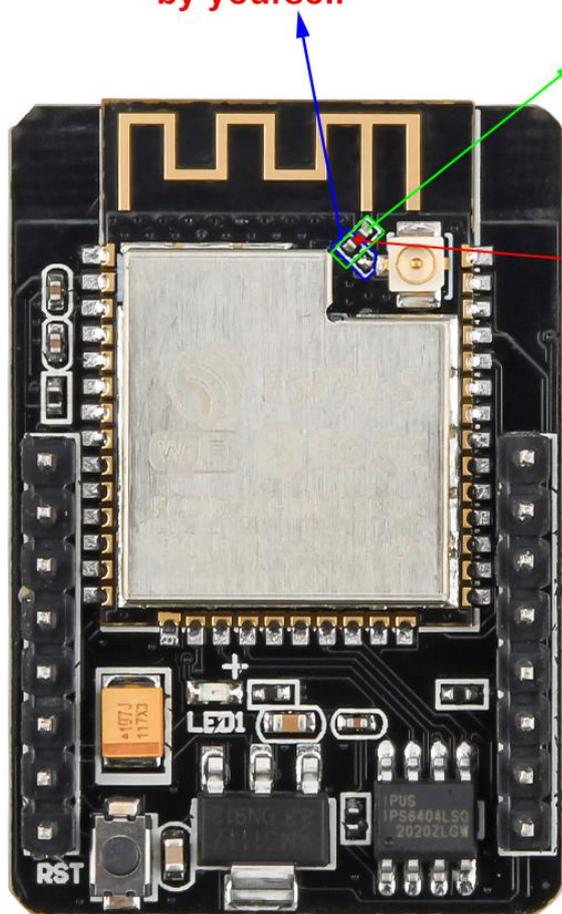


Manual

ESP32-CAM-MB MICRO USB ESP32 Serial to WiFi ESP32 CAM Development Board CH340 CH340G
5V Bluetooth+OV2640 Camera+2.4G Antenna IPX

This product has built-in antenna,if you need to use external antenna,you should resoldering resistance with soldering iron by yourself



