

JOYSTICK

SKU:U024

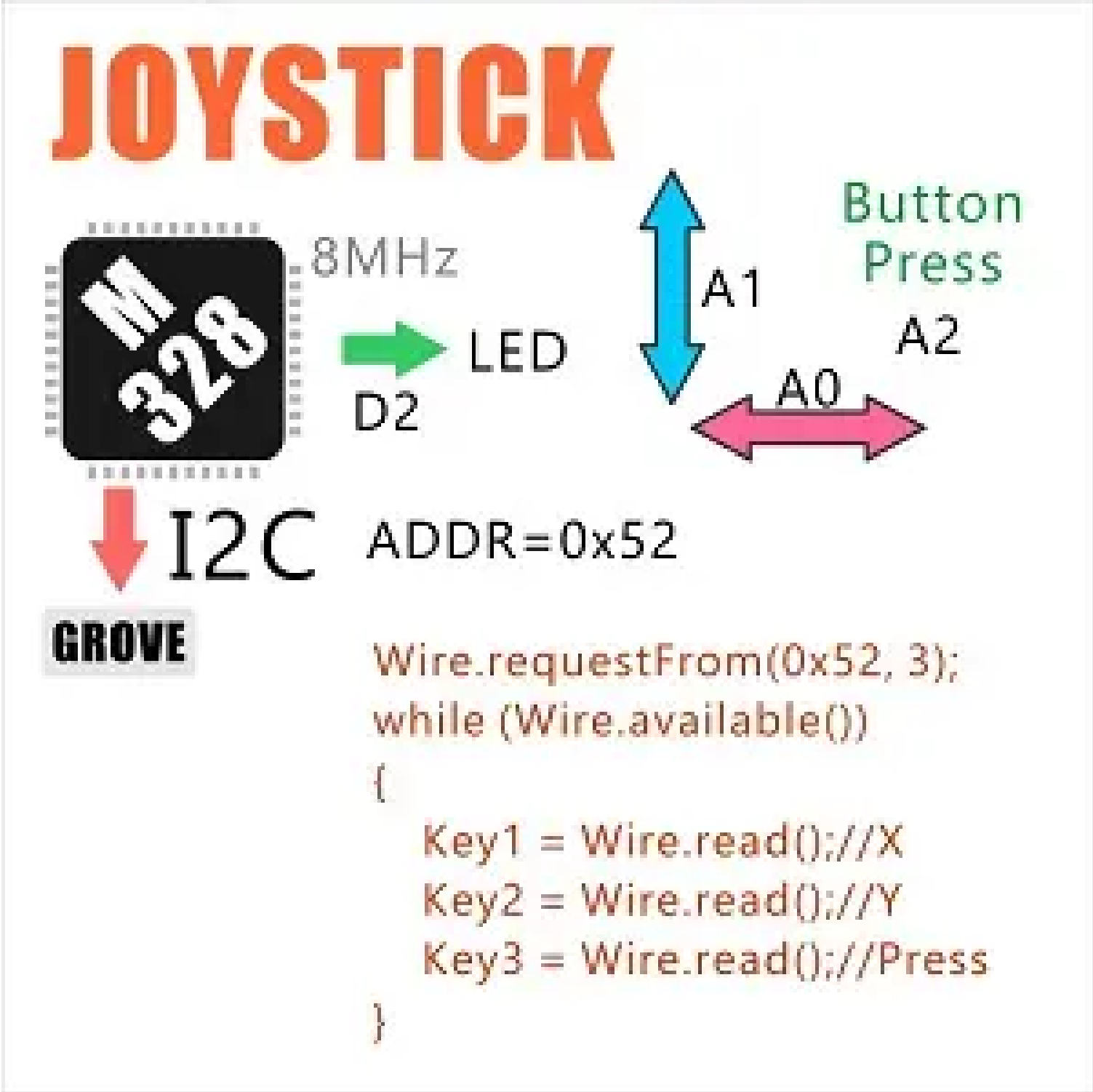


Description

JOYSTICK, M5Stack has two types of JOYSTICKs: one is compatible with FACES Kit and this one, which is a M5Unit version of ther other **JOYSTICK** device.

