

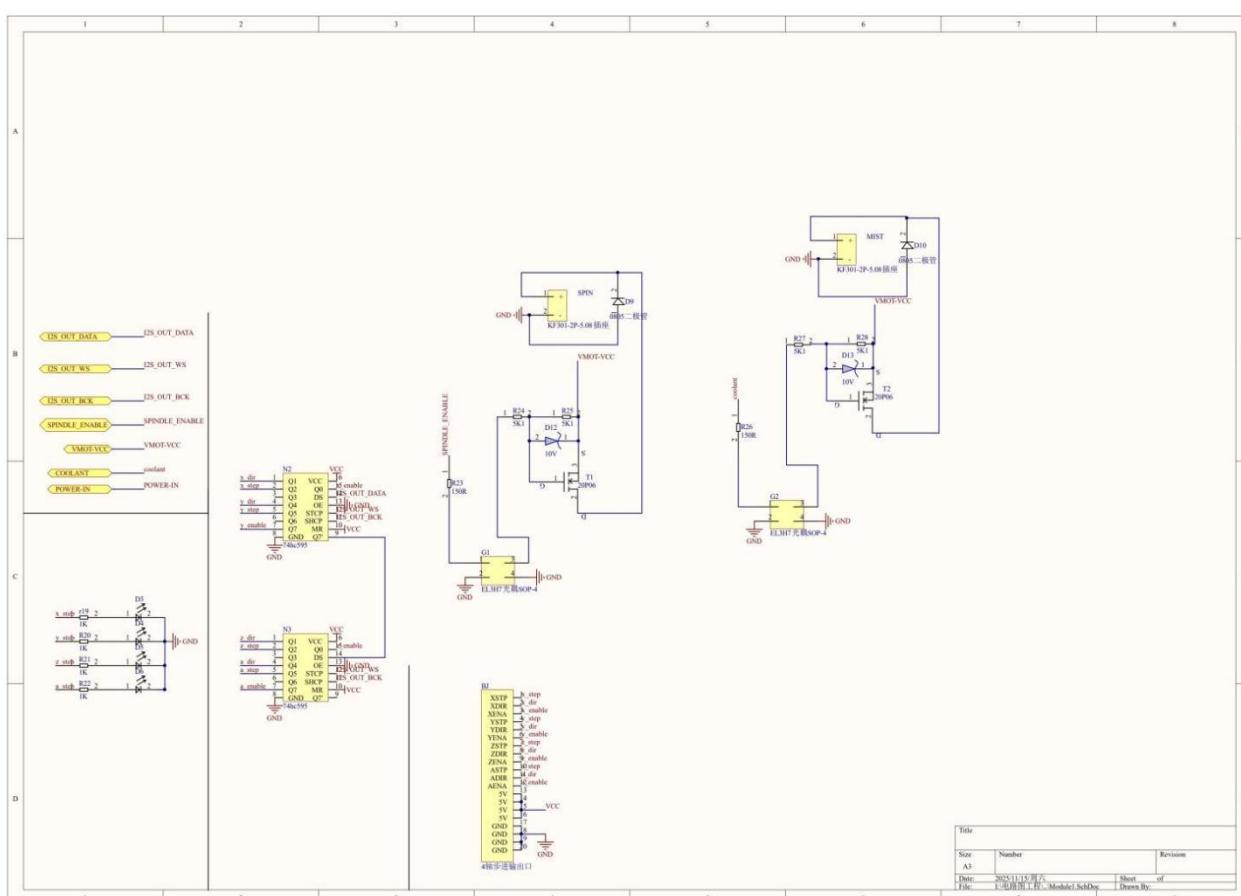
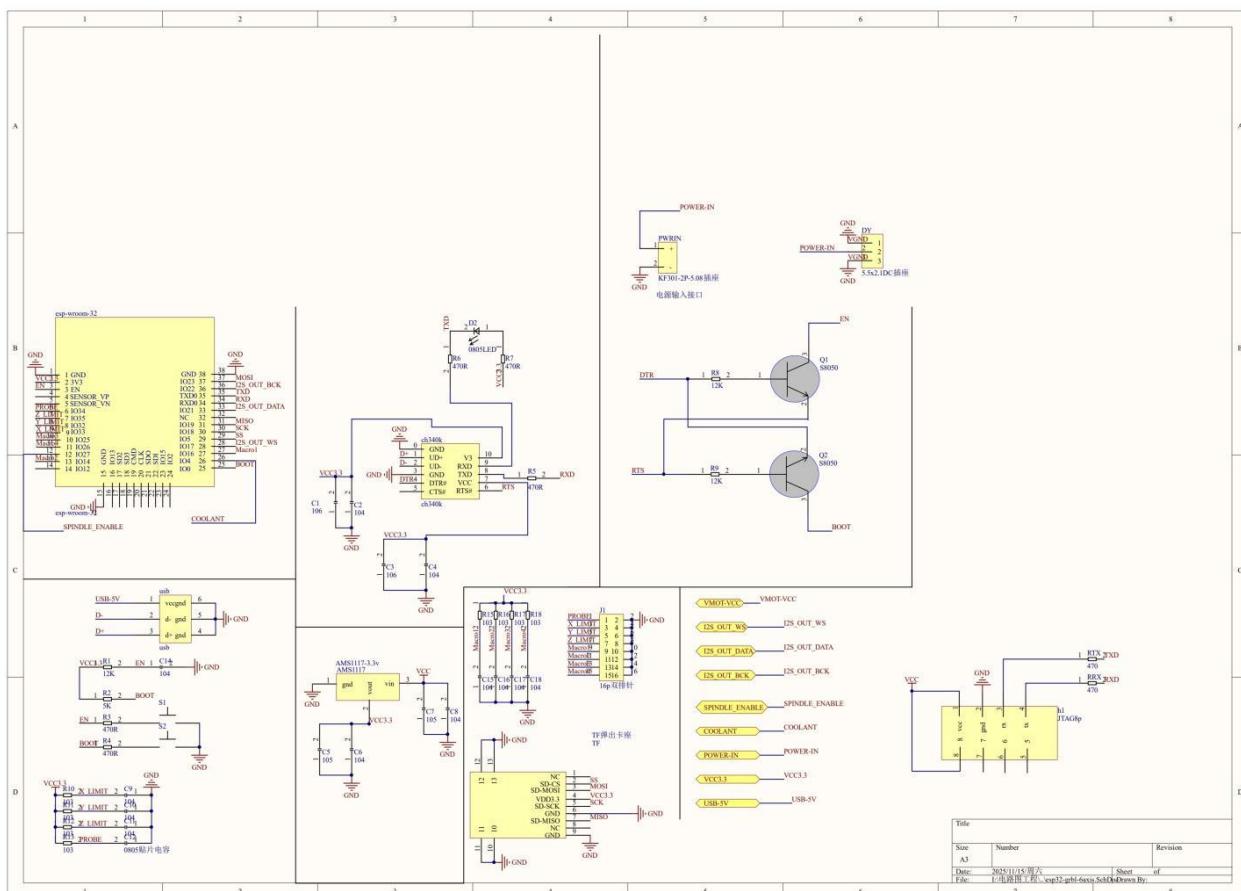
Features

