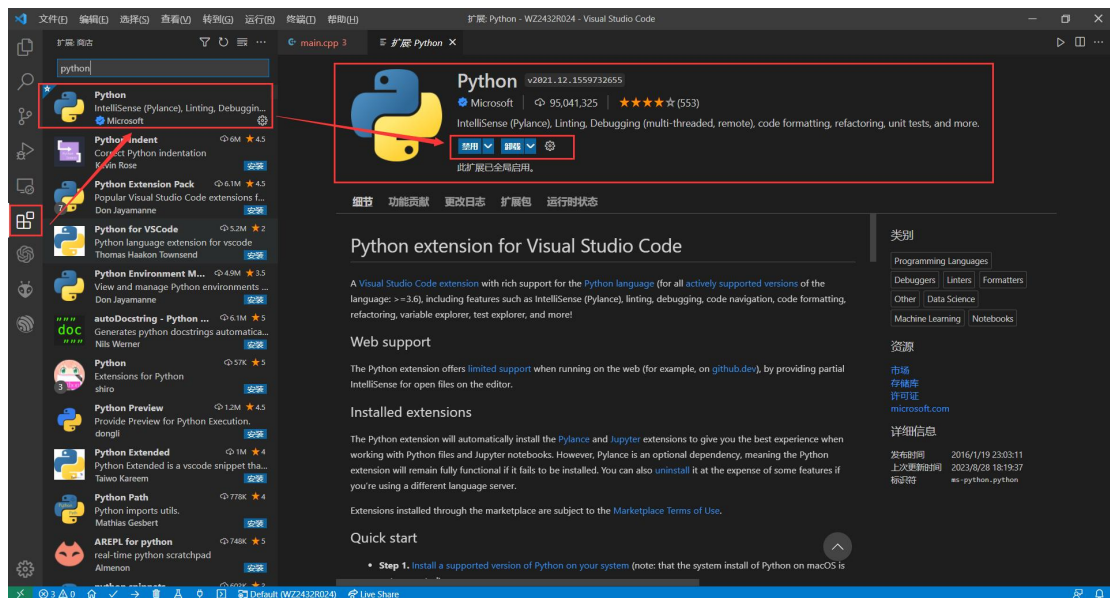


PlatformIO

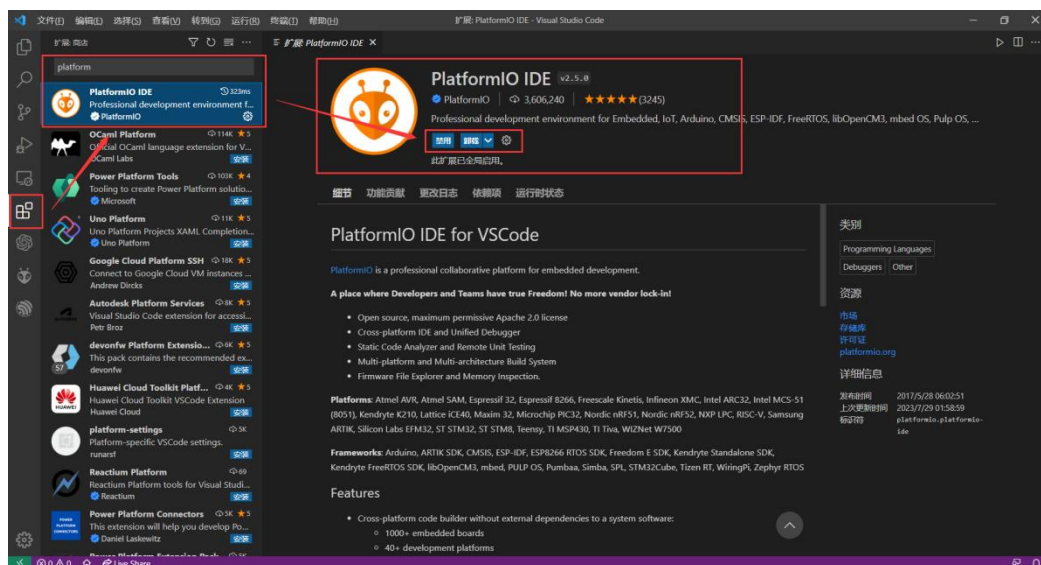
WZ8048C050

Take the WZ4827R043 as an example

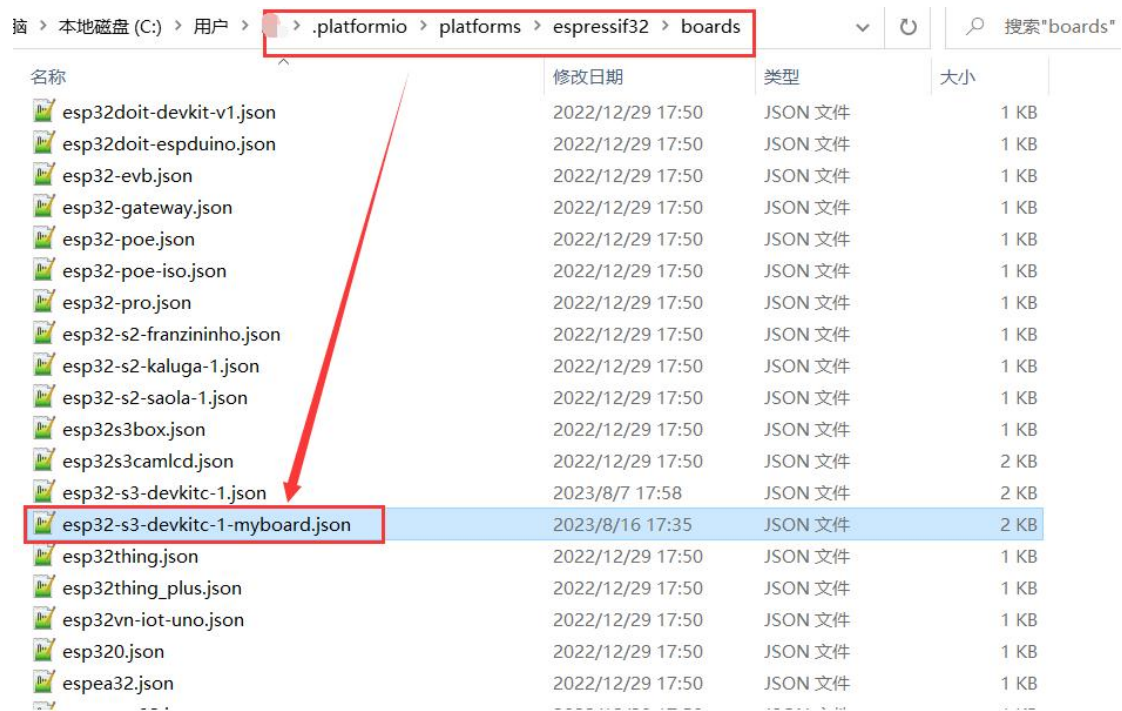
First open the VScode to check if the python is installed