JOYSTICK is very similar to the 'analog' joystick on PS2 (PlayStation 2) controllers. The X and Y axes are two 10k potentiometers which control 2D movement by generating analog signals. The joystick also has a push button that could be used for special applications. Therefore, the entire Unit can output X-Y motion signals in both directions and Z direction.

Based on the schematic, the Joystick X dimension is connected to pin A0 of MEGA328, the Joystick Y dimension is connected to pin A1 on MEGA328, the Joystick Z dimension is connected to pin A2 on MEGA328.



This Unit communicates with the M5Core via the GROVE A interface. It's I2C address is 0x52. By reading the data transferred from JOSTICK, you can obtain the motion information of JOYSTICK.

Product Features

- Output value of X, Y direction: 10 ~ 250
- Output value of Z direction is (0: released; 1: pressed)
- Software Development Platform : Arduino, UIFlow(Blockly, Python)
- Two Lego-compatible holes

Include

Interface

- 1x JOYSTICK Unit
- 1x Grove Cable

Applications

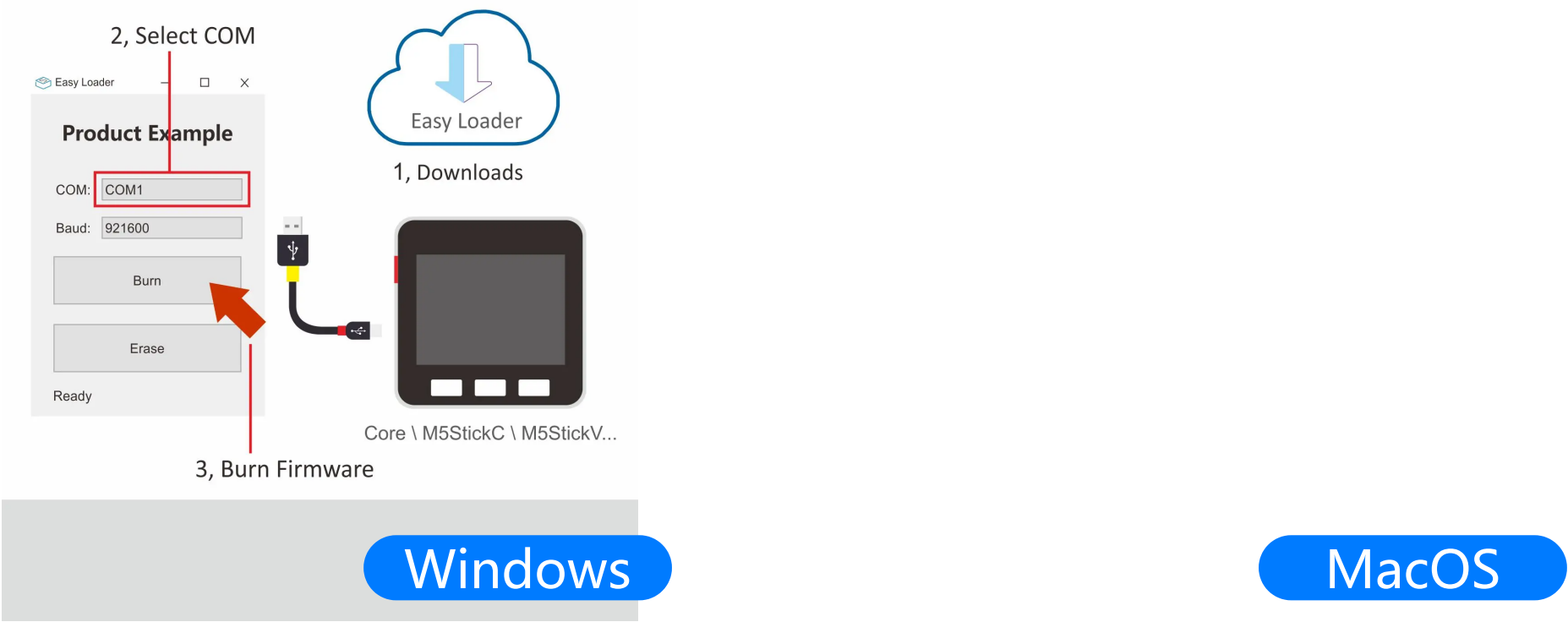
- Game Controller
- Robot remote control

