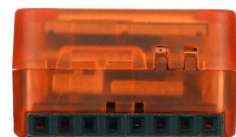
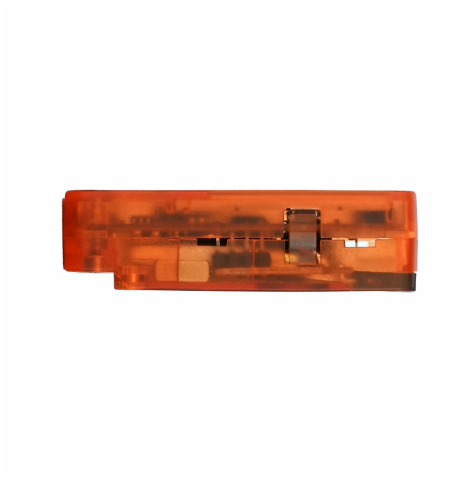


StickC-Plus SE

SKU:K016-P-SE

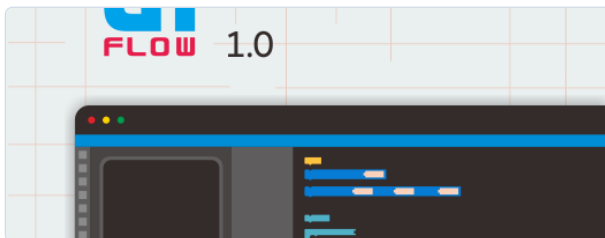




Description

StickC-Plus SE is a lightweight version of [StickC-Plus](#). It retains the core features while removing the onboard 6-axis IMU sensor, offering better cost efficiency. The enclosure features a new translucent orange design with a distinctive translucent appearance. Powered by the ESP32-PICO-D4 module, it supports 2.4 GHz Wi-Fi and integrates an infrared transmitter, RTC, onboard microphone, status indicator, customizable buttons, passive buzzer, and power management unit (PMU). It features a 1.14-inch color LCD with a 135 x 240 resolution for clear, detailed visuals. The built-in 120mAh battery and compatibility with Hat and Unit series expansion products provide flexible extensibility. This product is suitable for lightweight IoT development and simple creative projects that do not require motion sensing and prioritize cost efficiency.

Tutorial



UiFlow

This tutorial introduces how to control the StickC-Plus SE using the UiFlow graphical programming platform.



UiFlow2

This tutorial introduces how to control the StickC-Plus SE using the UiFlow2 graphical programming platform.



Arduino IDE

This tutorial introduces how to program and control the StickC-Plus SE using Arduino IDE.

Features

- ESP32-PICO-D4 main controller
 - 4MB Flash
 - 520KB SRAM
 - 2.4 GHz Wi-Fi

- Onboard red status indicator
- Integrated infrared transmitter
- Built-in RTC module
- Onboard microphone
- Customizable buttons, LCD, power button, and reset button
- Built-in 120 mAh lithium battery
- Integrated passive buzzer
- Magnetic back; translucent orange enclosure
- Development Platform
 - UiFlow1
 - UiFlow2
 - Arduino IDE
 - ESP-IDF
 - PlatformIO

| Includes

- 1 x StickC-Plus SE

| Applications

- Lightweight wearable devices
- IoT smart controllers
- Simple creative DIY projects
- Compact smart home control terminals

| Specifications

Specification	Parameter
SoC	ESP32-PICO-D4 @ Xtensa® 32-bit LX6 dual-core processor, clock frequency 240MHz
Flash	4MB
SRAM	520KB
Wi-Fi	2.4 GHz Wi-Fi
Antenna	2.4G 3D Antenna
Input Voltage	5V@500mA
Battery	Built-in 3.7V 120mAh lithium battery
Power Management	AXP192
Expansion Interface	HY2.0-4P x 1, Hat-Bus 2.54-8P interface
LCD	1.14-inch color TFT LCD, 135 x 240 resolution, ST7789v2 driver
Microphone	SPM1423
RTC	BM8563
IR	Infrared transmission
Button	Customizable button x 2
LED	Red LED x 1
Buzzer	Onboard passive buzzer
Operating Temperature	0 ~ 60°C
Product Size	48.0 x 24.0 x 8.4mm
Product Weight	17.0g
Package Size	104.4 x 65.0 x 18.0mm
Gross Weight	25.3g

