M5stack Technology M5Paper Touchable Ink Screen Controller Device User Manual

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Overview

M5 Paper is a touchable ink screen controller device. This document will demonstrate how to use the device to test basic WIFI and Bluetooth functions.

Development environment

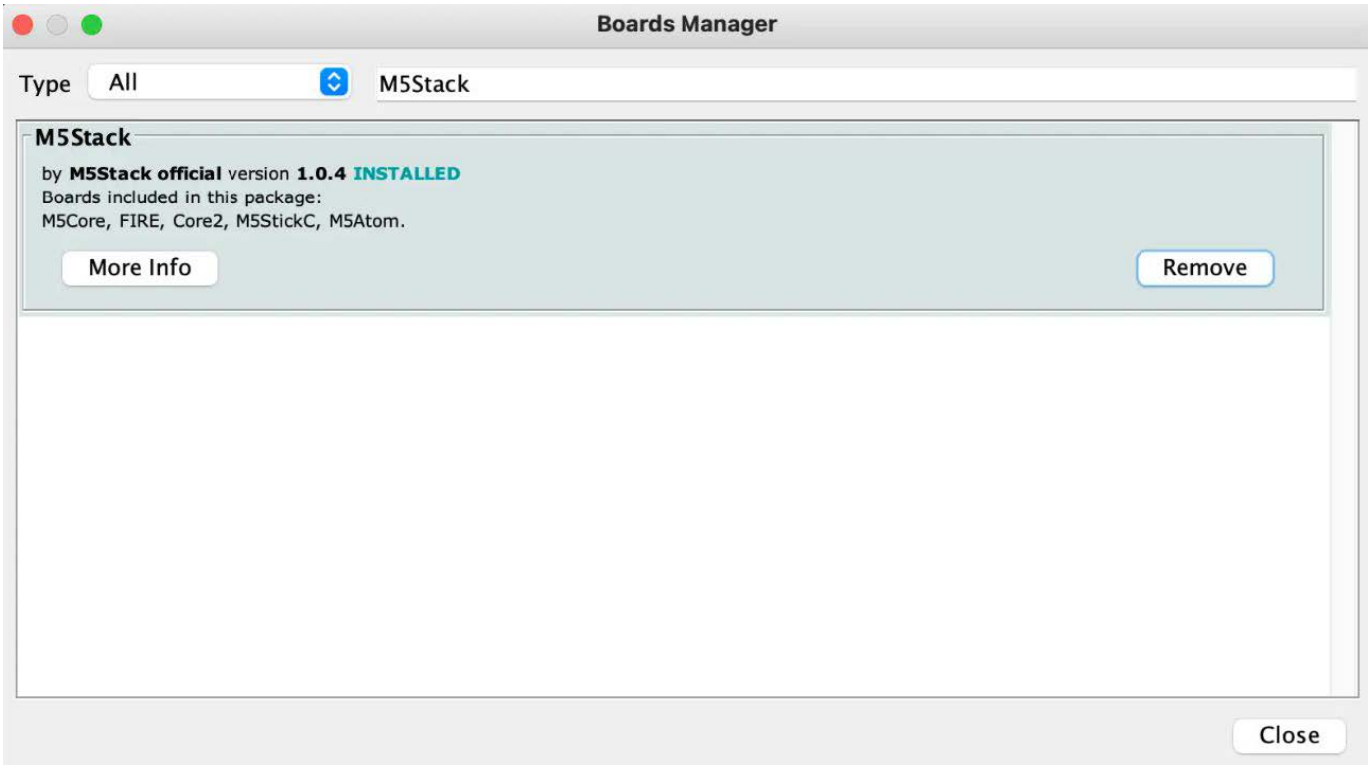
Arduino IDE

Go to https://www.arduino.cc/en/main/software to download the Arduino IDE corresponding to your operating system and install it.

Open the Arduino IDE and add the management address of the M5Stack board to the preferences.

