

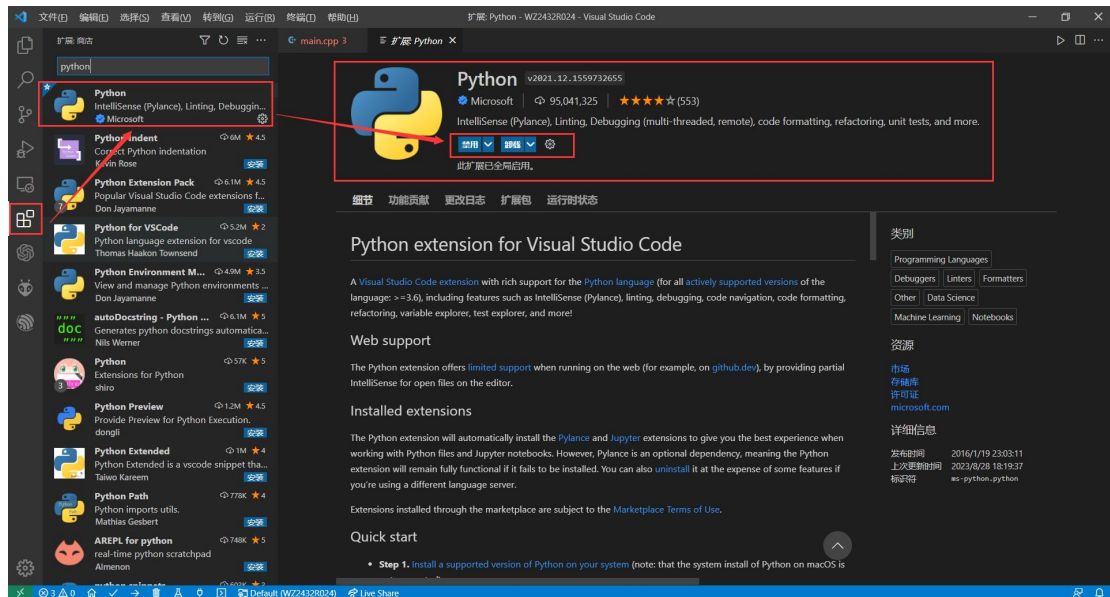
PlatformIO

WZ8048C070 or WZ8048C050

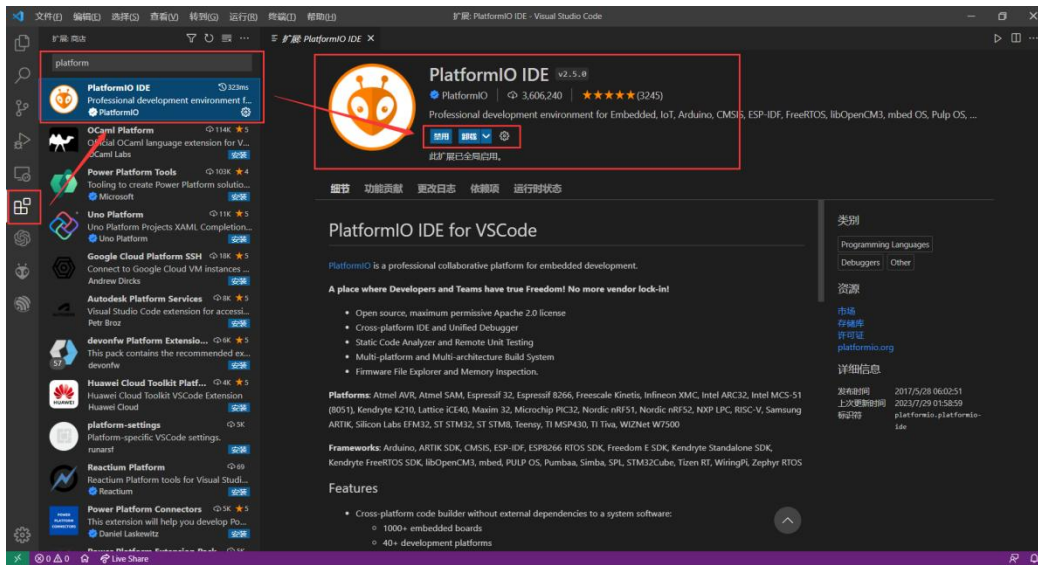
Take the WZ8048C070 as an example

Before proceeding with this tutorial, install Git: git-scm.com

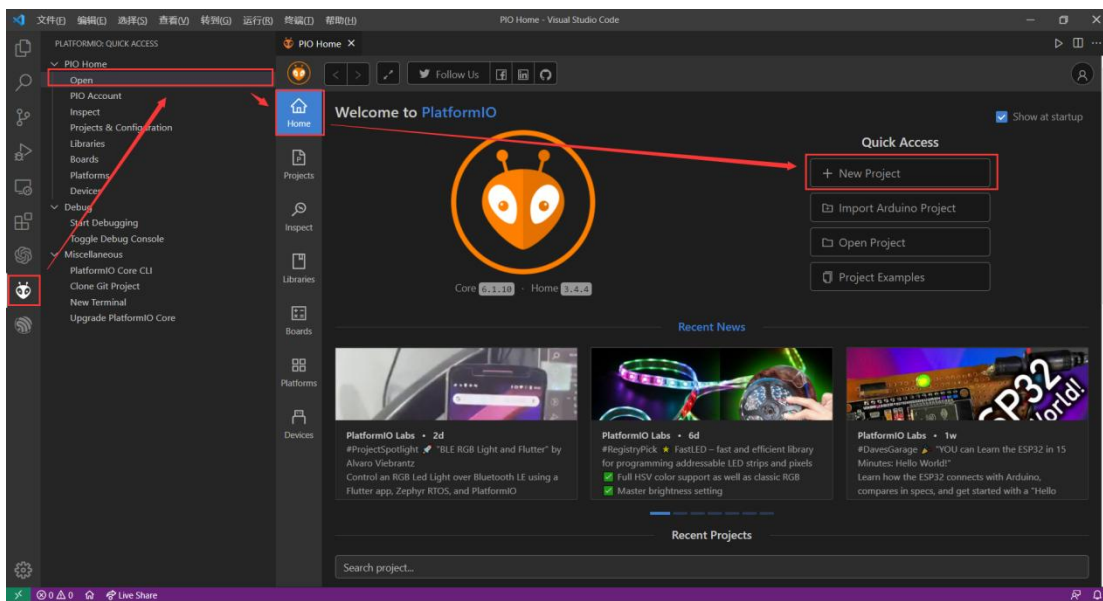
First open the VSCode to check if the python is installed

