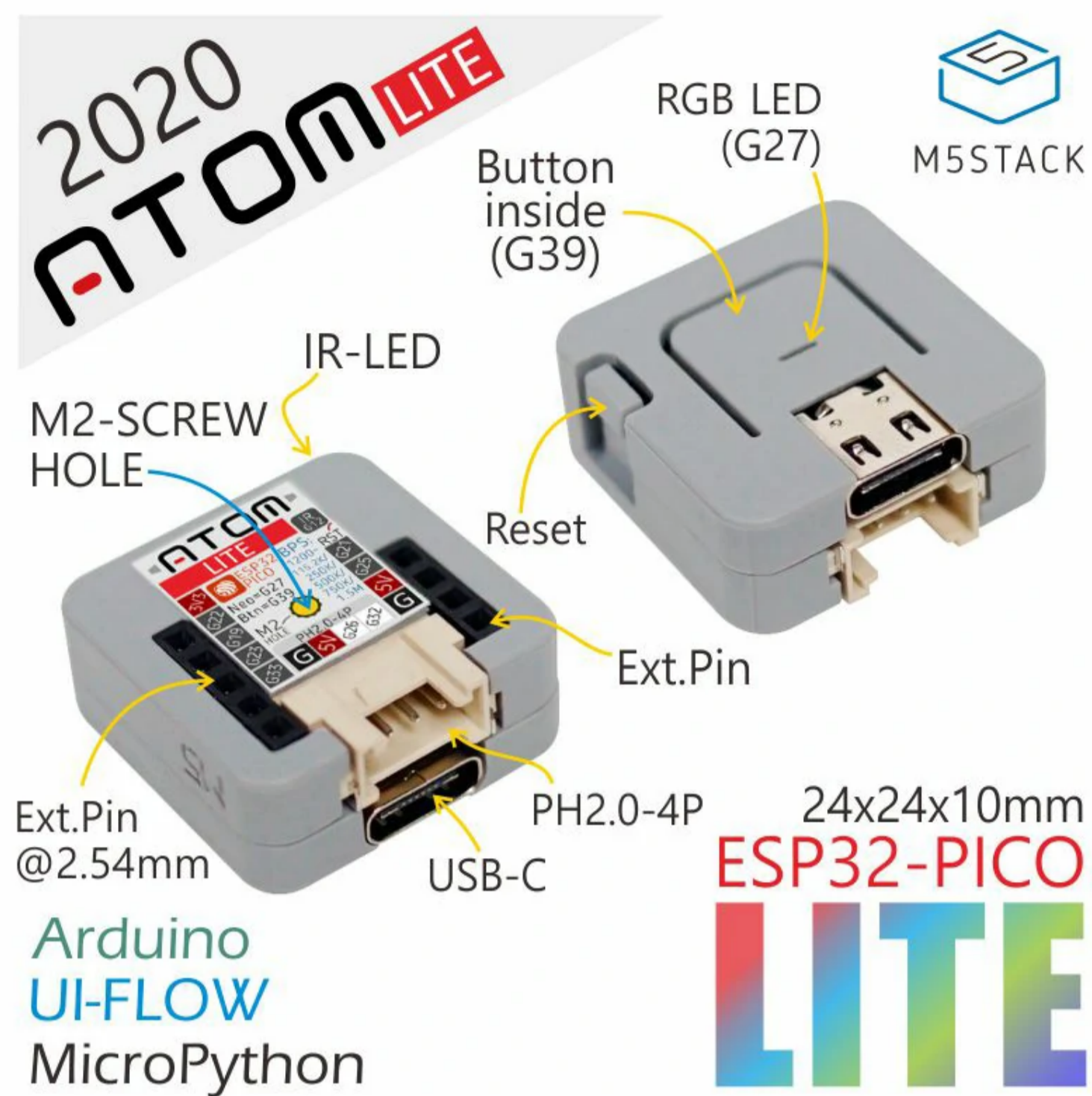


# ATOM Lite

SKU:C008



## Tutorial&Quick-Start

Choose the development platform you want to use, view the corresponding tutorial&quick-Start.

