

ESP32S3 displays double eye expressions on dual circular 240x240 1.8-inch GC9A01 SPI displays

Using ESP32-S3 development board, connect the circular 240x240 1.8-inch GC9A01 SPI display, and use Arduino TFT-E SPI library to realize double eye expression display:

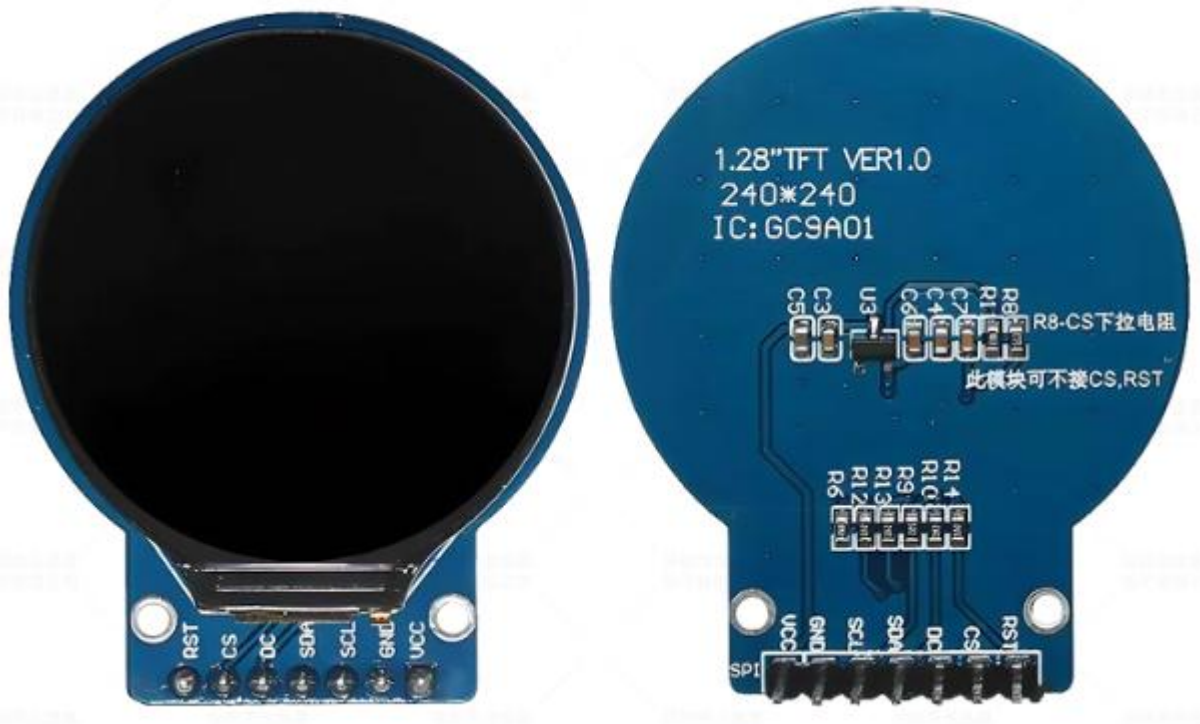


Step

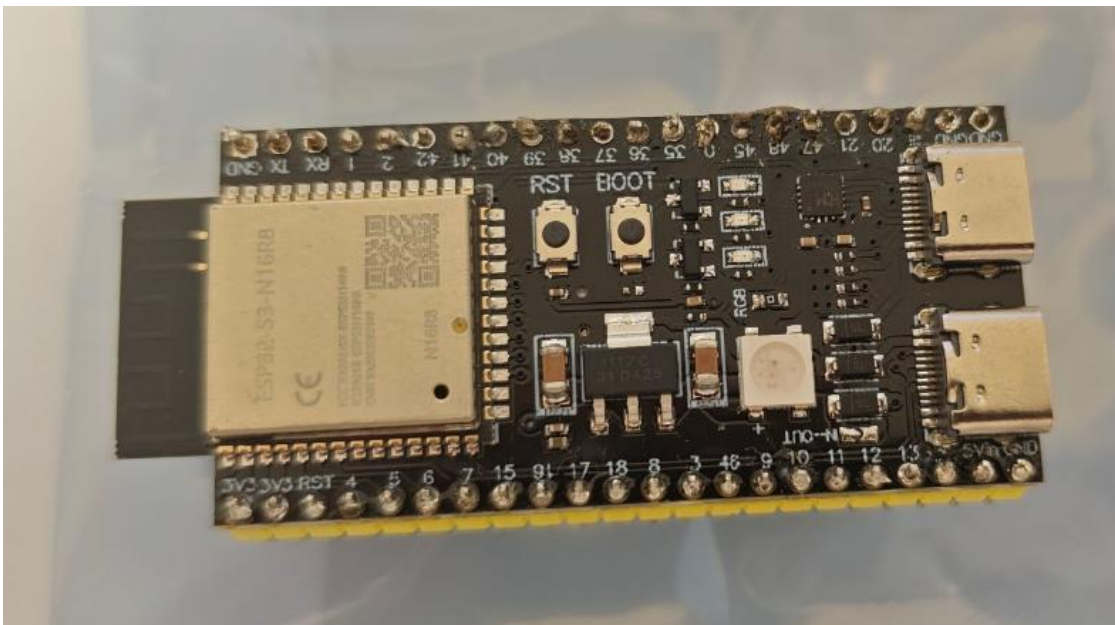
1. Circuit connection

| GC9A01 240x240 1.28 inch display | ESP32-S3-DevKitC-1 N16R8 development board |
