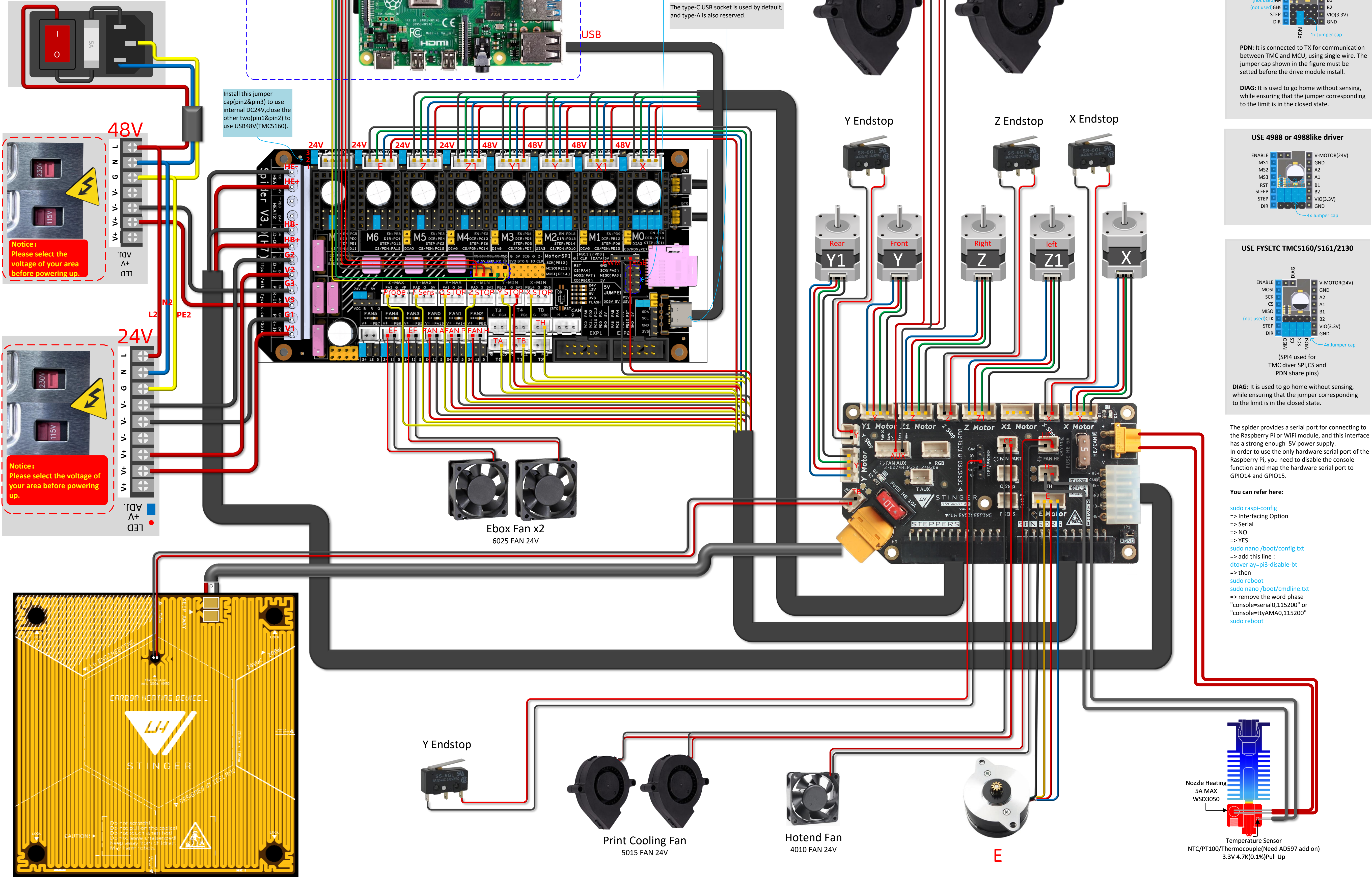


Spider v3.0 H7

LH Stinger V1.0



USE FYSETC TMC 2209 V3.1

Pin	Function
ENABLE	ENABLE
MS1	(not used)
MS2	(not used)
TX	TX
RX	(not used)
CLK	(not used)
STEP	STEP
DIR	DIR
PDN	PDN
V-MOTOR(24V)	V-MOTOR(24V)
GND	GND
A2	A2
A1	A1
B1	B1
B2	B2
VIO(3.3V)	VIO(3.3V)
GND	GND

1x Jumper cap

PDN: It is connected to TX for communication between TMC and MCU, using single wire. The jumper cap shown in the figure must be setted before the drive module install.

DIAG: It is used to go home without sensing, while ensuring that the jumper corresponding to the limit is in the closed state.

USE 4988 or 4988like driver

Pin	Function
ENABLE	ENABLE
MS1	MS1
MS2	MS2
MS3	MS3
RST	RST
SLEEP	SLEEP
STEP	STEP
DIR	DIR
V-MOTOR(24V)	V-MOTOR(24V)
GND	GND
A2	A2
A1	A1
B1	B1
B2	B2
VIO(3.3V)	VIO(3.3V)
GND	GND

4x Jumper cap

USE FYSETC TMC5160/5161/2130

Pin	Function
ENABLE	ENABLE
MOSI	MOSI
SCK	SCK
CS	CS
MISO	MISO
CLK	(not used)
STEP	STEP
DIR	DIR
V-MOTOR(24V)	V-MOTOR(24V)
GND	GND
A2	A2
A1	A1
B1	B1
B2	B2
VIO(3.3V)	VIO(3.3V)
GND	GND

4x Jumper cap

(SPI4 used for TMC driver SPI, CS and PDN share pins)

DIAG: It is used to go home without sensing, while ensuring that the jumper corresponding to the limit is in the closed state.

The spider provides a serial port for connecting to the Raspberry Pi or WiFi module, and this interface has a strong enough 5V power supply. In order to use the only hardware serial port of the Raspberry Pi, you need to disable the console function and map the hardware serial port to GPIO14 and GPIO15.

You can refer here:

```
sudo raspi-config  
=> Interfacing Option  
=> Serial  
=> NO  
=> YES  
sudo nano /boot/config.txt  
=> add this line :  
dtoverlay=pi3-disable-bt  
=> then  
sudo reboot  
sudo nano /boot/cmdline.txt  
=> remove the word phrase  
"console=serial0,115200" or  
"console=ttyAMA0,115200"  
sudo reboot
```