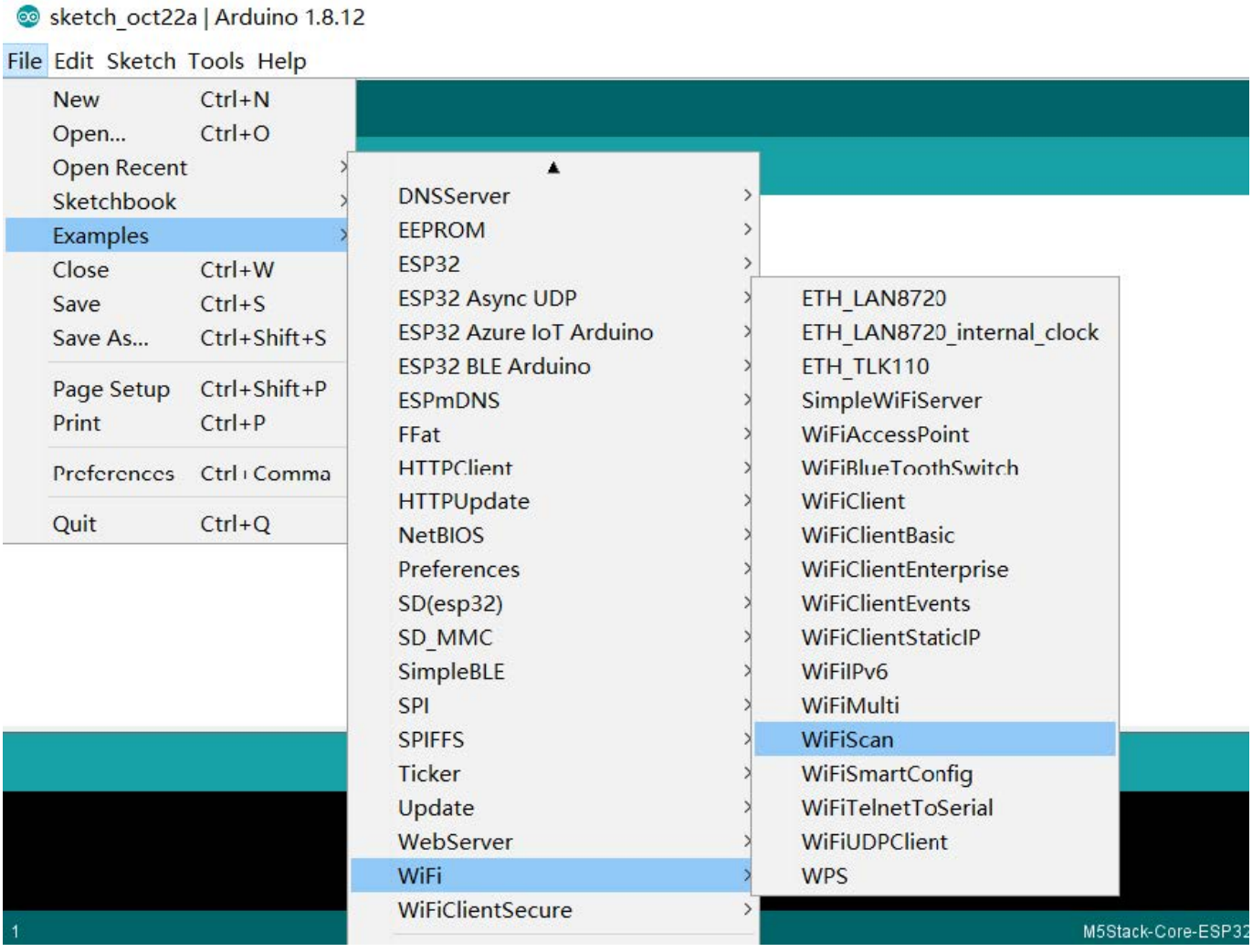
https://m5stack.oss-cn-shenzhen.aliyuncs.com/resource/arduino/package_m5stack_index.json

Search for “M5Stack” in the board management and download it.

