
AdafruitL0373 Library Documentation

Release 1.0

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CircuitPython `displayio` driver for IL0373-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-10373
```

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

```
sudo pip3 install adafruit-circuitpython-10373
```

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-10373
```


CHAPTER 3

Usage Example

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 device works with this simple test.

Listing 1: examples/il0373_simpletest.py

```
1  """Simple test script for 2.13" 212x104 tri-color featherwing.
2
3  Supported products:
4      * Adafruit 2.13" Tri-Color FeatherWing
5      * https://www.adafruit.com/product/4128
6      """
7
8  import time
9  import board
10 import displayio
11 import adafruit_il0373
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_il0373.IL0373(
24     display_bus, width=212, height=104, rotation=90, highlight_color=0xFF0000
25 )
26
27 g = displayio.Group()
```

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```
28
29 f = open("/display-ruler.bmp", "rb")
30
31 pic = displayio.OnDiskBitmap(f)
32 t = displayio.TileGrid(pic, pixel_shader=displayio.ColorConverter())
33 g.append(t)
34
35 display.show(g)
36
37 display.refresh()
38
39 print("refreshed")
40
41 time.sleep(120)
```

6.2 adafruit_il0373

CircuitPython `displayio` driver for IL0373-based ePaper displays

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6.2.1 Implementation Notes

Hardware:

- Adafruit 1.54" Tri-Color Display Breakout
- Adafruit 2.13" Tri-Color Display Breakout
- Adafruit Flexible 2.9" Black and White
- Adafruit Flexible 2.13" Black and White
- Adafruit 2.13" Tri-Color FeatherWing

Software and Dependencies:

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

class `adafruit_il0373.IL0373` (*bus*, *swap_rams=False*, ***kwargs*)
IL0373 driver

Parameters

- **bus** – The data bus the display is on
- **swap_rams** (*bool*) – Color and black rams/commands are swapped
- ****kwargs** – See below

Keyword Arguments

- *width* (*int*) – Display width
- *height* (*int*) – Display height
- *rotation* (*int*) – Display rotation
- *color_bits_inverted* (*bool*) – Invert color bit values

- *black_bits_inverted* (bool) – Invert black bit values

CHAPTER 7

Indices and tables

- `genindex`
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