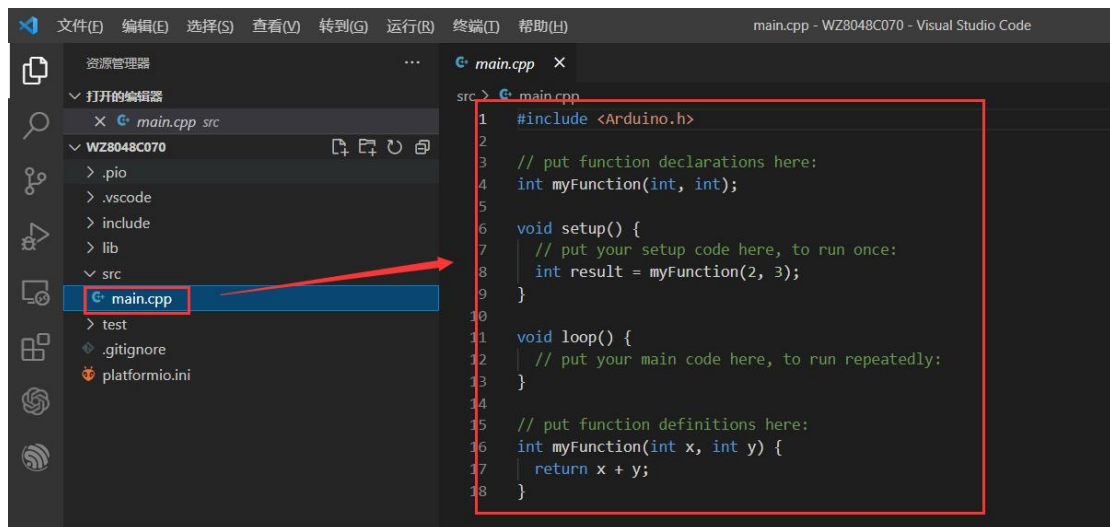
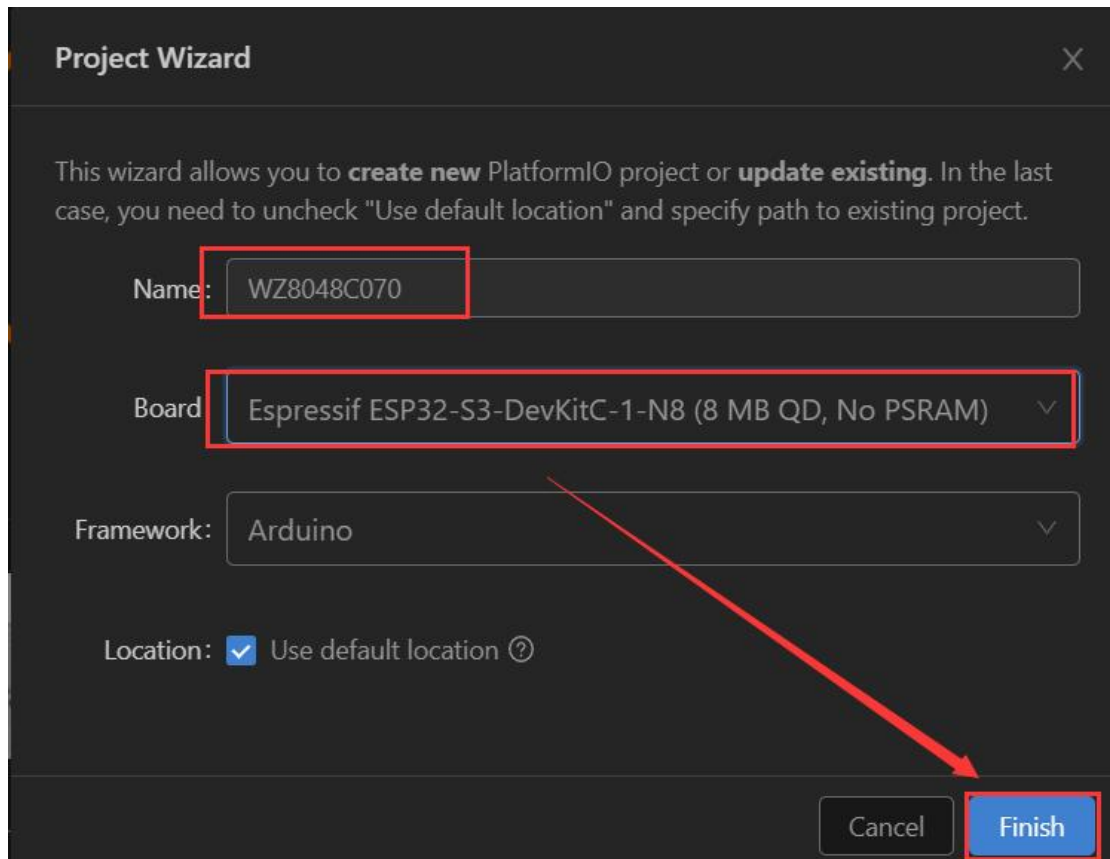


