

MKS Monster8 V2 User Manual

This document is the basic hardware and firmware description of MKS Monster8 V2, which is convenient for beginners or users who are not familiar with 3D printing.

If your question is deeper, or the documentation doesn't mention it.

*Please don't worry, you can contact us through **Makerbase.store** information or email (service@makerbase.store),*

we will try our best to help you solve the problem.

This document is divided into 3 parts

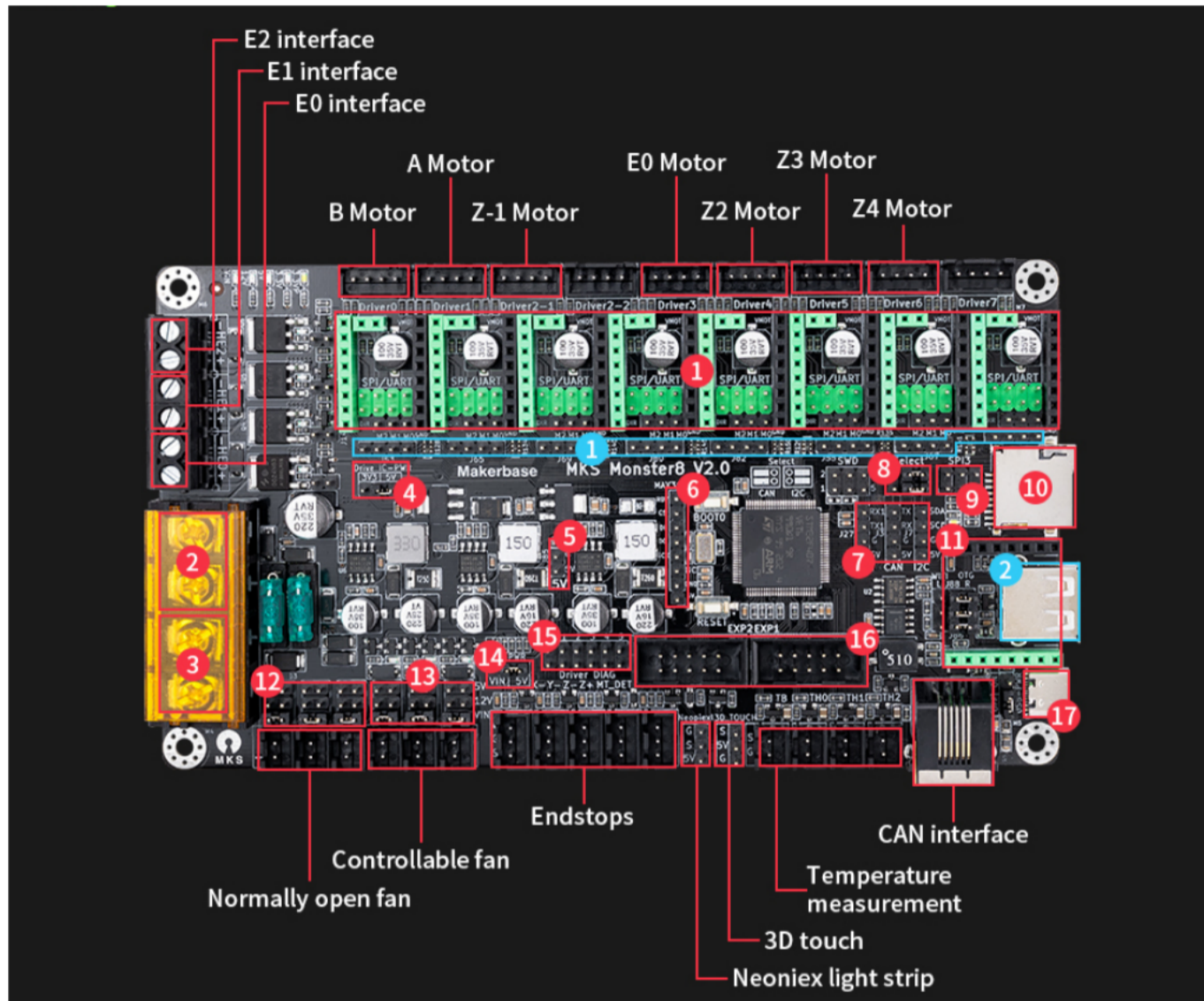
[MKS Monster8 V2 Hardware Interface](#)

