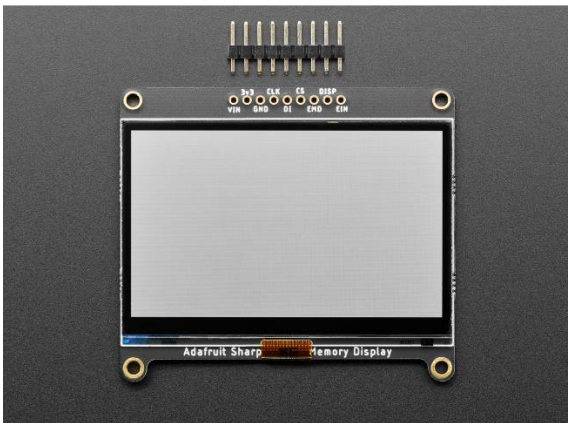
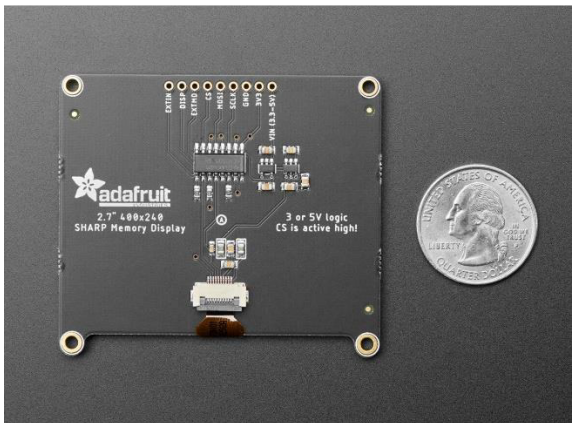




Adafruit SHARP Memory Display Breakout - 2.7" 400x240 Monochrome

PRODUCT ID: 4694

The Adafruit 2.7" 400x240 SHARP Memory Display Breakout is a chonky cross between an eInk (e-paper) display and an LCD. It has the ultra-low power usage of eInk and the fast-refresh rates of an LCD. This model has a gray background, and the pixels show up as black-on-gray for a nice e-reader type display. It does not have a backlight, but it *is* daylight readable. For dark/nighttime reading you may need to illuminate the LCD area with external LEDs.

The bare display is 5V powered and 3V logic, so we placed it on a fully assembled-and-tested breakout board with both a 3V regulator, 5V boost converter, and level shifting circuitry. Now you can use it safely with 3 *or* 5V power and logic. The bare display slots into a ZIF socket on board, and we use a piece of double-sided tape to adhere it. Comes with four mounting holes so you can easily attach it to your project.

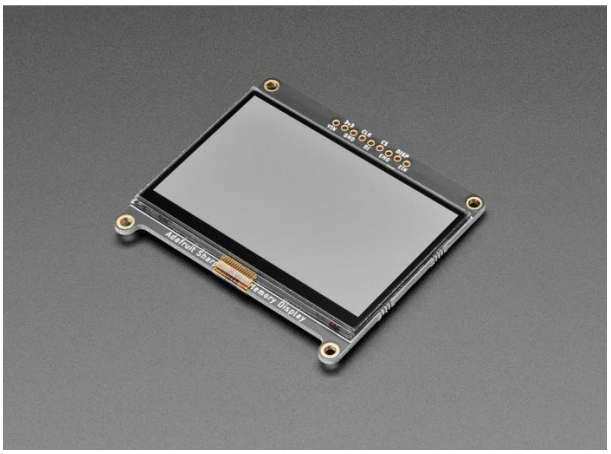
The display is 'write only' which means that it only needs 3 pins to send data. However, the downside of a write-only display is that the entire 400x240 bits (13.5 KB) must be buffered by the microcontroller driver. That means you cannot use this with an ATmega328 (e.g. Arduino UNO) or ATmega32u4 (Feather 32u4, etc). You must use a high-RAM chip such as ATSAMD21 (Feather M0), Teensy, ESP8266, ESP32, etc. On those chips, this display works great and looks fantastic.

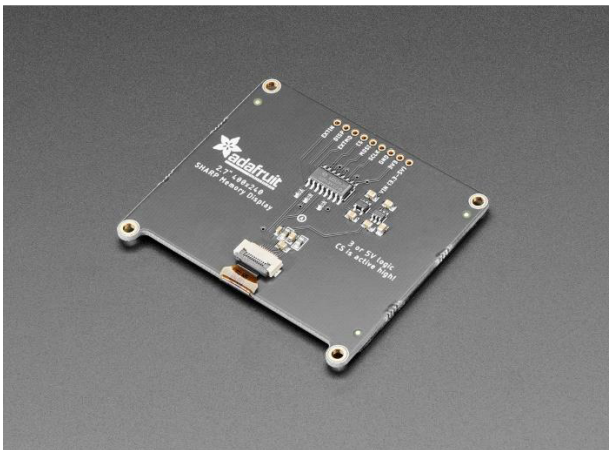
Please note, the animation of the display showing the Bad Apple demo is scaled up which is why it looks blocky, the animation is there to show you the contrast and refresh not resolution!

Check our our detailed guide for wiring diagrams, schematics, libraries, code, Fritzing objects, etc!

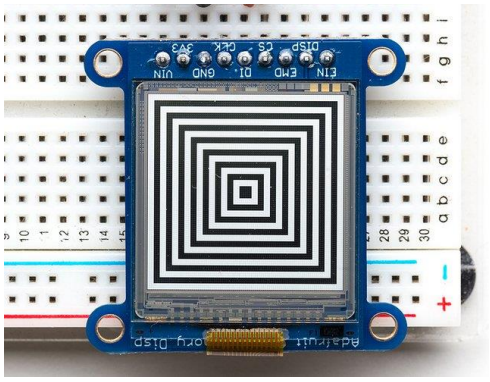
TECHNICAL DETAILS

- Display dimensions (viewable): 58.8mm × 35.3mm
- Dot pitch: 0.147 mm (square)
- Display size: 6.86 cm / 2.7" diagonal



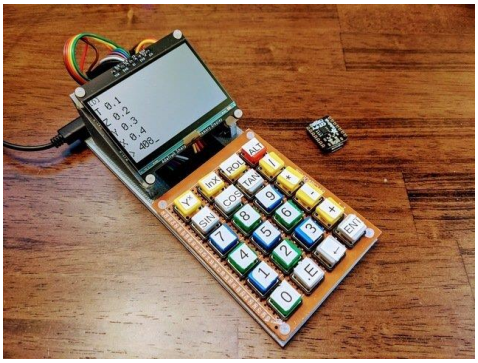


LEARN



Adafruit Sharp Memory Display Breakout

Ultra-Low Power, Daylight Visible Display



DIY Desktop Calculator with CircuitPython

3D Print, Solder, and Code your own RPN Calculator

https://www.adafruit.com/product/4694/4-30-21