



Stepmotor Module with MEGA328P (DRV8825)+FAN Module for Stepmotor+12V Power Adapter

SKU: M012

STEPMOTOR is used for stepper motor control. It is perfect for any motion project as it can drive up to 3 Stepper motors with **GRBL** control.

It is built with MEGA328P has been flashed **GRBL** firmware. The module communicates with M5Core via I2C(0x70)

Integrated 3 DRV8825, a simple but very powerful board that can control one bipolar stepper motor at the time and allows micro stepping up to 1/32 of a step.

Product Features

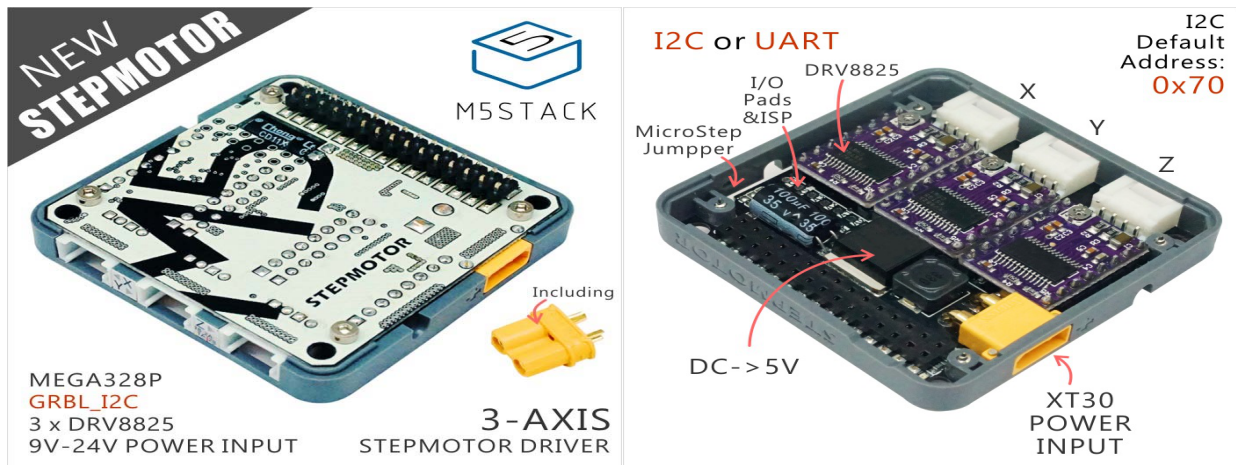
- 9-24V Power Input
- 3-way stepper motors (**X, Y, Z**)

Kit includes

- 1x Step Motor Module
- 12V Power (Optional)
- 1x 5V FAN Module for heat dissipation (Optional)

Applications

- DIY 3D Printer
- Simple Robot Arm



Example

1. Arduino IDE

The code below is incomplete. TO get complete code, please click [here](#).

```
/*
   If Button A was pressed,
   stepmotor will rotate back and forth at a time
*/

#include <M5Stack.h>
#include <Wire.h>

#define STEPMOTOR_I2C_ADDR 0x70

// initialization
M5.begin();
Wire.begin();

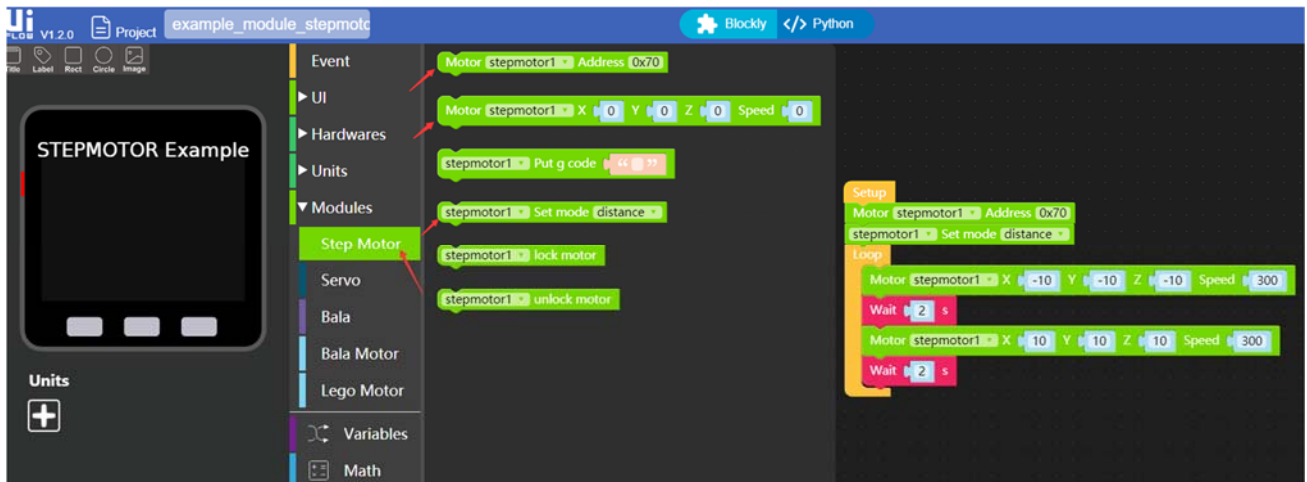
// Controlling Protocol:
// G<n> X<distance>Y<distance>Z<distance> F<speed>
SendCommand(STEPMOTOR_I2C_ADDR, "G1 X20Y20Z20 F500");
SendCommand(STEPMOTOR_I2C_ADDR, "G1 X0Y0Z0 F400");

// Get Data from Module.
Wire.requestFrom(STEPMOTOR_I2C_ADDR, 1);
if (Wire.available() > 0) {
  int u = Wire.read();
  if (u != 0) Serial.write(u);
}

// Send Data to Module.
while (Serial.available() > 0) {
  int inByte = Serial.read();
  SendByte(STEPMOTOR_I2C_ADDR, inByte);
}
```

2. UIFlow

Wanna explore the easiest way of Servo programming?? Check out the Blockly Platform at [UIFlow](#).
To get complete code, please click [here](#).



Schematic

