
Adafruitstmpe610 Library Documentation

Release 1.0

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Adafruit CircuitPython module for the STMPE610 Resistive Touch Screen Controller

CHAPTER 1

Dependencies

This driver depends on:

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

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

CHAPTER 2

Usage Example

See examples in github repository: https://github.com/adafruit/Adafruit_CircuitPython_STMPE610/tree/master/examples

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-stmpe610 --
↳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/stmpe610_simpletest.py

```
1 import busio
2 import board
3 import digitalio
4 from adafruit_stmpe610 import Adafruit_STMPE610_SPI
5
6 spi = busio.SPI(board.SCK, board.MOSI, board.MISO)
7 cs = digitalio.DigitalInOut(board.D6)
8 st = Adafruit_STMPE610_SPI(spi, cs)
9
10 print("Go Ahead - Touch the Screen - Make My Day!")
11 while True:
12     if not st.buffer_empty:
13         print(st.read_data())
```

5.2 adafruit_stmpe610

This is a CircuitPython Driver for the STMPE610 Resistive Touch sensor

- Author(s): Jerry Needell

class adafruit_stmpe610.**Adafruit_STMPE610**

A driver for the STMPE610 Resistive Touch sensor.

buffer_empty

Buffer empty status

buffer_size

The amount of touch data in the buffer

get_point

Read one touch from the buffer

get_version

Read the version number from the sensor

read_data()

Request next stored reading - return tuple containing (x,y,pressure)

touched

Report if any touches have been detected

touches

Returns a list of touchpoint dicts, with 'x' and 'y' containing the touch coordinates, and 'pressure'

class adafruit_stmpe610.**Adafruit_STMPE610_I2C**(*i2c, address=65*)

I2C driver for the STMPE610 Resistive Touch sensor.

class adafruit_stmpe610.**Adafruit_STMPE610_SPI**(*spi, cs, baudrate=1000000*)

SPI driver for the STMPE610 Resistive Touch sensor.

CHAPTER 6

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