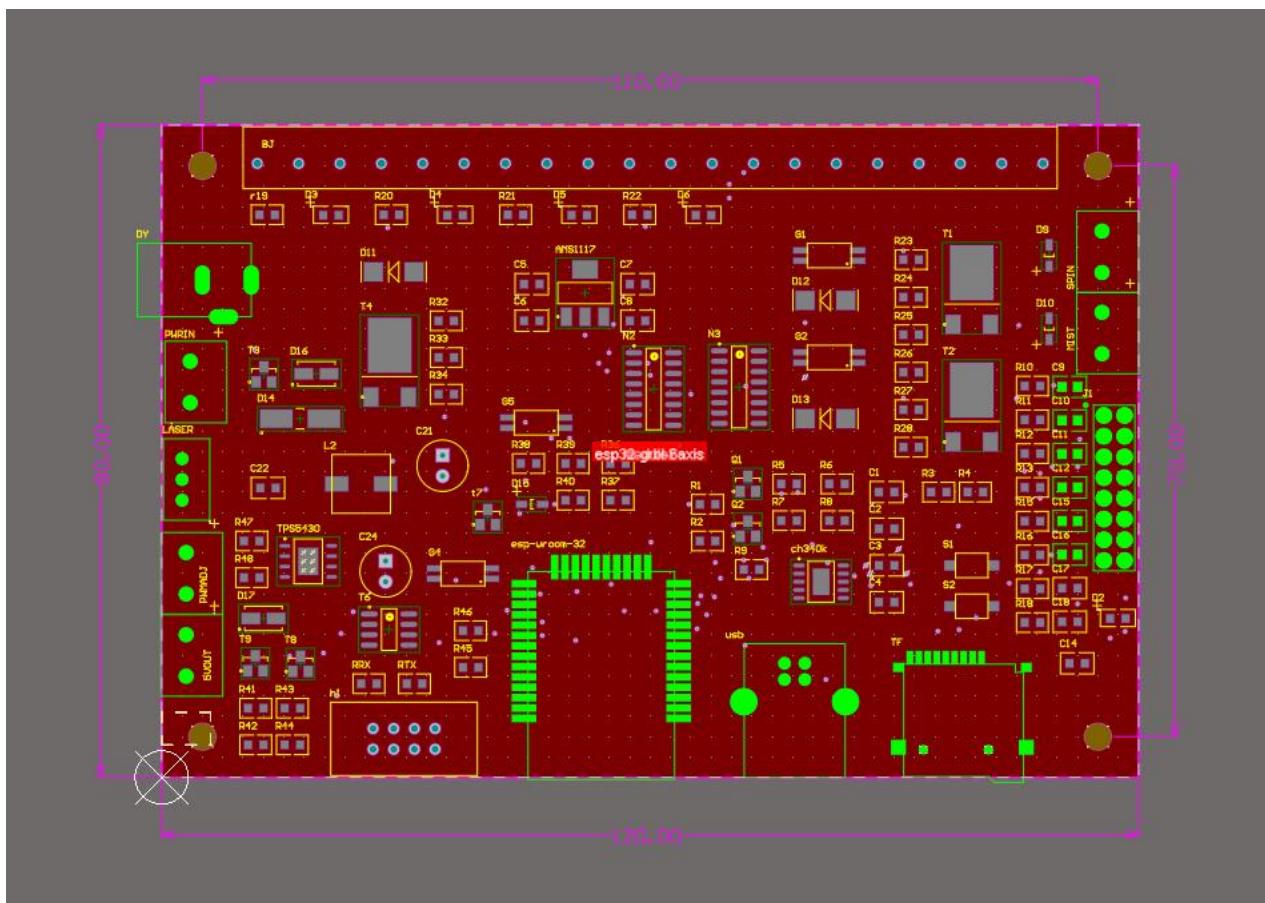
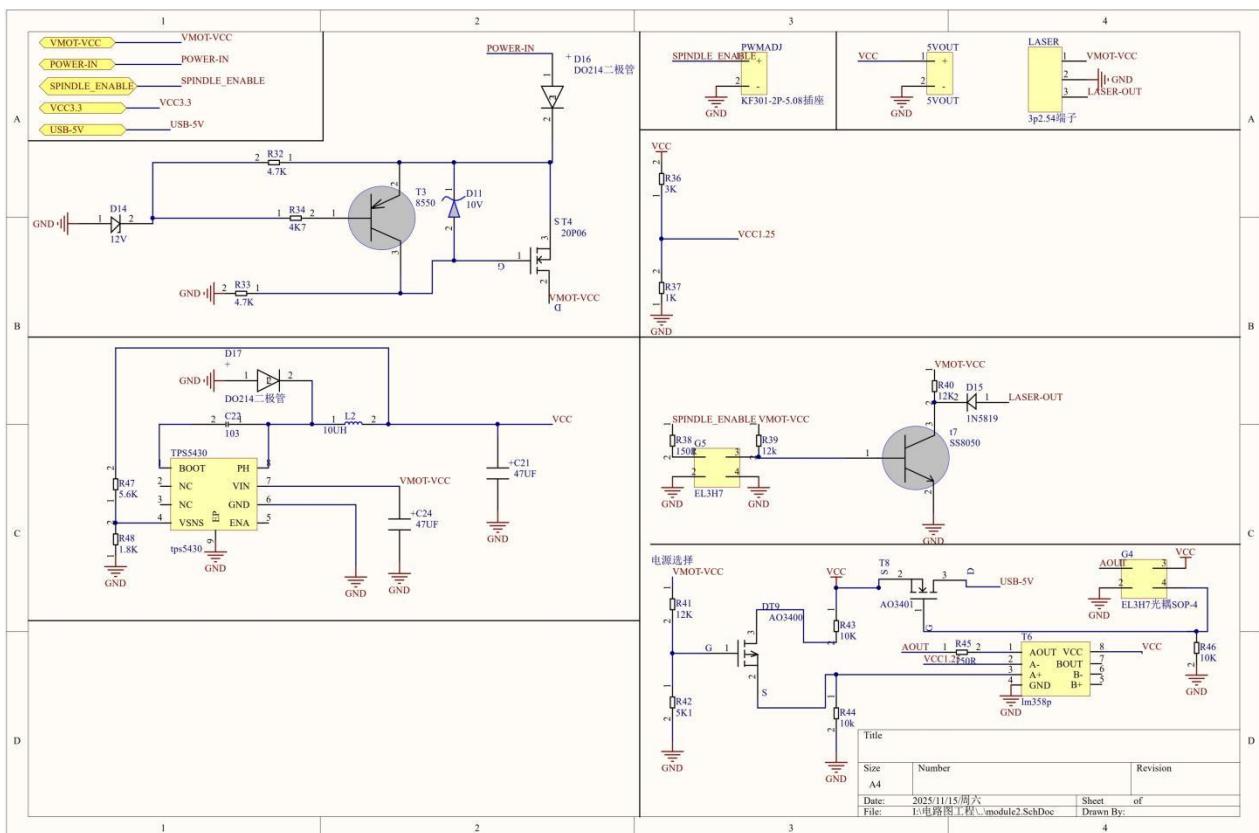
- ❖ Adopting dual-core ESP32 32-bit high-speed processor
- ❖ Compatible with Candle,Bcnc,CNC3D COMMANDER...
- ❖ Support four stepper drivers,including X,Y,Z,A axis.
- ❖ Support Homing,software/hardware endstop,Z probe.
- ❖ Support hotspot,Wifi wireless to control
- ❖ Support 3pin laser. PWM output.
- ❖ Support 12-24V DC

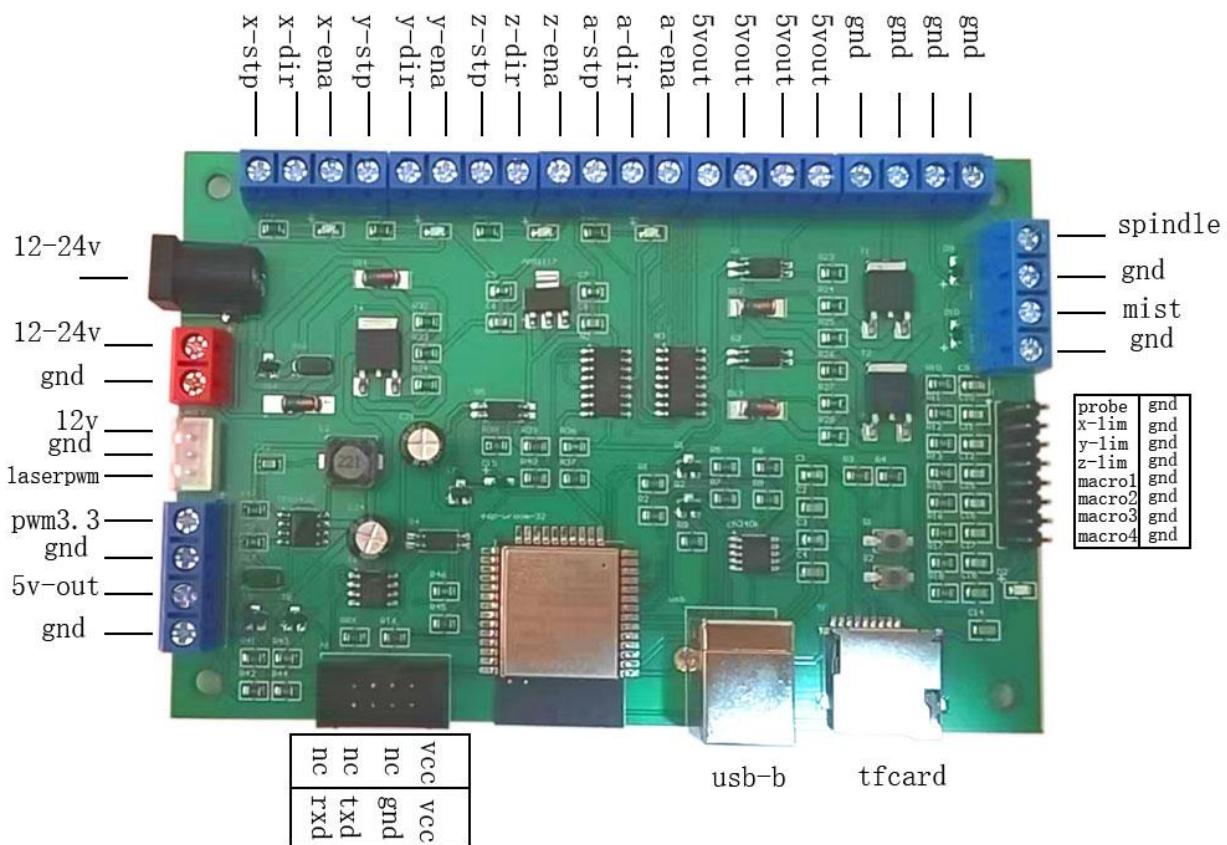
Auto-cut off power when voltage exceeding 30V.