[MKS Monster8 V2 Configuration and update of firmware](#)

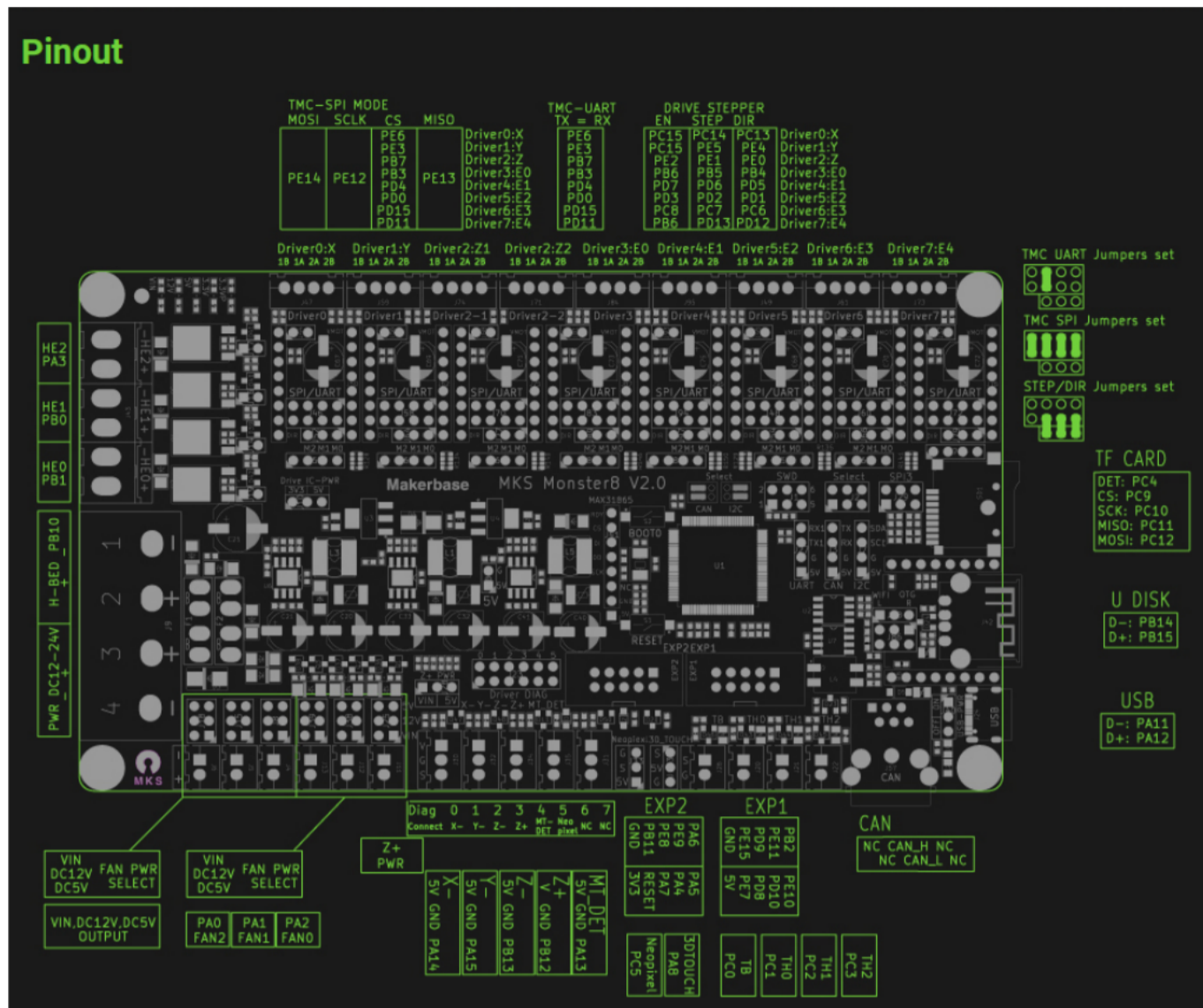
[Q&A of MKS MKS Monster8 V2](#)

MKS Monster8 V2 Hardware Interface

Wiring :