Open the VScode to download the PlatformIO

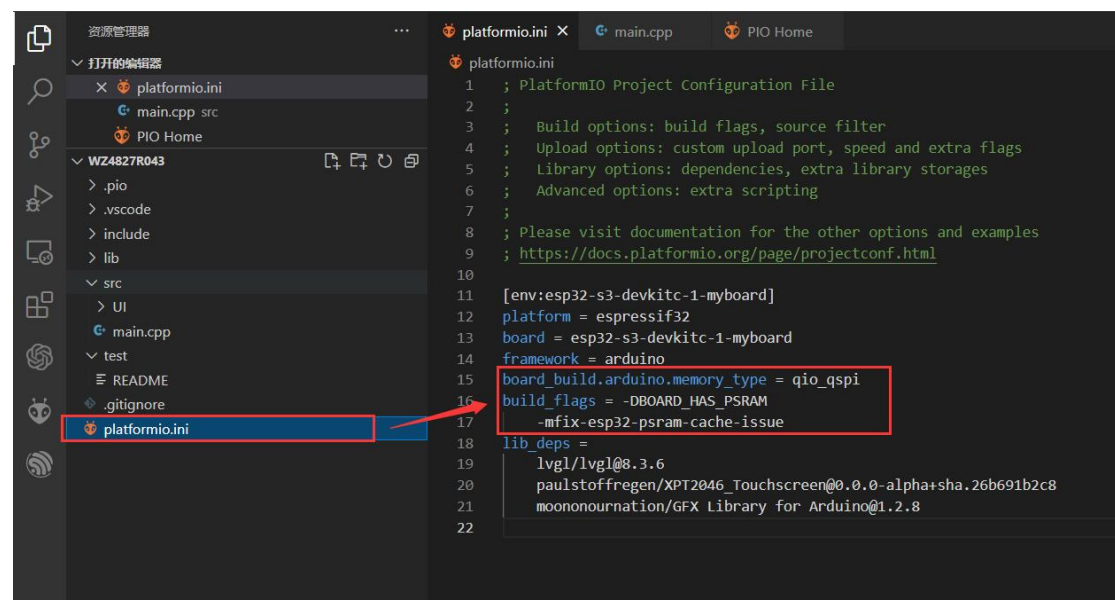


First, add the custom board to