I²C OLED Display

## Monochrome 0.91-inch, 128x32 pixels

Product Overview

10-27-2021

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

Adafruit Monochrome 0.91-inch 128x32 I²C OLED Display is small (only about 1-inch diagonal) but very readable due to the high contrast of the OLED display. This display is made of 128x32 individual white OLED pixels, each one is turned on or off by the controller chip. Because the display makes its own light, no backlight is required. This reduces the power required to run the OLED and is why the display has such high contrast. The OLED display has been put onto a breakout PCB along with support circuitry to let the user use this with 3.3V (Feather/ Raspberry Pi) or 5V (Arduino/ Metro328) logic levels.
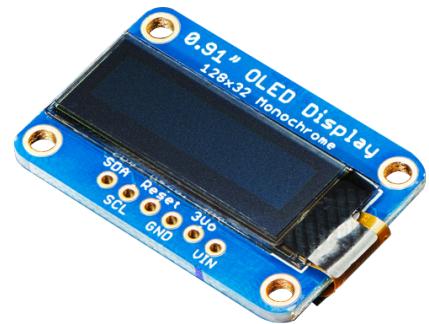
The SparkFun Qwiic compatible STEMMA QT connectors for the I²C bus are included, so there is no need to solder. The power requirements depend a little on how much of the display is lit but on average the display uses about 20mA from the 3.3V supply.

Board Overview
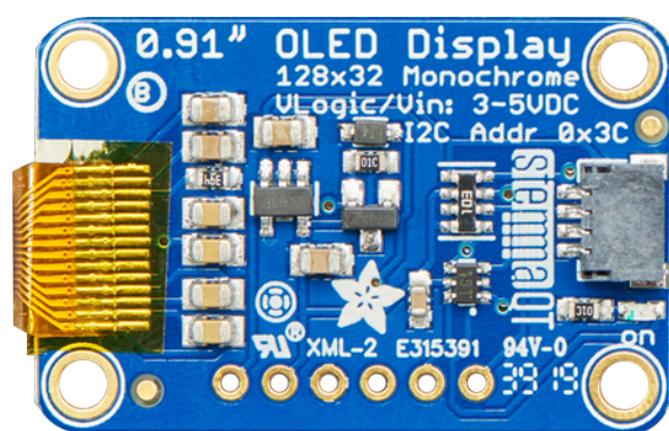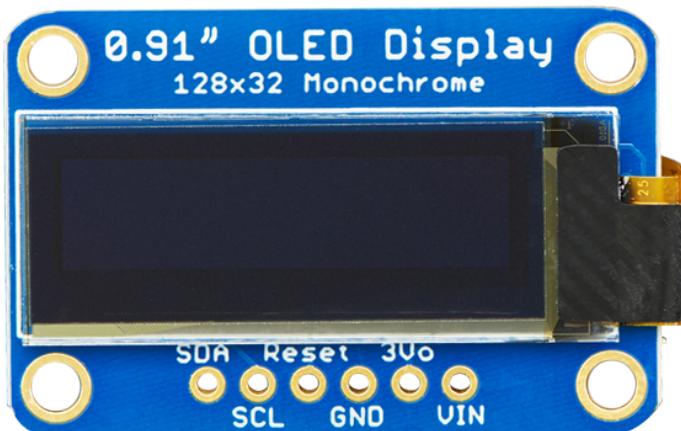
Specifications

- **Display details:**
  - 0.91-inch diagonal screen size
  - 128×32 number of pixels
  - Monochrome (White) color depth
  - COG module construction
  - 46.30mm×11.50mm×1.45mm module size
  - 30.00mm×11.50mm×1.45mm panel size
  - 22.384mm×5.584mm active area
  - 0.175mm×0.175mm pixel pitch
  - 0.159mm×0.159mm pixel size
  - 1/32 duty
  - 150 (typ) at 7.25V Brightness (cd/m^2)
  - I^{2}C interface
  - Display current draw is completely dependent on usage
  - Each OLED LED draws current when on so the more pixels lit, the more current is used
  - They tend to draw ~15mA or so in practice but for precise numbers the user must measure the current in their usage circuit
  - This board/chip uses I^{2}C 7-bit address 0x3C

- **Dimensions:**
  - 20mmx35mm PCB
  - 7mmx25mm display area
  - 4mm thickness

Mouser Part Number(s)

View Part

To learn more, visit https://www.mouser.com/new/adafruit/adafruit-oled-display-breakout-board/