Automatically select external power supply as the main control input power,

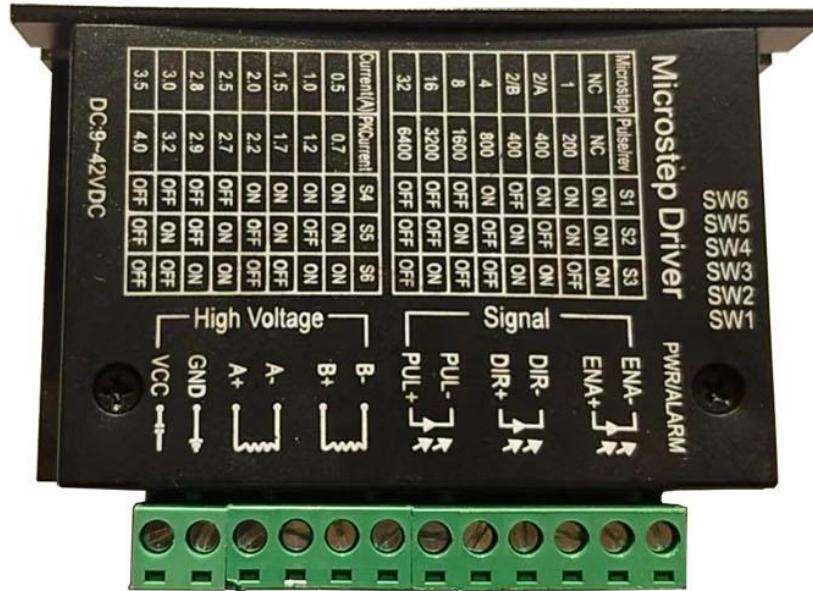
and prevent reverse power transmission,protect USB port.



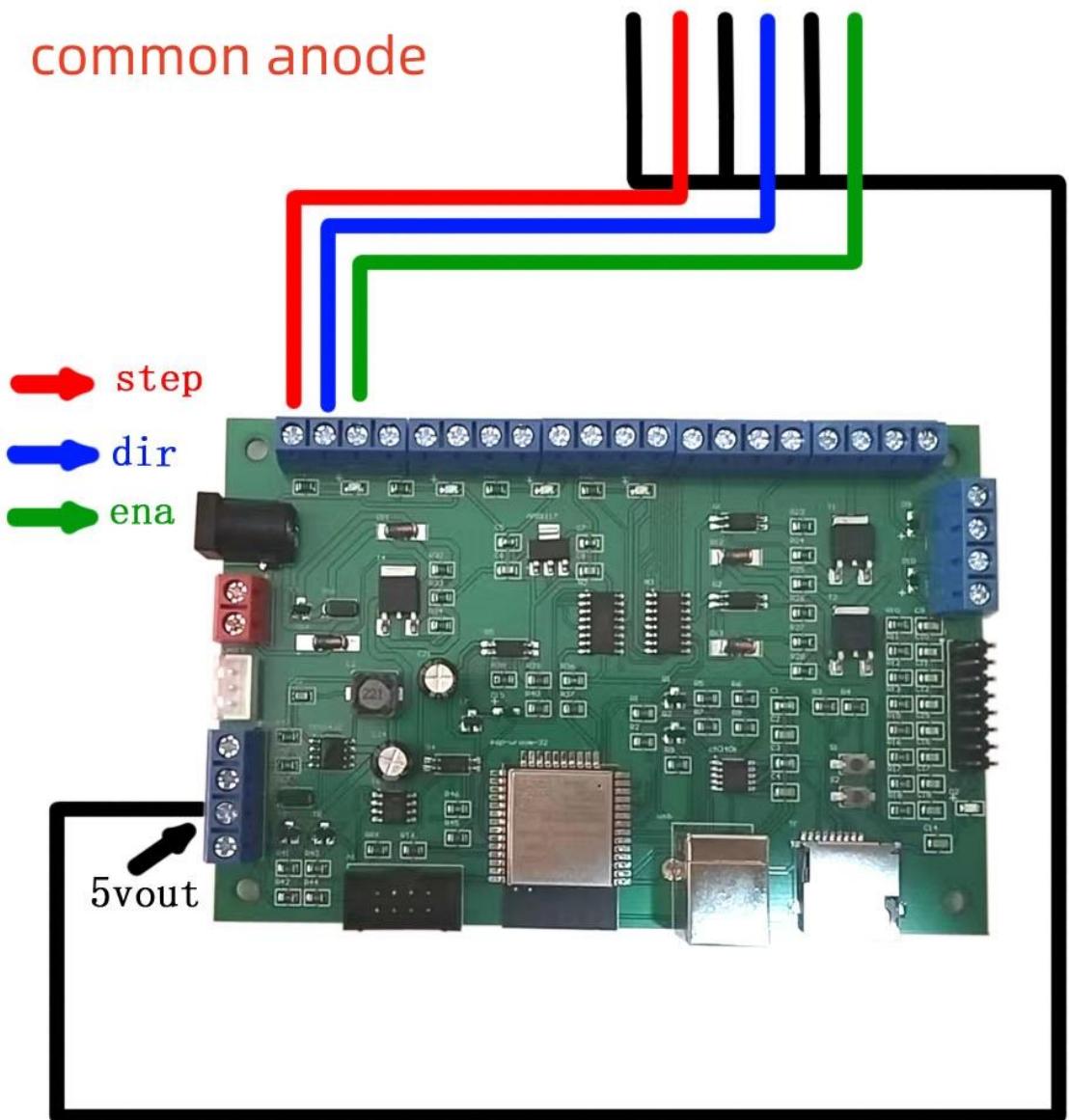


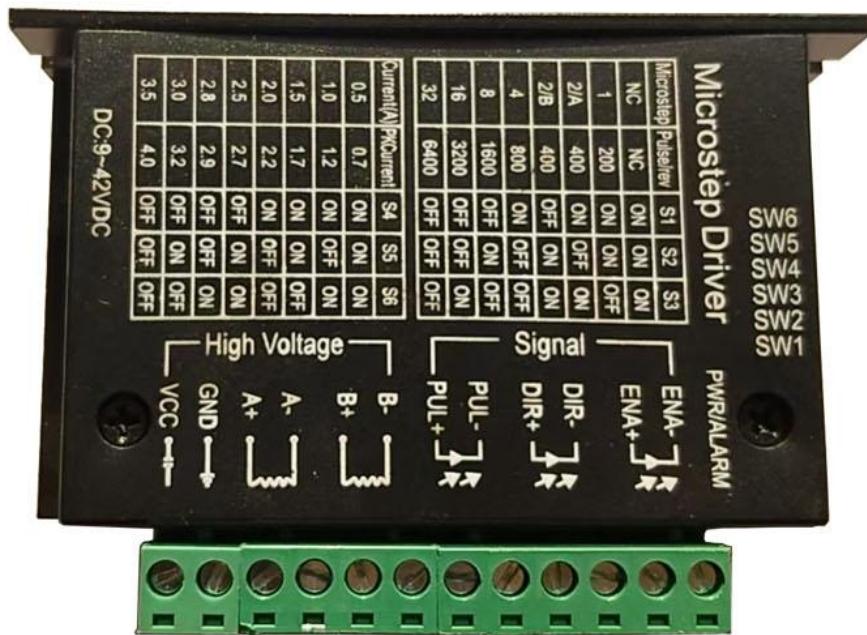


PROBE	Z-probe
X-LIM	X limit,NO
Y-LIM	Y limit,NO
Z-LIM	Z limit,NO
GND	XYZ axis com,Z probe
PWM-OUT	PWM output
GND	PWM ground
5vout	5v output
GND	All drivers PUL-,EAN-,DIR-
X-STEP	X-PUL+
X-EAN	X-ENA+
X-DIR	X-DIR+

