
AdafruitMPL115A2 Library Documentation

Release 1.0

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Contents

1	Dependencies	3
1.1	Installing from PyPI	3
2	Usage Example	5
3	Contributing	7
4	Building locally	9
4.1	Zip release files	9
4.2	Sphinx documentation	9
5	Table of Contents	11
5.1	Simple test	11
5.2	adafruit_mpl115a2	11
5.2.1	Implementation Notes	11
6	Indices and tables	13
	Python Module Index	15
	Index	17

CircuitPython driver for MPL115A2 I2C Barometric Pressure/Temperature Sensor.

This driver depends on:

- [Adafruit CircuitPython](#)
- [Bus Device](#)

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

1.1 Installing from PyPI

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-mp1115a2
```

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

```
sudo pip3 install adafruit-circuitpython-mp1115a2
```

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-mp1115a2
```


CHAPTER 2

Usage Example

See usage examples in the examples folder.

CHAPTER 3

Contributing

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

4.1 Zip release files

To build this library locally you'll need to install the `circuitpython-build-tools` package.

```
python3 -m venv .env
source .env/bin/activate
pip install circuitpython-build-tools
```

Once installed, make sure you are in the virtual environment:

```
source .env/bin/activate
```

Then run the build:

```
circuitpython-build-bundles --filename_prefix adafruit-circuitpython-mpl115a2 --
↳library_location .
```

4.2 Sphinx documentation

Sphinx is used to build the documentation based on rST files and comments in the code. First, install dependencies (feel free to reuse the virtual environment from above):

```
python3 -m venv .env
source .env/bin/activate
pip install Sphinx sphinx-rtd-theme
```

Now, once you have the virtual environment activated:

```
cd docs
sphinx-build -E -W -b html . _build/html
```

This will output the documentation to `docs/_build/html`. Open the `index.html` in your browser to view them. It will also (due to `-W`) error out on any warning like Travis will. This is a good way to locally verify it will pass.

5.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/mdl115a2_simpletest.py

```
1 import time
2 import board
3 import busio
4 import adafruit_mpl115a2
5
6 i2c = busio.I2C(board.SCL, board.SDA)
7
8 mpl = adafruit_mpl115a2.MPL115A2(i2c)
9
10 while True:
11     print("Pressure: {}    Temperature: {}".format(mpl.pressure, mpl.temperature))
12     time.sleep(1)
```

5.2 adafruit_mpl115a2

CircuitPython driver for MPL115A2 I2C Barometric Pressure/Temperature Sensor.

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5.2.1 Implementation Notes

Hardware:

- MPL115A2 I2C Barometric Pressure/Temperature Sensor

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://github.com/adafruit/circuitpython/releases>
- Adafruit's Bus Device library: https://github.com/adafruit/Adafruit_CircuitPython_BusDevice

class `adafruit_mpl115a2.MPL115A2` (*i2c, address=96*)
Driver for MPL115A2 I2C barometric pressure / temperature sensor.

pressure

The pressure in hPa.

temperature

The temperature in deg C.

CHAPTER 6

Indices and tables

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

a

`adafruit_mpl115a2`, [11](#)

A

adafruit_mpl115a2 (*module*), 11

M

MPL115A2 (*class in adafruit_mpl115a2*), 12

P

pressure (*adafruit_mpl115a2.MPL115A2 attribute*),
12

T

temperature (*adafruit_mpl115a2.MPL115A2 at-
tribute*), 12