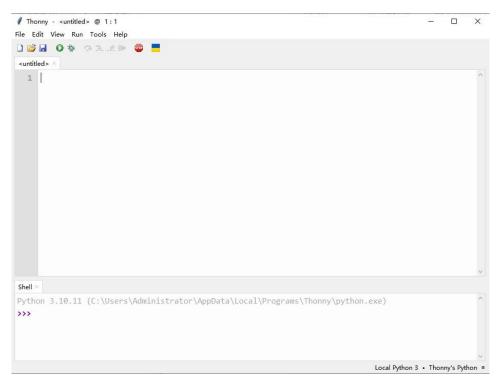
## **CAM Module Installation Firmware**

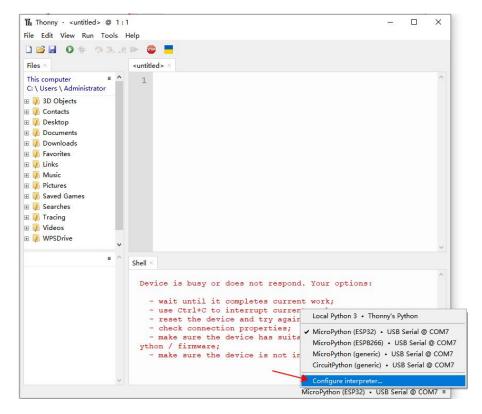
The QD002 expansion pack is based on the QD001 smart car, so if you purchased the car and expansion pack, please use the QD001 tutorial to learn the basics first.

Next, you'll see how the CAM module installs firmware.

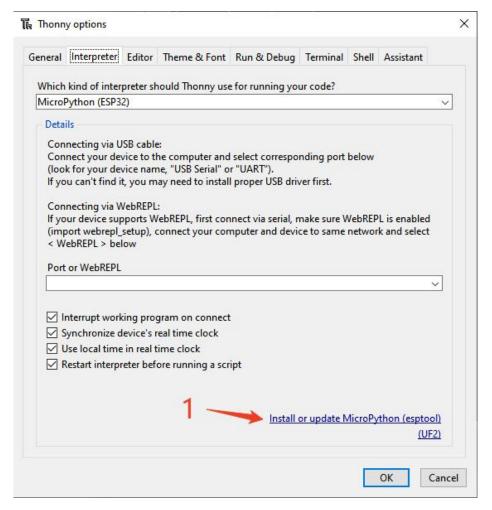
- 1.Connect the ESP32 CAM module controller board to the PC using a USB cable.
- 2. Open the Thonny programming software.



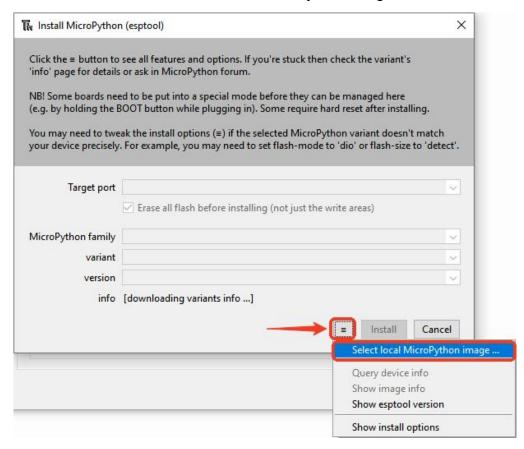
2.Click on the bottom right corner and click Configure interpreter.



