Adafruit HT16K33 Library Documentation

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This is a library for using the I^2C-based LED matrices with the HT16K33 chip. It supports both 16x8 and 8x8 matrices, as well as 7- and 14-segment displays.

Note this library is intended for Adafruit CircuitPython's API. For a library compatible with MicroPython machine API see this library: https://github.com/adafruit/micropython-adafruit-ht16k33

CHAPTER 1

Installation

This driver depends on many other libraries! Please install it by downloading the Adafruit library and driver bundle.

CHAPTER 2

Usage Example

```
# Import all board pins.
from board import *
import busio

# Import the HT16K33 LED matrix module.
from adafruit_ht16k33 import matrix

# Create the I2C interface.
i2c = busio.I2C(SCL, SDA)

# Create the matrix class.
# This creates a 16x8 matrix:
matrix = matrix.Matrix16x8(i2c)
# Or this creates a 8x8 matrix:
#matrix = matrix.Matrix8x8(i2c)
# Or this creates a 8x8 bicolor matrix:
#matrix = matrix.Matrix8x8x2
# Finally you can optionally specify a custom I2C address of the HT16k33 like:
#matrix = matrix.Matrix16x8(i2c, address=0x70)

# Clear the matrix.  Always call show after changing pixels to make the display
# update visible!
matrix.fill(0)
matrix.show()

# Set a pixel in the origin 0,0 position.
matrix.pixel(0, 0, 1)
# Set a pixel in the middle 8, 4 position.
matrix.pixel(8, 4, 1)
# Set a pixel in the opposite 15, 7 position.
matrix.pixel(15, 7, 1)
matrix.show()
```

CHAPTER 3

Contributing

Contributions are welcome! Please read our Code of Conduct before contributing to help this project stay welcoming.

CHAPTER 4

API Reference

4.1 Variety of HT16K33 displays

4.1.1 `ht16k33` - Base class for the displays

4.1.2 `matrix` - Matrix of dots in the displays

4.1.3 `segments` - Segment display such as those on alarm clocks