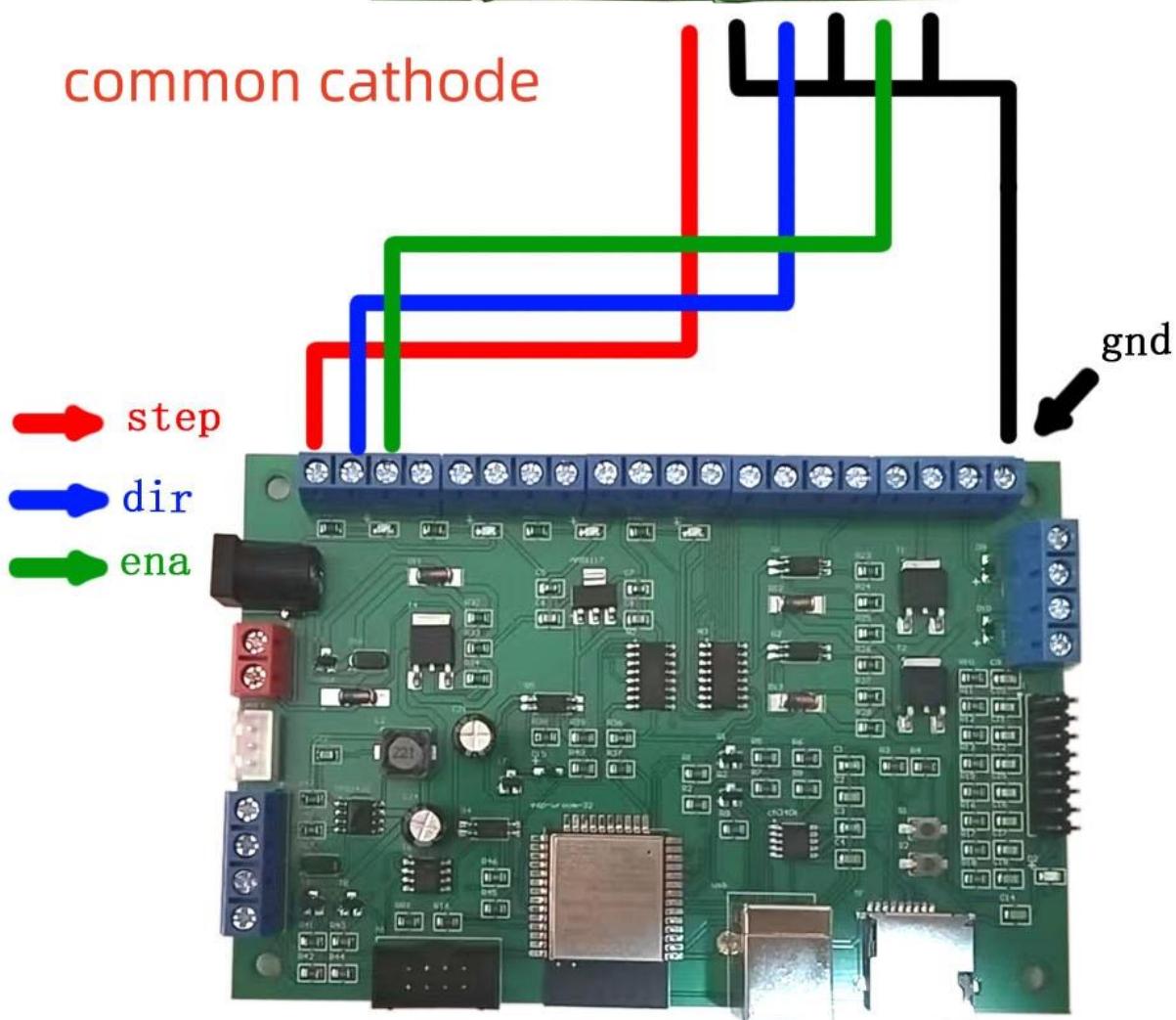


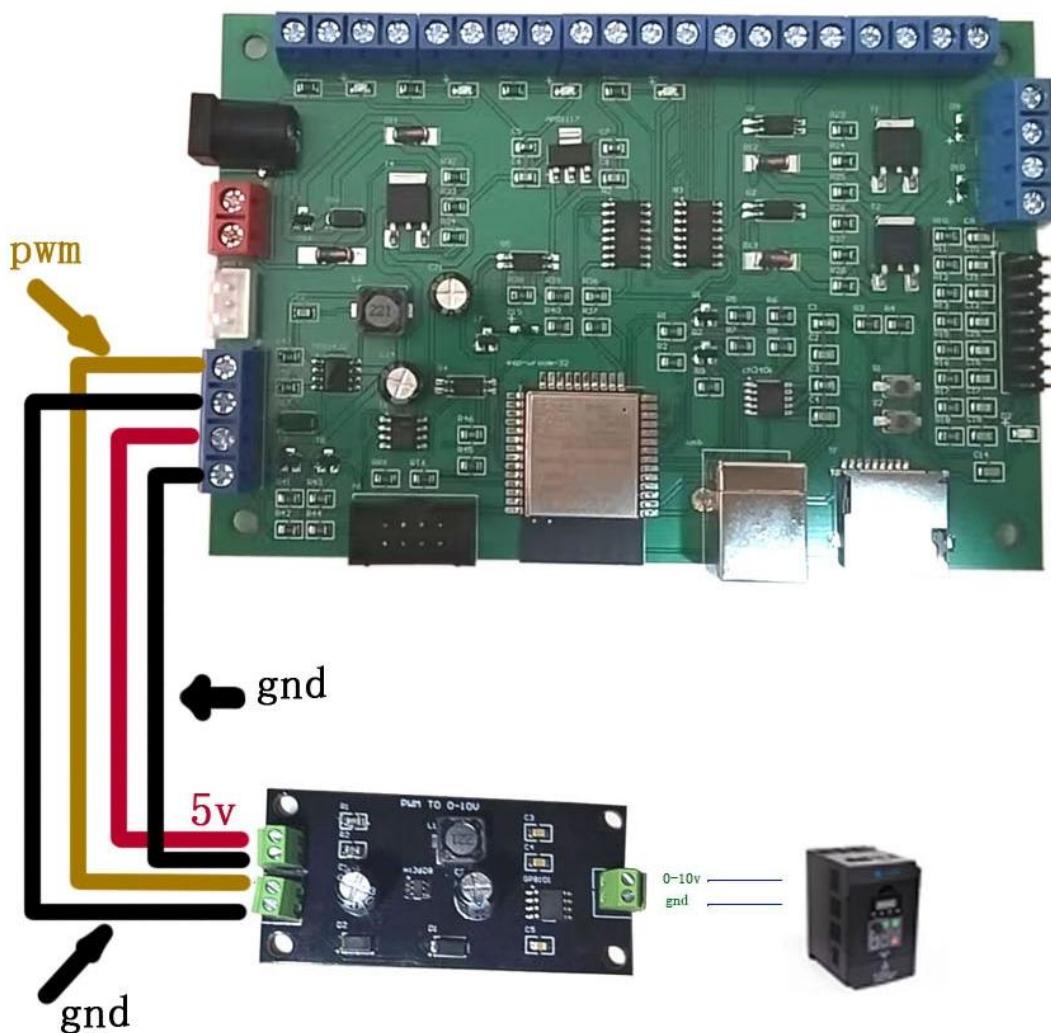
common anode



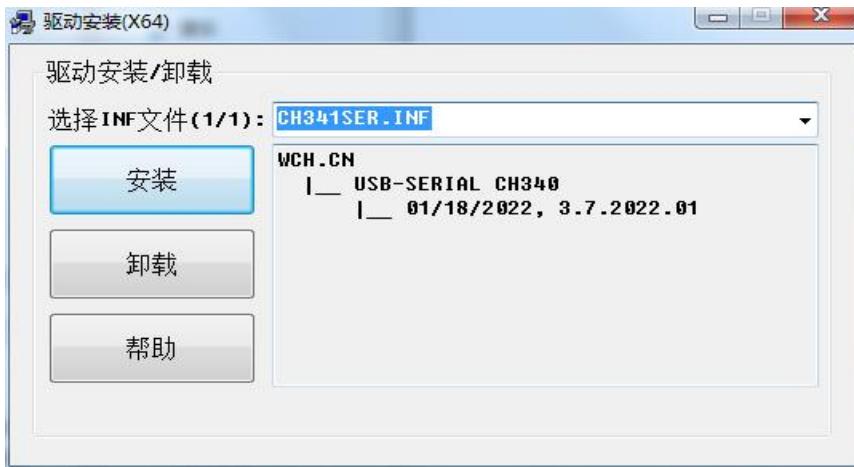


common cathode





