Instructions for use:

1. Download software and development board

We take the module in the arduino IDE (can be downloaded from the official website https://www.arduino.cc/en/Main/Software) development environment as an example to illustrate how to use the module.

Open the software Arduino IDE, The following interface appears.

```
sketch_dec25a | Arduino IDE 2.2.1
                                                                                                    X
文件 编辑 项目 工具 帮助(H)
                   ALKS ESP32
                                                                                                     -Λ-
                                                                                                        .0
      sketch_dec25a.ino
              void setup() {
         1
         2
                // put your setup code here, to run once:
         4
         5
              void loop() {
         7
               // put your main code here, to run repeatedly:
$ >
         8
        10
```

2. Add ESP32 development environment

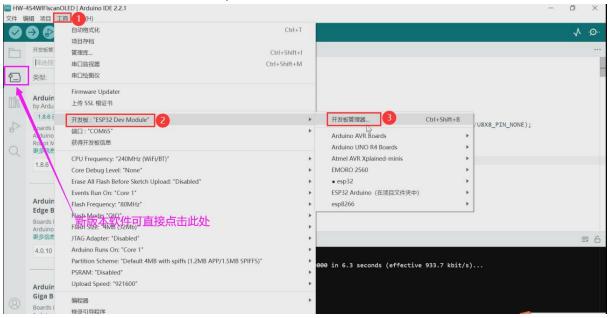
Add path to ESP32 development environment

In the Arduino IDE, open File->Preferences (shortcut key 'Ctrl+,').

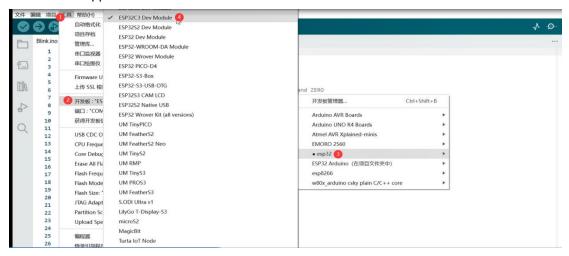
Put the json address of the development board https://dl.espressif.com/dl/package_esp32_index.json into the attached

in the development board manager URL. Click "OK" ('OK' for new versions). Click "OK" again ('OK' for the new version) to return to the Arduino IDE homepage.

Click the development board manager, the development board manager window will appear, search for ESP32, and install the development environment

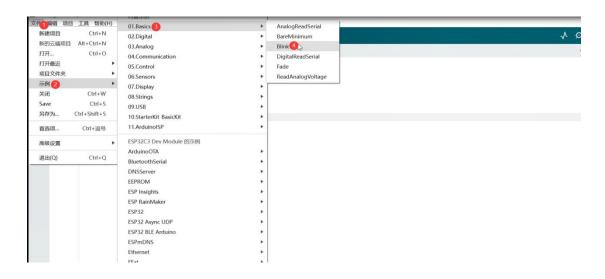


Already installed, you can use it directly. After installation, you can see in the development board that a lot of support for ESP32 modules has been added.

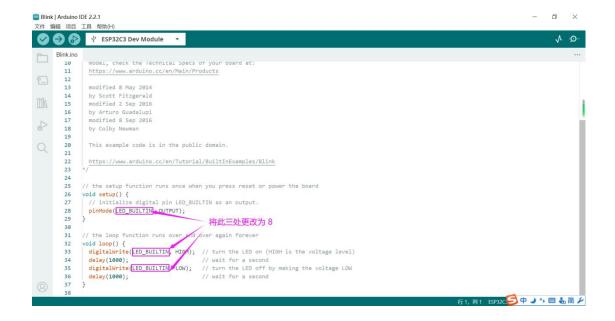


3. Start downloading the flash program test:

Select File-Example-Blink



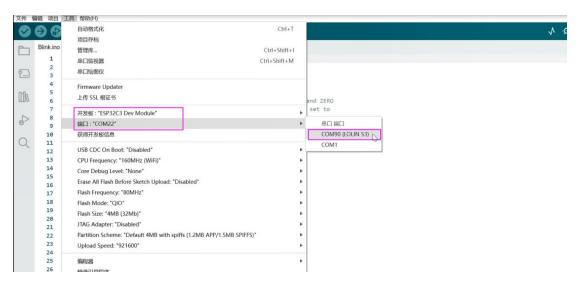
As shown below, change LED_BUILTIN to 8



Select the corresponding port and development board model

Note: If the Com port cannot be recognized on Arduino, you can try this method:

Manually enter download mode: Method 1: Press and hold BOOT to power on. Method 2: Press and hold the BOOT button of the ESP32C3, then press the RESET button, release the RESET button, and then release the BOOT button. At this time, the ESP32C3 will enter the download mode.



Click upload and wait until the download is completed and the blue indicator light on the module flashes normally.

```
- o ×
Blink | Arduino IDE 2.2.1
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 Blink.ino
                                  https://www.arduino.cc/en/Tutorial/BuiltInExamples/Blink
                 23
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  // the setup function runs once when you press reset or power the board
void setup() {
    // initialize digital oin LED_BUILTIN as an output.
    pinMode(8, OUTPUT);
}
  // the loop function runs over and over again forever
void loop() {
    digitalWrite(8, HIGH); // turn the LED on (HIGH is the voltage level)
    delay(1000); // wait for a second
    digitalWrite(8, LOW); // turn the LED off by making the voltage LOW
    delay(1000); // wait for a second
                                                                                                                                                                                                                                                                                                               ■ 6
             输出
                writing at 0x0003c6d7... (77 %)
Writing at 0x00043363... (88 %)
Writing at 0x00043562... (100 %)
Writing at 0x0004356c... (100 %)
Wrote 243840 bytes (136427 compressed) at 0x00010000 in 2.1 seconds (effective 925.9 kbit/s)...
Hash of data verified.
                Leaving...
Hard resetting via RTS pin...
```