# Micropython

# **ESP32 Terminal SPI**

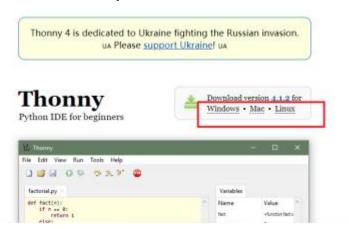
# Items to be prepared:

| ID       | module                                     | quantity |
|----------|--|----------|
| Hardware |  |          |
| 1        | USB A to TYPE-C cable                      | 1        |
| 2        | 2.4inch screen                             | 1        |
| 3        | Crowtail-light sensor                      | 1        |
| 4        | Crowtail-led                               | 1        |
| 5        | 4-pin HY2.0 cable (for<br>Crowtail module) | 2        |
| Software |  |          |
| 1        | Thonny                                     | 1        |
| 2        | Lvgl+micropyhton firmware                  | 1        |



## **Software preparation:**

Go to https://thonny.org/ and download the corresponding software version (take the Windows version as an example).

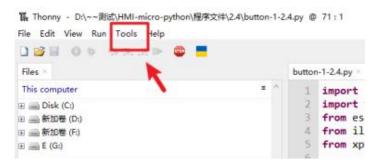


Double-click the downloaded exe file to install the software. (Go to the next step and install directly)

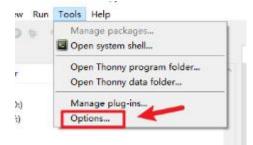


### Firmware download:

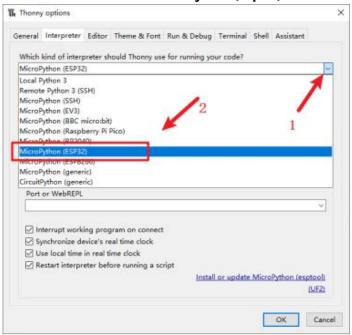
**Open the thonny software and click Tools** 



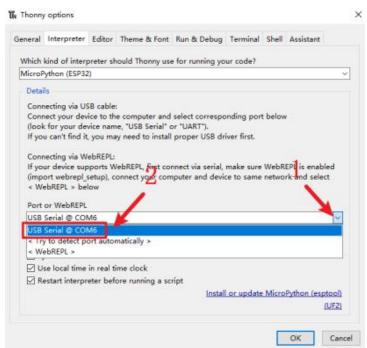
Click Options to enter the Interpreter option.



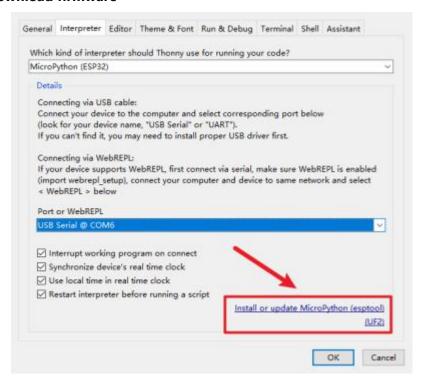
Click the drop-down menu and select MicroPython(esp32)



Select the serial port number (you need to press the hardware BOOT key and then connect to the computer, if no com number is displayed, check whether the serial port driver is installed)



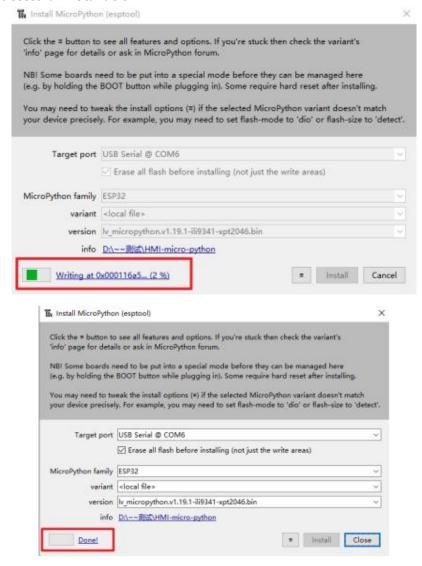
#### Click to download firmware



Choose to download the firmware from local and click Install (select the firmware corresponding to the screen)

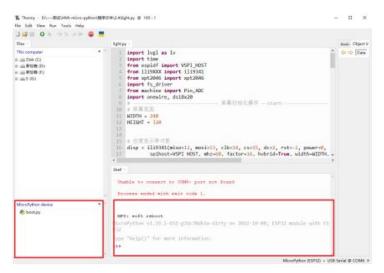


#### Wait for successful installation

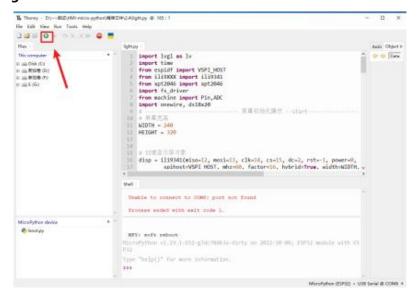


## Run program:

Click the reset button on the screen or reinsert the data cable to open the routine program.



#### Run the program and click Run



Program effect (when the light intensity exceeds 60%, the light goes out. Light is on when the light intensity is less than 60%)

```
>>> %Run -c $EDITOR_CONTENT

MFY: soft reboot
Double buffer
ILI9341 initialization completed
Enable backlight
提示: 接下Ctrl+c结束程序
```