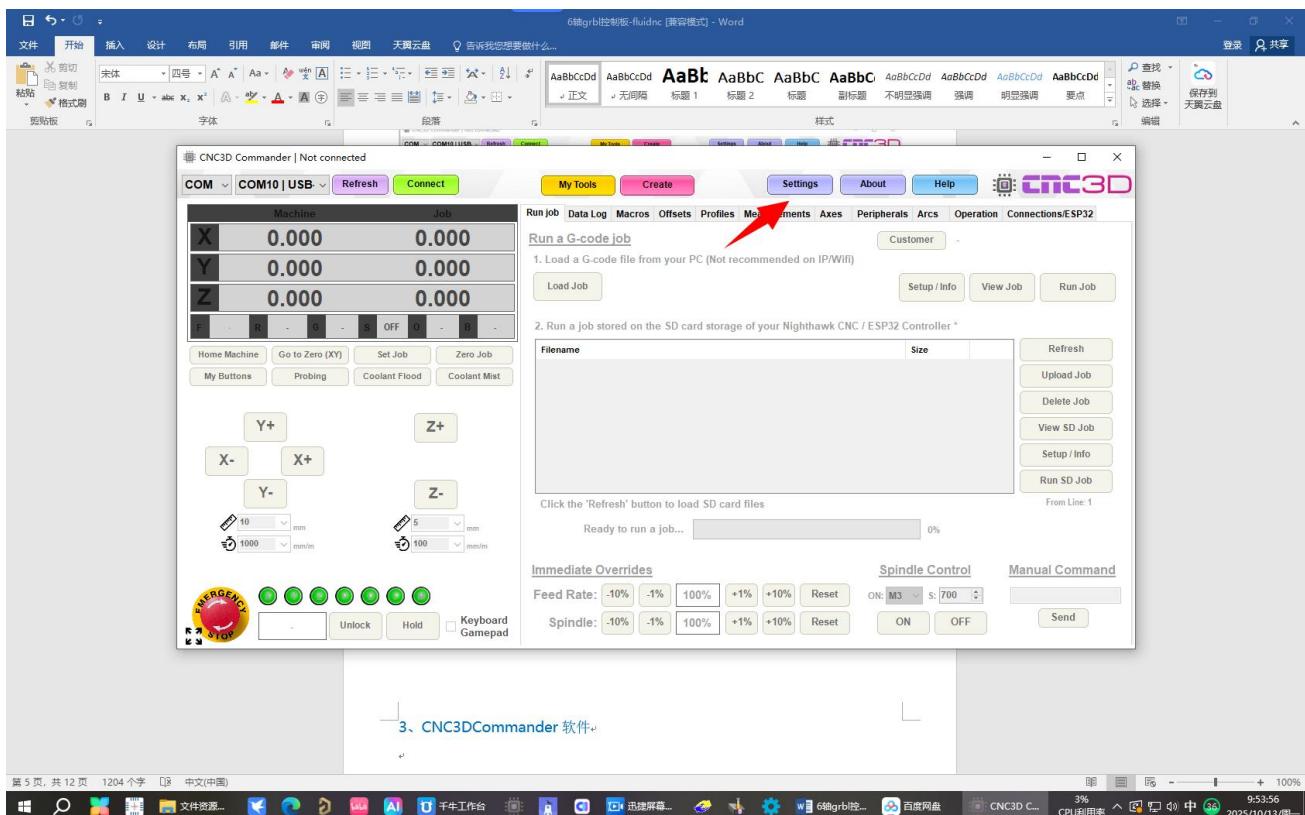
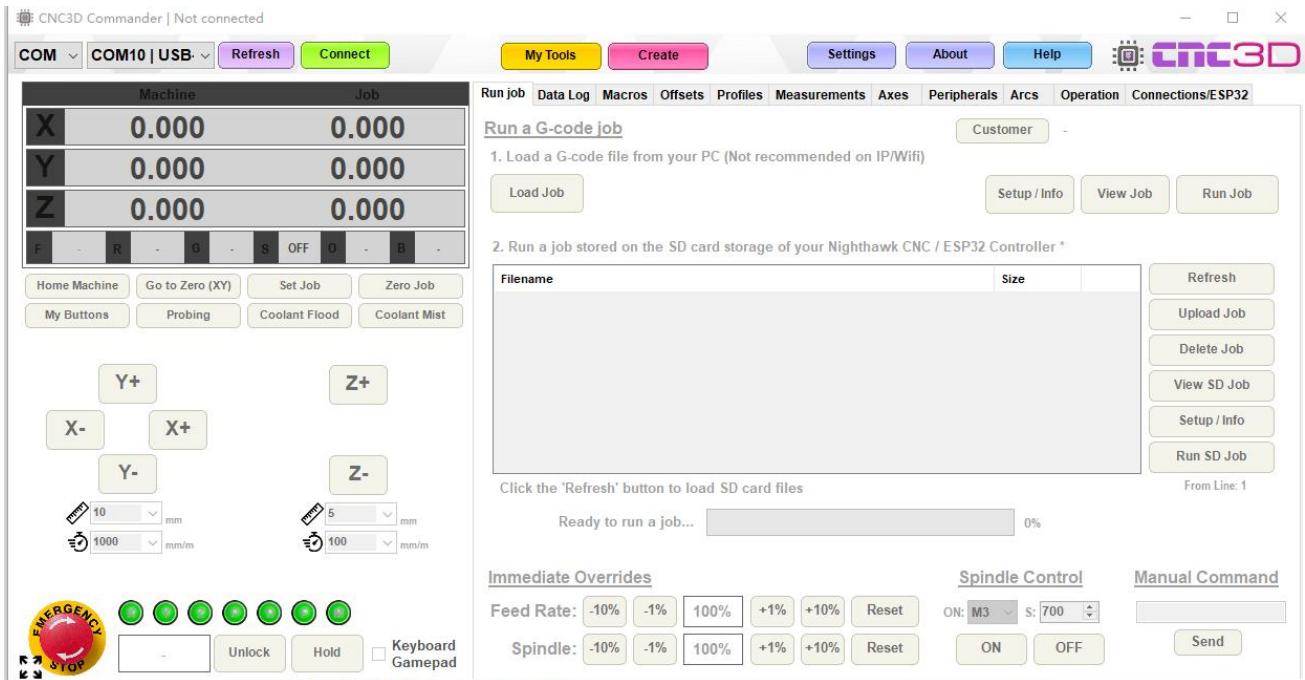
Install ch340 USB Driver

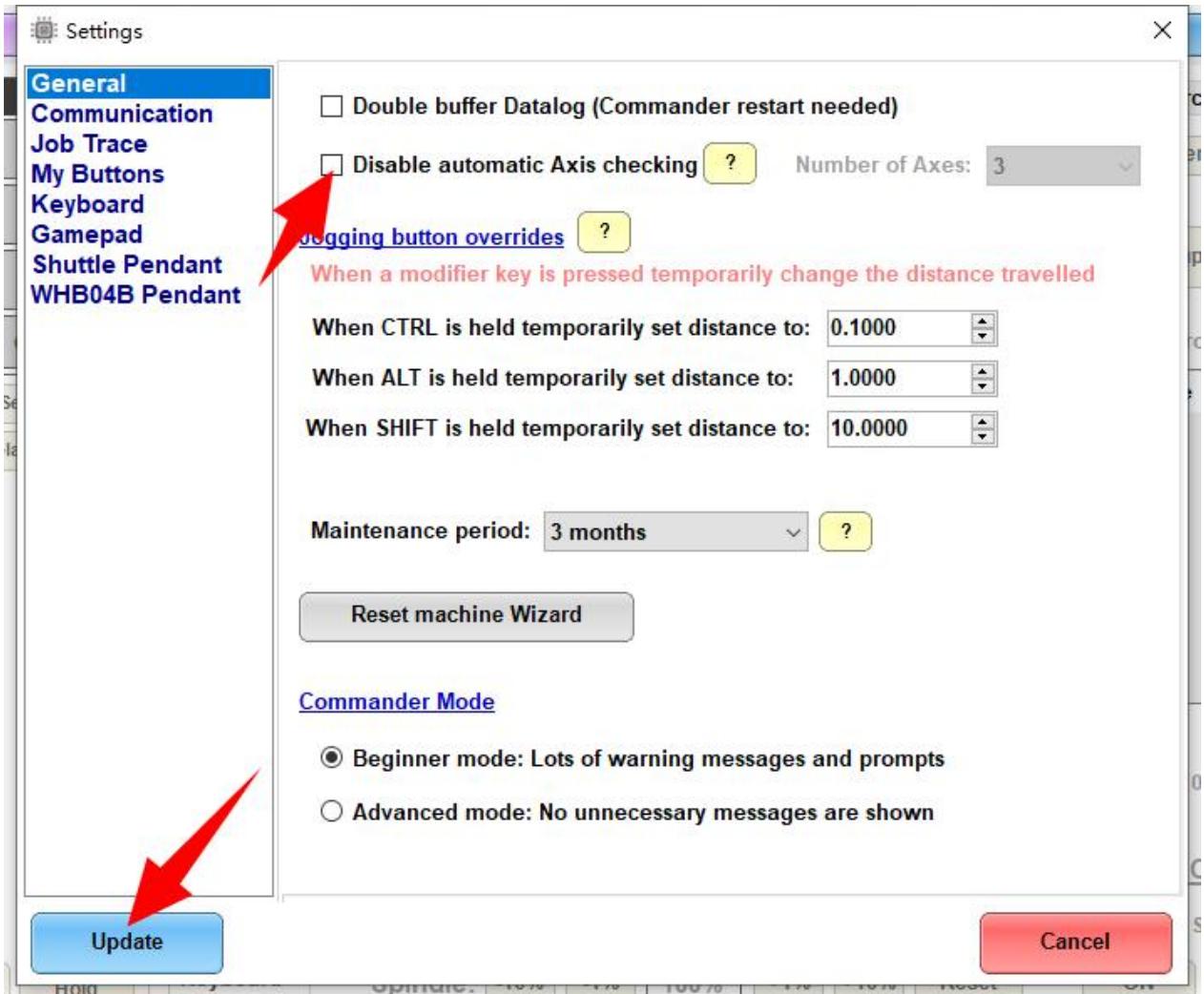


Successfully install when CH340K comes up.