the directory in the figure below

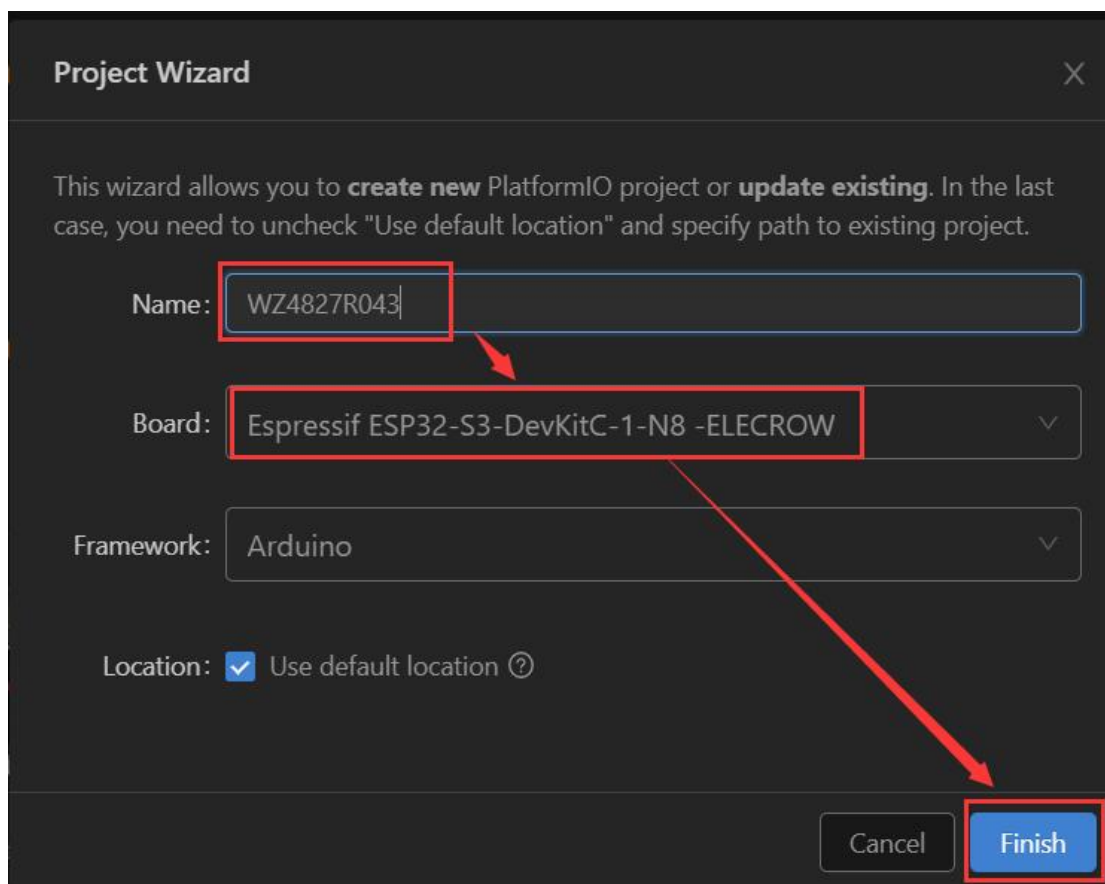
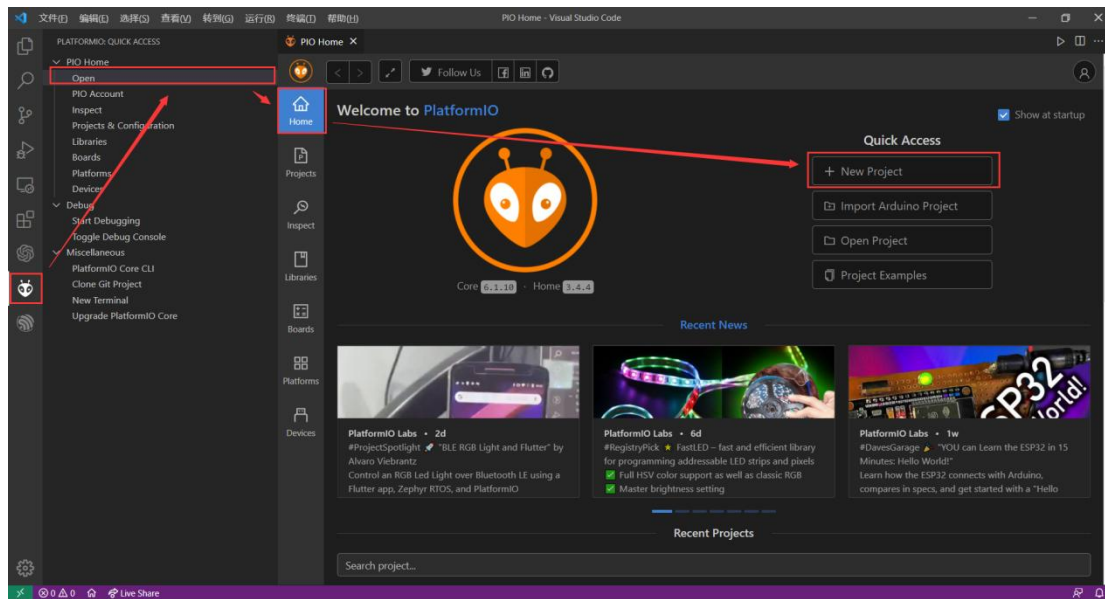