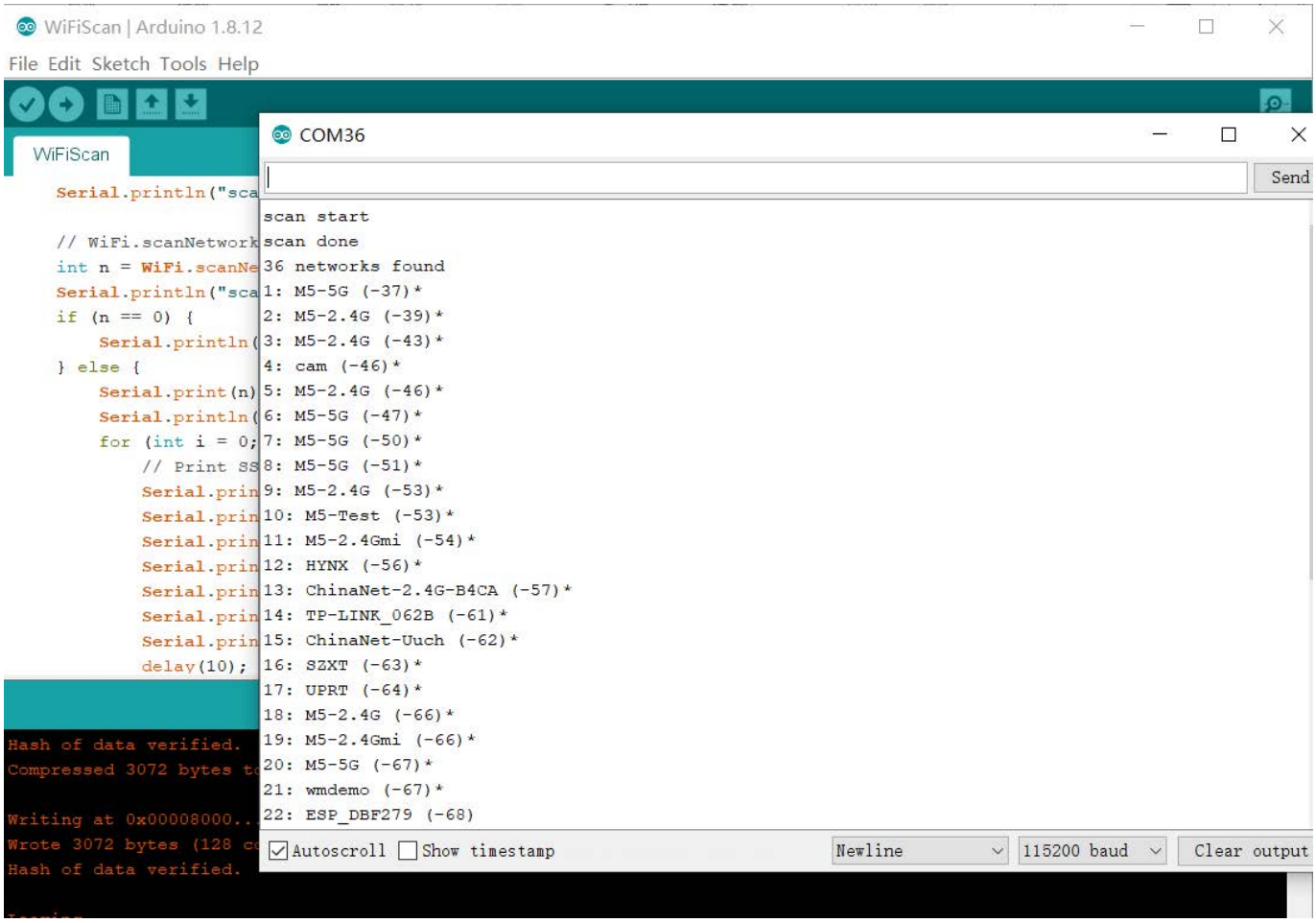


WiFi

Use the official WIFI scanning case provided by ESP32 in the Example list to test.