Open the VSCode to download the PlatformIO



Create new projects (Note: PlatformIO does not support Spaces and special characters in file paths)





First, place the following picture file into the project directory

本地磁盘 (C:) > 用户 > 3 > 文档 > PlatformIO > Projects > WZ8048C070

名称	修改日期	类型	大小
.pio	2023/9/8 16:38	文件夹	
.vscode	2023/9/8 16:38	文件夹	
include	2023/9/8 16:38	文件夹	
lib	2023/9/8 16:38	文件夹	
src	2023/9/8 16:38	文件夹	
test	2023/9/8 16:38	文件夹	
.qtiqignore	2023/9/8 16:38	文本文档	1 KB
esp32-s3-devkitc-1-myboard.json	2023/9/8 15:10	JSON 文件	2 KB
huge_app.csv	2023/5/23 16:49	XLS 工作表	1 KB
platformio.ini	2023/9/8 16:38	配置设置	1 KB

Add the following code to the platformio.ini file

```
[platformio]
src_dir = src
boards_dir = .

[env:esp32-s3-devkitc-1-myboard]
platform = espressif32
board = esp32-s3-devkitc-1-myboard
framework = arduino
platform_packages = framework-arduinospressif32 @
https://github.com/espressif/arduino-esp32#2.0.3
; platform_packages = platformio/framework-arduinospressif32@3.20003.220626
build_flags =
; -D USEPLATFORMIO
-D LV_LVGL_H_INCLUDE_SIMPLE
-I./include
lib_deps =
lvgl/lvgl@8.3.6
moononournation/GFX Library for Arduino@1.2.8
tamctec/TAMC_GT911@^1.0.2
; build_src_filter = ${env.build_src_filter}
; +<../.pio/libdeps/esp32-s3-devkitc-1-myboard/lvgl/demos/widgets>
board_build.partitions = huge_app.csv
```

```
platformio.ini
1 ; PlatformIO Project Configuration File
2 ;
3 ; Build options: build flags, source filter
4 ; Upload options: custom upload port, speed and extra flags
5 ; Library options: dependencies, extra library storages
6 ; Advanced options: extra scripting
7 ;
8 ; Please visit documentation for the other options and examples
9 ; https://docs.platformio.org/page/projectconf.html
10
11 [platformio]
12 src_dir = src
13 boards_dir = .
14
15 [env:esp32-s3-devkitc-1-myboard]
16 platform = espressif32
17 board = esp32-s3-devkitc-1-myboard
18 framework = arduino
19 platform_packages = framework-arduinoespressif32 @ https://github.com/espressif/arduino-esp32#2.0.3
20 ; platform_packages = platformio/framework-arduinoespressif32@3.20003.220626
21 build_flags =
22 ; -D USEPLATFORMIO
23 -D LV_LVGL_H_INCLUDE_SIMPLE
24 -I./include
25 lib_deps =
26 lvgl/lvgl@8.3.6
27 moonounation/GFX Library for Arduino@1.2.8
28 tamctec/TAMC_GT911@1.0.2
29 ; build_src_filter = ${env.build_src_filter}
30 ; ++./../pio/libdeps/esp32-s3-devkitc-1-myboard/lvgl/demos/widgets>
31 board_build.partitions = huge_app.csv
```

Download the required library (lvgl、TAMC_GT911、GFX Library for Arduino)

PIO Home x main.cpp 5

Registry Installed Built-in Updates

LVGL

Libraries 19

GFX Library for Arduino by Moon On Our Nation 98,383 36 Arduino

Arduino_GFX is a GFX library for various color displays with various data bus interfaces. Arduino_GFX is a Arduino graphics library. Currently support GC9A01 round display, GC9106, GC9107, HX8347C, HX8347D, HX8352C, HX8357A, HX8357B, HX8369A, ILI6122, ILI9225, ILI9331, ILI9341, ILI9342(M5Stack, ESP32-S3-BOX), ILI9481, ILI9486, ILI9488, ILI9806, JBT6K71, NT35310, NT39125, NV3041A, OTM8009A, R61529, RM67162, SEPS525, SSD1283A, SSD1331, SSD1351, ST7735, ST7789, ST7796 and virtually all Raspberry Pi DPI (RGB) display. Tested RGB display: GC9503V, ILI6485, ST7262, ST7701. Currently support software SPI (8-bit and 9-bit), hardware SPI (8-bit, ESP32 also support 9-bit), 8-bit parallel interface(AVR, ESP32, RPi Pico, RTL8720, STM32), 16-bit parallel interface(ESP32 and RPi Pico) and RGB Panel interface(ESP32S3).

lvgl by LVGL 26,913 64

Graphics library to create embedded GUI with easy-to-use graphical elements, beautiful visual effects and low memory footprint. It offers anti-aliasing, opacity, and animations using only one frame buffer.

Registry Installed Built-in Updates

lvgl by LVGL

Graphics library to create embedded GUI with easy-to-use graphical elements, beautiful visual effects and low memory usage, and animations using only one frame buffer.

Installation

8.3.6 released 3 months ago **Add to Project** | More info

Examples Installation Headers Changelog

lv_example_chart_1

lv_example_chart_1

```
#include "../lv_examples.h"
#if LV_USE_CHART && LV_BUILD_EXAMPLES

void lv_example_chart_1(void)
{
    /*Create a chart*/
    lv_obj_t * chart;
    chart = lv_chart_create(lv_scr_act());
```

Add project dependency

lvgl/lvgl@8.3.6

Projects\WZ8048C070

You can manage your projects in the "Projects" section: create a new or add existing.