Learn

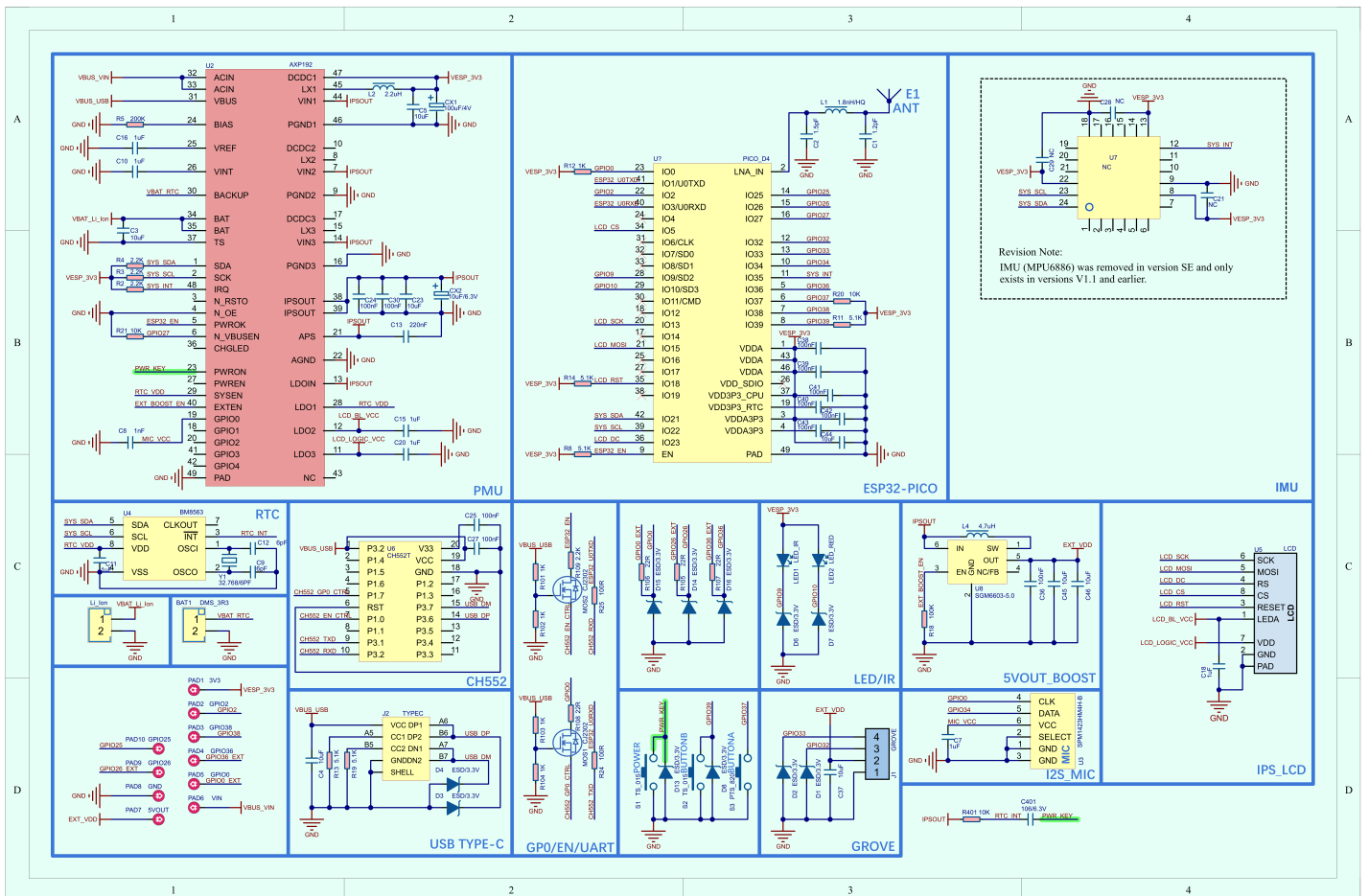
Power On/Off

- Power on / Reset: Press the power button once
- Power off: Press and hold the power button



Schematics

- StickC-Plus SE Schematics PDF



PinMap

LCD

ESP32-PICO-D4	G15	G13	G23	G18	G5
ST7789v2	LCD_MOSI	LCD_CLK	LCD_DC	LCD_RST	LCD_CS

LED & IR & Buttons & Buzzer

ESP32-PICO-D4	G10	G9	G37	G39	G2
LED_RED	LED				
IR_TX		TX			
Button A			Input		
Button B				Input	
Buzzer					Output