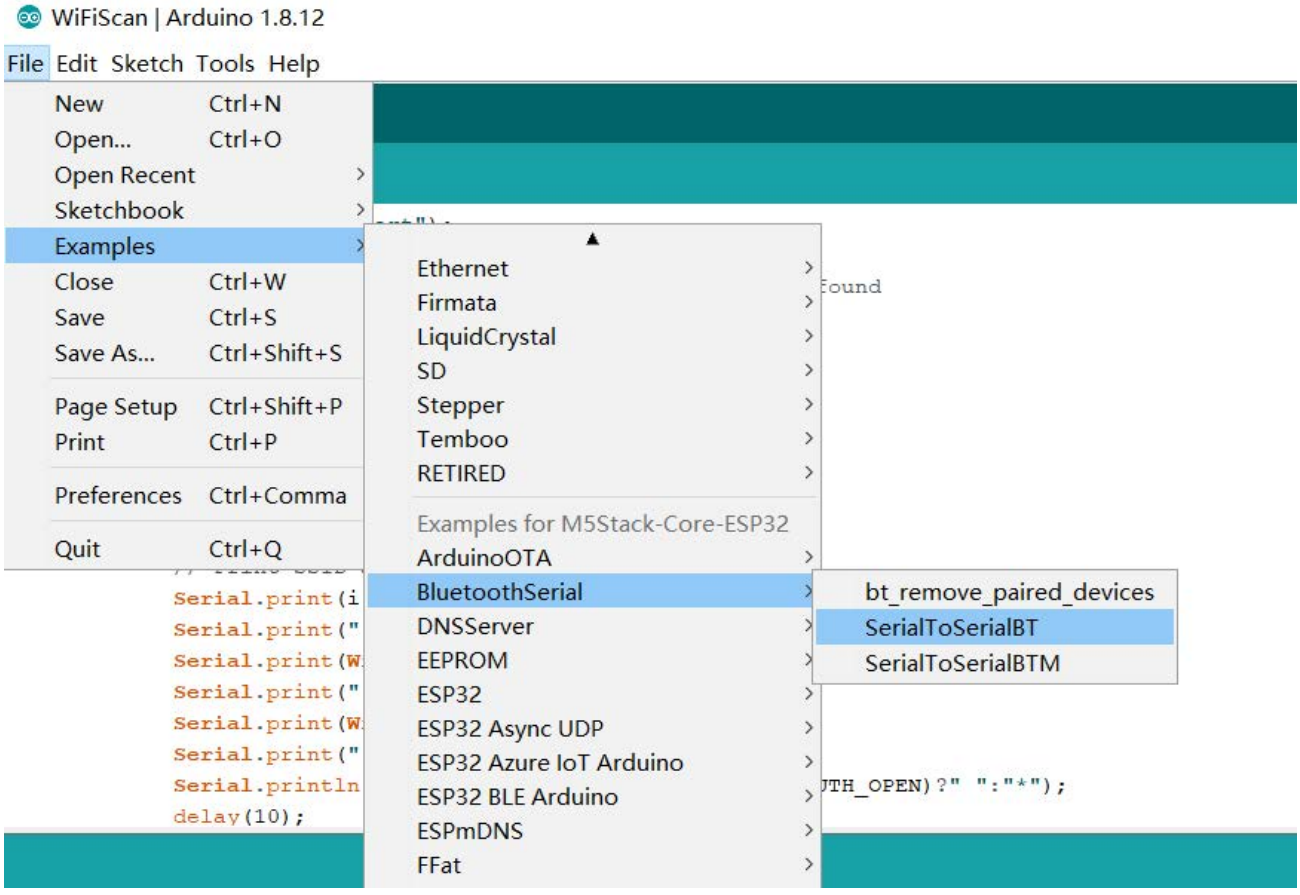


After uploading the program to the development board, open the serial monitor to view the WiFi scan results.

