

6060-Push

SKU: K028



Description

6060-Push is a motion control module within the M5Stack structural system. It features a high-precision stepper motor, a Mega328 microprocessor, and a 1515 aluminum profile frame. By writing control programs, you can control the stepper motor. The module communicates via the RS485 serial bus, enabling high-precision displacement. It is suitable for various motion control scenarios, such as 3D printing and linear motion control.

Features

- Built-in Mega328: GRBL
- Customizable: Body length & effective stroke
- RS485 communication
- 1515 aluminum profile frame
- 48 stepper motor: Two-phase, four-wire system
- Stroke: 57mm
- Input voltage: 12-24V
- Motor power: 10W

Includes

- 1x 6060-Push module

Applications

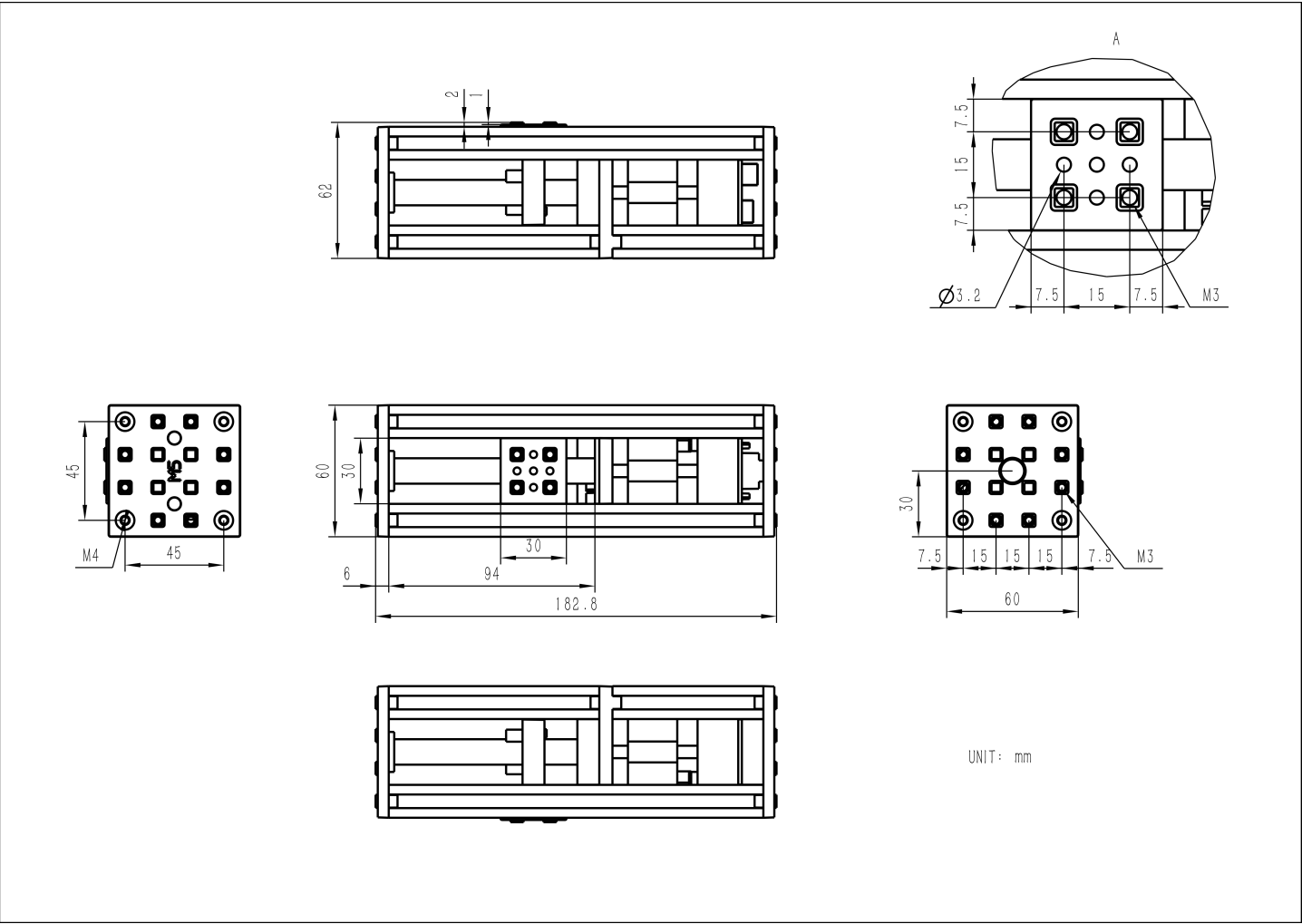
- 3D printing
- Linear motion control

Specifications

Specification	Parameter
Product Size	166.0 x 60.0 x 60.0mm
Product Weight	556.8g
Package Size	166.0 x 60.0 x 60.0mm
Gross Weight	556.8g

Model Size

- 6060-PUSH Dimension PDF



Datasheets

- Mega328P

Softwares

Arduino

```
#include <M5Stack.h>
#define RX_PIN 16
```

```

#define TX_PIN      17

#define X_LOCAL 40
#define Y_LOCAL 40

#define X_OFF 160
#define Y_OFF 30

int distance = 0;    // Stepper motor movement step value

void header(const char *string, uint16_t color){    // Title
    M5.Lcd.fillScreen(color);
    M5.Lcd.setTextSize(1);
    M5.Lcd.setTextColor(TFT_MAGENTA, TFT_BLUE);
    M5.Lcd.fillRect(0, 0, 320, 30, TFT_BLUE);
    M5.Lcd.setTextDatum(TC_DATUM);
    M5.Lcd.drawString(string, 160, 3, 4);
}

void setup() {
    M5.begin();
    M5.Power.begin();

    header("PUSH 6060", TFT_BLACK);
    M5.Lcd.setTextFont(2);
    M5.Lcd.setTextColor(TFT_WHITE, TFT_BLACK);
    Serial2.begin(9600, SERIAL_8N1, RX_PIN, TX_PIN); // Configure Serial2
    delay(500);
    Serial2.print("ID=123\r\n");                    // Serial2 outputs ID=123\r\n, configuring 6060 motor I
}

void loop() {
    if(M5.BtnA.wasPressed()){                        // Button A pressed, send ID\r\n to check 6060 motor ID
        Serial2.print("ID\r\n");
    }
    if(M5.BtnB.wasPressed()){                        // Button B pressed, send ID123:X%d\r\n to control absolu
        if(distance < 50){
            distance +=10;
            Serial2.printf("ID123:X%d\r\n",distance);
        }
    }
    if(M5.BtnC.wasPressed()){                        // Button C pressed, send ID123Z\r\n to return motor to o
        Serial2.print("ID123Z\r\n");
    }
    if(Serial2.available()){                         // Serial2 receives messages from 6060 and prints them
        char c = Serial2.read();
        Serial.print(c);
    }
    M5.update();
}

```

- [6060-Push Mega328 Internal Firmware](#)