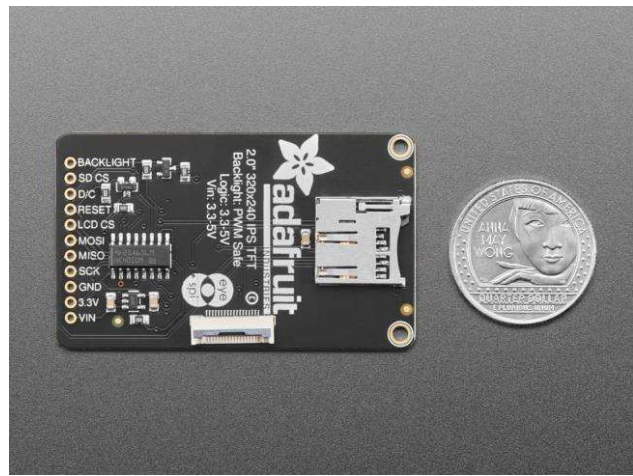
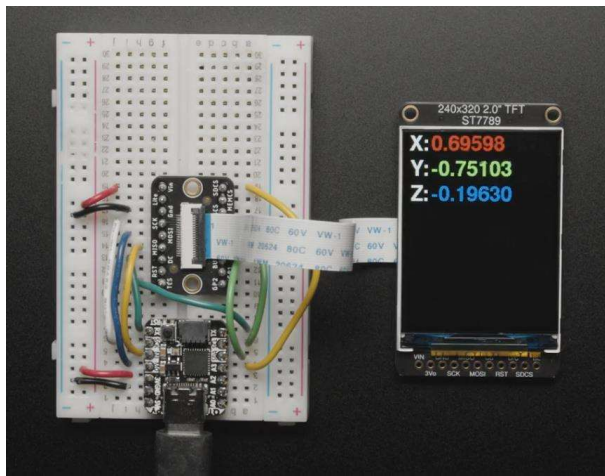




2.0" 320x240 Color IPS TFT Display with microSD Card Breakout – EYESPI

Product ID: 4311



Description

This gorgeous IPS display breakout is the best way to add a small, colorful, and bright display to any project, with excellent visibility from any angle. Since the display uses 4-wire SPI to communicate and has its own pixel-addressable frame buffer, it can be used with every kind of microcontroller. Even a very small one with low memory and few pins available!

The 2.0" display has 320x240 color pixels. Unlike the low cost "Nokia 6110" and similar LCD displays, which are CSTN type and thus have poor color and slow refresh, this display is a true TFT! Not only that, but it's an IPS display for vivid color and high-angle visibility. The TFT driver (ST7789) can display full 18-bit color (262,144 shades), but almost all drivers will use just 16-bit color. The TFT will always come with the same driver chip so there's no worries that your code will not work from one to the other.

The breakout has the TFT display soldered on (it uses a delicate flex-circuit connector) as well as a ultra-low-dropout 3.3V regulator, auto-reset circuitry, and a 3/5V level shifter so you can use it with 3.3V or 5V power and logic. We also had a little space so we placed a microSD card holder so you can easily load full color bitmaps from a FAT16/FAT32 formatted microSD card. The microSD card is not included.

Of course, we wouldn't just leave you with a datasheet and a "good luck!" – [we've written a full open source graphics library that can draw pixels, lines, rectangles, circles, text, and bitmaps as well as example code](#). The code is written for Arduino but can be easily ported to your favorite microcontroller! Wiring is easy, we strongly encourage using the hardware SPI pins of your Arduino as software SPI is noticeably slower when dealing with this size display.

New! As of February 2023, this display breakout also features an 18-pin "EYESPI" standard FPC connector with flip-top connector. You can use an 18-pin 0.5mm pitch FPC cable to connect to the display over SPI and I2C, respectively. Great for when you want to skip soldering all those headers.

Technical Details

Revision History:

- As of February 22, 2023 – we've updated this TFT breakout with an EYESPI connector to make cabling easier with an 18-pin FPC. We also used Adafruit Pinguin to make a lovely silkscreen. The board is otherwise the same size, pinout, and functionality.

Product Dimensions: 59.2mm x 35.5mm x 3.7mm / 2.3" x 1.4" x 0.1"

Product Weight: 13.5g / 0.5oz



<https://www.adafruit.com/product/4311> 6-21-23