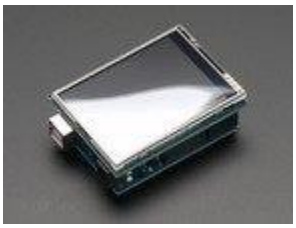
2.8" TFT TOUCH SHIELD FOR ARDUINO WITH RESISTIVE TOUCH SCREEN



DESCRIPTION

Spice up your Arduino project with a beautiful large touchscreen display shield with built in microSD card connection. This TFT display is big (2.8" diagonal) bright (4 white-LED backlight) and colorful (18-bit 262,000 different shades)! 240x320 pixels with individual pixel control. It has way more resolution than a black and white 128x64 display. As a bonus, this display has a resistive touchscreen attached to it already, so you can detect finger presses anywhere on the screen. (We also have a capacitive-touch version of this shield here)

We've updated our original v1 shield to an SPI display - its a tiny bit slower but uses a lot less pins and is now much easier to use with Mega & Leonardo. We also include an SPI touchscreen controller so you only need one additional pin to add a high quality touchscreen controller. Even with all the extras, the price is lower thanks to our parts sourcing & engineering skillz!

The shield is fully assembled, tested and ready to go. No wiring, no soldering! Simply plug it in and load up our library - you'll have it running in under 10 minutes! Works best with any classic Arduino (UNO/Duemilanove/Diecimila). Solder three jumpers and you can use it at full speed on a Leonardo or Mega as well.

This display shield has a controller built into it with RAM buffering, so that almost no work is done by the microcontroller. This shield needs fewer pins than our v1 shield, so you can connect more sensors, buttons and LEDs: 5 SPI pins for the display, another pin for the SPI touchscreen controller and another pin for uSD card if you want to read images off of it.

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 and text. We also have a touch screen library that detects x, y and z (pressure) and example code to demonstrate all of it. The code is written for Arduino but can be easily ported to your favorite microcontroller!

For people who want the same screen but not in a shield form-factor, check out our 2.8" TFT breakout

2.8" TFT Touch Shield for Arduino v2 (2:56)

TECHNICAL DETAILS

- 2.8" diagonal color touchscreen TFT
- 240x320 resolution, 18-bit (262,000) color - our library uses 16 bit color mode
- ILI9341 (datasheet) controller with built in video RAM buffer
- STMPE610 touch screen controller
- High speed SPI display with digital SPI touchscreen driver
- The display uses digital pins 13-9. Touchscreen controller requires digital pin 8. microSD pin requires digital #4. That means you can use digital pins 2, 3, 5, 6, 7 and analog 0-5. Pin 4 is available if not using the microSD
- Works with any classic Arduino '328. Solder closed three jumpers to use the ICSP header for use with Leonardo or Mega
- Onboard 3.3V @ 300mA LDO regulator, current draw depends on usage but is about 100mA for the display and touchscreen
- 4 white LED backlight. On by default but you can connect the transistor to a digital pin for backlight control
- 4-wire resistive touchscreen attached to STMPE610 controller

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