[UIFlow](#) [Arduino](#)

## Description

**Atom Lite**, which has a size of only 24\*24mm, is a very compact development board in the M5Stack development kit series. It provides more GPIOs 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 HY2.0 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(SK6812)
- Programmable button
- Built-in Infra-red
- Extendable Pins & Holes
- Program Platform: [Arduino](#)、[UIFlow](#)

## Include

- 1x ATOM Lite

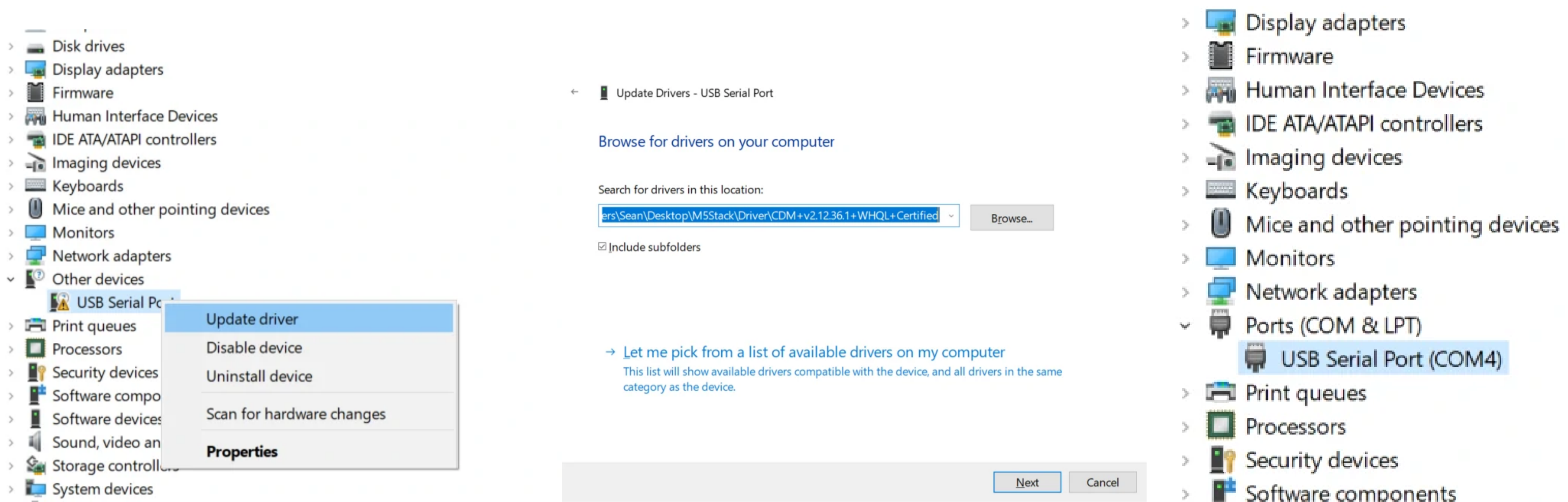
## Applications

- Internet of things terminal controller

- IoT node
- Wearable peripherals

## USB Drive problems

UnitV/M5StickV/M5StickC/ATOM may not work without driver in some systems. Users can manually install **FTDI driver** to fix this problem. Take the win10 environment as an example, download the driver file that matches the operating system, decompress it, and install it through the device manager. (Note: In some system environments, the driver needs to be installed twice for the driver to take effect. The unrecognized device name is usually **M5Stack** or **USB Serial**. Windows recommends using the driver file to install directly in the device manager (custom Update), the executable file installation method may not work properly).