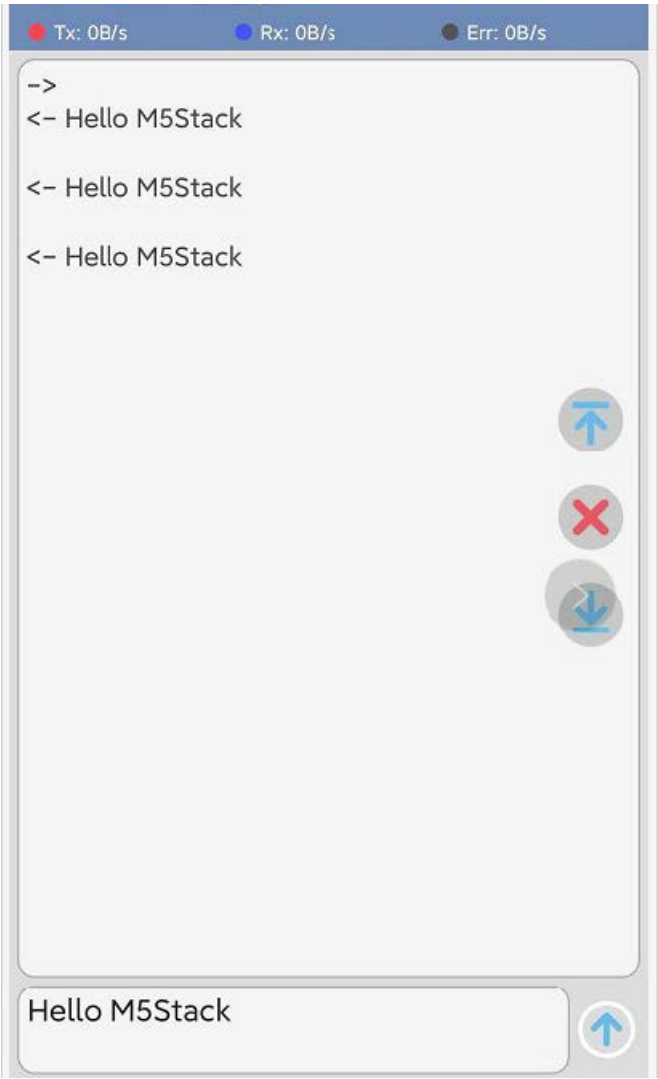


Bluetooth

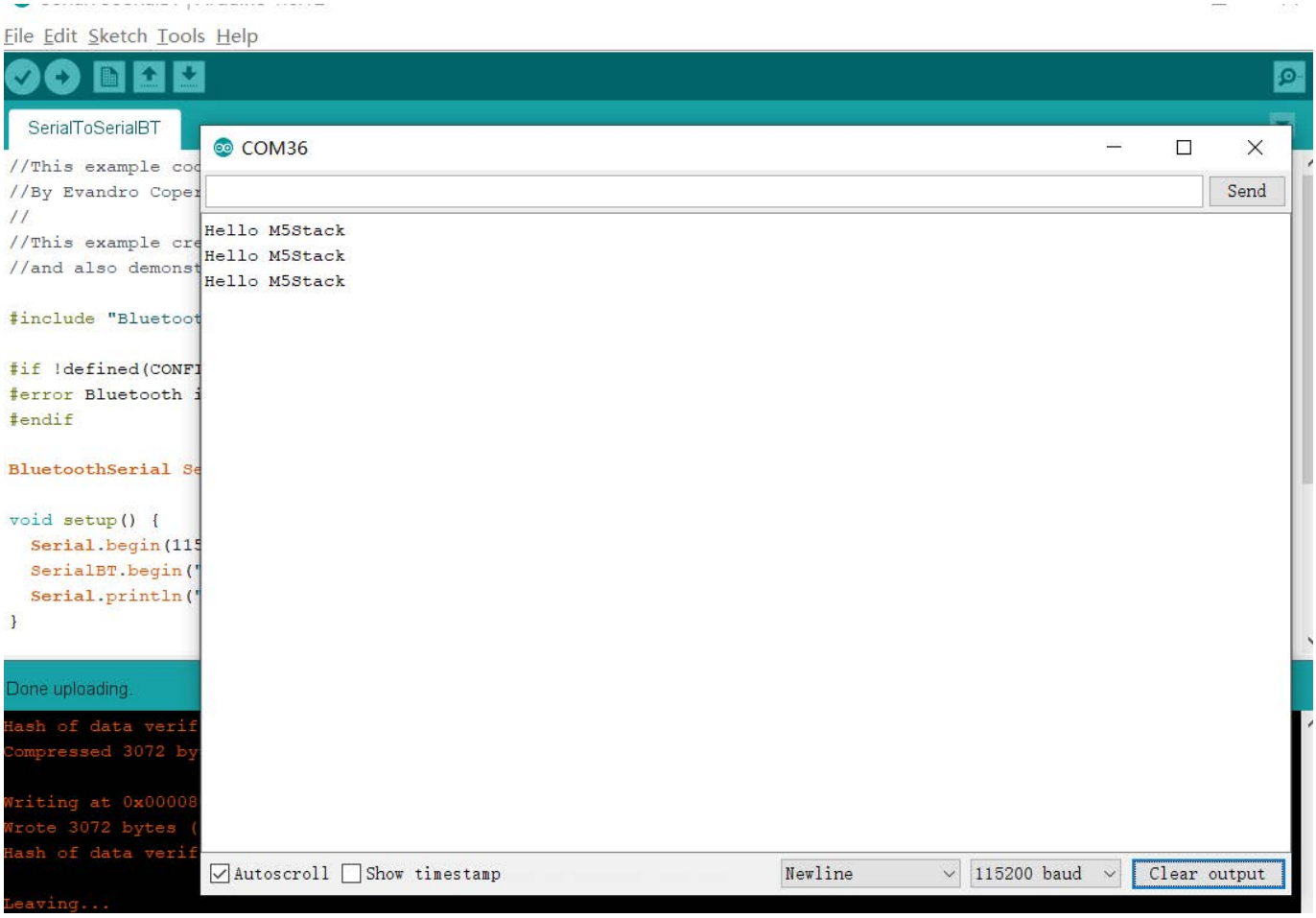
Demonstrate how to use classic Bluetooth to send messages through Bluetooth and transmit them to the serial port for printing.



After uploading the program to the development board, use any Bluetooth serial debugging tool to pair and connect, and send messages. (The following will use the mobile phone Bluetooth serial port debugging app for demonstration).



After the debugging tool sends a message, the device will receive the message and print it to the serial port.



Overview

M5 Paper is a touchable ink screen controller device, the controller adopts ESP32-D0WD. An electronic ink screen with a resolution of 540*960 @4.7″ is embedded on the front, supporting 16-level grayscale display. With GT911 capacitive touch panel, it supports two-point touch and multiple gesture operations. Integrated dial wheel encoder, SD card slot, and physical buttons. An additional FM24C02 storage chip (256KB-EEPROM) is mounted for power-off storage of data. Built-in 1150mAh lithium battery, combined with the internal RTC (BM8563) can achieve sleep and wake-up functions, The device provides strong endurance. The opening of 3 sets of HY2.0-4P peripheral interfaces can expand more sensor devices.

Product Features

- Embedded ESP32, support WiFi, Bluetooth.
- Built-in 16MB Flash.
- Low-power display panel.
- Support two-point touch.
- Nearly 180-degree viewing angle.
- Human-computer interaction interface.
- Built-in 1150mAh large capacity lithium battery.

Documents / Resources

M5Paper 	**M5stack Technology M5Paper Touchable Ink Screen Controller Device** [pdf] User Manual M5PAPER, 2AN3WM5PAPER, M5Paper Touchable Ink Screen Controller Device, Touchable Ink Screen Controller Device

References

- **Software \| Arduino**