Information

- > Registry and Specification
- > External resources

Cancel **Add**

Congrats!
Resolving esp32-s3-devkitc-1-myboard dependencies... Installing lvgl/lvgl @ 8.3.6
Unpacking 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% lvgl@8.3.6 has been installed!

lvgl by LVGL
Graphics library to create embedded GUI with easy-to-use graphical elements, beautiful visual effects, opacity, and animations using only one frame buffer.

Installation
8.3.6 released 3 months ago [Add to Project](#) | [More info](#)

Examples | [Installation](#) | [Headers](#) | [Changelog](#)

lv_example_chart_1

```
#include "../lv_examples.h"
#if LV_USE_CHART && LV_BUILD_EXAMPLES

void lv_example_chart_1(void)
{
    /*Create a chart*/
    lv_obj_t * chart;
    chart = lv_chart_create(lv_scr_act());
    lv_obj_set_size(chart, 200, 150);
    lv_obj_center(chart);
    lv_chart_set_type(chart, LV_CHART_TYPE_LINE); /*Show lines and points too*/

    /*Add two data series*/

```

Tags
graphics, gui, embedded, tft, lvgl

Platforms
Aceinna IMU, Infineon XMC, Kendryte K210, Nuclei, Atmel AVR, Atmel SAM, Espressif 8266, Freescale Kinetis, Intel ARC32, Linux ARM, Linux i686, Linux x86_64, Native, Windows x86, Microchip PIC32, Nordic nRF51, NXP LPC, Silicon Labs EFM32

GT911

tft display, dht, header:RH_ASK.h, keyword:mqtt, framework:mbed, platform:espressif8266, more...

Libraries 10

LovyanGFX by lovyano3
↓ 11,965 | 29 | Arduino, ESP8266 Non-OS SDK, ESP8266 RTOS SDK, Zephyr RTOS, Espidf
TFT LCD Graphics driver with touch for ESP32, ESP8266, SAMD21, SAMD51, RP2040
lcd, tft, fx, lgfx, esp32, esp8266, samd21, samd51, m5stack, m5stackcore2, m5stickc, m5stickcplus, odroid-go, ttgo t-watch, ttgo t-wristband, esp-wrover-kit, wioterminal, wifiboy, makepython, hx8357
Atmel SAM, Espressif 8266, Native, Espressif 32

TAMC_GT911 by TAMC
↓ 671 | 1 | Arduino
Arduino library for GT911. Arduino library for GT911 Touch Panel
display
Espressif 32

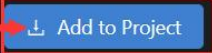
Registry Installed Built-in Updates

TAMC_GT911

by TAMC

Arduino library for GT911. Arduino library for GT911 Touch Panel

Installation

1.0.2 released 2 years ago  [More info](#)

Examples Installation Headers Changelog

TouchPrint

TouchPrint

```
#include "TAMC_GT911.h"

#define TOUCH_SDA 4
#define TOUCH_SCL 5
#define TOUCH_INT 25
#define TOUCH_RST 26
#define TOUCH_WIDTH 320
#define TOUCH_HEIGHT 240

TAMC_GT911 tp = TAMC_GT911(TOUCH_SDA, TOUCH_SCL, TOUCH_INT, TOUCH_RST, TOUCH_WIDTH, TOUCH_HEIGHT);

void setup() {
```

Add project dependency


tamctec/TAMC_GT911@^1.0.2

Projects\WZ8048C070

You can manage your projects in the "Projects" section: create a new or add existing.

Information

- > Registry and Specification
- > External resources

Cancel 

TAMC_GT911 by TAMC
Arduino library for GT911. Arduino library for GT911 Touch Panel

Installation: 1.0.2 (released 2 years ago) [Add to Project](#) | [More info](#)

Tags: display

Platforms: Espressif 32

Frameworks: Arduino

Authors: TAMC (maintainer)

```
#include "TAMC_GT911.h"

#define TOUCH_SDA 4
#define TOUCH_SCL 5
#define TOUCH_INT 25
#define TOUCH_RST 26
```

Search:

Libraries (133)

Adafruit GFX Library by Adafruit (251,629) [Arduino](#)
Adafruit GFX graphics core library, this is the 'core' class that all our other graphics libraries derive from. Install this library in addition to the display library for your hardware.
Tags: display
Platforms: Infineon XMC, Kendryte K210, Atmel AVR, Atmel SAM, Espressif 8266, Intel ARC32, Microchip PIC32, Nordic nRF51, ST STM32, Teensy, TI MSP430, TI TIVA, Espressif 32, Nordic nRF52, ST STM8, Atmel megaAVR, Logic Green boards, Logicrom Development Platform, Raspberry Pi RP2040, K1921VK, TI MSP432, Heltec CubeCell, LibreTiny, Renesas RA

Adafruit SSD1306 by Adafruit (152,824) [Arduino](#)
SSD1306 oled driver library for monochrome 128x64 and 128x32 displays
Tags: display
Platforms: Infineon XMC, Kendryte K210, Atmel AVR, Atmel SAM, Espressif 8266, Intel ARC32, Microchip PIC32, Nordic nRF51, ST STM32, Teensy, TI MSP430, TI TIVA, Espressif 32, Nordic nRF52, ST STM8, Atmel megaAVR, Logic Green boards, Logicrom Development Platform, Raspberry Pi RP2040, K1921VK, TI MSP432, Heltec CubeCell, LibreTiny, Renesas RA

GFX Library for Arduino by Moon On Our Nation (98,399) [Arduino](#)
Arduino_GFX is a GFX library for various color displays with various data bus interfaces. Arduino_GFX is a Arduino graphics library. Currently support GC9A01 round display, GC9106, GC9107, HX8347C, HX8347D, HX8352C, HX8357A, HX8357B, HX8369A, ILI6122, ILI9225, ILI9331, ILI9341, ILI9342(M5Stack, ESP32-S3-BOX), ILI9481,