|----------------------------------|--|
| VCC | 3V3 |
| GND | GND |
| SCL | 10 |
| SDA | 11 |
| DC | 8 |
| CS | 9 |
| RST | 4 |

GC9A01 240x240 1.28 inch display



ESP32-S3-DevKitC-1 N16R8 development board



2. Install the development environment

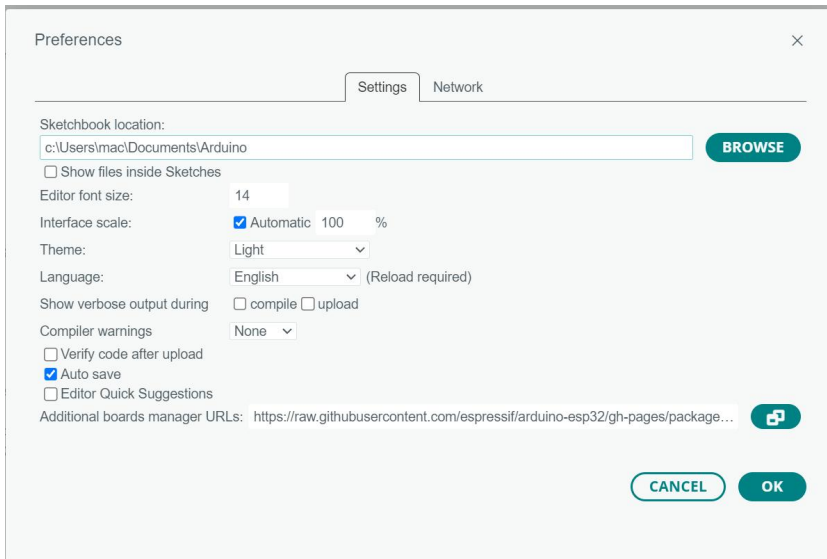
1. Install Aruidno IDE

2. Install Aruidno ESP32 chip pack

(1) Open Arduino IDE, select File-> Options-> Settings.

