
CircuitPython paj7620 Library Documentation

Release 1.0

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Nov 16, 2022

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Driver for the PAJ7620 gesture sensor.

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](#) or individual libraries can be installed using [circup](#).

INSTALLING FROM PYPI

Note: This library is not available on PyPI yet. Install documentation is included as a standard element. Stay tuned for PyPI availability!

On supported GNU/Linux systems like the Raspberry Pi, you can install the driver locally [from PyPI](#). To install for current user:

```
pip3 install circuitpython-paj7620
```

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

```
sudo pip3 install circuitpython-paj7620
```

To install in a virtual environment in your current project:

```
mkdir project-name && cd project-name
python3 -m venv .venv
source .env/bin/activate
pip3 install circuitpython-paj7620
```


INSTALLING TO A CONNECTED CIRCUITPYTHON DEVICE WITH CIRCUP

Make sure that you have `circup` installed in your Python environment. Install it with the following command if necessary:

```
pip3 install circup
```

With `circup` installed and your CircuitPython device connected use the following command to install:

```
circup install paj7620
```

Or the following command to update an existing version:

```
circup update
```


USAGE EXAMPLE

```
sensor = paj7620.PAJ7620Gesture(i2c)
gestures = sensor.read()
print(gestures)
```


DOCUMENTATION

API documentation for this library can be found on [Read the Docs](#).

For information on building library documentation, please check out [this guide](#).

CONTRIBUTING

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

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7.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/paj7620_simpletest.py

```
1  # SPDX-FileCopyrightText: 2017 Scott Shawcroft, written for Adafruit Industries
2  # SPDX-FileCopyrightText: Copyright (c) 2022 Radomir Dopieralski
3  #
4  # SPDX-License-Identifier: Unlicense
5  import board
6  import busio
7  import paj7620
8
9
10 i2c = busio.I2C(board.SCL, board.SDA, frequency=400_000)
11 sensor = paj7620.PAJ7620Gesture(i2c)
12
13 while True:
14     time.sleep(1)
15     gesture = sensor.read()
16     print(gesture)
17     if gesture & paj7620.UP:
18         print("up")
19     if gesture & paj7620.DOWN:
20         print("down")
21     if gesture & paj7620.LEFT:
22         print("left")
23     if gesture & paj7620.RIGHT:
24         print("right")
25     if gesture & paj7620.NEAR:
26         print("near")
27     if gesture & paj7620.FAR:
28         print("far")
29     if gesture & paj7620.CW:
30         print("cw")
31     if gesture & paj7620.CCW:
32         print("ccw")
33     if gesture & paj7620.WAVE:
34         print("wave")
```

7.2 paj7620

Driver for the PAJ7620 gesture sensor.

- Author(s): Radomir Dopieralski

7.2.1 Implementation Notes

Hardware:

- [Waveshare Breakout](#)

Software and Dependencies:

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

```
class paj7620.PAJ7620Gesture(i2c, addr=115)
```

Gesture sensor.

read()

Read and clear the gestures from the sensor.

INDICES AND TABLES

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- `modindex`
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