Registry Installed Built-in Updates

GFX Library for Arduino

by Moon On Our Nation

Arduino_GFX is a GFX library for various color displays with various data bus interfaces. Arduino_GFX is a Arduino graph round display, GC9106, GC9107, HX8347C, HX8347D, HX8352C, HX8357A, HX8357B, HX8369A, ILI6122, ILI9225, ILI93S3-BOX), ILI9481, ILI9486, ILI9488, ILI9806, JBT6K71, NT35310, NT35510, NT39125, NV3041A, OTM8009A, R61529, RMSSD1331, SSD1351, ST7735, ST7789, ST7796 and virtually all Raspberry Pi DPI (RGB) display. Tested RGB display: GC95. Currently support software SPI (8-bit and 9-bit), hardware SPI (8-bit, ESP32 also support 9-bit), 8-bit parallel interface(STM32), 16-bit parallel interface(ESP32 and RPI Pico) and RGB Panel interface(ESP32S3).

Installation

1.2.8 released 11 months ago **Add to Project** | More info

Examples Installation Headers Changelog

U8g2FontUTF8Chinese

U8g2FontUTF8Chinese

```
/*  
 * U8g2 Chinese font example  
 * Please note this font is 1,024,137 in size and cannot fit in many platform.  
 * This font is generated by U8g2 tools:  
 * u8g2/tools/font/bdfconv/bdfconv -v -f 1 -b 1 -m "32-127,11904-12351,19968-40959,63744-64255,65280-65376" u  
 */
```

Add project dependency

moononouration/GFX Library for Arduino@1.2.8

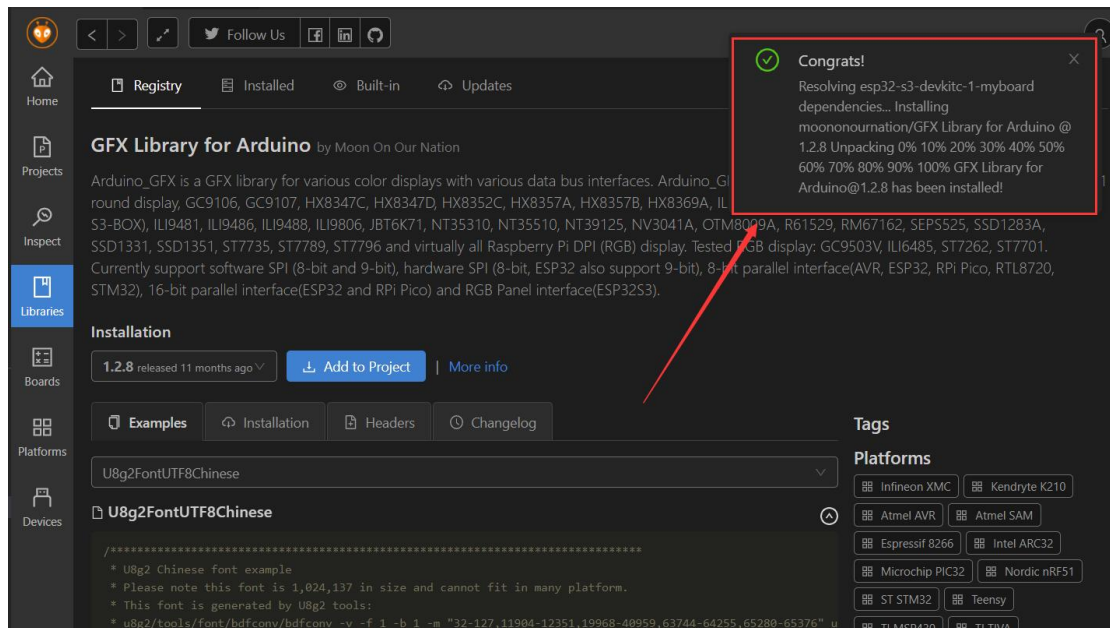
Projects\WZ8048C070

You can manage your projects in the "Projects" section: create a new or add existing.