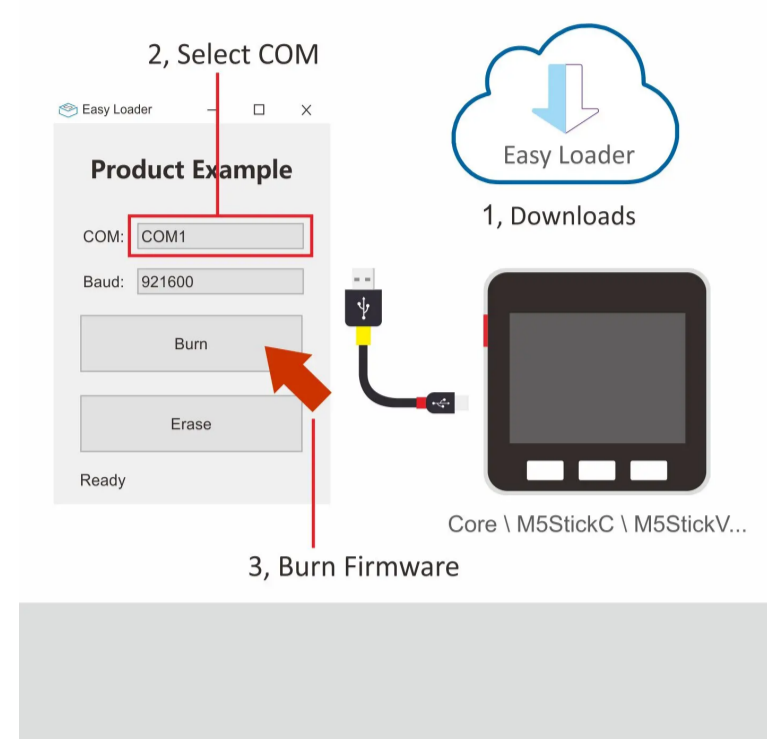


## Specification

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/O+UART) x 1
PIN Port	G19, G21,G22,G23,G25, G33
RGB LED	SK6812 3535 x 1
IR	Infrared transmission
Button	Custom button x 1
Antenna	2.4G 3D Antenna
Operating Temperature	32°F to 104°F ( 0°C to 40°C )
Net weight	3g
Gross weight	12g
Product Size	24*24*10mm
Package Size	43*43*13mm
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)

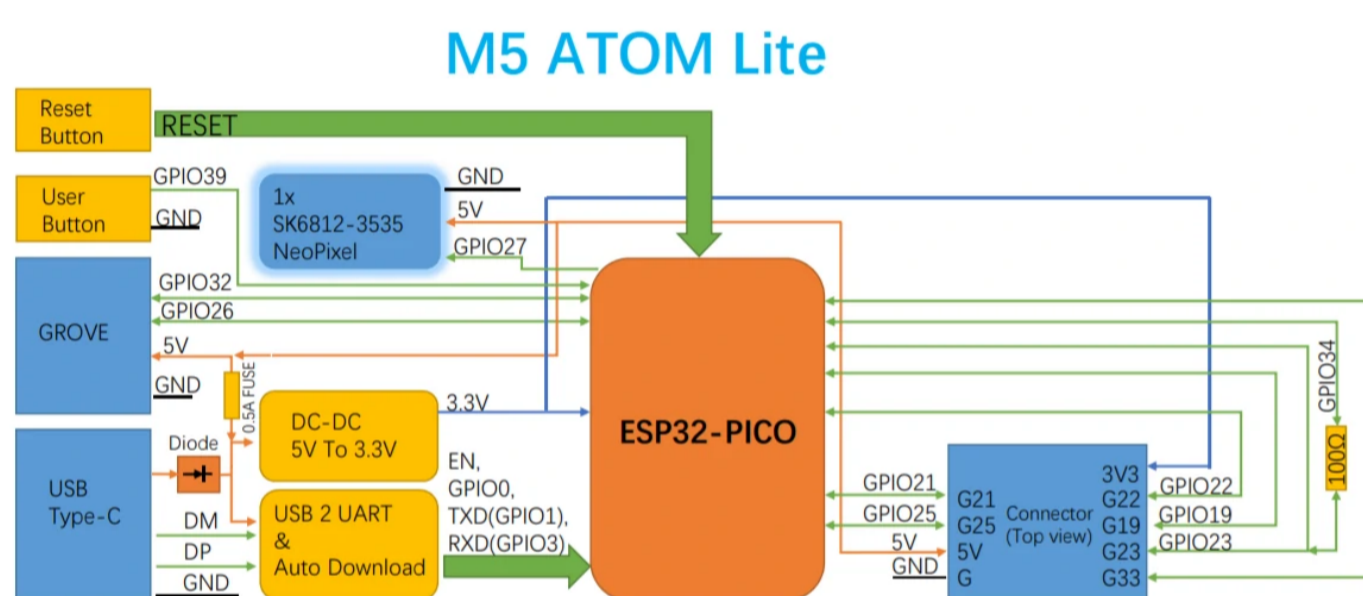


Windows

# Peripherals Pin Map

RGB Led	G27
Btn	G39
IR	G12

# Schematic



# Related Link

- o Datasheet
  - o [ESP32-PICO](#)