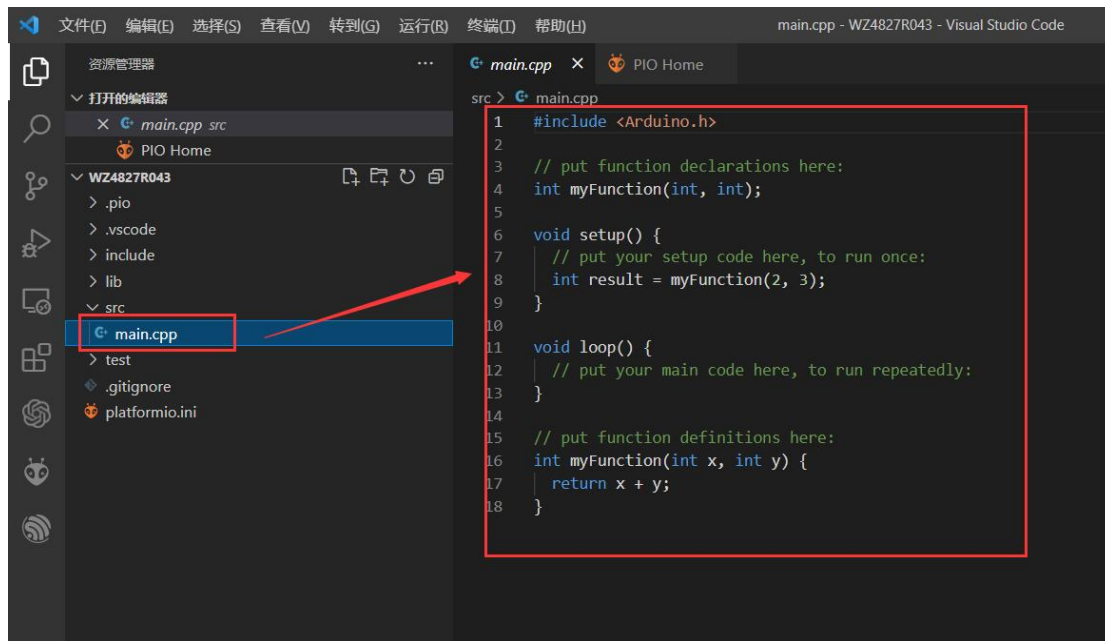
Add the following code to the platformio.ini file

```
board_build.arduino.memory_type = qio_qspi
build_flags = -DBOARD_HAS_PSRAM
-mfix-esp32-psram-cache-issue
```

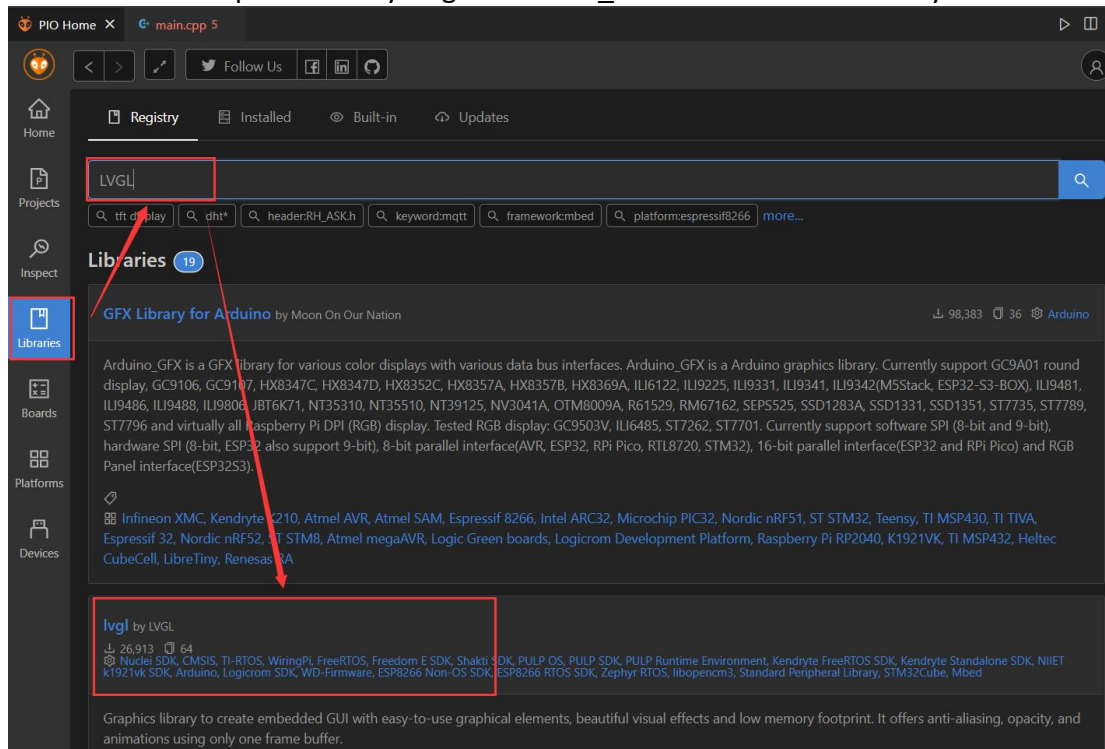


Create new projects





Download the required library (lvgl、XPT2046_Touchscreen、GFX Library for Arduino)



lvgl by LVGL

Graphics library to create embedded GUI with easy-to-use graphical elements, beautiful visual effects and low memory footprint, 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\WZ4827R043

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

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- > Registry and Specification
- > External resources

Cancel **Add**

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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.