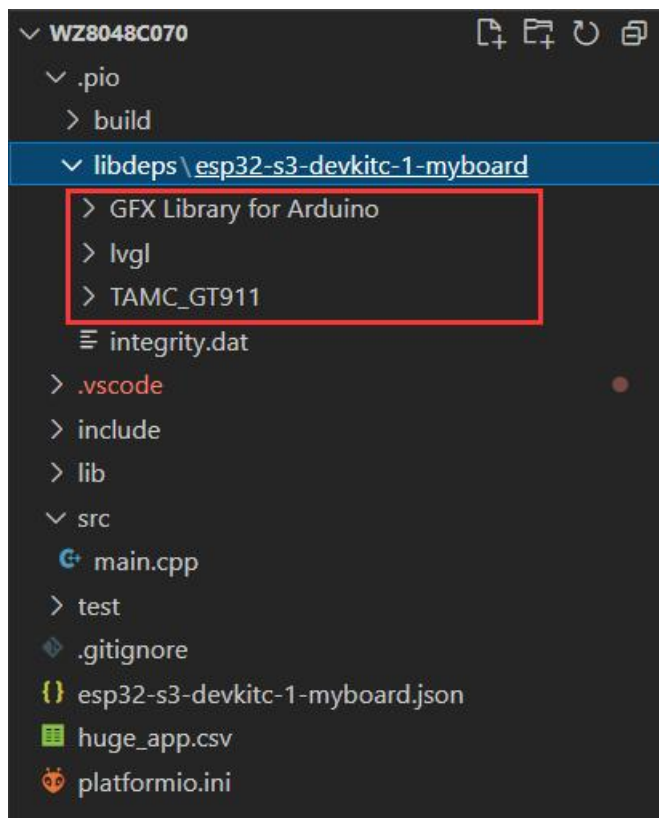
Information

- > Registry and Specification
- > External resources

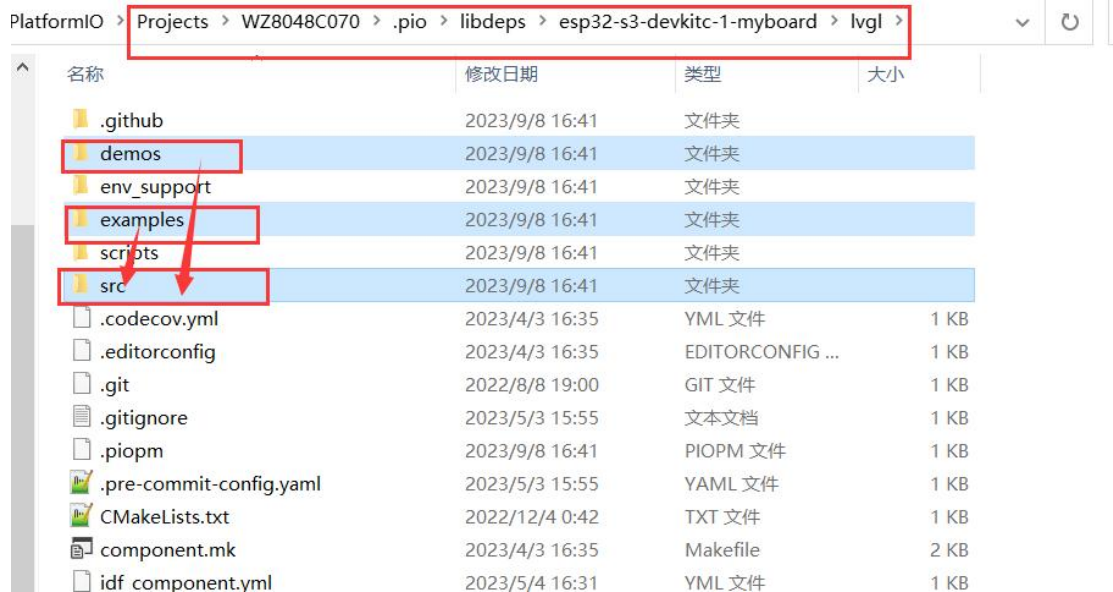
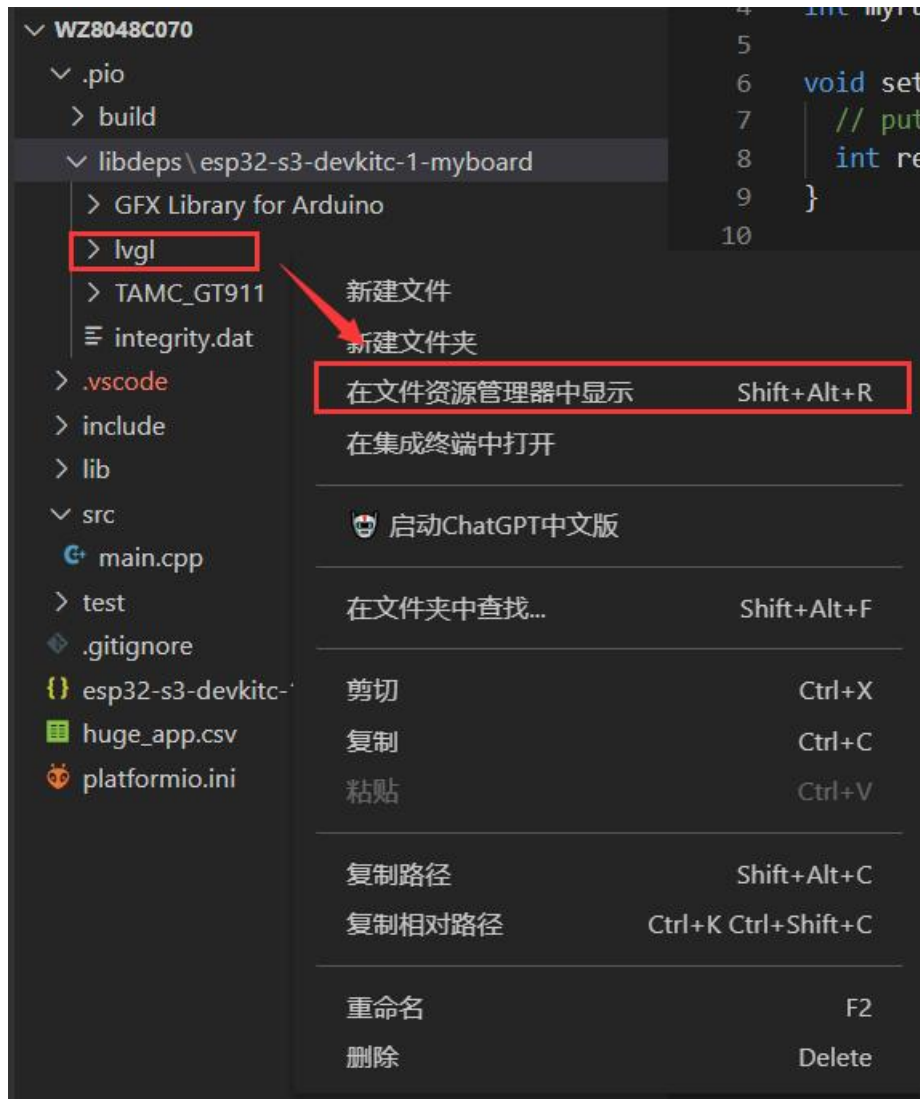
Cancel **Add**



We can see that the library has been added successfully!