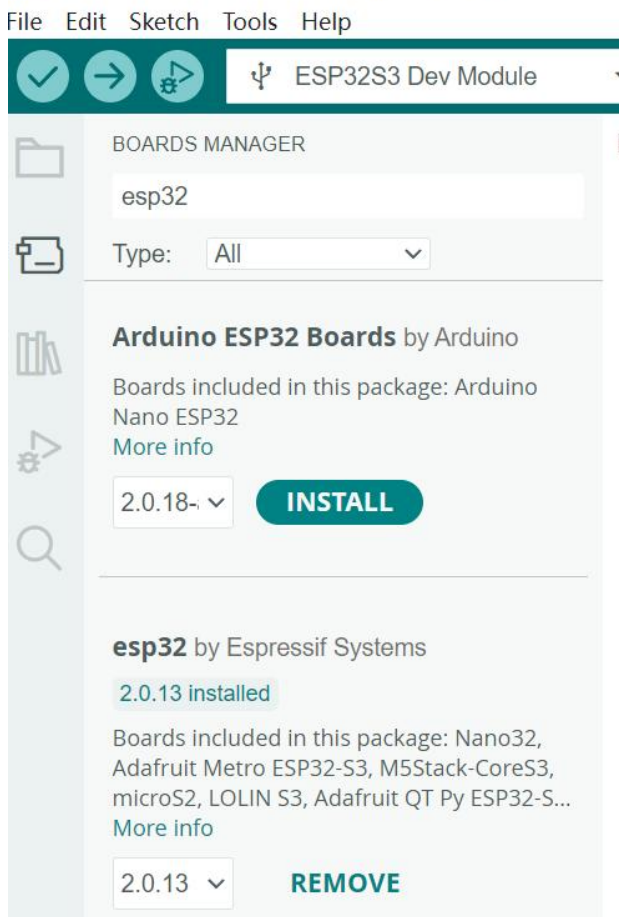
Paste the following link into the address of the development board manager:

https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_dev_index.json



(2) Open the Development Board Manager and search for "esp32". Locate the "ESP32 by Espressif Systems" entry. Select the version (choose 2.0.13 here as it has been tested without issues; higher versions may cause problems). Click Install to proceed with the installation process. Wait until the download and installation are complete. (If installation fails, try clicking Install again.)

ESP32LCDRound240x240Eyes | Arduino IDE 2.3.4



Offline installation

If the download fails and the installation fails, you can install it offline.

Download the package directly:

File shared through the web disk: ESP32 chip package for Arduino

Link: <https://pan.baidu.com/s/1rcNSqkbexJ5-YNmNXmt-dA?pwd=rd5h> Extraction code: rd5h

Select the decompression path. It should be placed in the corresponding user's Arduino device package directory. The following is the installation path for Arduino version:



edit

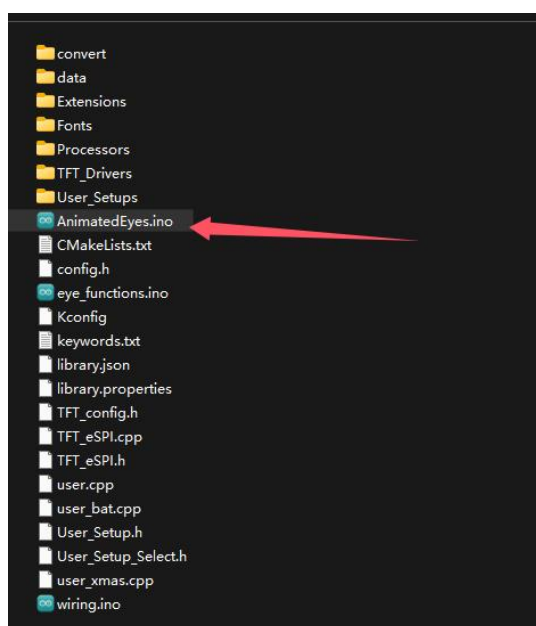
After the decompression to the corresponding folder is completed, close the software, open arduino again, click the development board manager, and you will see that esp32-arduino has been installed.