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());
    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

Freescall Kinetis

Intel ARC32

Linux ARM

Linux i686

Linux x86_64

Native

Windows x86

Microchip PIC32

Nordic nRF51

NXP LPC

Silicon Labs EFM32

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!

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XPT2046

tft display

dh1*

header-RH-ASK.h

keyword.mqtt

framework.mbed

platform.espressif8266

more...

Libraries

27

TFT_eSPI by Bodmer

80,577

152

Arduino

A TFT and ePaper (SPI or parallel interface) graphics library with optimisation for Raspberry Pi Pico, RP2040, ESP8266, ESP32 and STM32 processors

arduino, tft, display, ttgo, ili9341, epaper, pico, rp2040 nano connect, rp2040, stm32, esp8266, nodemcu, esp32, m5stack, ili9341, st7735, ili9163, s6d02a1, ili9481

Espressif 8266, ST STM32, Espressif 32, Raspberry Pi RP2040

LovyanGFX by lovyan03

11,756

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, gfx, lgfx, esp32, esp8266, samd21, samd51, m5stack, m5stackcore2, m5stickc, m5stickcplus, odroid-go, ttgo t-watch, ttgo t-wristband, esp-wrover-kit, wioterminal, wifiboy, nakepython, hx8357

Atmel SAM, Espressif 8266, Native, Espressif 32

XPT2046_Touchscreen by Paul Stoffregen

4,475

3

Arduino

Registry Installed Built-in Updates

XPT2046_Touchscreen by Paul Stoffregen

Touchscreens using the XPT2046 controller chip. Many very low cost color TFT displays with touch screens have this chip.

Installation

0.0.0-alpha+sha.26b691b2c8 released 4 years ago [Add to Project](#) [More info](#)

Examples Installation Headers Changelog

ILI9341Test

ILI9341Test

```
#include <ILI9341_t3.h>
#include <font_Arial.h> // from ILI9341_t3
#include <XPT2046_Touchscreen.h>
#include <SPI.h>

#define CS_PIN 8
#define TFT_DC 9
#define TFT_CS 10
// MOSI=11, MISO=12, SCK=13

XPT2046_Touchscreen ts(CS_PIN);
#define TIRQ_PIN 2
//XPT2046_Touchscreen ts(CS_PIN); // Param 2 - NULL - No interrupts
//XPT2046_Touchscreen ts(CS_PIN, 255); // Param 3 - 255 - No interrupts
```

Add project dependency

paulstoffsregen/XPT2046_Touchscreen

Projects\WZ4827R043

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XPT2046_Touchscreen by Paul Stoffregen

Touchscreens using the XPT2046 controller chip. Many very low cost color TFT displays with touch

Installation

0.0.0-alpha+sha.26b691b2c8 released 4 years ago

Add to ProjectMore info

ExamplesInstallationHeadersChangelog

ILI9341Test

```
#include <ILI9341_t3.h>
#include <font_Arial.h> // from ILI9341_t3
#include <XPT2046_Touchscreen.h>
#include <SPI.h>

#define CS_PIN 8
#define TFT_DC 9
#define TFT_CS 10
// MOSI=11, MISO=12, SCK=13

XPT2046_Touchscreen ts(CS_PIN);
#define TTRO_PIN 2
```

Tags

displaytftlcdgraphicsspitouchscreen

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

Congrats!

Resolving esp32-s3-devkitc-1-myboard dependencies... Installing paulstoffregen/XPT2046_Touchscreen

Unpacking 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

XPT2046_Touchscreen@0.0.0-alpha+sha.26b691b2c8 has been installed!

GFX Library

tft displaydht*header:RH_ASK.hkeyword:mqttframework:mbedplatform:espressif8266more...

Libraries 133

Adafruit GFX Library by Adafruit

251,6292Arduino

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.

display

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, Logicroom Development Platform, Raspberry Pi RP2040, K1921VK, TI MSP432, Heltec CubeCell, LibreTiny, Renesas RA

Adafruit SSD1306 by Adafruit

152,8245Arduino

SSD1306 oled driver library for monochrome 128x64 and 128x32 displays

display

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, Logicroom Development Platform, Raspberry Pi RP2040, K1921VK, TI MSP432, Heltec CubeCell, LibreTiny, Renesas RA

GFX Library for Arduino by Moon On Our Nation

98,39936Arduino

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, RM SSD1331, 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