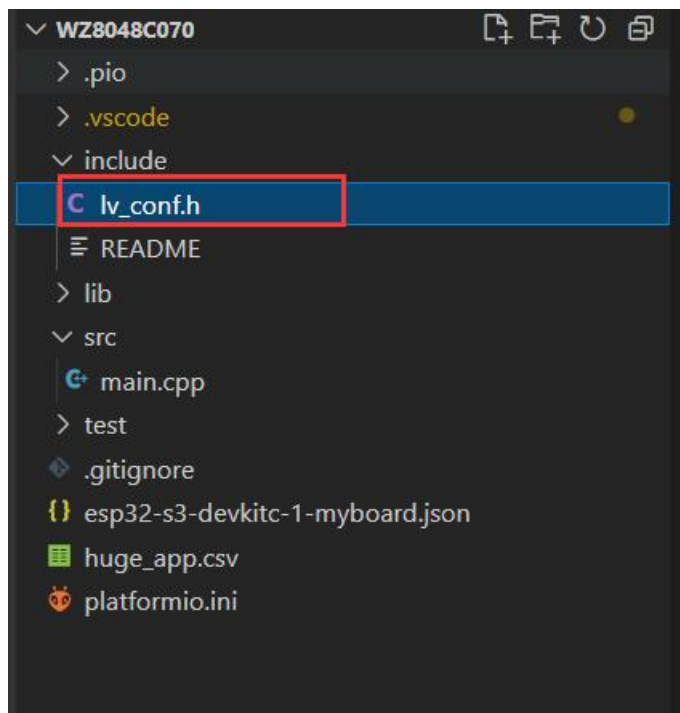
Next, we want to configure the lvgl library, right-click to open the folder directory, and put the demo and examples folders into the src folder!



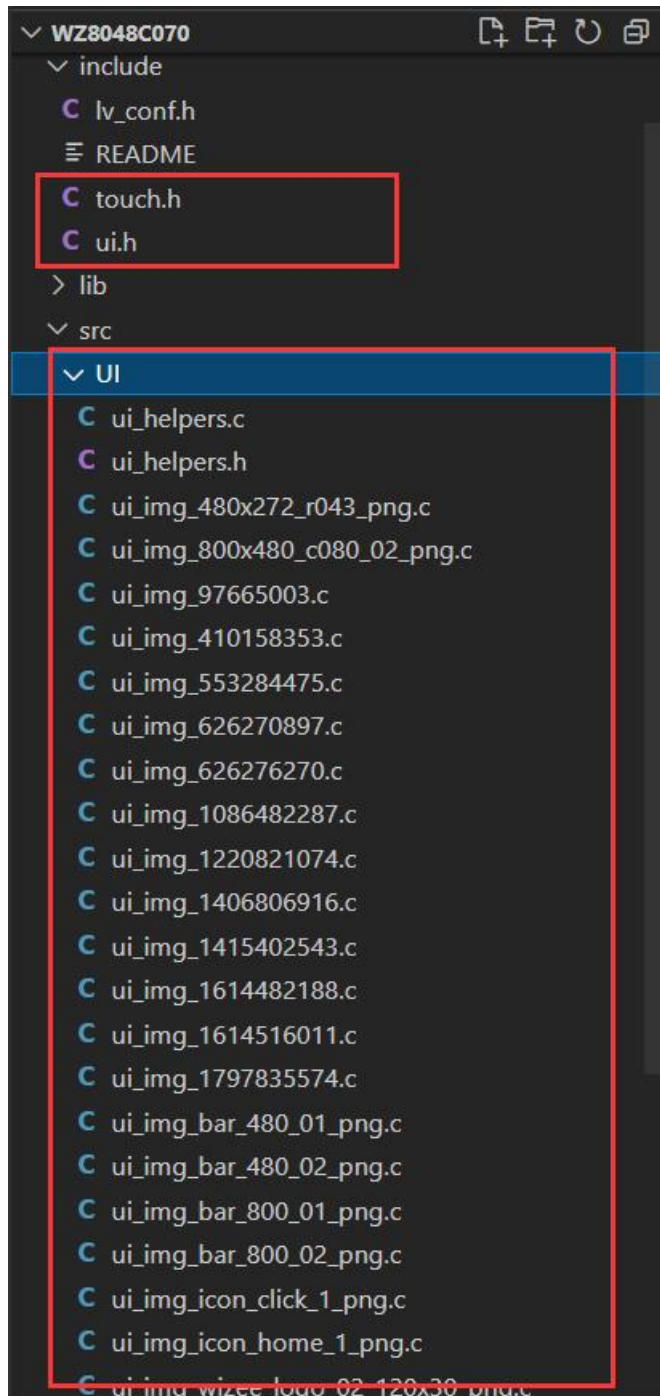
rojects > WZ8048C070 > .pio > libdeps > esp32-s3-devkitc-1-myboard > lvgl > src >

名称	修改日期	类型	大小
core	2023/9/8 16:41	文件夹	
demos	2023/9/8 16:57	文件夹	
draw	2023/9/8 16:41	文件夹	
examples	2023/9/8 16:57	文件夹	
extra	2023/9/8 16:41	文件夹	
font	2023/9/8 16:41	文件夹	
hal	2023/9/8 16:41	文件夹	
misc	2023/9/8 16:41	文件夹	
widgets	2023/9/8 16:41	文件夹	
lv_api_map.h	2023/4/3 16:35	H 文件	2 KB
lv_conf_internal.h	2023/5/4 16:32	H 文件	74 KB
lv_conf_kconfig.h	2023/5/3 15:55	H 文件	7 KB
lvgl.h	2023/4/3 16:35	H 文件	1 KB