- ① Motor driver slot ② Heated bed ③ Power supply
- ④ Drive voltage selection ⑤ 5V output ⑥ MAX31865
- ⑦ I2C/CAN/SUART1 expansion port
- ⑧ I2C and CAN selection, I2C is selected by default, namely EERPOM function
- ⑨ TF card signal SPI3 expansion port ⑩ TF card slot ⑪ WIFI module slot
- ⑫ Normally open fan voltage selection ⑬ Controllable fan voltage selection
- ⑭ Z+ endstops voltage selection, 5V or VIN ⑮ DIAG signal ⑯ Display
- ⑰ USB-C interface ⑱ External stepper driver ⑲ U disk



After you receive the motherboard, first check whether the appearance of the motherboard is complete. Then you can connect according to the interface marked in the picture according to the wiring of your printer.

Note:

1. During the connection process, you need to pay attention to the power supply, hotbed, hotend, fan and other interfaces, all of which have a distinction between "+" and "-", so you must pay attention to the wiring process to prevent the positive and negative connections from being reversed, resulting in damage to the motherboard.

2. By default, the motherboard needs to update the marlin firmware before it can be used normally. Therefore, you can also perform wiring after updating the firmware of your own parameters.

3. Any wiring or adjustment operation, please do it when the power is off.

If you need information such as the schematic diagram of MKS Monster8 V2, you can download it from this website:

<https://github.com/makerbase-mks/MKS-Monster8>

Refer to the introduction video on youtube.

<https://www.youtube.com/watch?v=mf8fV3ErES4>

MKS Monster8 V2 Configuration and update of firmware

Download Marlin

MKS Monster8 V2 uses Marlin2.0 firmware.

You can go to ogithub to download:

<https://github.com/MarlinFirmware/Marlin/tree/bugfix-2.0.x>

If your printer is Voron model, you can refer to our dedicated documentation on github:

[https://github.com/makerbase-mks/MKS-Monster8/blob/main/MKS%20MONSTER8%20V1.0%20datasheet%20\(based%20on%20Marlin%20firmware%20to%20configure%20Voron%202.4%20machine\).pdf](https://github.com/makerbase-mks/MKS-Monster8/blob/main/MKS%20MONSTER8%20V1.0%20datasheet%20(based%20on%20Marlin%20firmware%20to%20configure%20Voron%202.4%20machine).pdf)

KLIPPER firmware

If your motherboard uses KLIPPER firmware, you can refer to the content of this link:

https://github.com/makerbase-mks/MKS-Monster8/wiki/MKS_MONSTER8_V2_manual_based_on_Klipper_firmware_to_configure_Voron_2_4_machine

[https://github.com/makerbase-mks/MKS-Monster8/blob/main/MKS%20MONSTER8%20V1.0%20datasheet%20\(based%20on%20Klipper%20firmware%20to%20configure%20Voron%202.4%20machine\).pdf](https://github.com/makerbase-mks/MKS-Monster8/blob/main/MKS%20MONSTER8%20V1.0%20datasheet%20(based%20on%20Klipper%20firmware%20to%20configure%20Voron%202.4%20machine).pdf)

Install Visual Studio Code

Before starting to edit Marlin, we recommend that you install a good code editor - Visual Studio Code. You can even compile Marlin directly from it.

Visual Studio Code can be freely downloaded, after you have edited Marlin and the necessary parameters, you can compile it and upload your new firmware to the printer.

How to install Visual Studio Code and PlatformIO, edit and compile marlin, you can find from :