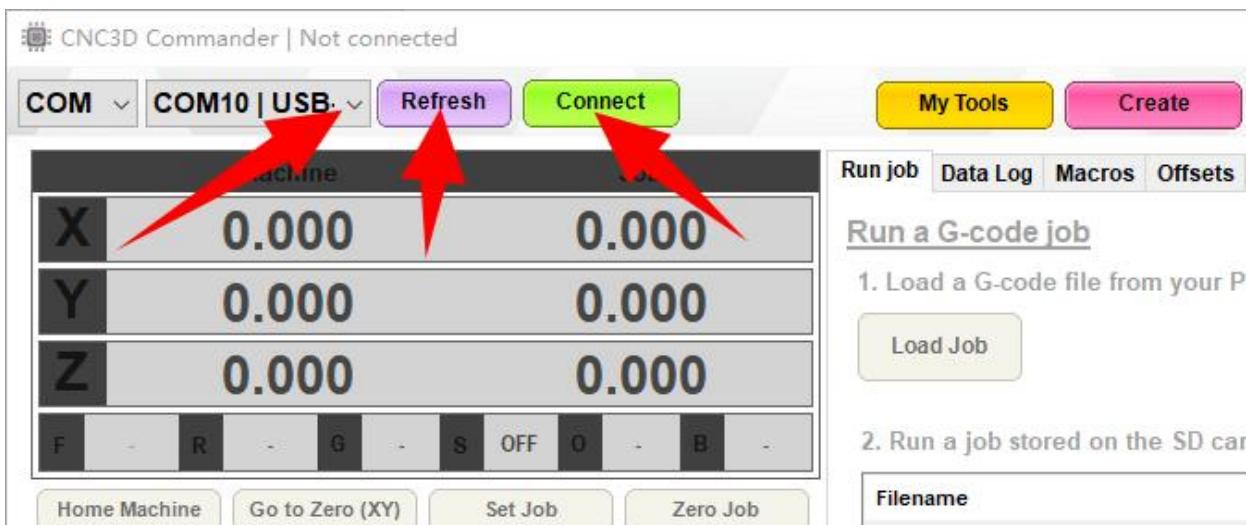
CNC3D Commander

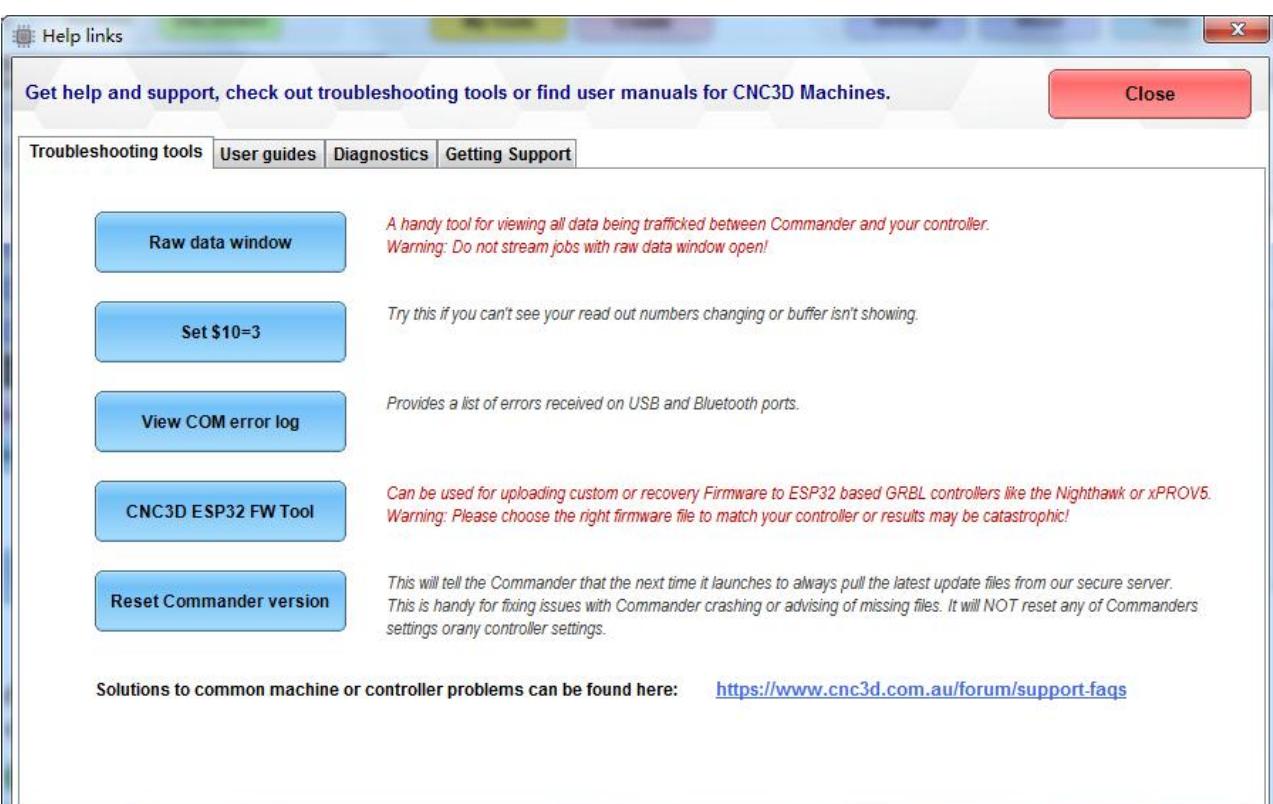
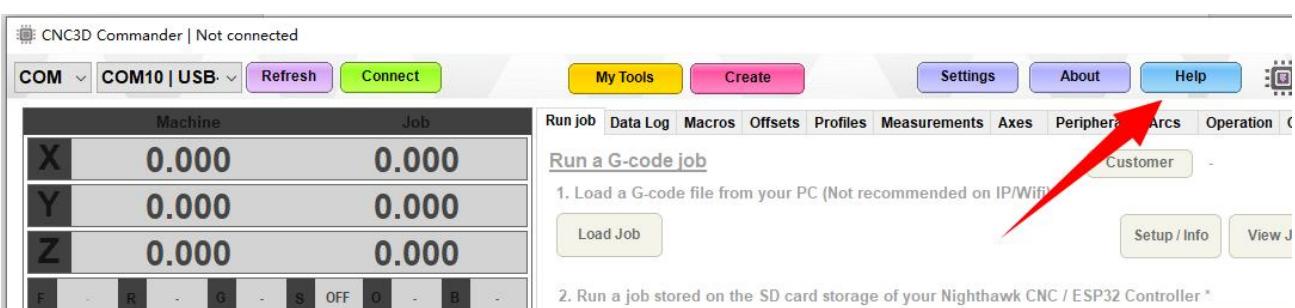
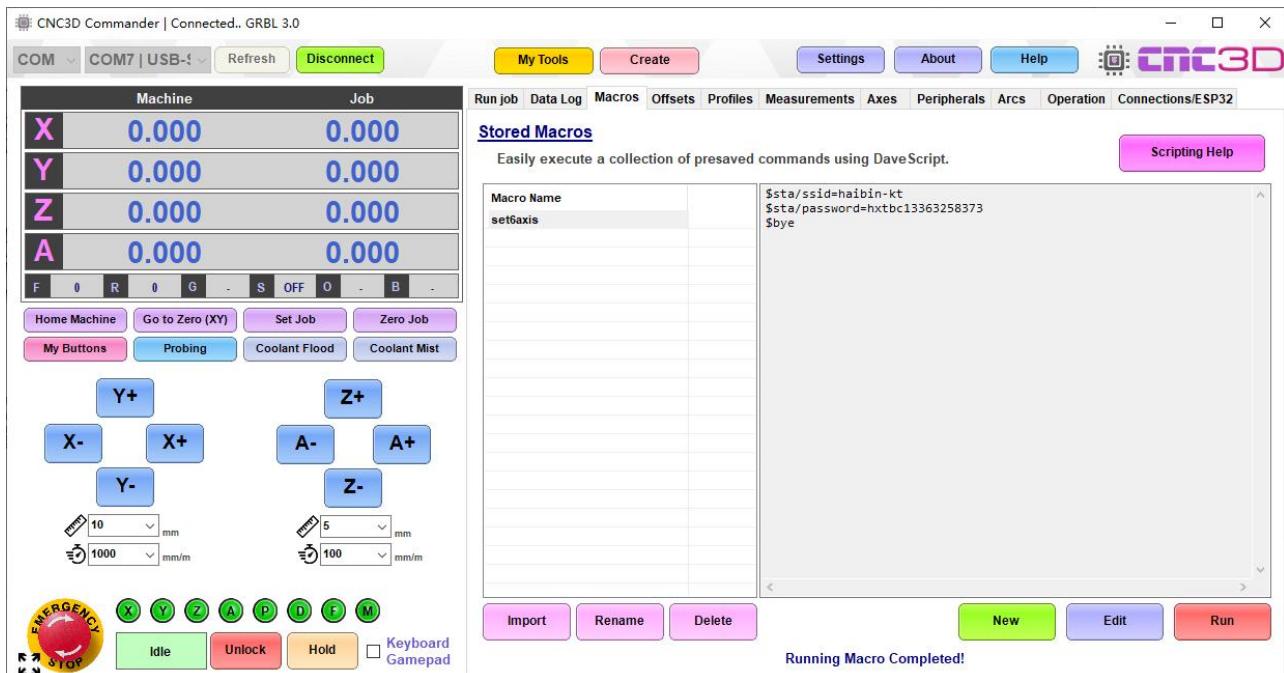
Open CNC3D Commander software and follow below settings.