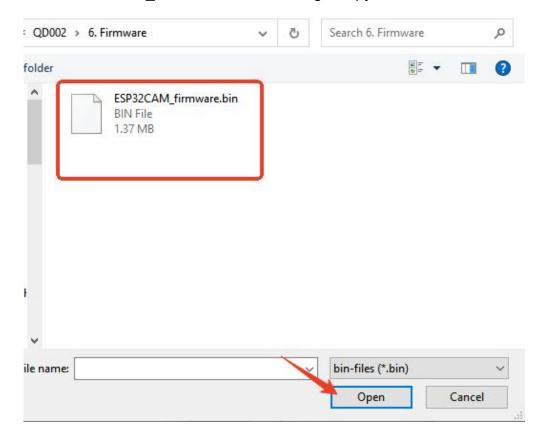
## 3.Click "Install or update MicroPython"



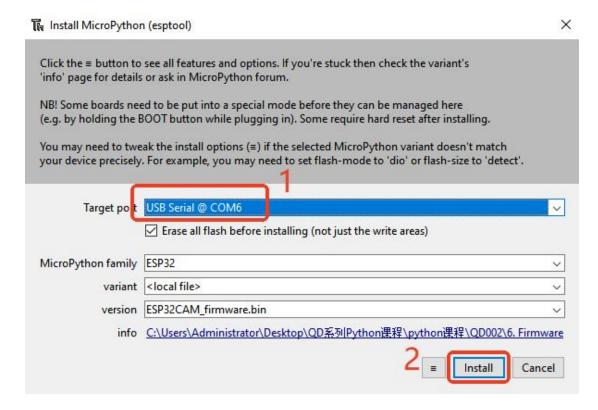
4. Click the icon to select "Select local MicroPython image..."



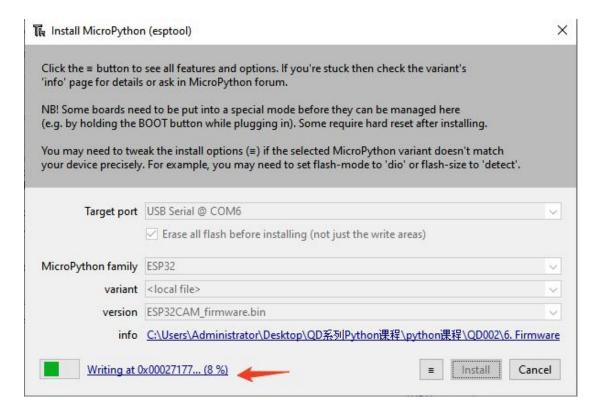
5. Click "ESP32CAM\_firmware.bin" file in English /python/6.Firmware.



## 6.Click Select serial port, then click "Install"



7. Waiting to download firmware. When the download is complete, click "Close".



Click the = button to see all features and options. If you're stuck then check the variant's 'info' page for details or ask in MicroPython forum.

NB! Some boards need to be put into a special mode before they can be managed here (e.g. by holding the BOOT button while plugging in). Some require hard reset after installing.

You may need to tweak the install options (=) if the selected MicroPython variant doesn't match your device precisely. For example, you may need to set flash-mode to 'dio' or flash-size to 'detect'.

Target port USB Serial @ COM6

□ Erase all flash before installing (not just the write areas)

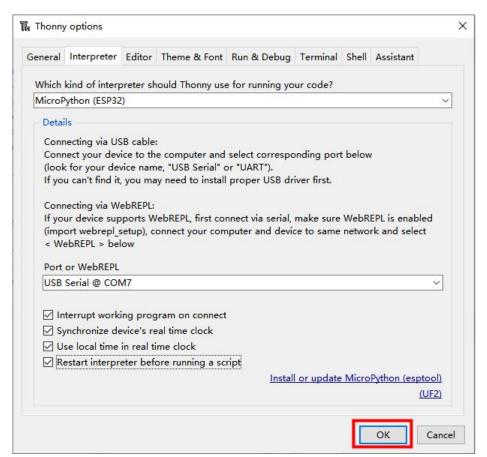
MicroPython family ESP32

variant <local file>

version ESP32CAM\_firmware.bin

□ C:\Users\Administrator\Desktop\QD系列Python课程\python课程\QD002\6. Firmware

## 8. Finally click "OK"



9.After downloading the firmware successfully, the CAM module will appear in the file bar "boot.py".

