
Adafruitdebouncer Library Documentation

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Debounces an arbitrary predicate function (typically created as a lambda) of 0 arguments. The constructor also accepts a digital pin as a convenience.

CHAPTER 1

Dependencies

This driver depends on:

- [Adafruit CircuitPython](#)

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

```
import board
import digitalio
from adafruit_debouncer import Debouncer

pin = digitalio.DigitalInOut(board.D12)
pin.direction = digitalio.Direction.INPUT
pin.pull = digitalio.Pull.UP
switch = Debouncer(pin)

while True:
    switch.update()
    if switch.fell:
        print('Just pressed')
    if switch.rose:
        print('Just released')
    if switch.value:
        print('not pressed')
    else:
        print('pressed')
```


CHAPTER 3

Contributing

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

CHAPTER 4

Documentation

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

5.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/debouncer_simpletest.py

```
1 # SPDX-FileCopyrightText: 2019 Dave Astels for Adafruit Industries
2 # SPDX-License-Identifier: MIT
3
4 # pylint: disable=invalid-name
5
6 import board
7 import digitalio
8 from adafruit_debouncer import Debouncer
9
10 pin = digitalio.DigitalInOut(board.D12)
11 pin.direction = digitalio.Direction.INPUT
12 pin.pull = digitalio.Pull.UP
13 switch = Debouncer(pin)
14
15 while True:
16     switch.update()
17     if switch.fell:
18         print("Just pressed")
19     if switch.rose:
20         print("Just released")
21     if switch.value:
22         print("not pressed")
23     else:
24         print("pressed")
```

5.2 adafruit_debouncer

Debounces an arbitrary predicate function (typically created as a lambda) of 0 arguments. Since a very common use is debouncing a digital input pin, the initializer accepts a DigitalInOut object instead of a lambda.

- Author(s): Dave Astels

5.2.1 Implementation Notes

Hardware:

Not all hardware / CircuitPython combinations are capable of running the debouncer correctly for an extended length of time. If this line works on your microcontroller, then the debouncer should work forever:

```
from time import monotonic_ns
```

If it gives an ImportError, then the time values available in Python become less accurate over the days, and the debouncer will take longer to react to button presses.

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://github.com/adafruit/circuitpython/releases>

```
class adafruit_debouncer.Debouncer (io_or_predicate, interval=0.01)
```

Debounce an input pin or an arbitrary predicate

current_duration

Return the number of seconds since the most recent transition.

fell

Return whether the debounced value went from high to low at the most recent update.

interval

The debounce delay, in seconds

last_duration

Return the number of seconds the state was stable prior to the most recent transition.

rose

Return whether the debounced value went from low to high at the most recent update.

update ()

Update the debouncer state. MUST be called frequently

value

Return the current debounced value.

CHAPTER 6

Indices and tables

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- `modindex`
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