
Adafruit MAX31865 Library Documentation

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CircuitPython module for the MAX31865 thermocouple amplifier.

CHAPTER 1

Dependencies

This driver depends on:

- [Adafruit CircuitPython](#)
- [Bus Device](#)

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

See `examples/simpletest.py` for a demo of the usage.

CHAPTER 3

Contributing

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

4.1 adafruit_max31865

CircuitPython module for the MAX31865 platinum RTD temperature sensor. See `examples/simpletest.py` for an example of the usage.

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class `adafruit_max31865.MAX31865` (*spi, cs, *, rtd_nominal=100, ref_resistor=430.0, wires=2*)
Driver for the MAX31865 thermocouple amplifier.

auto_convert

Get and set the boolean state of the sensor's automatic conversion mode (True/False).

bias

Get and set the boolean state of the sensor's bias (True/False).

clear_faults ()

Clear any fault state previously detected by the sensor.

fault

Get the fault state of the sensor. Use `clear_faults` to clear the fault state. Returns a 6-tuple of boolean values which indicate if any faults are present:

- HIGHTHRESH
- LOWTHRESH
- REFINLOW
- REFINHIGH
- RTDINLOW
- OVUV

read_rtd ()

Perform a raw reading of the thermocouple and return its 15-bit value. You'll need to manually convert

this to temperature using the nominal value of the resistance-to-digital conversion and some math. If you just want temperature use the temperature property instead.

resistance

Read the resistance of the RTD and return its value in Ohms.

temperature

Read the temperature of the sensor and return its value in degrees Celsius.

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