Step 1: To weld this two parts in blue box

Step 2: to Fuse the two positions selected by the green boxes in the picture

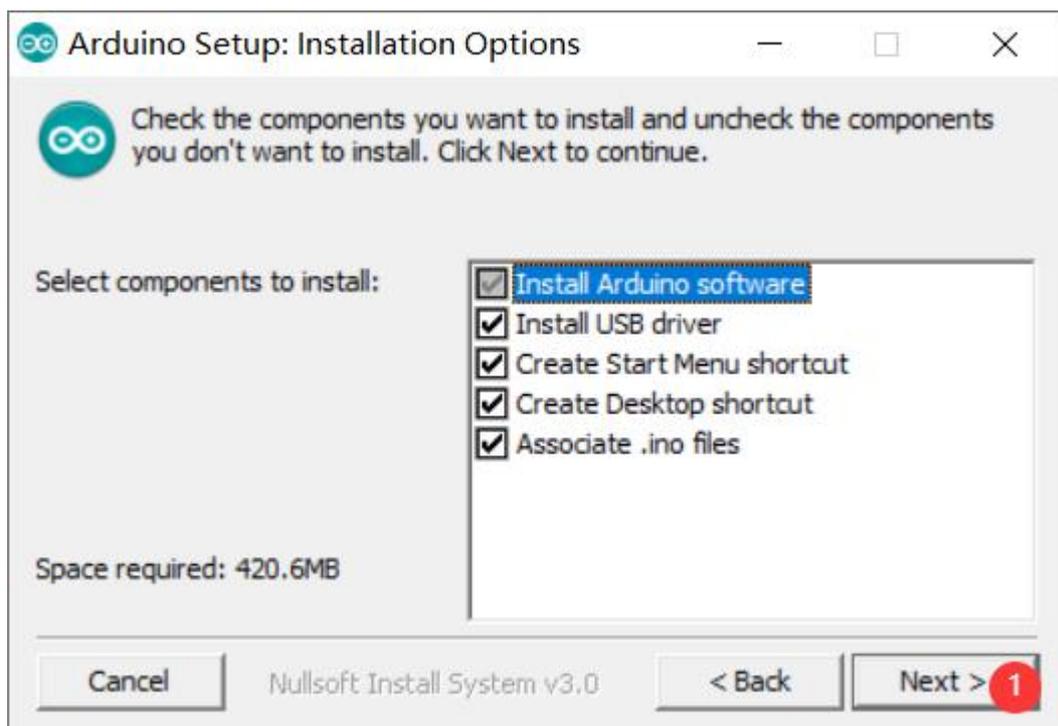
Step 3: to weld a Resistor

The results are as follows

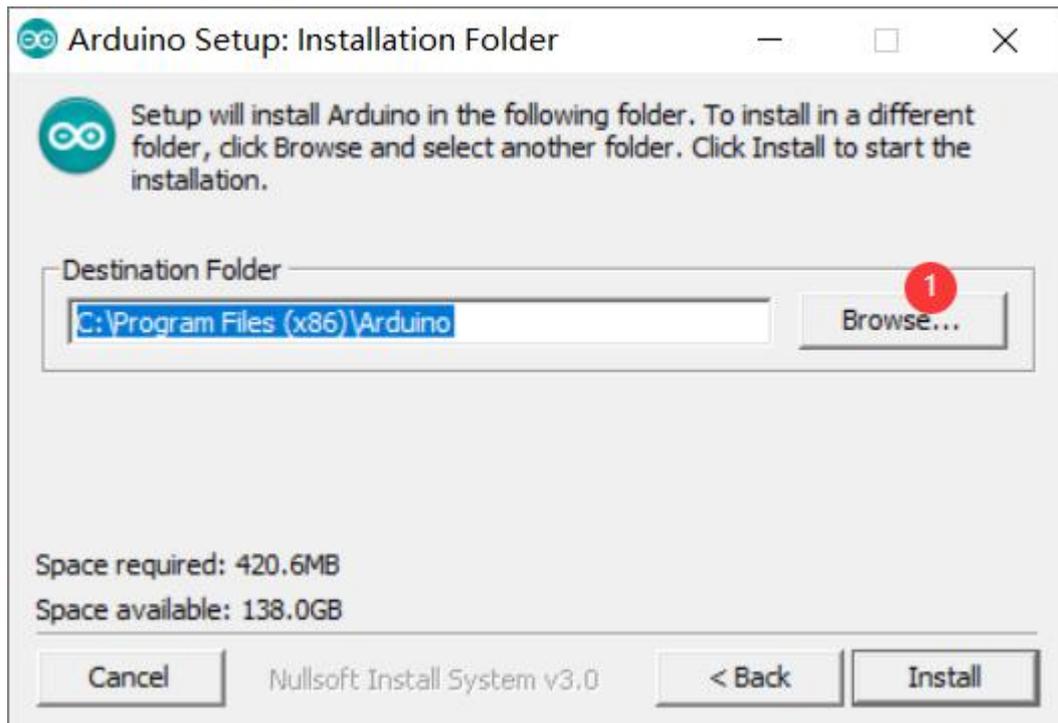


1. Arduino development environment construction

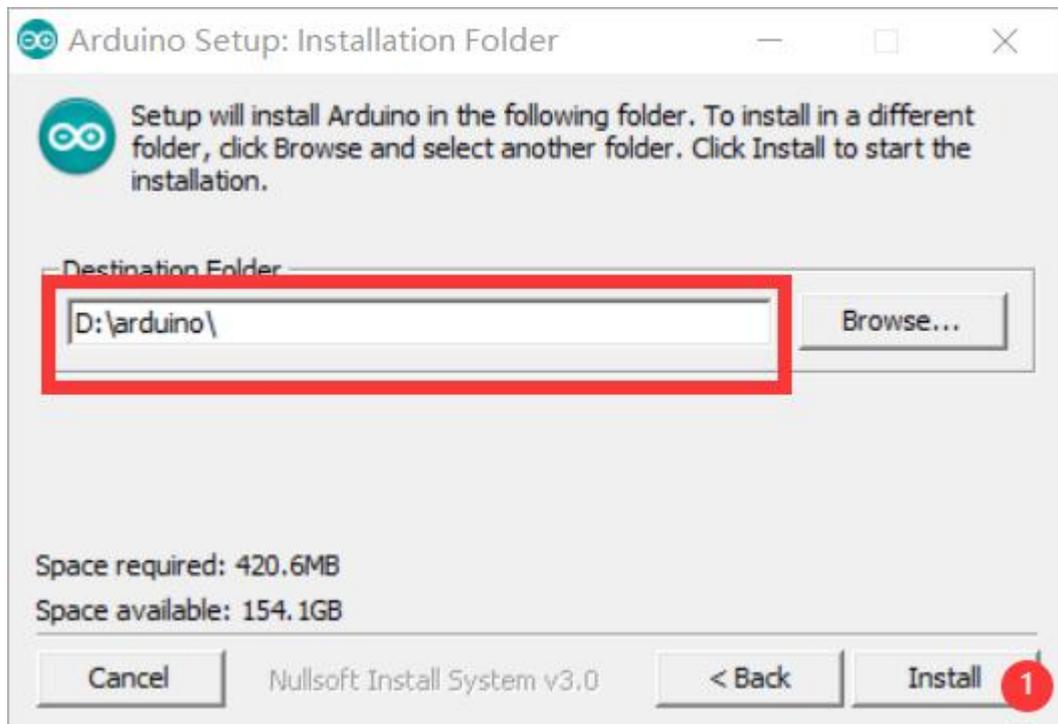
- (1) Download the Arduino IDE on the Arduino official website
- (2) Click "I agree", click Next



(3) The default is to install on the c drive, you can click Browse to change the installation location.



(4) Here I installed it in the arduino folder of drive d (remember this installation path)



(5) Wait for the installation to complete, open the hardware under the installation path

data (D:) > arduino

名称	修改日期	类型	大小
drivers	2020/11/6 14:20	文件夹	