3. Download the code and compile it

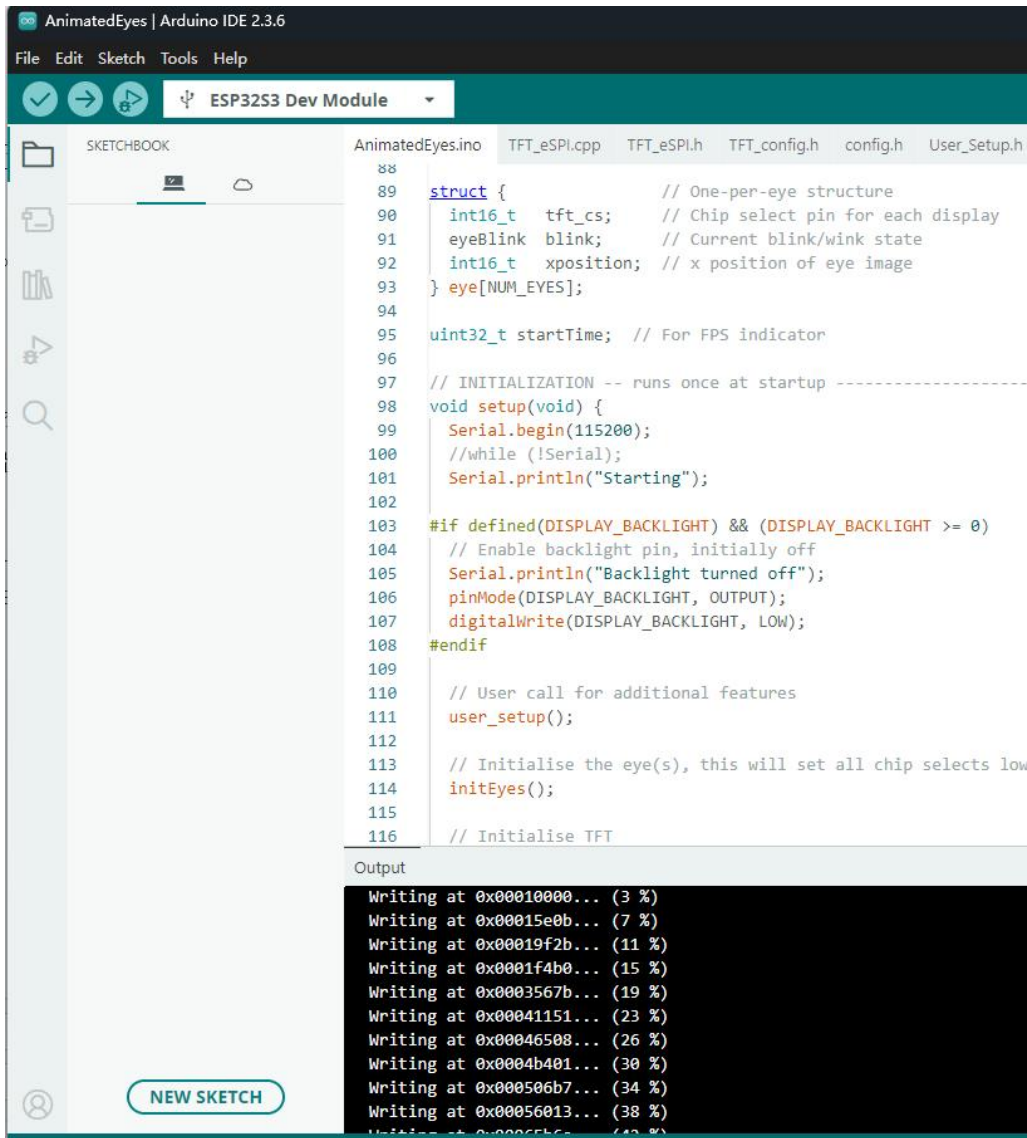
Download the code

git clone <https://github.com/iEmoBot/OpenEmo.git>

After downloading the code, the Arduino code displayed in the eyes is located below AnimatedEyes



Open the code and burn it with Arduino IDE



The software shows up after burning

