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# **Adafruitstmpe610 Library Documentation**

***Release 1.0***

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Adafruit CircuitPython module for the STMPE610 Resistive Touch Screen Controller



# CHAPTER 1

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## Dependencies

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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

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### Installing from PyPI

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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-stmpe610
```

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

```
sudo pip3 install adafruit-circuitpython-stmpe610
```

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-stmpe610
```



## CHAPTER 3

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### Usage Example

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See examples in github repository: [https://github.com/adafruit/Adafruit\\_CircuitPython\\_STMPE610/tree/master/examples](https://github.com/adafruit/Adafruit_CircuitPython_STMPE610/tree/master/examples)



## CHAPTER 4

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### Contributing

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



## CHAPTER 5

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### Documentation

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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/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())
```

### 6.2 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 7

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