Specification

Resources	Parameter
Communication protocol	I2C: 0x52
X、 Y Axis output value range	10-250
Z Axis output value range	0-1
Net weight	11g
Gross weight	27g
Product Size	48*24*32mm
Package Size	75*45*30mm

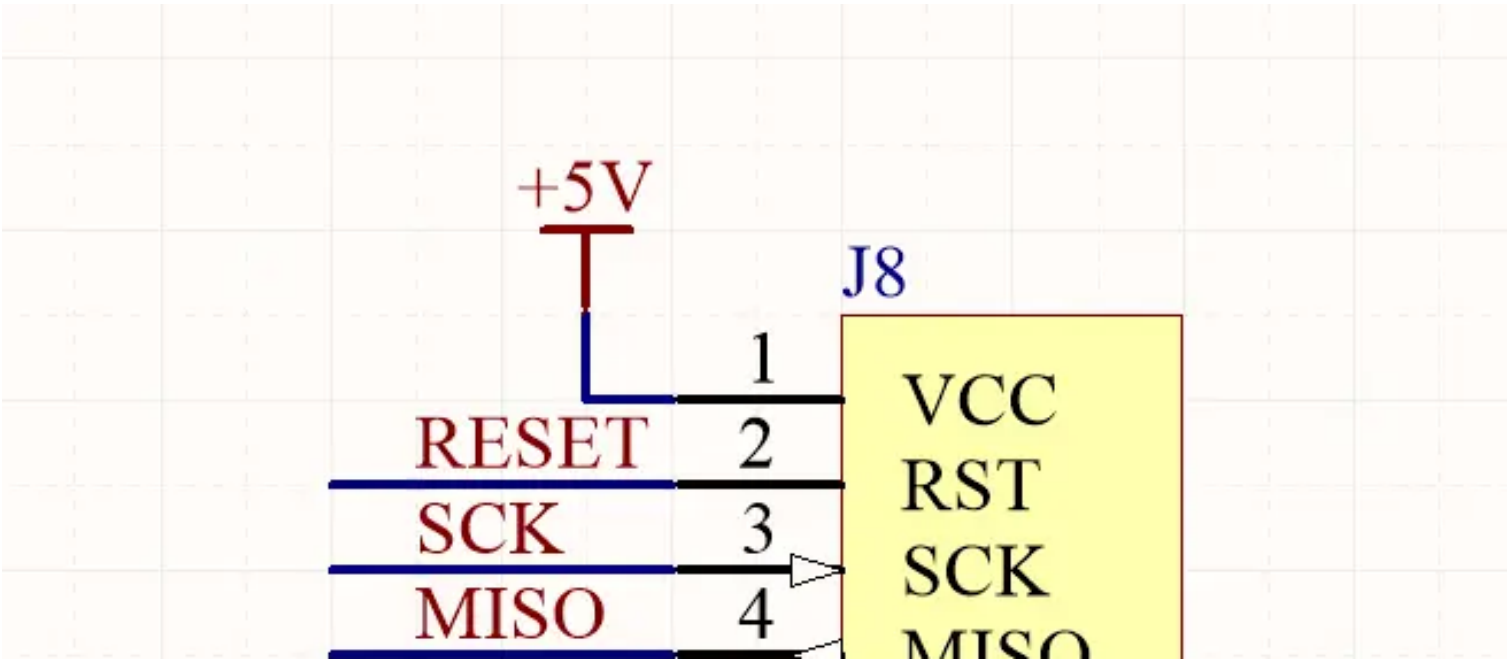
EasyLoader

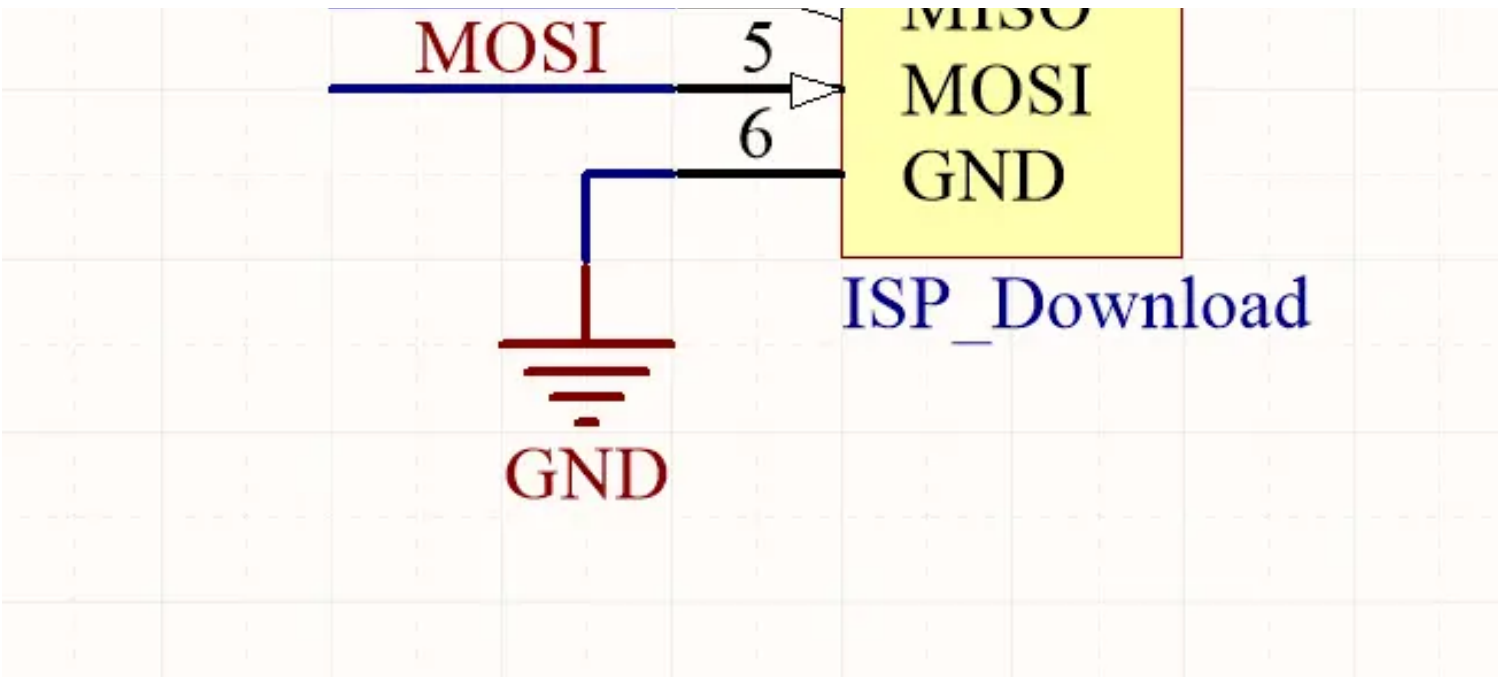
EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification. Please install the corresponding driver according to the device type. M5Core host [Please click here to view the CP210X driver installation tutorial](#), M5StickC/V/T/ATOM series can be used without driver)



