
AdafruitADT7410 Library Documentation

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ladyada

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CircuitPython driver for reading temperature from the Analog Devices ADT7410 precision temperature sensor

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.

1.1 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-adt7410
```

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

```
sudo pip3 install adafruit-circuitpython-adt7410
```

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-adt7410
```


CHAPTER 2

Usage Example

```
import time
import board
import busio
import adafruit_adt7410

i2c_bus = busio.I2C(board.SCL, board.SDA)
adt = adafruit_adt7410.ADT7410(i2c_bus, address=0x48)
adt.high_resolution = True

while True:
    print(adt.temperature)
    time.sleep(0.5)
```


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/adt7410_simpletest.py

```
1 import time
2 import board
3 import busio
4 import adafruit_adt7410
5
6 i2c_bus = busio.I2C(board.SCL, board.SDA)
7 adt = adafruit_adt7410.ADT7410(i2c_bus, address=0x48)
8 adt.high_resolution = True
9
10 while True:
11     print(adt.temperature)
12     time.sleep(0.5)
```

5.2 adafruit_adt7410

CircuitPython driver for reading temperature from the Analog Devices ADT7410 precision temperature sensor

- Author(s): ladyada

5.2.1 Implementation Notes

Hardware:

Software and Dependencies:

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

class `adafruit_adt7410.ADT7410` (*i2c_bus*, *address=72*)
Interface to the Analog Devices ADT7410 temperature sensor.

configuration

The ADT7410 configuration register

status

The ADT7410 status registers current value

temperature

The temperature in celsius

CHAPTER 6

Indices and tables

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