https://marlinfw.org/docs/basics/install_platformio_vscode.html

Configure and compile

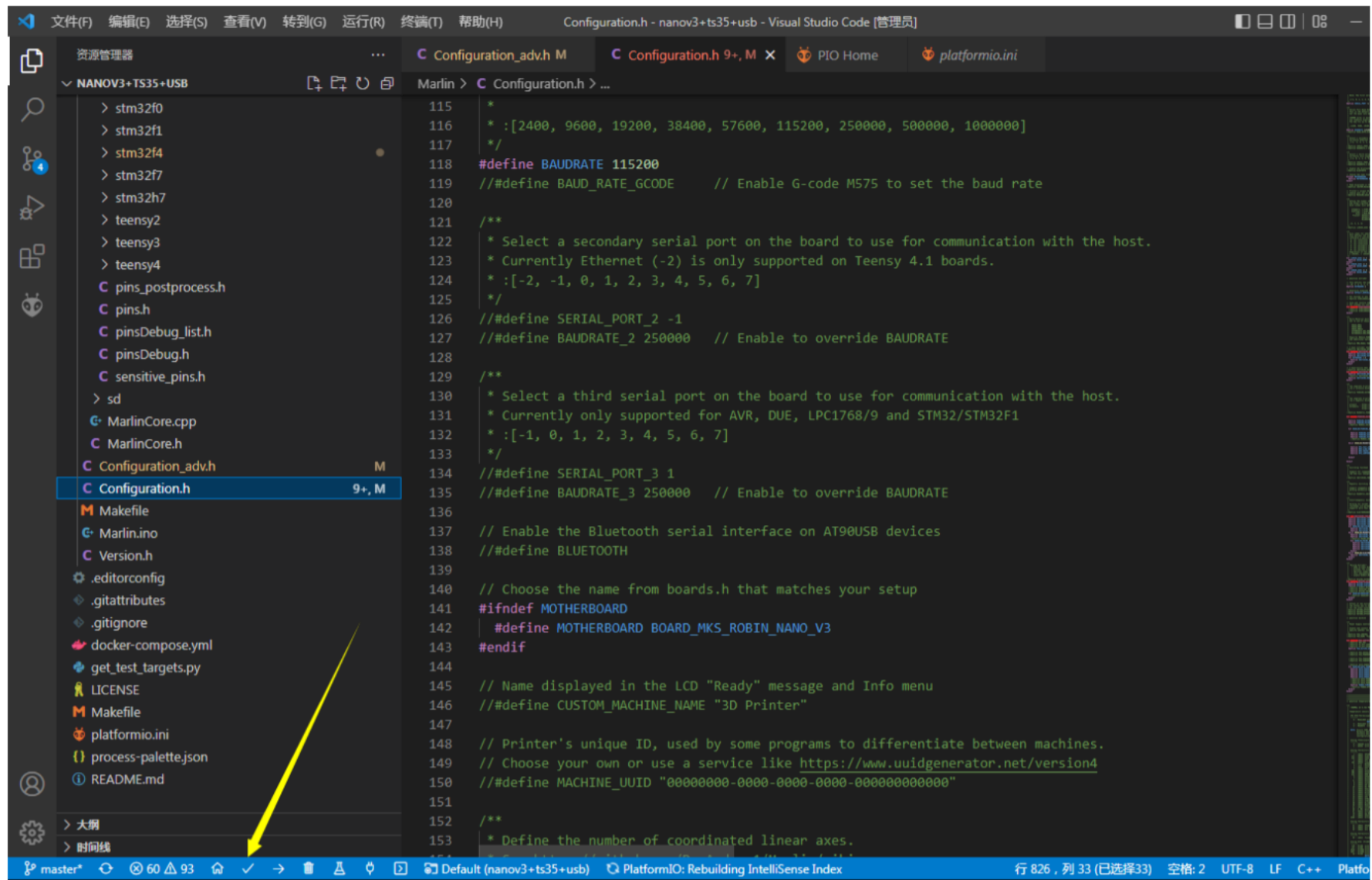
For parameter configuration of MKS Monster8 V2

You can refer to github-wiki for settings:

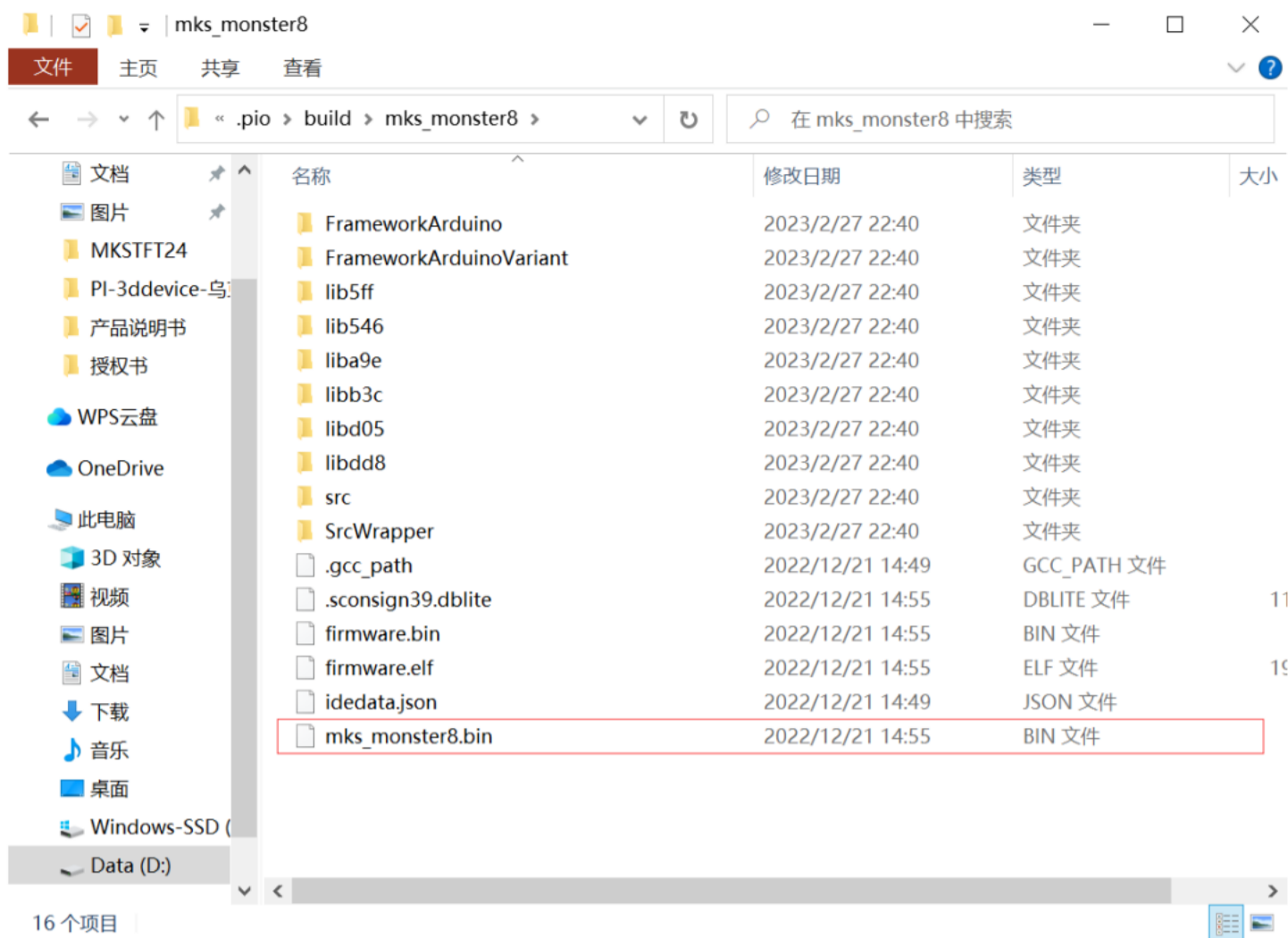
<https://github.com/makerbase-mks/MKS-Monster8/wiki#contents-monster8-v1>

The firmware setting part, the Monster8 v1 and v2 versions are basically the same, and you can refer to the wiki for setting.

