
AdafruitDS2413 Library Documentation

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CircuitPython driver for the DS2413 one wire 2 channel GPIO breakout.

CHAPTER 1

Dependencies

This driver depends on:

- [Adafruit CircuitPython](#)
- [Adafruit OneWire](#)

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 time
import board
from adafruit_owewire.bus import OneWireBus
import adafruit_ds2413

ow_bus = OneWireBus(board.D2)
ds = adafruit_ds2413.DS2413(ow_bus, ow_bus.scan()[0])

led = ds.IOA
button = ds.IOB
button.direction = adafruit_ds2413.INPUT

while not button.value:
    led.value = True
    time.sleep(0.5)
    led.value = False
    time.sleep(0.5)
```


3.1 adafruit_DS2413

CircuitPython driver for the DS2413 one wire 2 channel GPIO breakout.

- Author(s): Carter Nelson

class `adafruit_ds2413.DS2413` (*bus, address*)

Class which provides interface to DS2413 GPIO breakout.

IOA

The pin object for channel A.

IOB

The pin object for channel B.

pio_state

The state of both PIO channels.

class `adafruit_ds2413.DS2413Pin` (*number, host, direction=<sphinx.ext.autodoc._MockObject object>*)

Class which provides interface to single DS2413 GPIO pin.

direction

The direction of the pin, either INPUT or OUTPUT.

value

The pin state if configured as INPUT. The output latch state if configured as OUTPUT. True is HIGH/ON, False is LOW/OFF.

CHAPTER 4

Contributing

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

CHAPTER 5

Building locally

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-ds2413 --library_
↪location .
```


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