M5Stack FIRE IoT Development Kit (PSRAM 2.0)

SKU: K007

M5Stack FIRE Kit is a upgrade from the Gray kits,except the 9-Axis IMU sensor. It provides more hardware resources : 16M Flash + 4M PSRAM , enhanced Base (M5GO Base and M5GO CHG Base), larger battery, etc.
With a IMU posture sensor, you can include posture detection in your work : accelerated speed, angulation, and trajectory deection. You can make relative products like sports data collector, 3D remote gesture controller and more.

FIRE is M5 Core device. Its modular, stackable, scalable, and portable device is powered with an ESP-32 core, which makes it open source, low cost, full-function, and easy for developers to handle new product development on all stages include circuit design, PCB design, software, mold design and production.

M5Stack Fire comes with three separable parts. The top part ,just like Basic and Gray Kit, has all kinds of processors, chips ,scokets, 2.4G antenna etc, such as ESP32, power management IC , a LCD screen and some other interface components. The middle part is called M5GO base (link) provides a lithium battery, M-BUS(link) socket , LED bar and two more GROVE Port. (配图说明). The bottom part is a charge table,can be connect to the M5GO base via POGO pins.

Ever wanted to explore the fastest way of IoT prototyping, M5Stack development board is the perfect solution. Not like others, M5Stack development board is highly productlized, covered with industrial grade case, and ***ESP32-based*** *development board.* ***ESP32*** *is a hybid Wi-Fi & Bluetooth chip contains a dual-core and 4MB of SPI Flash . Together with 30+ M5Stack stackable modules(M5Modules-link) , 40+ extendable units(M5Units-link), and different levels of program language, you can create and verify your IoT product in a very short time. Supported development platforms and program languages: Arduino, Blockly language with UIFlow(link), Micropython. Regardless of what level program skill you have, M5Stack would guide you in every step of the way to realize your idea as well as to the final productlization.*
If you ever played with ESP8266, you would realize that ESP32 is a perfect upgrade from ESP8266. In comparison, ESP32 is full-feathered with more GPIO, plenty of analog inputs and two analog outputs, multiple extra perpherials(like a spare UART). Official development platform ESP-IDF have planted with FreeRTOS. With dual-core and real time OS you can get more organized code and much high speed processor.

Features

Product Features

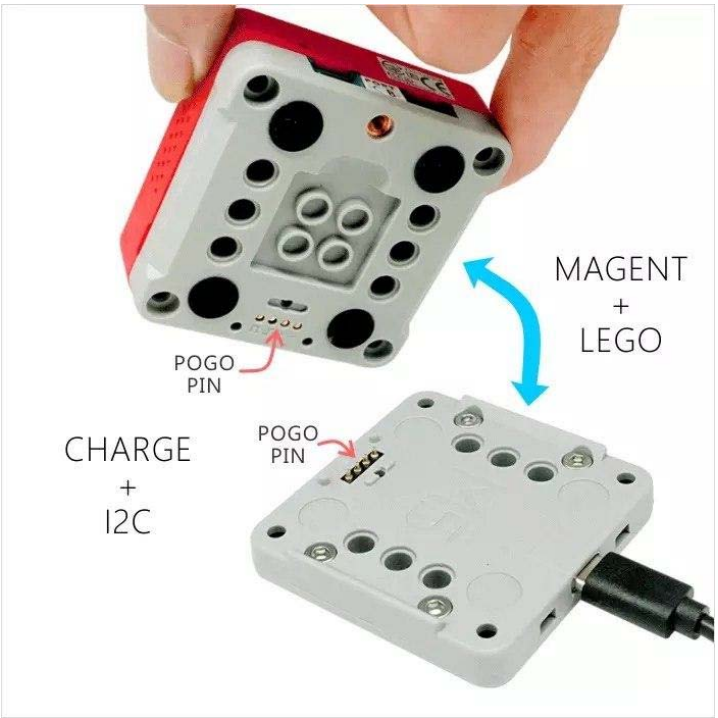
- 5V DC power supply
- USB Type-C
- ESP32-based
- 16 MByte flash + 520K RAM + 4M PSRAM
- SH200Q+BMM150
- Speaker, 3 Buttons, LCD(320*240), 1 Reset
- 2.4G Antenna: Proant 440
- TF card slot (16G Maximum size)
- Battery Socket & 600 mAh Lipo Battery
- Extendable Pins & Holes
- Grove Port
- M-Bus Socket & Pins
- Development Platform UIFlow, MicroPython, Arduino

