

3.5inch_Squareline_Terminal_

SPI_Demo Download

Introduction

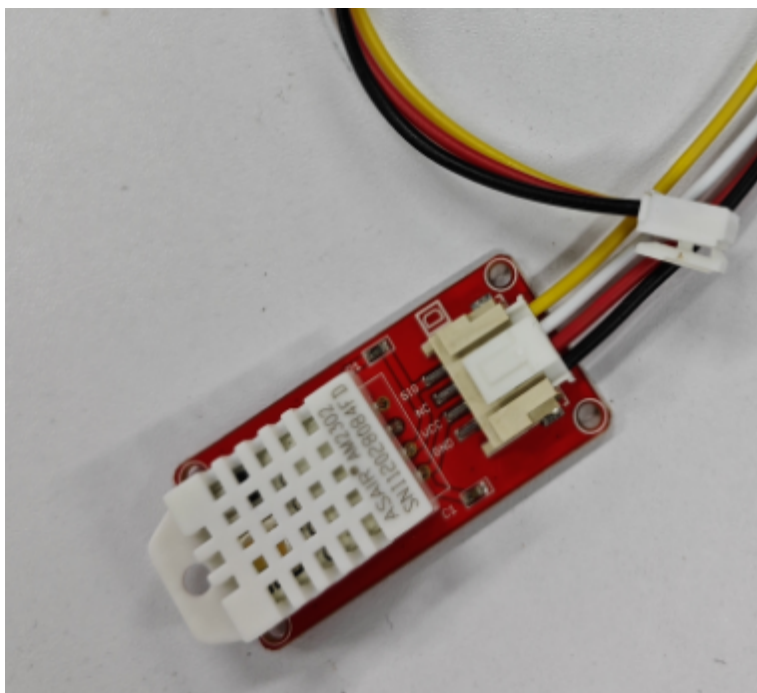
1. Operation before downloading cases

(1) Place all the lib library files provided in the folder into the libraries file of the arduino.

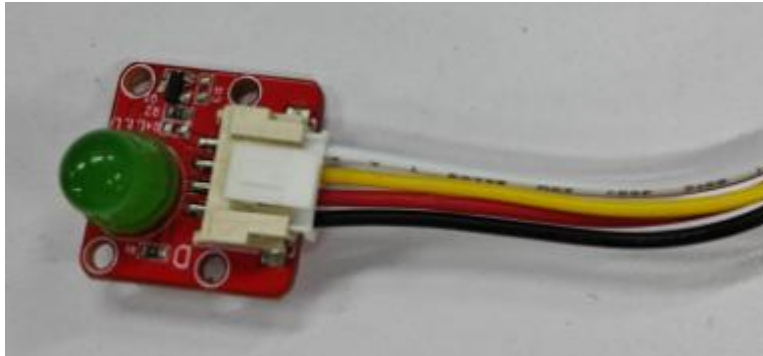
~~测试 > esp32_homeassistant_hmi > lib			
名称	修改日期	类型	大小
Adafruit_Sensor-master	1/17/2024 4:34 PM	文件夹	
Arduino_GFX	1/18/2024 11:16 AM	文件夹	
async-mqtt-client-develop	1/8/2024 4:20 PM	文件夹	
AsyncTCP-master	1/8/2024 4:20 PM	文件夹	
Crowbits_DHT20	1/18/2024 11:14 AM	文件夹	
DHT-sensor-library-master	1/17/2024 4:29 PM	文件夹	
FT6236	1/18/2024 11:32 AM	文件夹	
gt911-arduino	1/18/2024 11:32 AM	文件夹	
LovyanGFX	1/18/2024 11:13 AM	文件夹	
lvgl	1/18/2024 11:33 AM	文件夹	
TFT_eSPI	1/18/2024 11:13 AM	文件夹	
U8g2	1/18/2024 11:33 AM	文件夹	
UI	1/18/2024 11:33 AM	文件夹	
XPT2046_Touchscreen	1/18/2024 11:33 AM	文件夹	
lv_conf.h	8/3/2023 9:55 AM	C/C++ Header	26 KB

Sensor wiring:

(1) Temperature and humidity sensor (Crowtail-AM2302) with IO40 interface



(2) LED to IO11 port



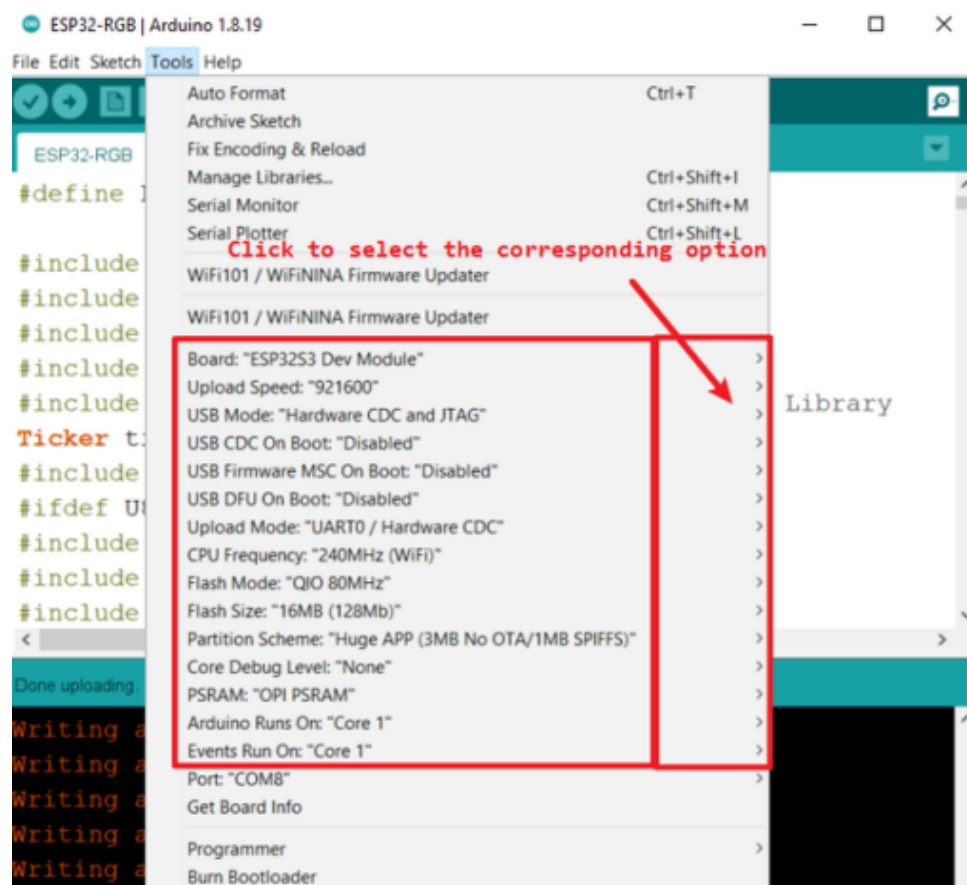
2. Use arduino software to open

3.5inch_Squareline_Terminal_SPI_Demo.ino, arduino

related operations can refer to this screen wiki

(<https://www.elecrow.com/esp-terminal-3-5-inch-320-480-spi-tft-capacitive-touch-display-with-ov2640-camera.html>)

Download Settings:



3. Download the programme.

4. Operational effects.



5. Explanation of key points with MQTT

(1) WiFi and server address settings, the network needs to be in the same LAN, the server address and port that is the address and port automatically generated by Raspberry Pi.

```
File Edit Sketch Tools Help
3.5inch_Squareline_Terminal_SPI_Demo FT6236.cpp FT6236.h ui.c ui.h ui_events.h ui_helpers.c ui_helpers.h ui_img
19
20 #define LED 11
21
22 #define WIFI_SSID "yanfa_software"
23 #define WIFI_PASSWORD "yanfa-123456"
24
25 // Raspberry Pi Mosquitto MQTT Broker
26 #define MQTT_HOST IPAddress(192, 168, 50, 233)
27
28 // For a cloud MQTT broker, type the domain name
29 // #define MQTT_HOST "example.com"
30 #define MQTT_PORT 1885
31
```

(2) MQTT theme settings, the specific parameters are set according to the contents of the configuration.yaml file on the MQTT server.

```
28 // Temperature MQTT Topics
29 #define MQTT_PUB_LED_S  "esp32/led/state"
30 #define MQTT_PUB_LED_C  "esp32/led/command"
31 #define MQTT_PUB_TEMP  "esp32/temperature"
32 #define MQTT_PUB_HUM   "esp32/humidity"
33 #define mqtt_username   "elecrow"
34 #define mqtt_password   "elecrow2014"
35
```