

Demo Board (SHT30 VERSION)

SKU:K024-B



| Tutorial&Quick-Start

[Tutorial&PDF](#)

| Description

Demo Board. This is a feast of IoT stuff, powered by M5Stack. It is an all-in-one Learning board powered by ESP32, which includes anything you can imagine in an IoT + industrial application scenarios. Let's see what you can do with it: Robotic movement, the most commonly used serial communication port(RS485 RS232), Relay control, all different types of Button control, RF reader, speaker, Microphone and more all able to develop by an M5stack core device, so you can program this board with Blockly(UIFlow), Arduino, and Micropython. Based on application scenarios, we've partitioned them into different functional parts with the good-looking layout and full-function performance. Here comes the most powerful IoT learning board.

| Product Features

- Fully Compatible with the M5Stack stackable and extendable system
- Protoboard, M5-BUS extension
- Each module comes with an individual power switch.
- Environment Sensor set (Temperature, Humidity, barometric pressure, light intensity, and Microphone)
- Joystick Controller
- 8 Channel of Realy output
- 4x DAC. 4x ADC
- 4x4 button matrix
- 8x8 RGB LED matrix
- Encoder
- 1x Servo
- DC-Motor(with feedback encoder)
- step motor with four-phase five-wire
- Radio frequency identification Reader
- RS-485. RS232 series communication



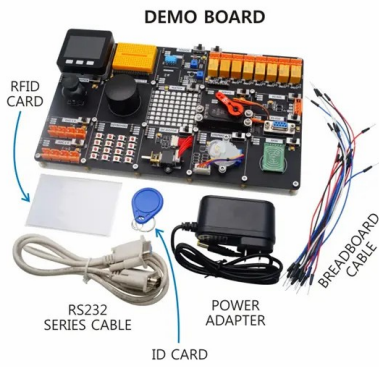
1: CORE 2: PROTO 3: SENSOR 4: RELAYx8
5: JOYSTICK 6: ENCODER 7: MATRIX 8: SERVO
9: RS-485/RS-232 10: DACx4/ADCx4 11: KEYBOARD
12: DC-MOTOR 13: STEPMOTOR 14: RFID

| Include

- 1x **Demo Board** learning board
- 1x Power Aapter
- 1x RS232 cable
- 1x RFID Card
- 1x ID Card
- 16x breadboard cable

| Applications

- IOT teaching experiment board
- Multi function test board



Specification

Resources	Parameter
Net weight	1120g
Gross weight	1120g
Product Size	330*210*95mm
Package Size	330*210*95mm

EasyLoader



download EasyLoader

1. EasyLoader is a simple and fast program burner. Every product page in EasyLoader provides a product-related case program. It can be burned to the master through simple steps, and a series of function verification can be performed.

2. After downloading the software, double-click to run the application, connect the M5 device to the computer via the data cable, select the port parameters, and click **"Burn"** to start burning.

3. The CP210X (USB driver) needs to be installed before the EasyLoader is burned. [Click here to view the driver installation tutorial](#)

Module parameters

Module Name	working Voltage	Parameter
ADC	5V	4x ADC port/ADS1115
DAC	5V	4x DAC port/DAC6574
Joystick	3.3V	axis-X/Y potentiometer input, axis-Z button input
SHT30	3.3V	I2C address 0x44
BMP280	3.3V	I2C address 0x76
Light	3.3V	A/D sampling supported, adjustable threshold
Microphone	3.3V	A/D sampling supported, adjustable threshold
Relay	5V	8 channels /3A-220V-AC/3A-30V-DC
RGB LED	5V	8x8 LED matrix
Servo	5V	10KG torsion
DC-Motor	5V	feedback encoder/LV8548MC
Stepmotor	5V	4-phase 5 wires LV8548MC
RFID	3.3V	Read & Write distance: < 8 cm/ MFRC522
RS485	5V	SP485EEN-L/TR
RS232	5V	MAX232ESE
Encode		Encoder button
Proto		170x holes
Keyboard		4x4 button matrix

Related Link

Datasheet

- [ADS1115](#)
- [DAC6574](#)
- [LV8548MC](#)
- [TPS54360](#)
- [MRC522](#)
- [MAX232ESE](#)
- [MAX4466](#)
- [SP485EEN](#)
- [BMP280](#)
- [SHT30](#)

| Schematic

- [M5IoT-kit](#)

| Example

1. Arduino

- Click to download [example code](#)
- [Tutorial&PDF](#)