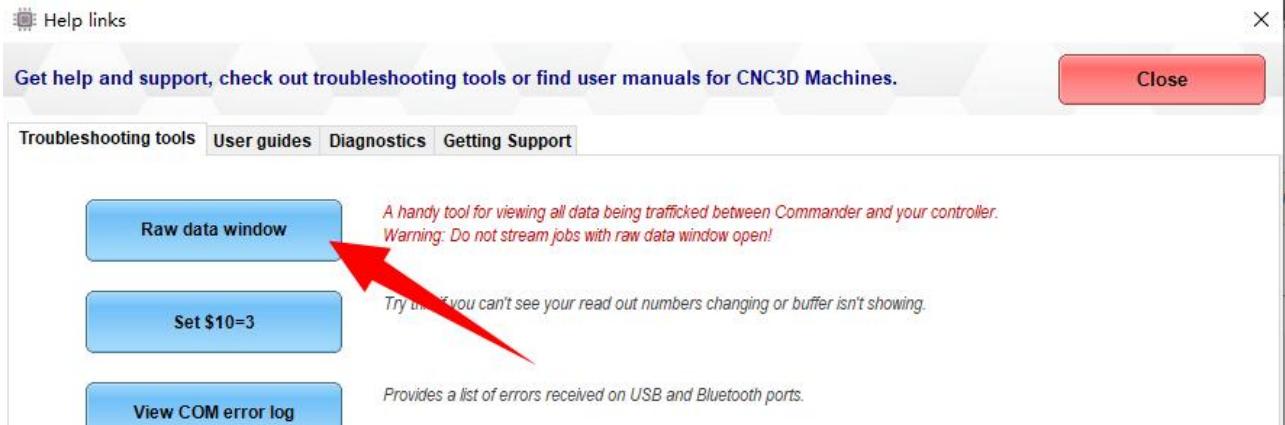


Refresh and connect





Click data window



Enter below

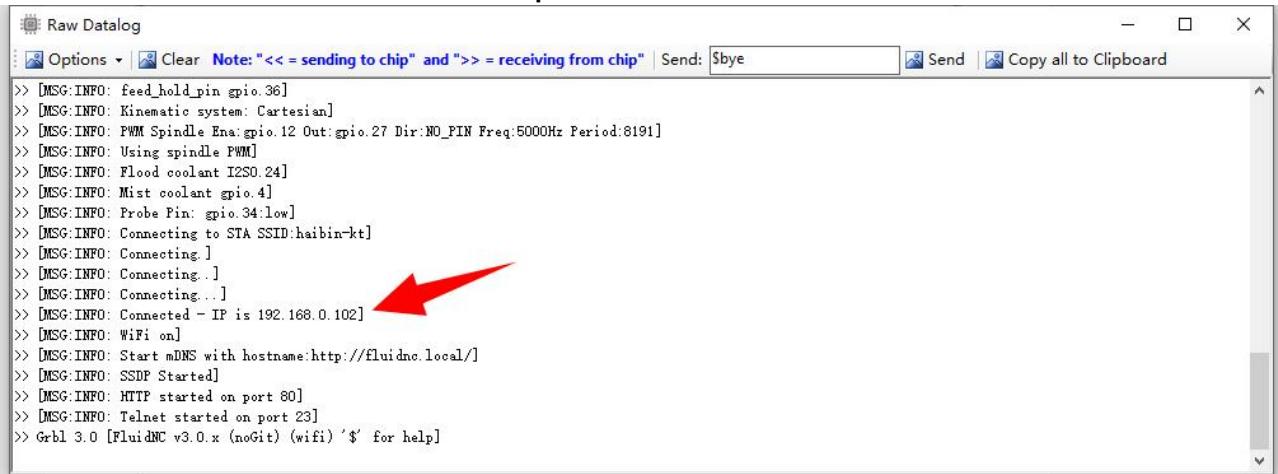
\$sta/ssid=your wifi account

\$sta/password= your wifi password

\$bye



Send OK and return find out ip address.



Enter ip you got on browser and click FluidNC.

The screenshot shows a web browser window with the URL `fluidnc` and IP `192.168.0.102`. The top navigation bar includes tabs for `Dashboard`, `FluidNC` (which is highlighted with a red arrow), and `Tablet`. Below the tabs, there's a `Controls` section with icons for home, X, Y, Z, and a pen tool, and a `GRBL` configuration section. The main content area is titled `FluidNC Settings` and contains several icons: a blue square with a grid, a green folder, an orange cloud, a red power button, and a blue refresh. A red arrow points to the green folder icon. A modal dialog box titled `FluidNC Local Filesystem` is open in the foreground. It has a `Upload files` button and a message `No file chosen`. Below this are icons for a folder with a plus sign and a folder with a slash. A table lists files: `config.yaml` (size 116668) and `index.html.gz` (size 116668). Each file row has a red arrow pointing to the download icon (a white circle with a downward arrow). The dialog also shows a progress bar at 13% and buttons for `Close` and `Refresh`.

Type	Name	Size
config.yaml	config.yaml	116668
index.html.gz	index.html.gz	116668

Total: 875.31 KB | Used: 120.60 KB 13%

Close Refresh

Open the config file you download.

```
board: 6 Pack
name: 6 Pack StepStick XYZABC
stepping:
  engine: I2S_STREAM
  idle_ms: 250
  pulse_us: 4
  dir_delay_us: 6
  disable_delay_us: 0
axes:
  shared stepper_disable_pin: NO_PIN
  x:
    steps_per_mm: 800.000
    max_rate_mm_per_min: 5000.000
    acceleration_mm_per_sec2: 100.000
    max_travel_mm: 300.000
    soft_limits: false
    homing:
      cycle: 1
      positive_direction: false
      mpos_mm: 0.000
      feed_mm_per_min: 100.000
      seek_mm_per_min: 200.000
      settle_ms: 500
      seek_scaler: 1.100
      feed_scaler: 1.100
  motor0:
    limit_neg_pin: NO_PIN
```

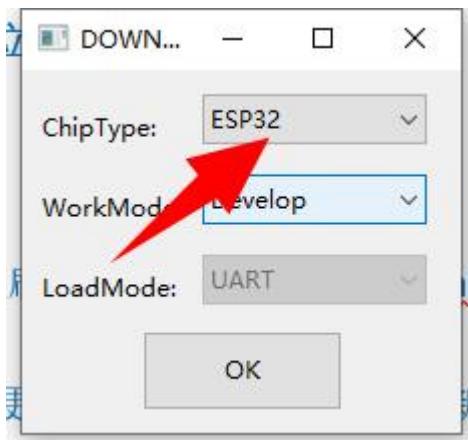
Update Firmware

The 4 axis card is already pre-installed FluidNC firmware. And upload index and yaml file.