examples	2020/11/6 14:20	文件夹	
hardware	2020/11/6 14:20	文件夹	
java	2020/11/6 14:20	文件夹	
lib	2020/11/6 14:20	文件夹	
libraries	2020/11/6 14:20	文件夹	
reference	2020/11/6 14:20	文件夹	
tools	2020/11/6 14:20	文件夹	
tools-builder	2020/11/6 14:20	文件夹	
arduino.exe	2017/8/18 22:55	应用程序	395 KB
arduino.l4j.ini	2017/8/18 22:55	配置设置	1 KB
arduino_debug.exe	2017/8/18 22:55	应用程序	393 KB
arduino_debug.l4j.ini	2017/8/18 22:55	配置设置	1 KB
arduino-1.8.4-windows.exe	2020/8/26 14:24	应用程序	92,546 KB
arduino-builder.exe	2017/8/18 22:55	应用程序	3,214 KB
libusb0.dll	2017/8/18 22:55	应用程序扩展	43 KB
msvcp100.dll	2017/8/18 22:55	应用程序扩展	412 KB
msvcr100.dll	2017/8/18 22:55	应用程序扩展	753 KB
revisions.txt	2017/8/18 22:55	TXT 文件	84 KB
uninstall.exe	2020/11/6 14:20	应用程序	404 KB
wrapper-manifest.xml	2017/8/18 22:55	XML 文档	1 KB

