SparkFun Transparent Graphical OLED Breakout (Qwiic)

LCD-15173 Open Source Hardware

The future is here! The SparkFun Qwiic Transparent Graphical OLED Breakout allows you to display custom images on a transparent screen using either SPI or I²C connections. Brilliantly lit in the dark and still visible by daylight, this OLED sports a display area of 128x64 pixels, 128x56 of which are completely transparent. Utilizing our handy Qwiic system, no soldering is required to connect it to the rest of your system making it easy to get started with your own images. However, we still have broken out 0.1"-spaced pins in case you prefer to use a breadboard.

The Arduino sketch required to drive this display requires quite a bit of dynamic memory, meaning that it is not going to fit on a smaller controller like an ATmega328. Control of the OLED is based on our new HyperDisplay library and any controller with larger RAM should have no problem. In addition, your 3.3V source should be robust enough to supply around 400mA to the display.

The SparkFun Qwiic Connect System is an ecosystem of I²C sensors, actuators, shields and cables that make prototyping faster and less prone to error. All Qwiic-enabled boards use a common 1mm pitch, 4-pin JST connector. This reduces the amount of required PCB space, and polarized connections mean you can't hook it up wrong.

FEATURES

- 128x56 transparent pixels (128x64 total pixels)
- Display area 35.5 x 18mm
- Glass area 42mm x 27.16mm
- 1-bit color depth
- I²C or SPI operation
- 400 kHz I²C, 10 MHz SPI
- I2C Addresses: 0x30 (Default), 0x31
- Qwiic compatible and standard PCB footprint
- Operates and communicates at 3.3V
- Less than 200 mA current draw pixels all-on

https://www.sparkfun.com/products/15173/3-15-19