Adafruitfeatherwing Library Documentation

Release 1.0

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This library provides FeatherWing specific classes for those that require a significant amount of initialization.

CHAPTER 1

Dependencies

These drivers depends on:

- Adafruit CircuitPython
- PCA9685
- Motor

Please ensure all dependencies are available on the CircuitPython filesystem. This is easily achieved by downloading the Adafruit library and driver bundle and highly recommended over installing each one.

CHAPTER 2

API Reference

2.1 adafruit_featherwing.motor_featherwing

Helper for using motors with the Motor FeatherWing.

- Author(s): Scott Shawcroft

2.2 adafruit_featherwing.ina219_featherwing

Helper for using the INA219 FeatherWing.

- Author(s): Kattni Rembor

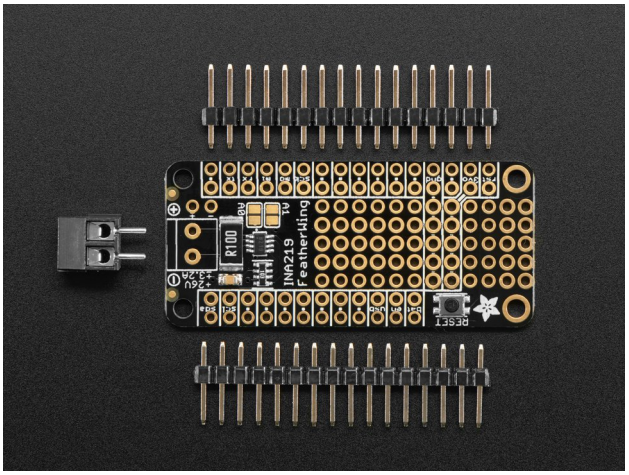
class adafruit_featherwing.ina219_featherwing.**INA219FeatherWing**

Class representing an Adafruit INA219 FeatherWing.

Automatically uses the feather's I2C bus.

bus_voltage

Bus voltage returns volts.



This example prints the bus voltage with the appropriate units.

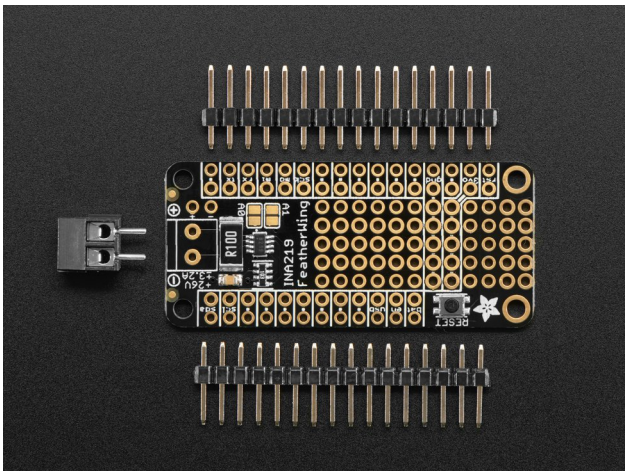
```
from adafruit_featherwing import ina219_featherwing
import time

ina219 = ina219_featherwing.INA219FeatherWing()

while True:
    print("Bus Voltage: {} V".format(ina219.bus_voltage))
    time.sleep(0.5)
```

current

Current returns mA.



This example prints the current with the appropriate units.

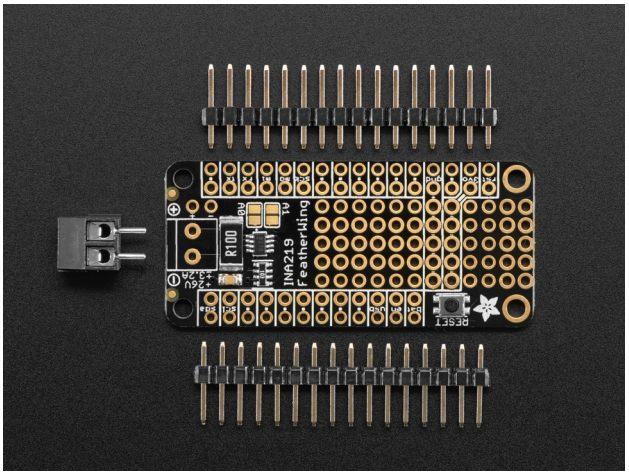
```
from adafruit_featherwing import ina219_featherwing
import time

ina219 = ina219_featherwing.INA219FeatherWing()

while True:
    print("Current: {} mA".format(ina219.current))
    time.sleep(0.5)
```

shunt_voltage

Shunt voltage returns volts.



This example prints the shunt voltage with the appropriate units.

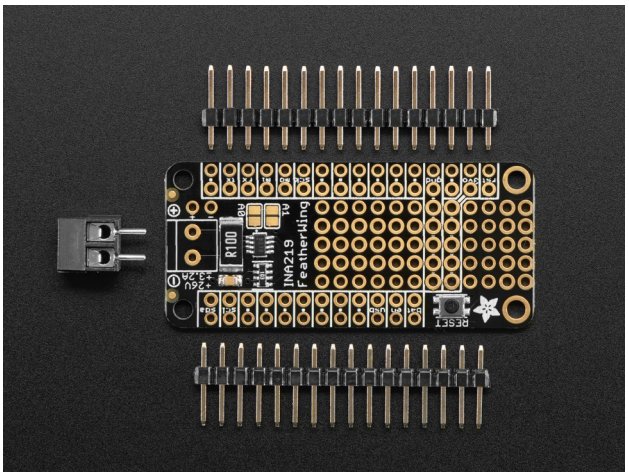
```
from adafruit_featherwing import ina219_featherwing
import time

ina219 = ina219_featherwing.INA219FeatherWing()

while True:
    print("Shunt Voltage: {} V".format(ina219.shunt_voltage))
    time.sleep(0.5)
```

voltage

Voltage, known as load voltage, is bus voltage plus shunt voltage. Returns volts.



This example prints the voltage with the appropriate units.

```
from adafruit_featherwing import ina219_featherwing
import time

ina219 = ina219_featherwing.INA219FeatherWing()

while True:
    print("Voltage: {} V".format(ina219.voltage))
    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

Building locally

To build this library locally you'll need to install the circuitpython-build-tools package.

```
python3 -m venv .env
source .env/bin/activate
pip install circuitpython-build-tools
```

Once installed, make sure you are in the virtual environment:

```
source .env/bin/activate
```

Then run the build:

```
circuitpython-build-bundles --filename_prefix adafruit-circuitpython-featherwing --
↪library_location .
```

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