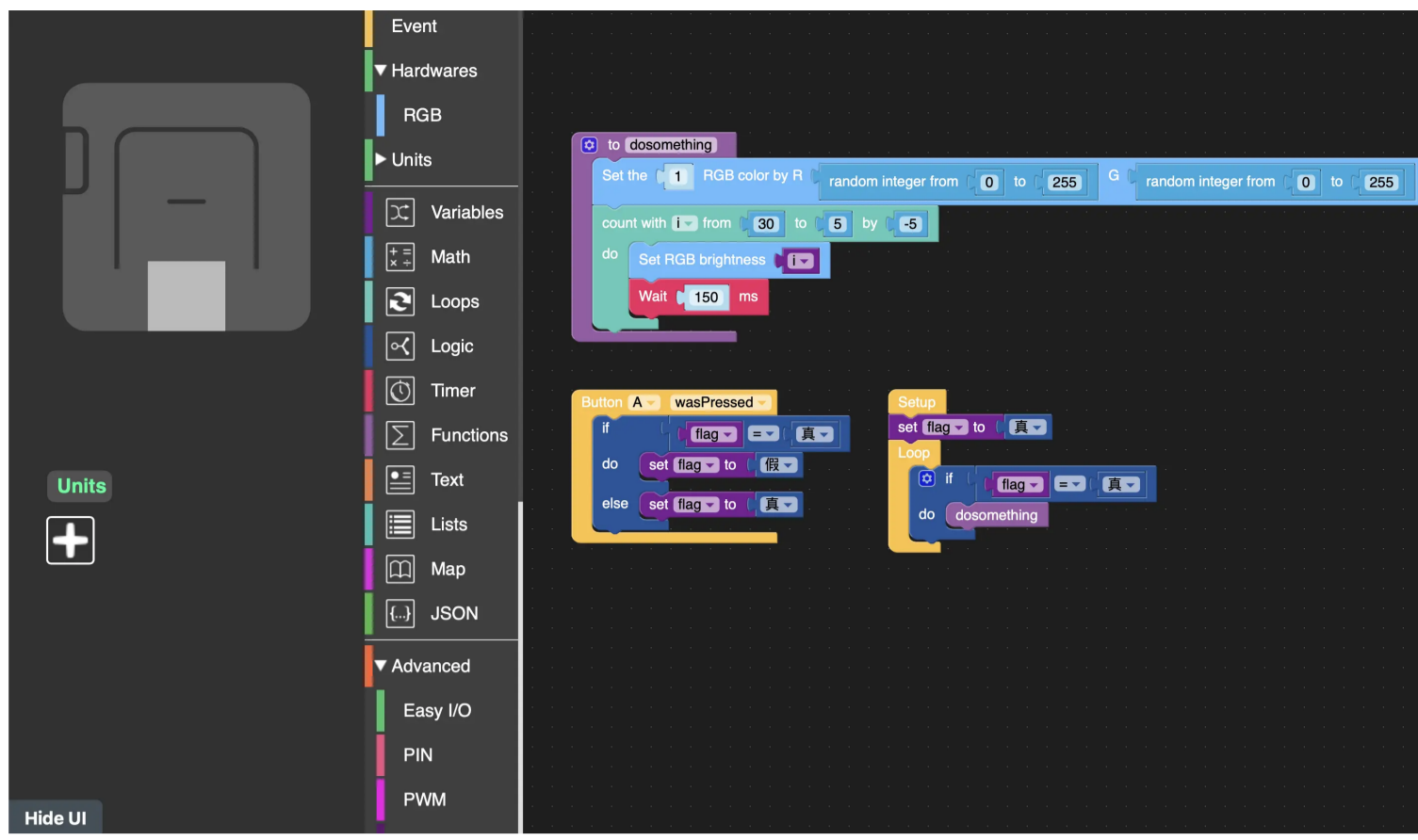
# Example

## 1. Arduino IDE

- o To get the code, please click [here](#)
- o **Before compiling the program, please configure the development board as M5StickC**

## 2. UIFlow

◦ Click [here](#) to view UIFlow example



## Video

Specification	Parameter
Frequency Baud	868MHz
Communication	UART
Protocol	AT Command
DC interface specifications	5.5mm
Net weight	40g
Gross weight	75g
Product Size	54.2*54.2*13.2mm
Package Size	165*60*36mm