moononounation/GFX Library for Arduino@1.2.8

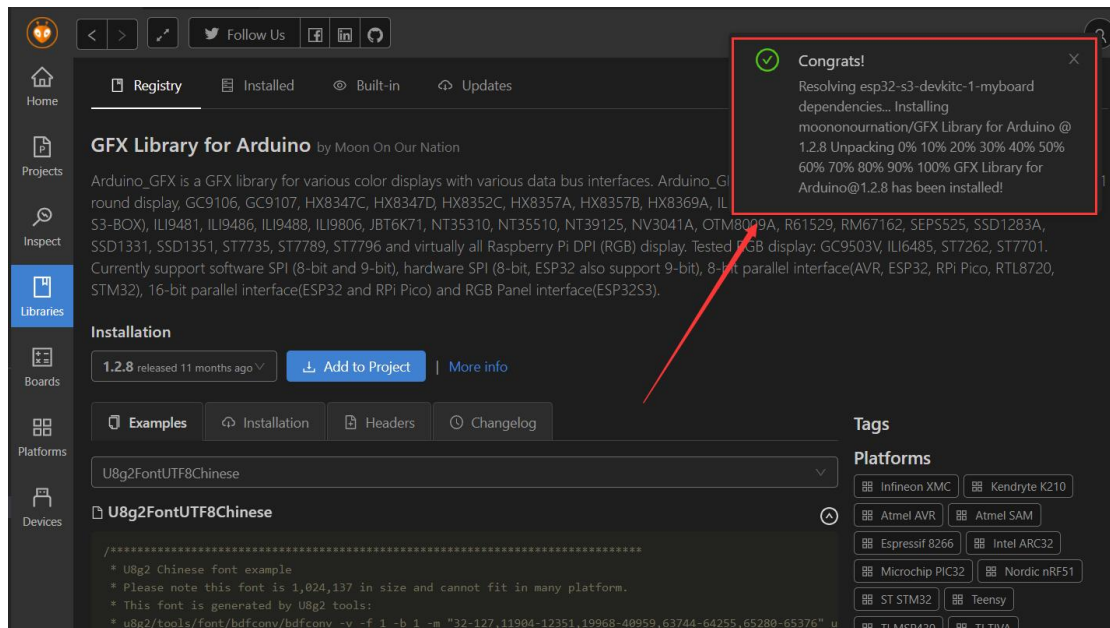
Projects\WZ4827R043

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

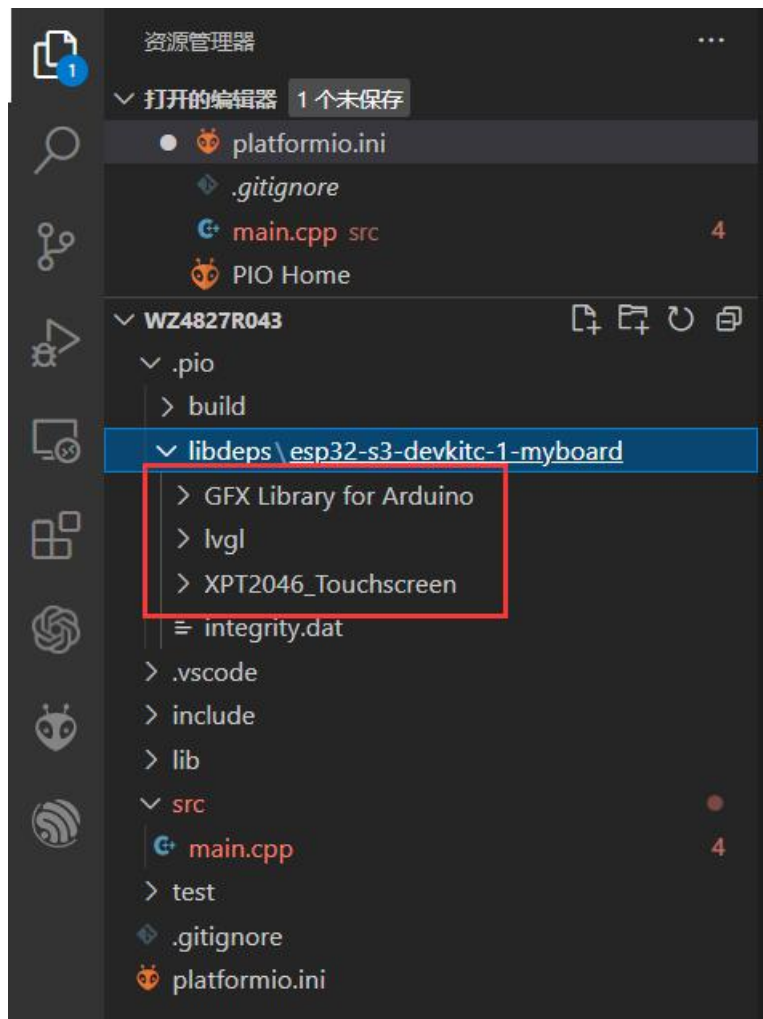
Information

- > Registry and Specification
- > External resources

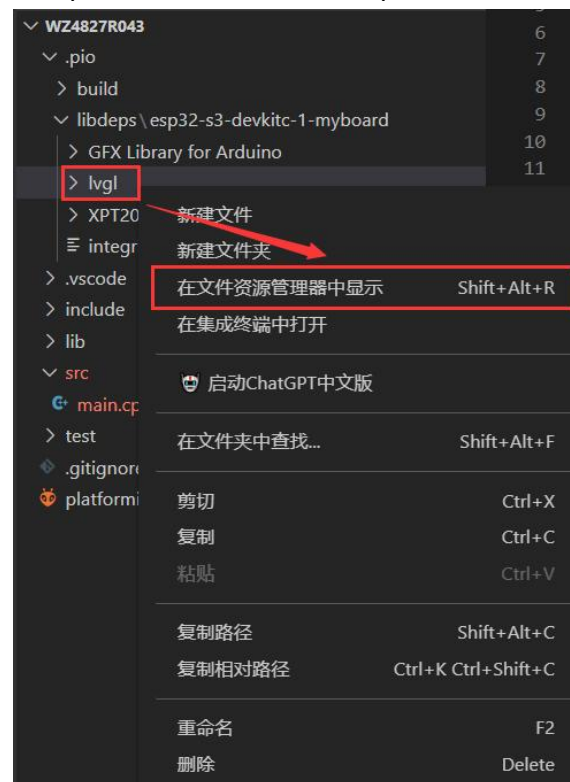
Cancel **Add**



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!



Projects > WZ4827R043 > .pio > libdeps > esp32-s3-devkitc-1-myboard > lvgl

名称	修改日期	类型	大小
.github	2023/8/29 16:54	文件夹	
demos	2023/8/29 16:54	文件夹	
env_support	2023/8/29 16:54	文件夹	
examples	2023/8/29 16:55	文件夹	
scripts	2023/8/29 16:55	文件夹	
src	2023/8/29 16:55	文件夹	
.codecov.yml	2023/4/3 16:35	YML 文件	1 KB
.editorconfig	2023/4/3 16:35	EDITORCONFIG ...	1 KB
.git	2022/8/8 19:00	GIT 文件	1 KB
.gitignore	2023/5/3 15:55	文本文档	1 KB
.pio	2023/8/29 16:55	PIOPM 文件	1 KB