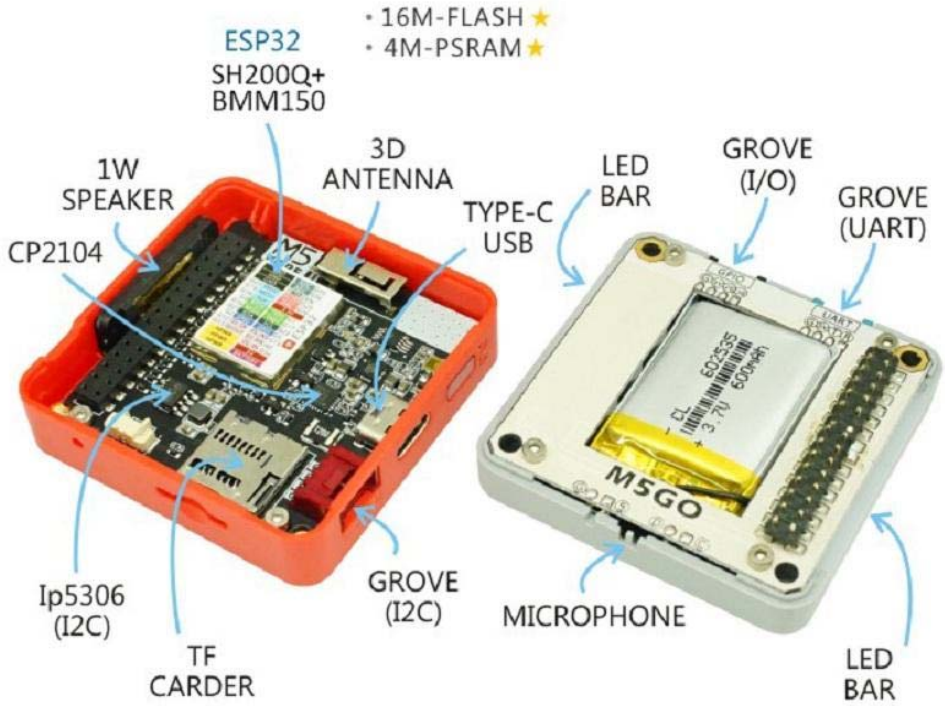
ESP32 Features

- 240 MHz dual core Tensilica LX6 microcontroller with 600 DMIPS
- Integrated 520 KB SRAM
- Integrated 802.11b/g/n HT40 Wi-Fi transceiver, baseband, stack and LWIP
- Integrated dual mode Bluetooth (classic and BLE)
- Hall sensor
- 10x capactive touch interface
- 32 kHz crystal oscillator
- PWM/timer input/output available on every GPIO pin
- SDIO master/salve 50MHz
- SD-card interface support

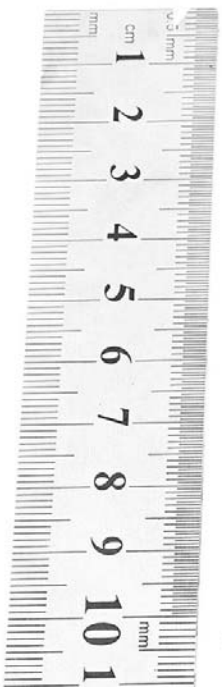
Kit includes

- 1x M5Stack Fire Controller
- 1x M5GO Base(LEGO compatible)
- 1x M5GO CHG Base
- 10x Femal-male Dupont
- Type-C USB cable
- User Manual





The Most Powerful M5Stack Kit!



https://m5stack.com/products/fire-iot-development-kit/10-2-19