

---

# **Adafruitstmpe610 Library Documentation**

***Release 1.0***

**Jerry Needell**

**Jan 23, 2020**



---

## Contents

---

<b>1</b>	<b>Dependencies</b>	<b>3</b>
<b>2</b>	<b>Installing from PyPI</b>	<b>5</b>
<b>3</b>	<b>Usage Example</b>	<b>7</b>
<b>4</b>	<b>Contributing</b>	<b>9</b>
<b>5</b>	<b>Documentation</b>	<b>11</b>
<b>6</b>	<b>Table of Contents</b>	<b>13</b>
6.1	Simple test . . . . .	13
6.2	adafruit_stmpe610 . . . . .	13
<b>7</b>	<b>Indices and tables</b>	<b>15</b>
	<b>Python Module Index</b>	<b>17</b>
	<b>Index</b>	<b>19</b>



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

---

### 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-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

---

### Usage Example

---

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

---

### 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/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

---

### Indices and tables

---

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



---

## Python Module Index

---

### a

adafruit\_stmpe610, [13](#)



## A

`Adafruit_STMPE610` (class in *adafruit\_stmpe610*),  
13  
`adafruit_stmpe610` (module), 13  
`Adafruit_STMPE610_I2C` (class in  
*adafruit\_stmpe610*), 14  
`Adafruit_STMPE610_SPI` (class in  
*adafruit\_stmpe610*), 14

## B

`buffer_empty` (*adafruit\_stmpe610.Adafruit\_STMPE610*  
*attribute*), 13  
`buffer_size` (*adafruit\_stmpe610.Adafruit\_STMPE610*  
*attribute*), 13

## G

`get_point` (*adafruit\_stmpe610.Adafruit\_STMPE610*  
*attribute*), 14  
`get_version` (*adafruit\_stmpe610.Adafruit\_STMPE610*  
*attribute*), 14

## R

`read_data()` (*adafruit\_stmpe610.Adafruit\_STMPE610*  
*method*), 14

## T

`touched` (*adafruit\_stmpe610.Adafruit\_STMPE610 at-*  
*tribute*), 14  
`touches` (*adafruit\_stmpe610.Adafruit\_STMPE610 at-*  
*tribute*), 14