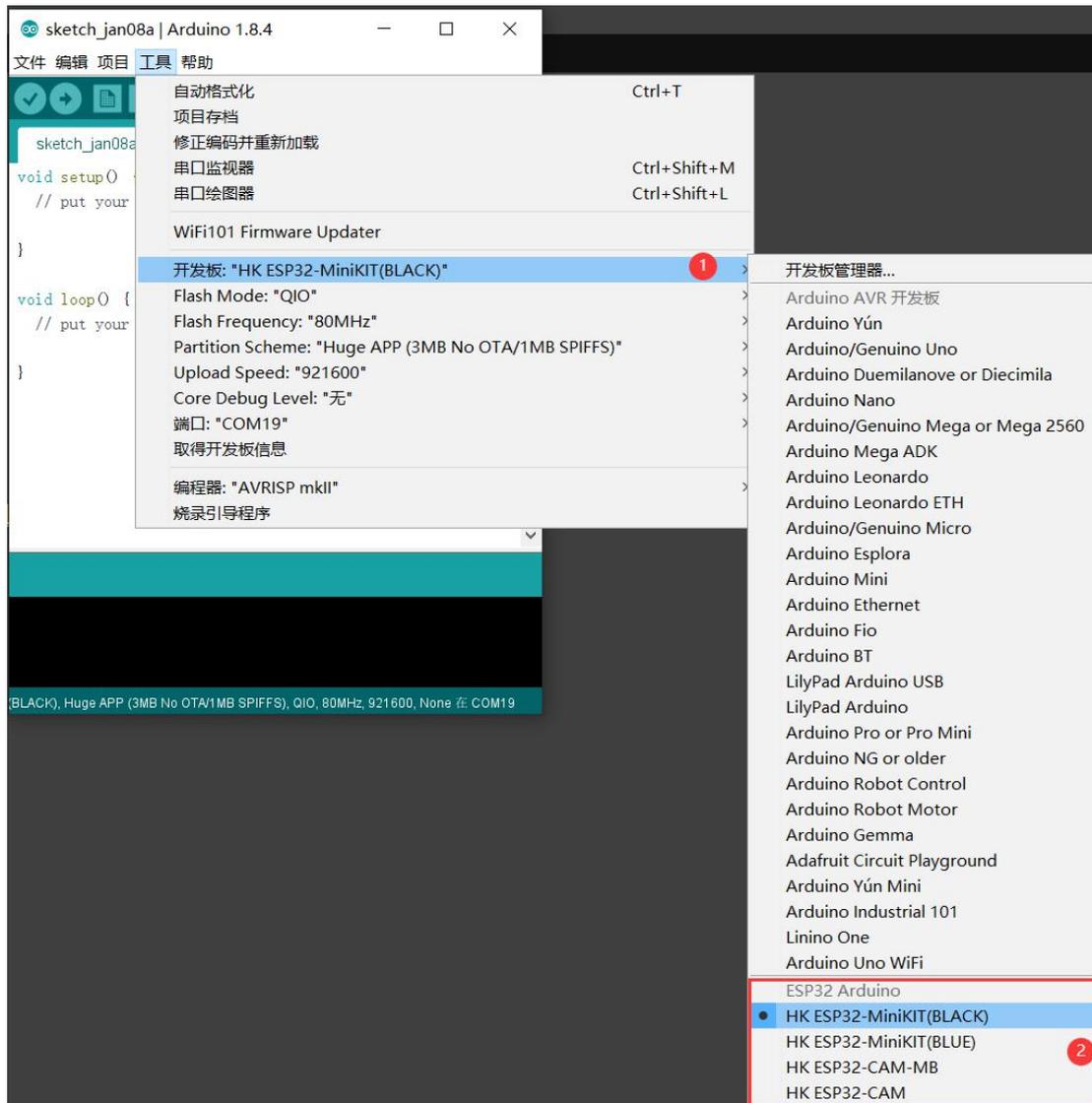
(6) Unzip the file "espressif"

After the download is complete, unzip it to the hardware directory

data (D:) > arduino > hardware

名称	修改日期	类型	大小
arduino	2020/11/6 14:43	文件夹	
espressif	2020/11/6 14:44	文件夹	
tools	2020/11/6 14:43	文件夹	
package_index_bundled.json	2017/8/18 22:55	JSON File	9 KB
platform.keys.rewrite.txt	2017/8/18 22:55	TXT 文件	8 KB
platform.txt	2017/8/18 22:55	TXT 文件	1 KB