Microphone

ESP32-PICO-D4	G0	G34
SPM1423	CLK	DATA

Power Management

ESP32-PICO-D4	G22	G21
AXP192	SCL	SDA

AXP192	LDO1	LDO2	LDO3	GPIO0	EXT_EN
RTC	RTC_VDD				
LCD		LCD_BL	LCD_LOGIC_VCC		
MIC				MIC_VCC	
Grove 5V					EXT_BOOST_EN

APX192	PWRON
Button PWR	PWR_KEY

Hat-Bus

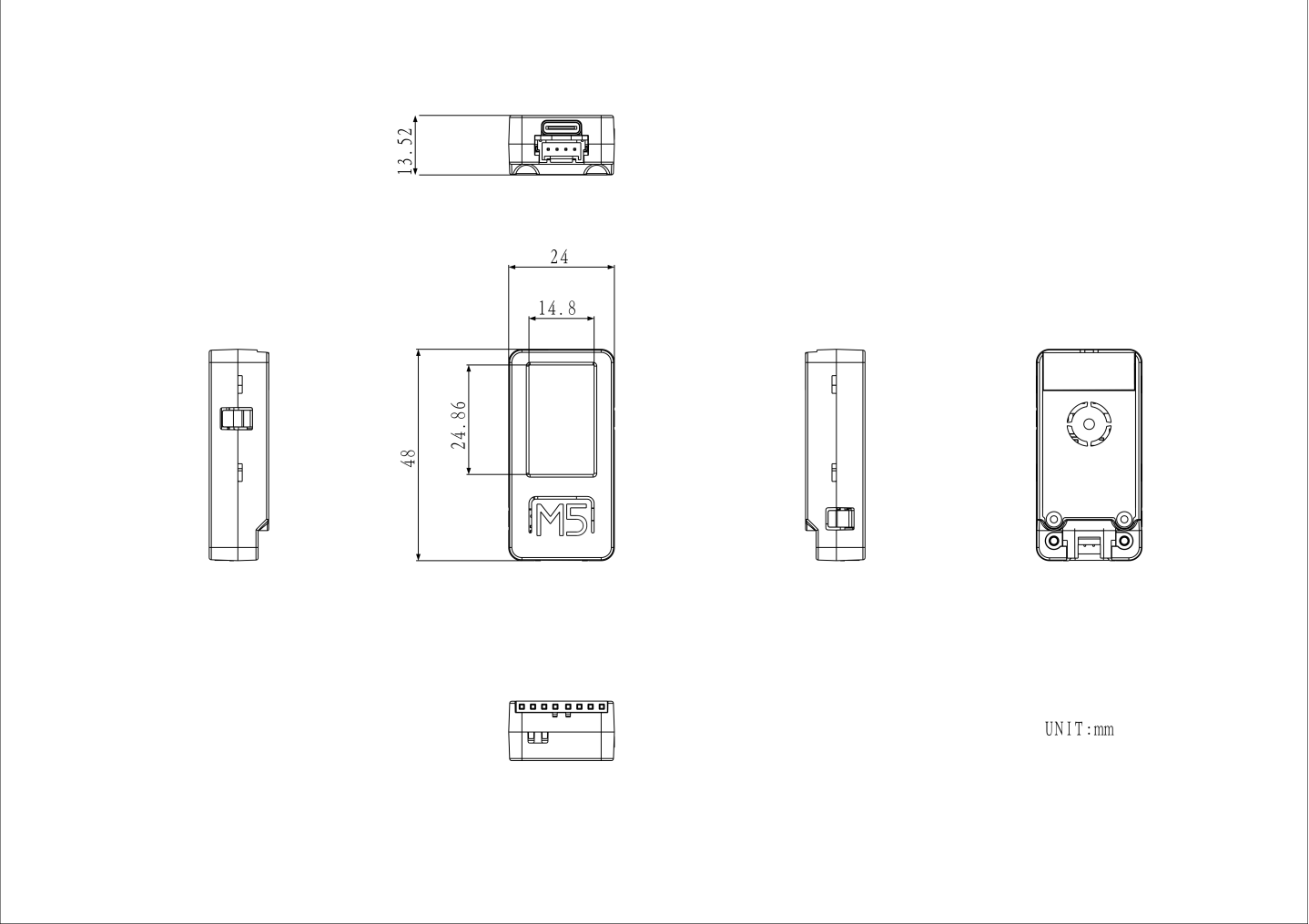
Hat-Bus	StickC-Plus SE
1	GND
2	5V_OUT
3	G26
4	G36
5	G0
6	BAT
7	3V3
8	5V_IN

