Revision By: Andy England

REV:  
v10

Date: 12/4/2017 1:49 PM

Sheet: 1/1