

Hat BugC2

| Example

Alternates between moving forward and backward.



The code is organized into two sections: Setup and Loop.

Setup:

- hat_bugc2_0 Init device I2C address 0x38 (0x01 ~ 0x7f)

Loop:

Forward Movement:

- hat_bugc2_0 Set motor FRONT_LEFT speed 100 (-100 ~ 100)
- hat_bugc2_0 Set motor REAR_LEFT speed 100 (-100 ~ 100)
- hat_bugc2_0 Set motor FRONT_RIGHT speed -100 (-100 ~ 100)
- hat_bugc2_0 Set motor REAR_RIGHT speed -100 (-100 ~ 100)
- Wait 5 s

Backward Movement:

- hat_bugc2_0 Set motor FRONT_LEFT speed -100 (-100 ~ 100)
- hat_bugc2_0 Set motor REAR_LEFT speed -100 (-100 ~ 100)
- hat_bugc2_0 Set motor FRONT_RIGHT speed 100 (-100 ~ 100)
- hat_bugc2_0 Set motor REAR_RIGHT speed 100 (-100 ~ 100)
- Wait 5 s

```

from m5stack import *
from m5ui import *
from uiflow import *
import time
import hat

setScreenColor(0x111111)

hat_bugc2_0 = hat.get(hat.BUGC2)

hat_bugc2_0.InitDeviceAddr(0x38)
while True:
    hat_bugc2_0.SetMotorSpeed(0x00, 100)
    hat_bugc2_0.SetMotorSpeed(0x02, 100)
    hat_bugc2_0.SetMotorSpeed(0x01, -100)
    hat_bugc2_0.SetMotorSpeed(0x03, -100)
    wait(5)
    hat_bugc2_0.SetMotorSpeed(0x00, -100)
    hat_bugc2_0.SetMotorSpeed(0x02, -100)
    hat_bugc2_0.SetMotorSpeed(0x01, 100)
    hat_bugc2_0.SetMotorSpeed(0x03, 100)
    wait(5)
    wait_ms(2)

```

API

hat_bugc2_0 Init device I2C address 0x38 (0x01 ~ 0x7f)

hat_bugc2_0.InitDeviceAddr(0x38)

- Initialize the device I2C address, set to 0x38.

hat_bugc2_0 Get adc 8BIT raw value (return int)

hat_bugc2_0.GetAdcValue(8)

- Get the raw 8-bit ADC value (returns an integer).

hat_bugc2_0 Get battery voltage (mV, return int)

hat_bugc2_0.GetBatVoltage

- Get the battery voltage in millivolts (returns an integer).

hat_bugc2_0 ▾ Get device FIRMWARE_VERSION ▾ spec detail (return int)

```
hat_bugc2_0.GetDeviceSpec(0xFE)
```

- Retrieve detailed firmware version information (returns an integer).

hat_bugc2_0 ▾ IR NEC receive callback data data1 ▾ address addr1 ▾

```
hat_bugc2_0.SetRxCb(hat_bugc2_0_rx_cb)
```

- NEC infrared reception callback function, used to process received data and address.

hat_bugc2_0 ▾ Set device I2C address 0x38 (0x01 ~ 0x7f)

```
hat_bugc2_0.SetI2cAddress(0x38)
```

- Set the I2C address of the device.

hat_bugc2_0 ▾ Set motor FRONT_LEFT ▾ speed 50 (-100 ~ 100)

```
hat_bugc2_0.SetMotorSpeed(0x00, 50)
```

- Set the speed of the front-left motor. The current speed is set to 50, with a range of -100 to 100.

hat_bugc2_0 ▾ set RGB FRONT_LEFT ▾ color Palette ▾

```
hat_bugc2_0.SetRGBColor(0x00, 0xff0000)
```

- Set the RGB color of the wheel lights, currently set to red.