PinMap

Mega328 ISPDownload interface Pin foot definition





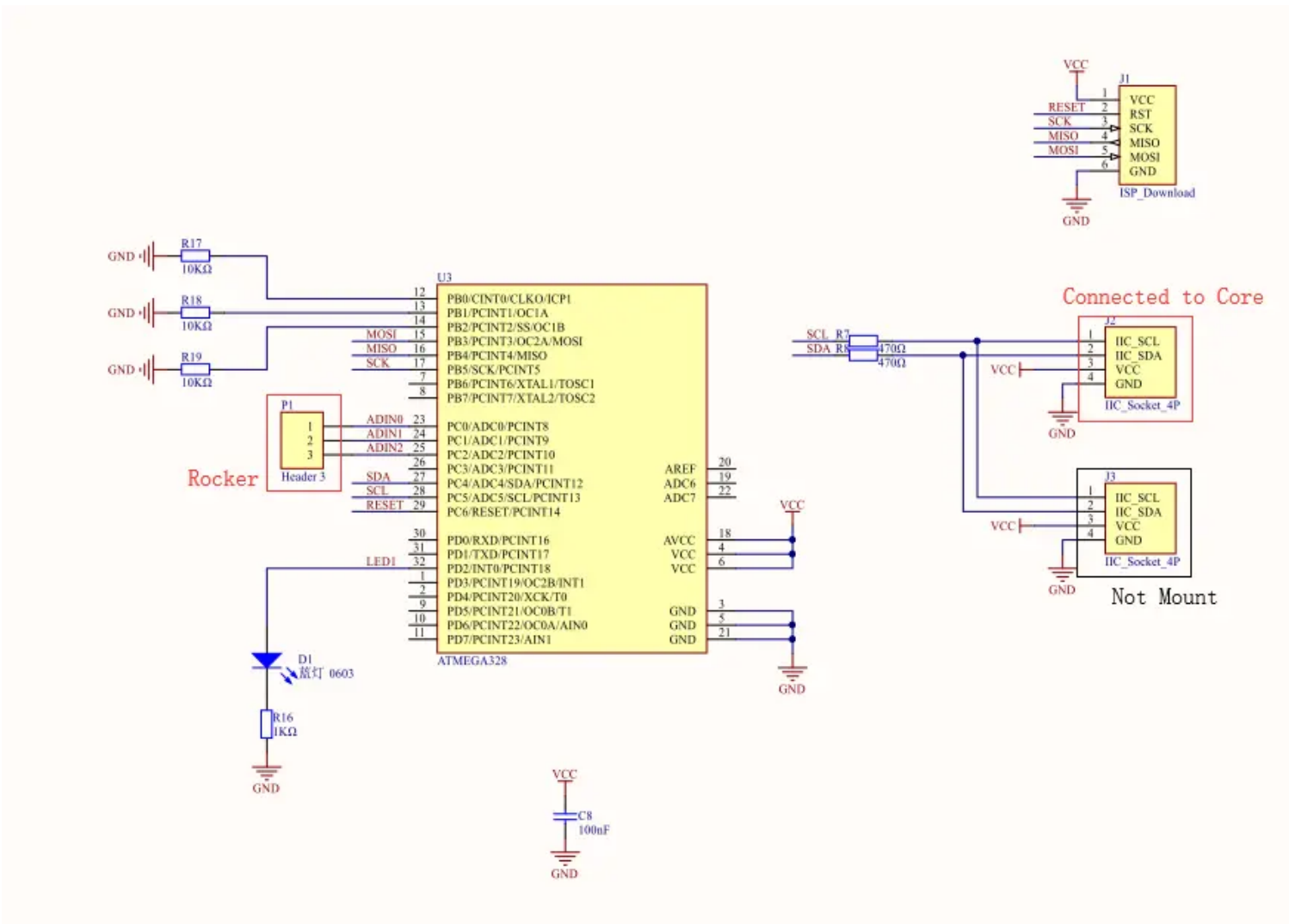
M5Core(GROVE A)	GPIO22	GPIO21	5V	GND
JOYSTICK Unit	SCL	SDA	5V	GND

Protocol

- Protocol type I2C
- I2C Address: **0x52**

```
/*-----*/
| JOYSTICK REG   | 0x52-0x54
| -----
| joystick_x_reg[0] 0x52   | R | JOYSTICK X VALUE
| joystick_x_reg[1] 0x53   | R | JOYSTICK Y VALUE
| joystick_btn_reg[2] 0x54   | R | JOYSTICK BTN STATUS
/*-----*/
```

