
AdafruitMPRLS Library Documentation

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CircuitPython library to support Honeywell MPRLS digital pressure sensors.

CHAPTER 1

Dependencies

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](#).

CHAPTER 2

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-mprls
```

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

```
sudo pip3 install adafruit-circuitpython-mprls
```

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-mprls
```


CHAPTER 3

Usage Example

```
import time
import board
import busio
import adafruit_mprls

i2c = busio.I2C(board.SCL, board.SDA)

# Simplest use, connect to default over I2C
mpr = adafruit_mprls.MPRLS(i2c, psi_min=0, psi_max=25)

while True:
    print((mpr.pressure,))
    time.sleep(1)
```


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/mprls_simpletest.py

```
1  # SPDX-FileCopyrightText: 2021 ladyada for Adafruit Industries
2  # SPDX-License-Identifier: MIT
3
4  import time
5  import board
6  import busio
7  import adafruit_mprls
8
9  i2c = busio.I2C(board.SCL, board.SDA)
10
11 # Simplest use, connect to default over I2C
12 mpr = adafruit_mprls.MPRLS(i2c, psi_min=0, psi_max=25)
13
14 # You can also specify both reset and eoc pins
15 """
16 import digitalio
17 reset = digitalio.DigitalInOut(board.D5)
18 eoc = digitalio.DigitalInOut(board.D6)
19 mpr = adafruit_mprls.MPRLS(i2c, eoc_pin=eoc, reset_pin=reset,
20                            psi_min=0, psi_max=25)
21 """
22
23 while True:
24     print((mpr.pressure,))
25     time.sleep(1)
```

6.2 adafruit_mprls

CircuitPython library to support Honeywell MPRLS digital pressure sensors

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6.2.1 Implementation Notes

Hardware:

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_mprls.MPRLS` (*i2c_bus*, *, *addr*=24, *reset_pin*=None, *eoc_pin*=None, *psi_min*=0, *psi_max*=25)

Driver base for the MPRLS pressure sensor :param *i2c_bus*: The `busio.I2C` object to use. This is the only required parameter. :param *int addr*: The optional I2C address, defaults to 0x18 :param *microcontroller.Pin reset_pin*: Optional digitalio pin for hardware resetting :param *microcontroller.Pin eoc_pin*: Optional digitalio pin for getting End Of Conversion signal :param *float psi_min*: The minimum pressure in PSI, defaults to 0 :param *float psi_max*: The maximum pressure in PSI, defaults to 25

pressure

The measured pressure, in hPa

CHAPTER 7

Indices and tables

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

a

`adafruit_mprls`, [13](#)

A

`adafruit_mprls` (*module*), [13](#)

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`MPRLS` (*class in `adafruit_mprls`*), [14](#)

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`pressure` (*`adafruit_mprls.MPRLS` attribute*), [14](#)