Latest FluidNC firmware

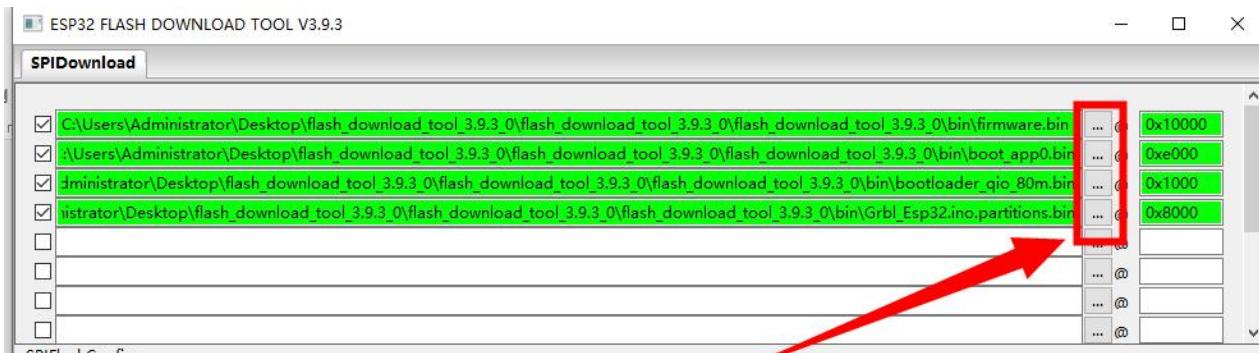
<https://github.com/bdring/FluidNC>

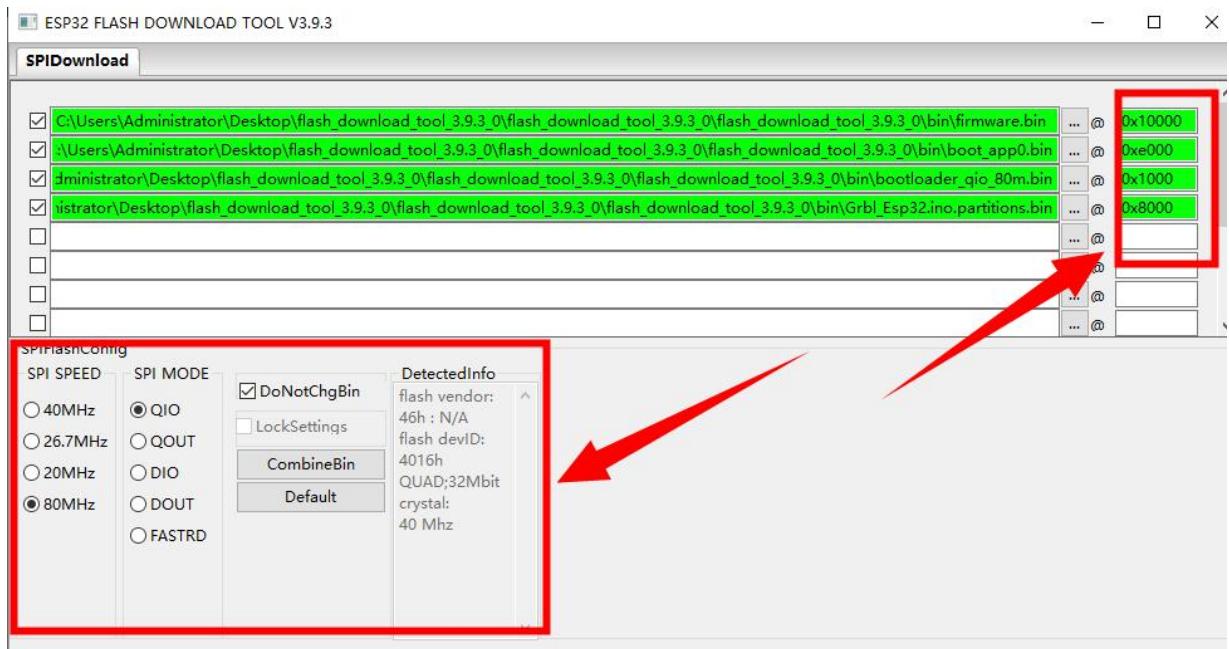
Open flash_download_tool3.9 software and select as below.



Select and upload file as below:

First line: firmware.bin
2th line: boot_app0.bin
3th line: bootloader_qio_80m.bin
4th line: Grbl_Esp32.ino.partitions.bin





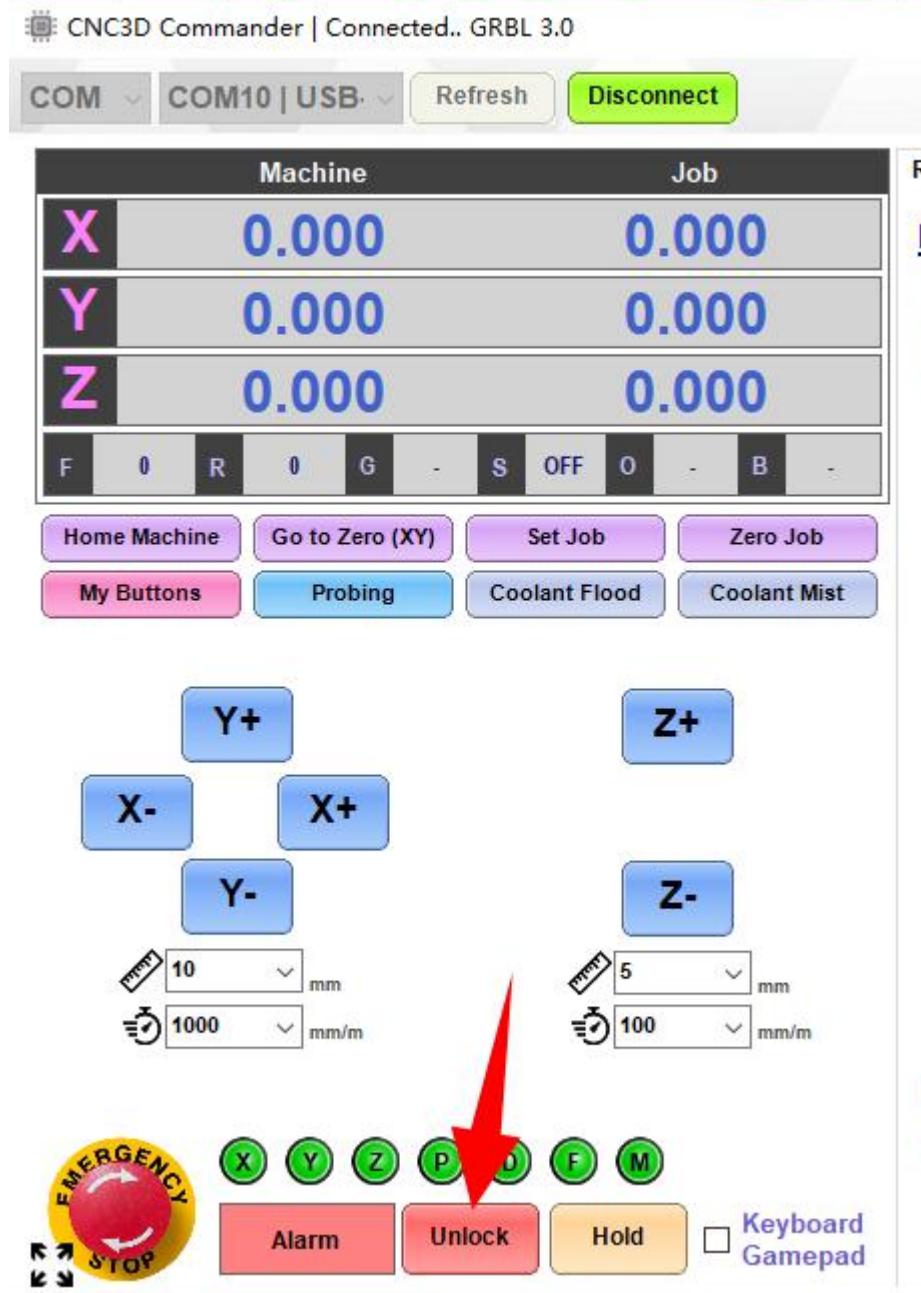
Select COM and Erase,then start.



After download firmware,re-boot control card and configure Wifi,Also upload yaml and index file.

There is no configuration and index in new firmware.

Need to unlock and set more axis.



Upload yaml and index file

The screenshot shows a web browser window with the URL `192.168.0.102`. The page title is "fluidnc". The navigation bar includes links for "Firmware", "Interface", and "Help". The main content area is titled "Flash Filesystem". It features a file upload form with a blue "选择文件" (Select File) button, a text input field showing "未选择文件" (No file selected), and a blue "Upload" button. Below the form is a table header with columns "Type", "Name", "Size", and "Time". At the bottom, there is a status message: "Status: Ok | Total space: 875.31 KB | Used space: 1 B | Occupation: [progress bar]". Red arrows point from the text instructions to the "选择文件" button and the "Upload" button.

The screenshot shows the FluidNC v3.0.x (noGit) web interface. At the top, there is a navigation bar with links for Firmware, Interface, and Help. Below the navigation bar, a red arrow points from the 'index.html' file entry in a file list to a 'Go to ESP3D interface' button. The file list table has columns for Name, 修改日期 (Last Modified), 类型 (Type), and 大小 (Size). The 'index.html' file is highlighted in blue. The main area displays a 'Flash Filesystem' section with a file list table. A second red arrow points from the 'index.html.gz' file entry in this list to the 'Go to ESP3D interface' button. The file list table has columns for Type, Name, Size, and Time. Both 'config.yaml' and 'index.html.gz' files have red trash can icons next to them. At the bottom of the interface, the IP address '192.168.0.102' is visible.

名称	修改日期	类型	大小
config.yaml	2024/11/6/周三 9:29	YAML 文件	6 KB
index.html	2024/11/6/周三 9:29	WinRAR 压缩文件	114 KB

Type	Name	Size	Time
□	config.yaml	5203	■
□	index.html.gz	116668	■

Re-start CNC3D Commander, and will see XYZABC axis.

More refer to

<http://wiki.fluidnc.com/en/config/overview>