Schematic



Example

1. Arduino

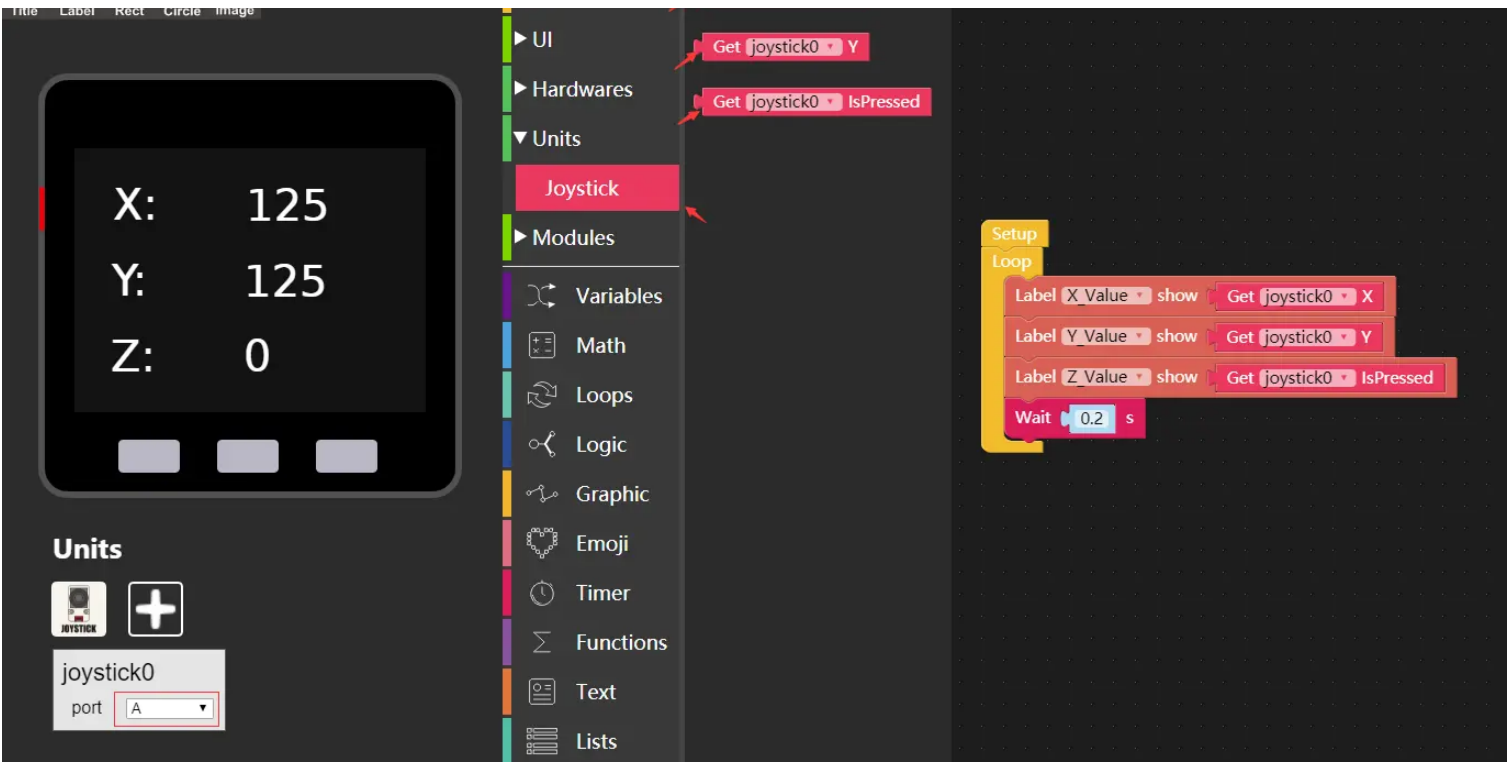
- [Click here to download the Arduino example](#)



2. UIFlow

- [Click here to download the UIFlow example](#)





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