Power Supply

The OLED requires a 1.65-3.3V supply for its logic circuits (VDD) and a 5-7.5V supply for its display circuits (VCC). Fortunately, it features a charge-pump boost converter to generate a 5V 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 <= VDD <= VDD (TEST-POINT) 3.3V

SJ3 closed by default, short 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 an onboard DC-DC converter, as long as C1 and C2 are present. It's boosted up from VDD.

VDD current <= 300mA

VCC current (internally generated) = 5.0-20mA

VCC current (externally supplied) = 1.7-6mA

Interface selection

The SS01306 can be controlled via SPI, I2C, or a parallel interface.

Use the B51 & B52 jumpers to select the interface. The breakout defaults to SPI (B51 & B52 to GND).

If the B51 & B52 jumpers are removed, the interface defaults to I2C.

Interface

<table>
<thead>
<tr>
<th>SPI</th>
<th>I2C</th>
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</thead>
<tbody>
<tr>
<td>B51</td>
<td>8-bit (6000B)</td>
</tr>
<tr>
<td>B52</td>
<td>8-bit (6000B)</td>
</tr>
</tbody>
</table>

In I2C mode, D/C sets the lower bit of the 7-bit address. Start it one way on the other. B51 is high (0) & B52 is low (1) is default. 0, 0x3C, 0x3D

D1 (SDAIn) and D2 (SDAOut) are cleared for SPI mode. Short for I2C, those interfaces this pin determines whether incoming signals are data or command.

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