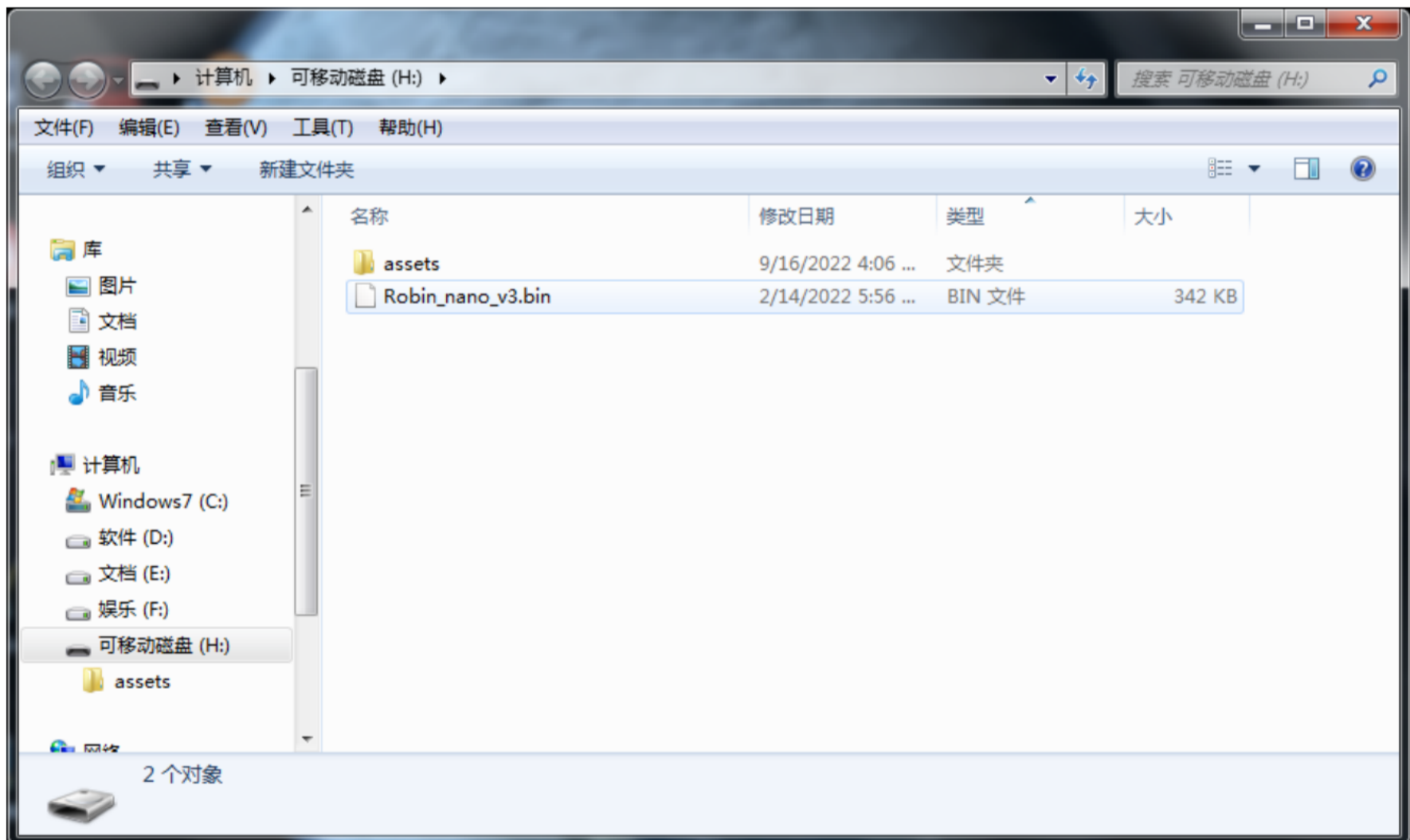
After the parameter modification is completed, it is to compile



After the compilation is successful, copy the "mks_monster8.bin" file to the sd card in this path of the file, and then connect to the motherboard for updating.