.pre-commit-config.yaml	2023/5/3 15:55	YAML 文件	1 KB
CMakeLists.txt	2022/12/4 0:42	TXT 文件	1 KB
component.mk	2023/4/3 16:35	Makefile	2 KB
idf_component.yml	2023/5/4 16:31	YML 文件	1 KB
Kconfig	2023/5/3 15:55	文件	42 KB
library.json	2023/5/4 16:32	JSON 文件	1 KB
library.properties	2023/5/4 16:32	PROPERTIES 文件	1 KB
LICENCE.txt	2022/12/4 0:42	TXT 文件	2 KB

Projects > WZ4827R043 > .pio > libdeps > esp32-s3-devkitc-1-myboard > lvgl > src

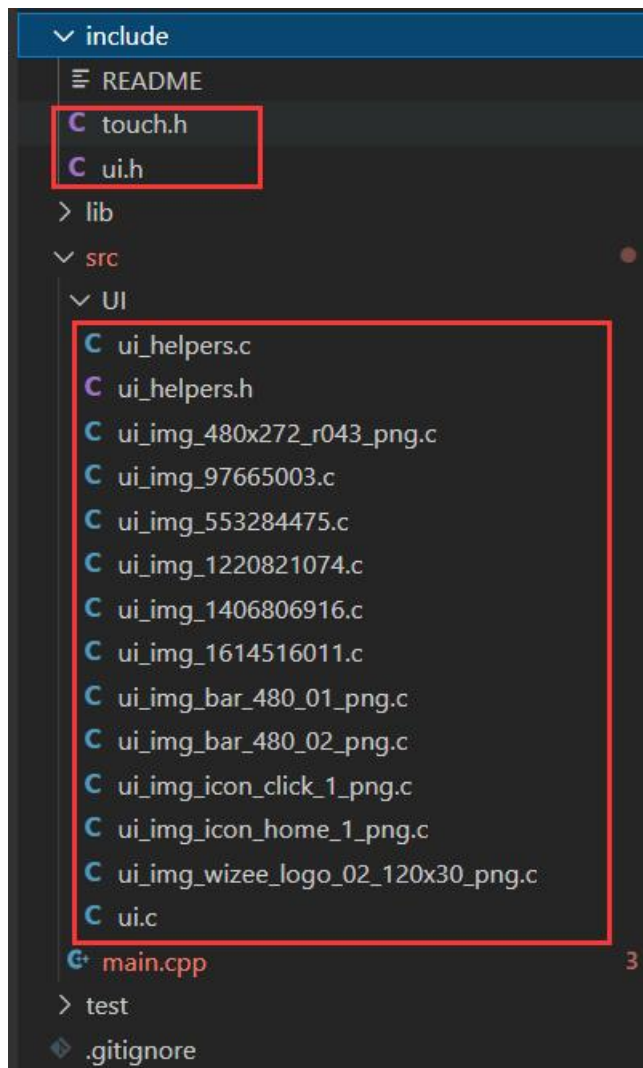
名称	修改日期	类型	大小
core	2023/8/29 16:55	文件夹	
demos	2023/8/29 17:03	文件夹	
draw	2023/8/29 16:55	文件夹	
examples	2023/8/29 17:03	文件夹	
extra	2023/8/29 16:55	文件夹	
font	2023/8/29 16:55	文件夹	
hal	2023/8/29 16:55	文件夹	
misc	2023/8/29 16:55	文件夹	
widgets	2023/8/29 16:55	文件夹	
lv_api_map.h	2023/4/3 16:35	H 文件	2 KB
lv_conf_internal.h	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 this directory again

