
Adafruitam2320 Library Documentation

Release 1.0

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Jan 23, 2020

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This is a CircuitPython driver for the AM2320 temperature and humidity sensor.

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](#).

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-am2320
```

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

```
sudo pip3 install adafruit-circuitpython-am2320
```

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-am2320
```


CHAPTER 3

Usage Example

See `am2320_simpletest.py` in the examples folder.

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/am2320_simpletest.py

```
1 import time
2 import board
3 import busio
4 import adafruit_am2320
5
6 # create the I2C shared bus
7 i2c = busio.I2C(board.SCL, board.SDA)
8 am = adafruit_am2320.AM2320(i2c)
9
10 while True:
11     print("Temperature: ", am.temperature)
12     print("Humidity: ", am.relative_humidity)
13     time.sleep(2)
```

6.2 adafruit_am2320

This is a CircuitPython driver for the AM2320 temperature and humidity sensor.

- Author(s): Limor Fried

6.2.1 Implementation Notes

Hardware:

- Adafruit AM2320 Temperature & Humidity Sensor (Product ID: 3721)

Software and Dependencies:

- **Adafruit CircuitPython firmware for the ESP8622 and M0-based boards:** <https://github.com/adafruit/circuitpython/releases>
- **Adafruit's Bus Device library:** https://github.com/adafruit/Adafruit_CircuitPython_BusDevice

class `adafruit_am2320.AM2320` (*i2c_bus*, *address=92*)

A driver for the AM2320 temperature and humidity sensor.

Parameters

- **`i2c_bus`** – The `busio.I2C` object to use. This is the only required parameter.
- **`address`** (*int*) – (optional) The I2C address of the device.

`relative_humidity`

The measured relative humidity in percent.

`temperature`

The measured temperature in celsius.

exception `adafruit_am2320.AM2320DeviceNotFound`

Indicates that a device couldn't be found.

exception `adafruit_am2320.AM2320Exception`

Base class for exceptions.

exception `adafruit_am2320.AM2320ReadError`

indicates that valid data could not be read from the sensor.

This may be due to a regular I2C read failure, or due to a checksum mismatch.

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