# Adafruit\_SSD1306 [Build Status](https://github.com/adafruit/Adafruit_SSD1306/actions)[Documentation](http://adafruit.github.io/Adafruit_SSD1306/html/index.html)

This is a library for our Monochrome OLEDs based on SSD1306 drivers

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These displays use I2C or SPI to communicate, 2 to 5 pins are required to interface.

Adafruit invests time and resources providing this open source code, please support Adafruit and open-source hardware by purchasing products from Adafruit!

Written by Limor Fried/Ladyada for Adafruit Industries, with contributions from the open source community. Scrolling code contributed by Michael Gregg. Dynamic buffer allocation based on work by Andrew Canaday. BSD license, check license.txt for more information. All text above must be included in any redistribution

Preferred installation method is to use the Arduino IDE Library Manager. To download the source from Github instead, click "Clone or download" above, then "Download ZIP." After uncompressing, rename the resulting folder Adafruit\_SSD1306. Check that the Adafruit\_SSD1306 folder contains Adafruit\_SSD1306.cpp and Adafruit\_SSD1306.h.

You will also have to install the **Adafruit GFX library** which provides graphics primitves such as lines, circles, text, etc. This also can be found in the Arduino Library Manager, or you can get the source from <https://github.com/adafruit/Adafruit-GFX-Library>

## Changes

Pull Request: (November 2021)

* Added define SSD1306\_NO\_SPLASH to opt-out of including splash images in PROGMEM and drawing to display during begin.

Pull Request: (September 2019)

* new #defines for SSD1306\_BLACK, SSD1306\_WHITE and SSD1306\_INVERSE that match existing #define naming scheme and won't conflict with common color names
* old #defines for BLACK, WHITE and INVERSE kept for backwards compat (opt-out with #define NO\_ADAFRUIT\_SSD1306\_COLOR\_COMPATIBILITY)

Version 1.2 (November 2018) introduces some significant changes:

* Display dimensions are now specified in the constructor...you no longer need to edit the .h file for different screens (though old sketches can continue to work that way).
* SPI transactions are used and SPI bitrate can be specified (both require Arduino 1.6 or later).
* SPI and Wire (I2C) interfaces other than the defaults are supported.

## Compatibility

| **MCU** | **Tested Works** | **Doesn't Work** | **Not Tested** | **Notes** |
| --- | --- | --- | --- | --- |
| Atmega328 | X |  |  |  |
| Atmega32u4 | X |  |  |  |
| Atmega2560 | X |  |  |  |
| ESP8266 | X |  |  | Change OLED\_RESET to different pin if using default I2C pins D4/D5. |
| ESP32 | X |  |  |  |
| ATSAM3X8E | X |  |  |  |
| ATSAMD21 | X |  |  |  |
| Intel Curie | X |  |  |  |
| WICED | X |  |  | No hardware SPI - bitbang only |
| ATtiny85 |  | X |  |  |
| Particle | X |  |  |  |

* ATmega328 : Arduino UNO, Adafruit Pro Trinket, Adafruit Metro 328, Adafruit Metro Mini
* ATmega32u4 : Arduino Leonardo, Arduino Micro, Arduino Yun, Teensy 2.0, Adafruit Flora, Bluefruit Micro
* ATmega2560 : Arduino Mega
* ESP8266 : Adafruit Huzzah
* ATSAM3X8E : Arduino Due
* ATSAMD21 : Arduino Zero, M0 Pro, Adafruit Metro Express, Feather M0
* ATtiny85 : Adafruit Gemma, Arduino Gemma, Adafruit Trinket
* Particle: Particle Argon