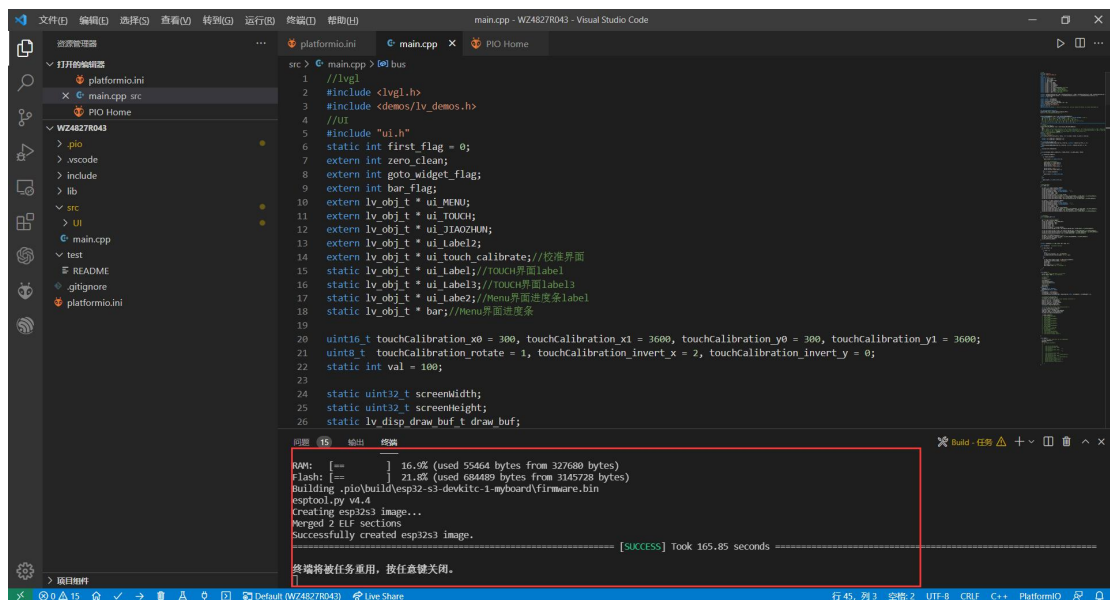
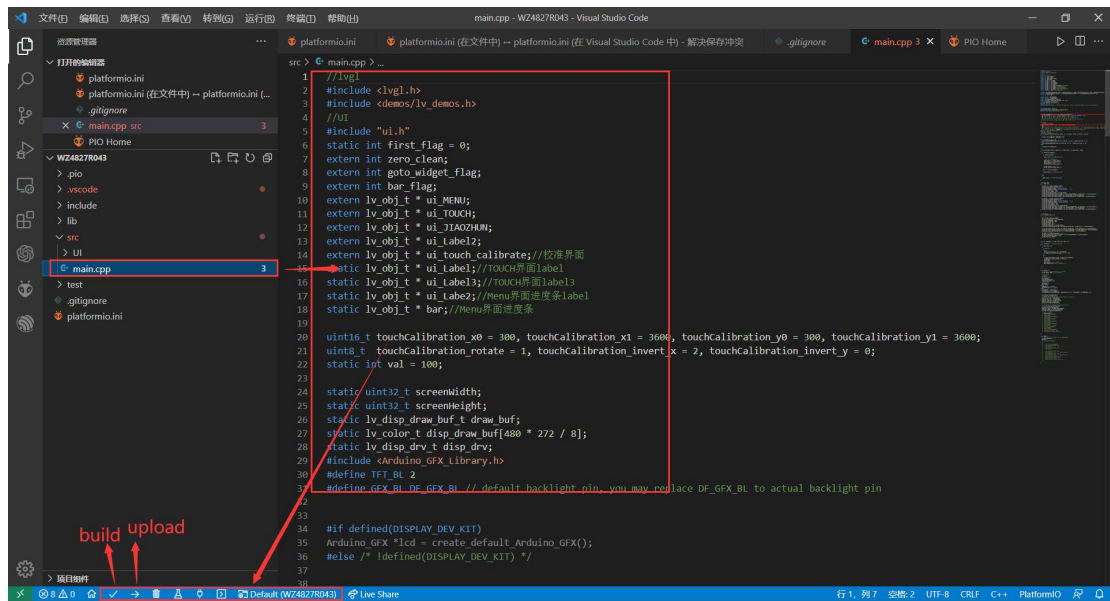
PlatformIO > Projects > WZ4827R043 > .pio > libdeps > esp32-s3-devkitc-1-myboard >

名称	修改日期	类型	大小
GFX Library for Arduino	2023/8/29 16:59	文件夹	
lvgl	2023/8/29 16:55	文件夹	
XPT2046_Touchscreen	2023/8/29 16:57	文件夹	
integrity.dat	2023/8/29 16:59	DAT 文件	1 KB
lv_conf.h	2023/8/25 17:25	H 文件	26 KB

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!