Place the lv_conf.h file under the /include directory

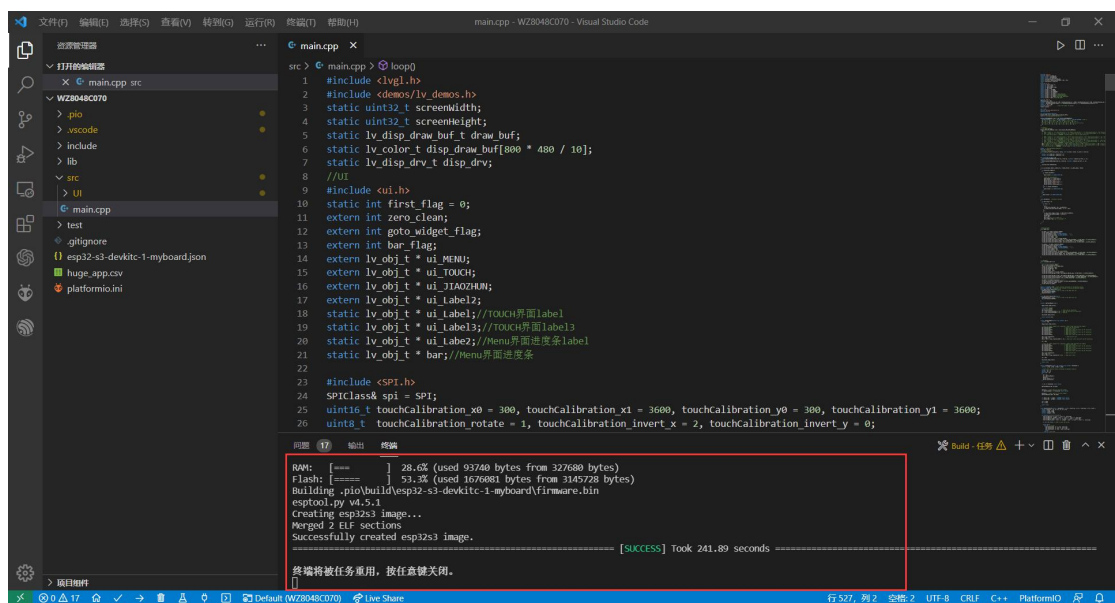
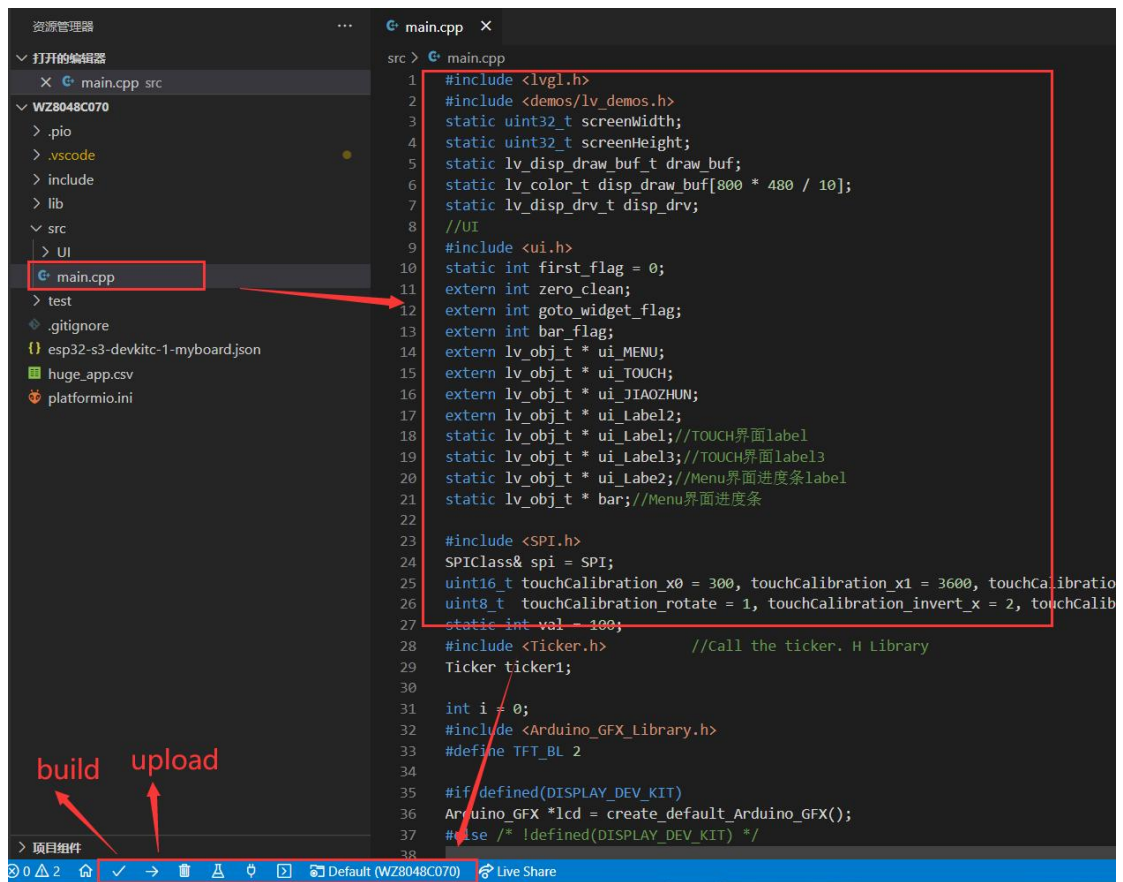


Next, let's configure our own UI files (the UI files are generated from the SquareLine Studio)



In the UI folder that will be generated. The c file is placed in the /src folder, and in the generated UI folder. Place the h file in the /include folder

At this time, we will complete all the configuration, write the code and start compiling the program



Next we began to burn the program, finished!

