
AdafruitSSD1675 Library Documentation

Release 1.0

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CircuitPython `displayio` drivers for SSD1675-based ePaper displays

CHAPTER 1

Dependencies

This driver depends on:

- [Adafruit CircuitPython](#)

Please ensure all dependencies are available on the CircuitPython filesystem. This is easily achieved by downloading the [Adafruit library and driver bundle](#).

CHAPTER 2

Installing from PyPI

Note: This library is not available on PyPI yet. Install documentation is included as a standard element. Stay tuned for PyPI availability!

On supported GNU/Linux systems like the Raspberry Pi, you can install the driver locally [from PyPI](#). To install for current user:

```
pip3 install adafruit-circuitpython-ssd1675
```

To install system-wide (this may be required in some cases):

```
sudo pip3 install adafruit-circuitpython-ssd1675
```

To install in a virtual environment in your current project:

```
mkdir project-name && cd project-name
python3 -m venv .env
source .env/bin/activate
pip3 install adafruit-circuitpython-ssd1675
```


CHAPTER 3

Usage Example

```
"""Simple test script for 2.13" 250x122 black and white featherwing.
Supported products:
 * Adafruit 2.13" Black and White FeatherWing
 * https://www.adafruit.com/product/4195
"""

import time
import board
import busio
import displayio
import adafruit_ssd1675

displayio.release_displays()

epd_cs = board.D9
epd_dc = board.D10

display_bus = displayio.FourWire(board.SPI(), command=epd_dc, chip_select=epd_cs,
↳baudrate=1000000)
time.sleep(1)

display = adafruit_ssd1675.SSD1675(display_bus, width=250, height=122, rotation=90)

g = displayio.Group()

f = open("/display-ruler.bmp", "rb")

pic = displayio.OnDiskBitmap(f)
t = displayio.TileGrid(pic, pixel_shader=displayio.ColorConverter())
g.append(t)

display.show(g)
```

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```
display.refresh()  
print("refreshed")  
time.sleep(120)
```

CHAPTER 4

Contributing

Contributions are welcome! Please read our [Code of Conduct](#) before contributing to help this project stay welcoming.

CHAPTER 5

Documentation

For information on building library documentation, please check out [this guide](#).

6.1 Simple test

Ensure your monochrome featherwing works with this simple test.

Listing 1: examples/ssd1675_simpletest.py

```
1  """Simple test script for 2.13" 250x122 black and white featherwing.
2
3  Supported products:
4      * Adafruit 2.13" Black and White FeatherWing
5      * https://www.adafruit.com/product/4195
6      """
7
8  import time
9  import board
10 import displayio
11 import adafruit_ssd1675
12
13 displayio.release_displays()
14
15 epd_cs = board.D9
16 epd_dc = board.D10
17
18 display_bus = displayio.FourWire(
19     board.SPI(), command=epd_dc, chip_select=epd_cs, baudrate=1000000
20 )
21 time.sleep(1)
22
23 display = adafruit_ssd1675.SSD1675(display_bus, width=250, height=122, rotation=90)
24
25 g = displayio.Group()
26
27 f = open("/display-ruler.bmp", "rb")
```

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```

28
29 pic = displayio.OnDiskBitmap(f)
30 t = displayio.TileGrid(pic, pixel_shader=displayio.ColorConverter())
31 g.append(t)
32
33 display.show(g)
34
35 display.refresh()
36
37 print("refreshed")
38
39 time.sleep(120)

```

6.2 2.13" Monochrome

Ensure your 2.13" Monochrome breakout works with this simple test.

Listing 2: examples/ssd1675_2.13_monochrome.py

```

1  """Simple test script for 2.13" 250x122 monochrome display.
2
3  Supported products:
4      * Adafruit 2.13" Monochrome ePaper Display Breakout
5      * https://www.adafruit.com/product/4197
6      """
7
8  import time
9  import board
10 import displayio
11 import adafruit_ssd1675
12
13 displayio.release_displays()
14
15 # This pinout works on a Feather M4 and may need to be altered for other boards.
16 spi = board.SPI() # Uses SCK and MOSI
17 epd_cs = board.D9
18 epd_dc = board.D10
19 epd_reset = board.D5
20 epd_busy = board.D6
21
22 display_bus = displayio.FourWire(
23     spi, command=epd_dc, chip_select=epd_cs, reset=epd_reset, baudrate=1000000
24 )
25 time.sleep(1)
26
27 display = adafruit_ssd1675.SSD1675(
28     display_bus, width=250, height=122, rotation=90, busy_pin=epd_busy
29 )
30
31 g = displayio.Group()
32
33 f = open("/display-ruler.bmp", "rb")
34
35 pic = displayio.OnDiskBitmap(f)

```

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```
36 t = displayio.TileGrid(pic, pixel_shader=displayio.ColorConverter())
37 g.append(t)
38
39 display.show(g)
40
41 display.refresh()
42
43 print("refreshed")
44
45 time.sleep(120)
```

6.3 adafruit_ssd1675

CircuitPython `displayio` drivers for SSD1675-based ePaper displays

- Author(s): Scott Shawcroft

6.3.1 Implementation Notes

Hardware:

- Adafruit 2.13" Monochrome ePaper Display Breakout
- Adafruit 2.13" Black and White FeatherWing

Software and Dependencies:

- Adafruit CircuitPython firmware (version 5+) for the supported boards: <https://github.com/adafruit/circuitpython/releases>

```
class adafruit_ssd1675.SSD1675 (bus, **kwargs)
    SSD1675 driver
```


CHAPTER 7

Indices and tables

- `genindex`
- `modindex`
- `search`

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