

# **ATOM Lite**

#### SKU:C008





### **Description**

**Atom Lite** is a very compact development board in the M5Stack development kit series with a size of only 24 \* 24mm. It provides more GPIO for user customization which is very suitable for embedded smart home devices and in making smart toys. The main control adopts the ESP32-PICO chip which comes integrated with Wi-Fi and Bluetooth technologies and has a 4MB of integrated SPI flash memory. Atom Lite board provides an Infra-Red LED, a RGB LED, buttons, and a PH2.0 interface. In addition, it can connect to external sensors and actuators through 6 GPIOs. The on-board Type-C USB interface enables rapid program upload and execution.

### **Product Features**

- ESP32-based
- RGB LED
- Programmable button
- Built-in Infra-red
- Extendable Pins & Holes
- Program Platform: Arduino, UIFlow

## Include

• 1x ATOM Lite

## **Applications**

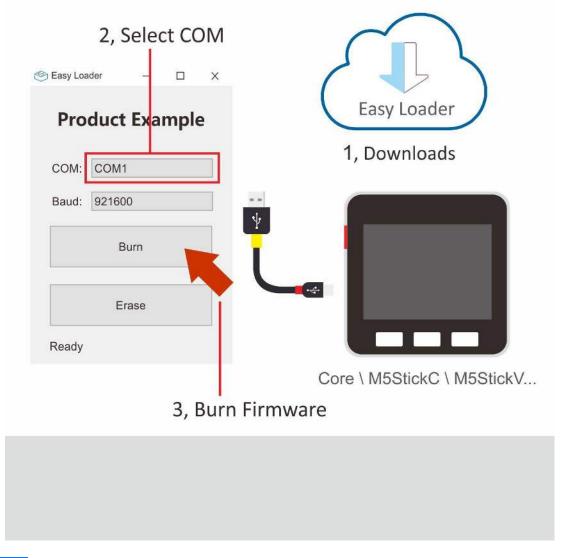
- Internet of things terminal controller
- IoT node
- Wearable peripherals

## Specification

Resources	Parameter
ESP32	240MHz dual core, 600 DMIPS, 520KB SRAM, Wi-Fi, dual mode Bluetooth
Flash	4MB
Power Input	5V @ 500mA
Port	TypeC x 1, GROVE(I2C+I/0+UART) x 1
PIN Port	G19, G21, G22, G23, G25, G33
RGB LED	WS2812B x 1
IR	Infrared transmission
Button	Custom button x 1
2.4G Antenna	Proant 440
Operating Temperature	32°F to 104°F ( 0°C to 40°C )
Size	24 x 24 x 10 mm
Weight	12g
Case Material	Plastic ( PC )

### 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)



### Windows

#### Description:

Through the color-changing breathing light program, test whether the RGB LED and buttons are working properly.

## Peripherals Pin Map

RGB Led	G27
Btn	G39
IR	G12

### Links

- Datasheet
  - o ESP32-PICO
  - o WS2812B-2020

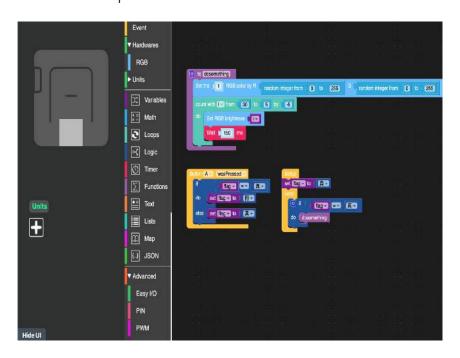
## Example

#### 1. Arduino IDE

• To get the code, please click here

#### 2. UIFlow

• Click here to view UIFlow example



https://docs.m5stack.com/#/en/core/atom\_lite/4-3-20