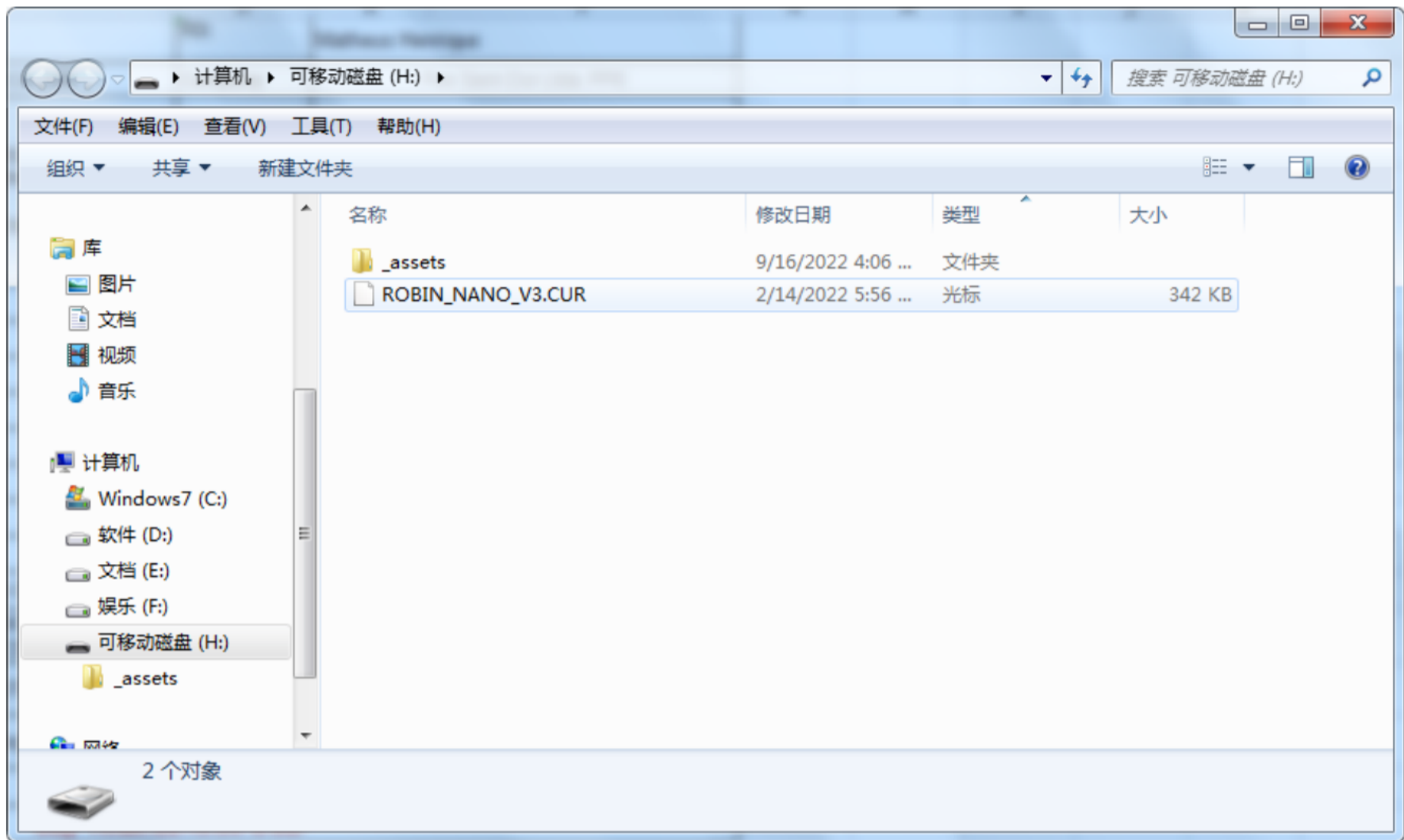
The directory of the sd card before the update



The directory of the sd card after the update completed

After the copied "bin" file is updated, the format becomes "cur", indicating that the firmware has been updated successfully. If the format does not change after power-on, you need to check whether the copied file name corresponds to the

motherboard. Or replace/format the sd card and re-update. (The format of the sd card needs to be in fat32 format)



Q&A of MKS Monster8 V2

Q1: Why does the screen not display normally after the motherboard is powered on?

A1 : Different types of screens need to be enabled in the firmware, and then connected to display normally. If you connect without enabling, it will not be displayed. For specific settings, please refer to the wiki page of github for operation.

Q2: Why didn't the file format change after updating the bin file and asset folder of the firmware? (update unsuccessful)

A2 : Replace the sd card or reformat the sd card. Update again. (The format required by the SD card is fat32)

Q3: Why is connecting usb cable to pc not recognized

A3: Check the jumper cap setting in front of the usb interface. It needs to be set to yes, and the usb interface will supply power to the motherboard. If you select "no", the motherboard needs to be connected to 12-24v for power supply.

Q4: Why after connecting the motor, the motor can only have noise and vibration, but does not rotate?

A4: In this case, the phase wiring of the motor may be incorrect, you can try to adjust the order of the motor wires

Q5: what if my question is not covered in this one?

A5: You can contact us directly through makerbase.store.

Or send questions to our email, or leave a message on our github

Email: service@makerbase.store

Github: <https://github.com/makerbase-mks>