SparkFun Transparent OLED HUD Breakout (Qwiic)

LCD-15079

Clear screens are no longer a thing of the Sci-Fi world! The Qwiic Transparent OLED HUD is SparkFun's answer to all of your futuristic transparent HUD needs. Designed for use in vehicle heads-up displays, this OLED panel is brilliant in the dark but easily visible in daylight. The display is "area colored" meaning that while no one segment can change colors, there are different colored segments on the display.

The SparkFun Transparent OLED Breakout allows you to easily control the display using the I²C protocol and includes a voltage step-up to generate the panel's 12V driving voltage from Qwiic's 3.3V bus. To make things even easier, we've thrown together an Arduino library so that doing things like changing the speedometer read out is as easy as calling *setSpeedometer()* in your sketch. Utilizing our handy Qwiic system, no soldering is required to connect it to the rest of your system. 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. Any controller with larger RAM should have no problem. It has been tested to run *very* well on an Arduino Mega 2560. In addition, your 3.3v source should be robust enough to supply around 400mA to the display.

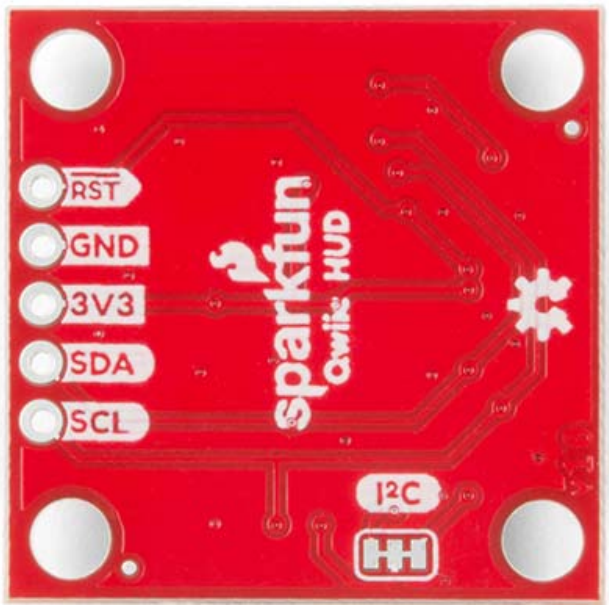
The SparkFun Qwiic Connect System is an ecosystem of I²C sensors, actuators, shields and cables that make prototyping faster and less prone to error. All Qwiic-enabled boards use a common 1mm pitch, 4-pin JST connector. This reduces the amount of required PCB space, and polarized connections mean you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

INCLUDES

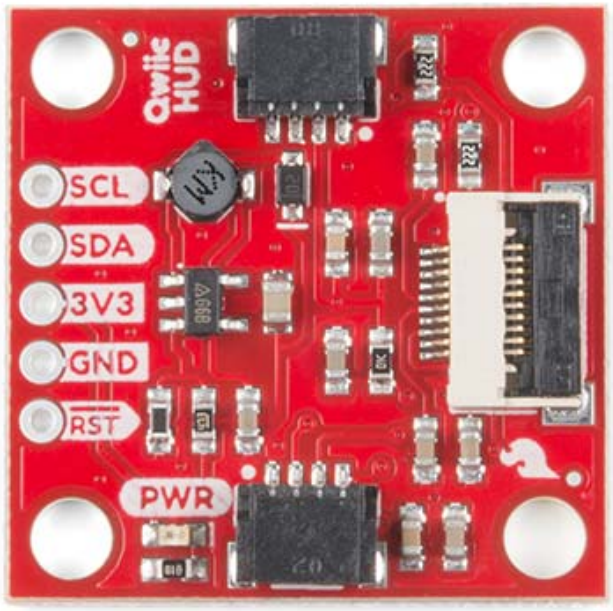
- 1 x Transparent OLED Display
- 1 x Qwiic HUD Breakout Board

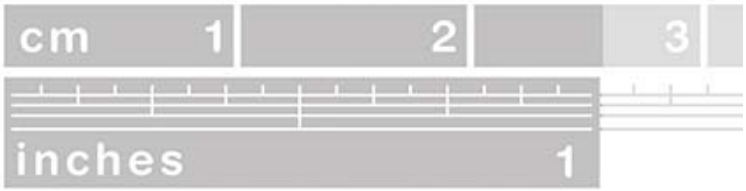
FEATURES

- 106.00mm x 37.90mm Panel Size
- Totally Transparent
- Segmented Display with 230 separate segments
- Requires 3.3V at ~500mA
- I²C Addresses: 0x30, 0x31
- 2x Qwiic Connectors


RST
GND
3V3
SDA
SCL
sparkfun
Qwiic HUD
I2C

inches
1
cm
1
2
3


Qwiic HUD
SCL
SDA
3V3
GND
RST
PWR


cm
1
2
3
inches
1

https://www.sparkfun.com/products/15079/3-7-19