Adafruitam2320 Library Documentation

Release 1.0

Limor Fried

Apr 23, 2020

Contents

1 Dependencies **3**

2 Installing from PyPI **5**

3 Usage Example **7**

4 Contributing **9**

5 Documentation **11**

6 Table of Contents **13**
- 6.1 Simple test . . . 13
- 6.2 `adafruit_am2320` . . . 13
  - 6.2.1 Implementation Notes . . . 13

7 Indices and tables **15**

Python Module Index **17**

Index **19**

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.

CHAPTER 2

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.

CHAPTER 6

Table of Contents

6.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/am2320_simpletest.py

```
import time
import board
import busio
import adafruit_am2320

# create the I2C shared bus
i2c = busio.I2C(board.SCL, board.SDA)
am = adafruit_am2320.AM2320(i2c)

while True:
    print("Temperature: ", am.temperature)
    print("Humidity: ", am.relative_humidity)
    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.

CHAPTER 7

Indices and tables

- genindex
- modindex
- search

Python Module Index

a

adafruit_am2320, 13

Index

A

adafruit_am2320 (*module*), 13
AM2320 (*class in adafruit_am2320*), 14

R

relative_humidity (*adafruit_am2320.AM2320 attribute*), 14

T

temperature (*adafruit_am2320.AM2320 attribute*), 14