(7) Open ArduinoIDE and select the corresponding development board

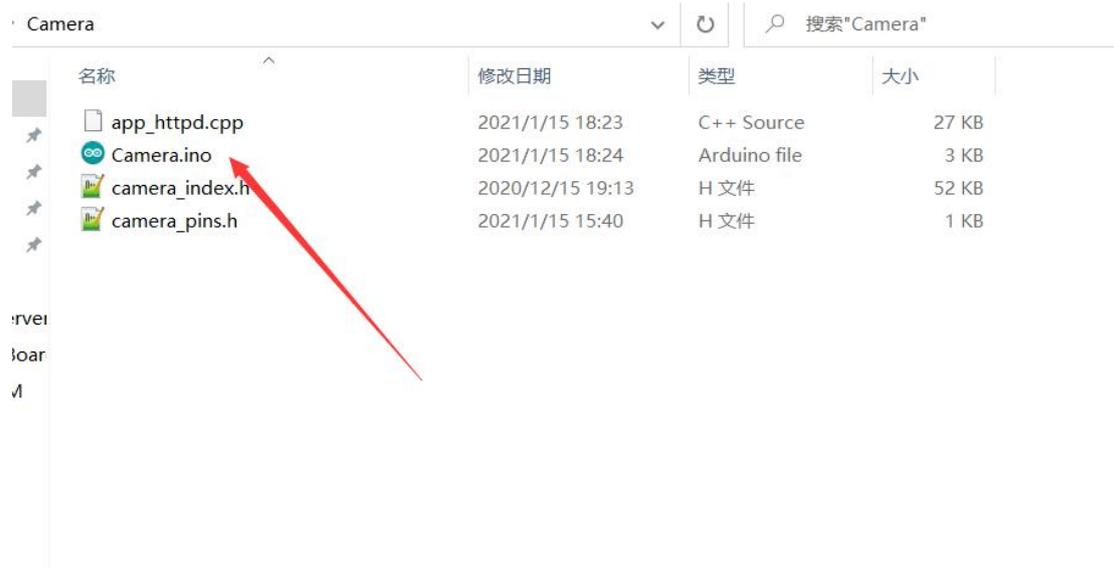


At this point, the Arduino IDE development platform is set up. Here is how to use the example