HY2.0-4P

HY2.0-4P	Black	Red	Yellow	White
PORT.CUSTOM	GND	5V	G32	G33

Model Size

- StickC-Plus SE Model Size PDF



Datasheets

- ESP32-PICO
- ST7789v2
- BM8563
- AXP192 datasheet
- AXP192 register
- SPM1423

Softwares

Arduino

- StickC-Plus SE Arduino Quick Start

- [StickC-Plus SE Arduino M5Unified Driver Library](#)
- [StickC-Plus SE Arduino M5GFX Driver Library](#)
- [StickC-Plus SE Factory Firmware](#)

UiFlow1

- [StickC-Plus SE UiFlow1 Quick Start](#)

UiFlow2

- [StickC-Plus SE UiFlow2 Quick Start](#)

USB Driver

Baud Rate Limitation

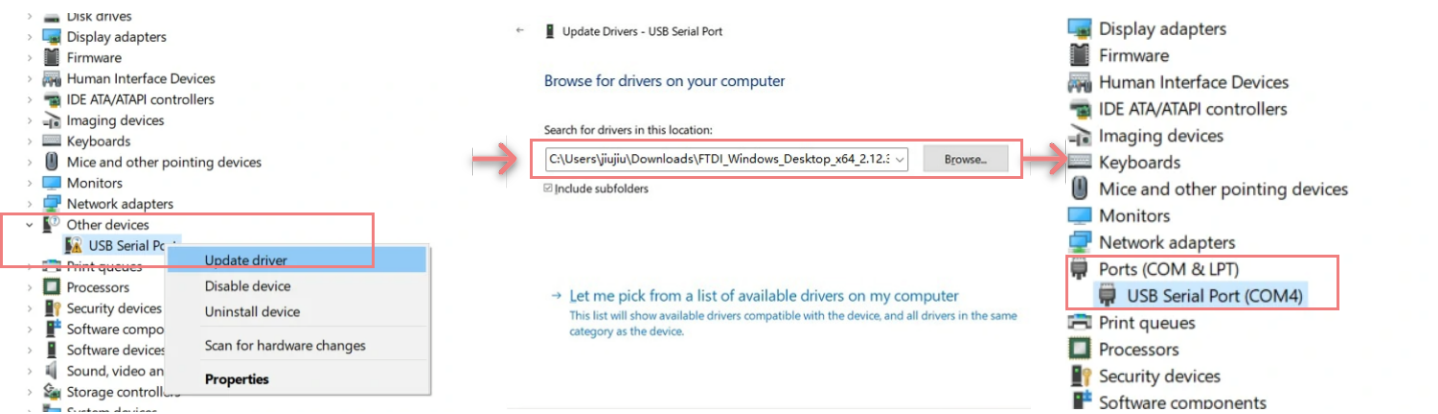
When downloading programs to the device, it is recommended to select one of the following serial baud rates. Using other speeds may cause the program to fail to download correctly.

1500000 bps / 750000 bps / 500000 bps / 250000 bps / 115200 bps

1. Select and download the driver file matching your operating system from the list below, then extract it. You can also visit the [FTDI Chip official website](#) to get additional FTDI driver versions.

Driver name	Download link
Windows_Desktop_x64	Download
Windows_Desktop_x86_32	Download
Windows_Desktop_ARM	Download
MacOS_Intel	Download
MacOS_ARM64	Download

2. Connect the device to your PC, open Device Manager, and install the FTDI driver (the screenshot below uses Windows 10 as an example). (Note: On some systems, you may need to install the driver twice for it to take effect. The unrecognized device is usually named `M5Stack` or `USB Serial`.)



Note:

- StickC-Plus SE supported baud rates: 1200 ~115200, 250K, 500K, 750K, 1500K
- G36/G25 share the same port. When using one pin, set the other pin to floating input
- For example, to use the G36 pin as an ADC input, configure the G25 pin as floating
- The input range of VBUS_VIN and VBUS_USB is limited to 4.8-5.5V. When powered by VBUS, the AXP192 power management will charge the internal battery.

```

setup()
{
    M5.begin();
    pinMode(36, INPUT);
    gpio_pulldown_dis(GPIO_NUM_25);
    gpio_pullup_dis(GPIO_NUM_25);
}

```

Easyloader

Easyloader	Download Link	Remarks
StickC-Plus SE Factory Firmware Easyloader	download	/

Video

Product Comparison

Product Compare		
		
	StickC-Plus SE	StickC-Plus
IMU	✗	✓ (MPU6886)
Enclosure Color	Orange, translucent	Orange, opaque

To compare Stick series products, visit the [Product Selection Table](#) and select the target products to view the comparison results. The table covers key information such as core specifications and functional features, and supports simultaneous comparison of multiple products.