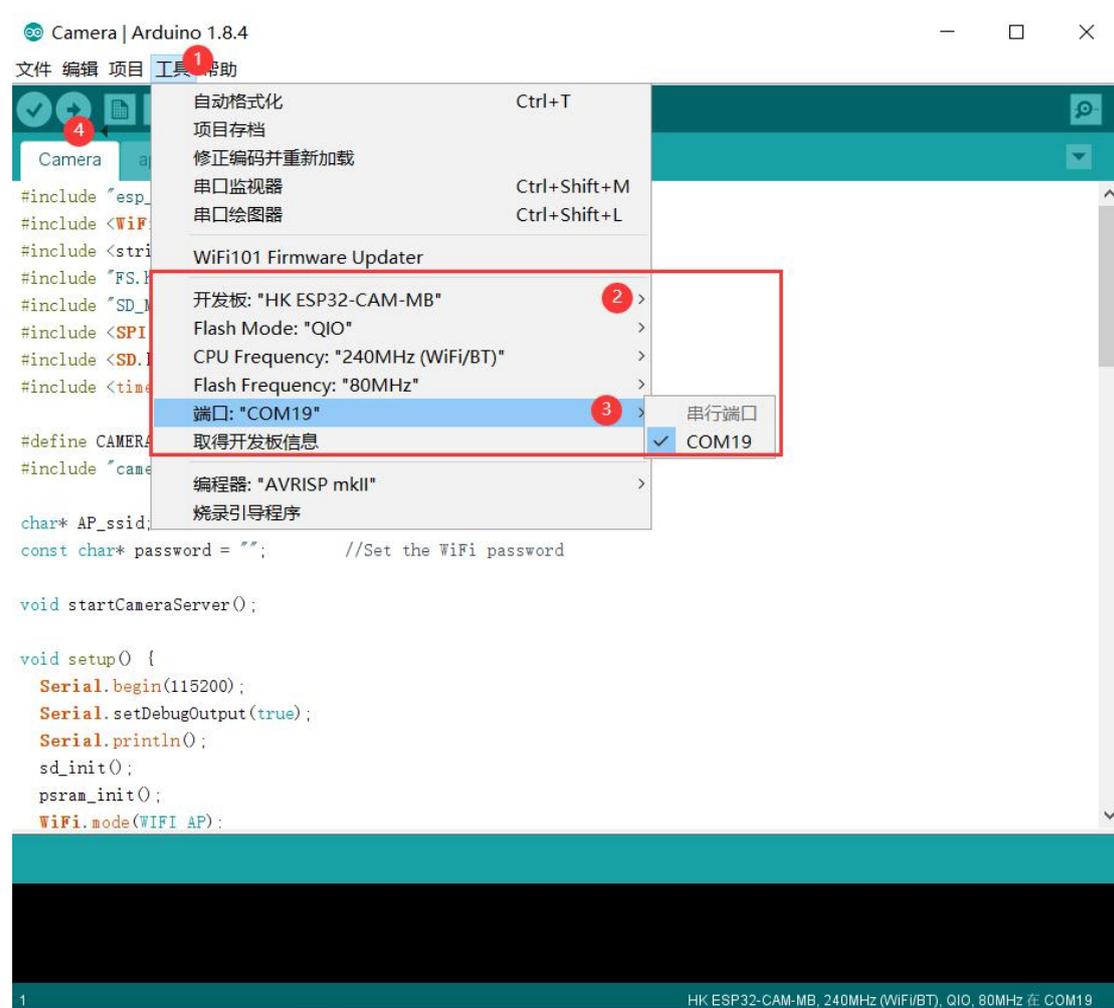
2. ESP-CAM video stream and photo examples

(1) Open Camera file

(2) After the download is complete, enter the "Camera" directory and double-click to open "Camera.ino"



(3) Select the development board, select the port, upload the code



(4) **Open the serial port, select the baud rate 115200, reset the development board, and check the serial port output**

```
ets Jun  8 2016 00:22:57

rst:0x1 (POWERON_RESET),boot:0x13 (SPI_FAST_FLASH_BOOT)
flash read err, 1000
ets_main.c 371
ets Jun  8 2016 00:22:57

rst:0x10 (RTCWDT_RTC_RESET),boot:0x13 (SPI_FAST_FLASH_BOOT)
configsip: 0, SPIWP:0xee
clk_drv:0x00,q_drv:0x00,d_drv:0x00,cs0_drv:0x00,hd_drv:0x00,wp_drv:0x00
mode:DIO, clock div:1
load:0x3fff0018,len:4
load:0x3fff001c,len:1216
ho 0 tail 12 room 4
load:0x40078000,len:10920
ho 0 tail 12 room 4
load:0x40080400,len:6388
entry 0x400806b4

SD Size: 7680MB OK
PSRAM OK
AP_ssid:CAM-7C:9E:ED:2F:8D
AP_password:
```

(5) Visit the video streaming server

You can turn on the WIFI of your mobile phone and connect to "ESP-xx:xx:xx:xx:xx:xx" (each development board has a different suffix). Open the browser and type the 192.168.4.1 address. Press the Start Streaming button to start video streaming. Press Get Still to take a photo, the photo is stored in the SD card, and the photo is named randomly



▲ 192.168.4.1

1



Contrast

Saturation

Special Effect

AWB

AWB Gain

WB Mode

AEC SENSOR

AEC DSP

AE Level

AGC

Gain Ceiling 2x 128x

BPC

WPC

Raw GMA

Lens Correction

H-Mirror

V-Flip

DCW (Downsize EN)

Color Bar

Face Detection

Face Recognition

2

