

MELLOW FLY SUPER 8 PRO

CPU: latest edition **STM32H723ZGT6** 32-bit @ 550 MHZ

Firmware: Reprap / Klipper / Marlin

Drive interface: 8pcs

Mainboard input voltage: **12V/24v**

Logic voltage: 3.3V

Network support: ESP32

PC communication interface: usb / wifi

Wifi module: Expandable wifi module,For RRF firmware(Optional)

WIFI transmission: 1.6m/s (using RRF firmware)

Display: Serial touch screen, 12864LCD, 2004LCD, FLY 4.3/7 .0

Expand interface: CAN, 3d touch, UART, PTIOO, K-type thermocouple

Extruder interface: 2pcs

Motor drive: A4988, LV8729, DRV8225, TMC2208/2209/5160 etc...

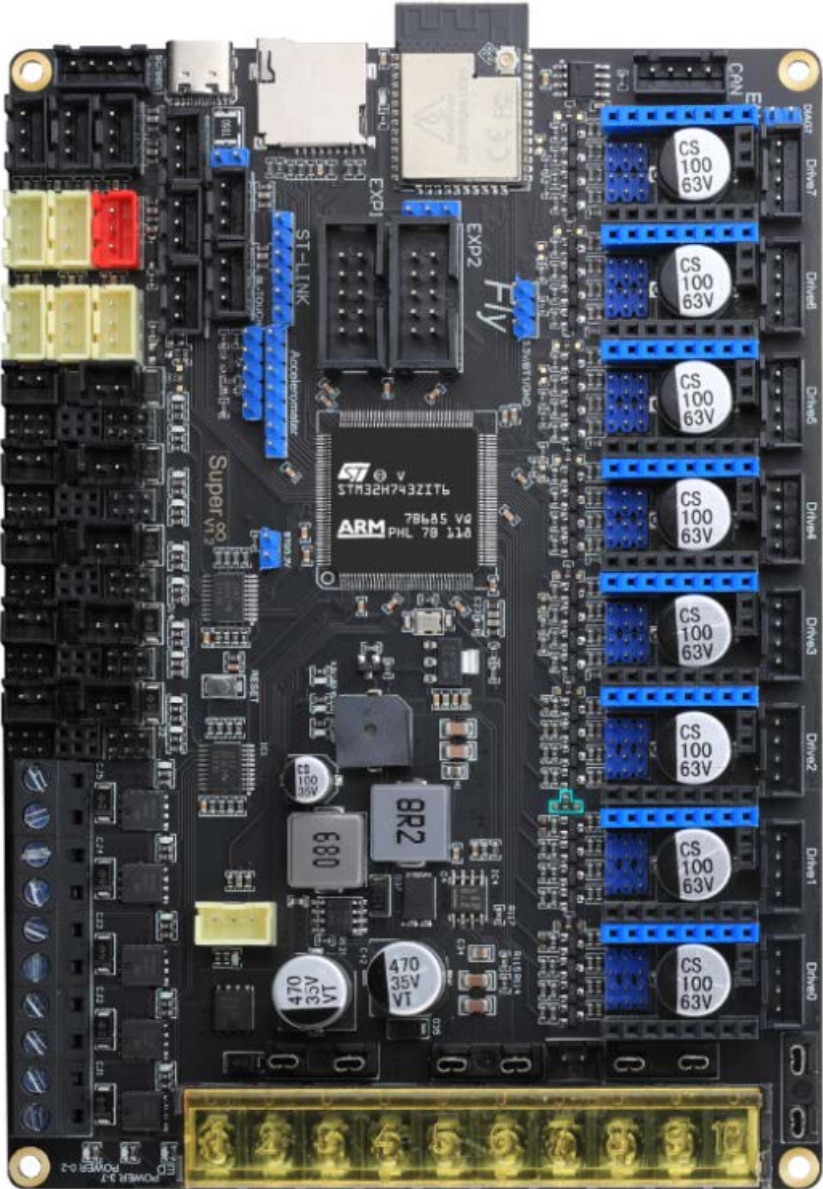
Driving operation mode support: TMC, uart / spi

Heating interface: HB, HEO, HEI

Maximum input current at hot bed port: **(24V) 15A**

PWM fan interface: Two wire CNC fan (FANO,FAN1,FAN2,FAN3)

Maximum output current of fan interface: **1A**



Driver7

Driver6

Driver5

Driver4

Driver3

Driver2

Driver1

Driver0

CS 100 63V

CS 100 63V

CS 100 63V

CS 100 63V

CS 100 63V

CS 100 63V

CS 100 63V

CS 100 63V

EXP2

EXP1

ST-LINK

Accelerometer

Super V3

ARM7B85 V6
PHL 7B 118

ARM

8R2

680

470 35V VT

470 35V VT

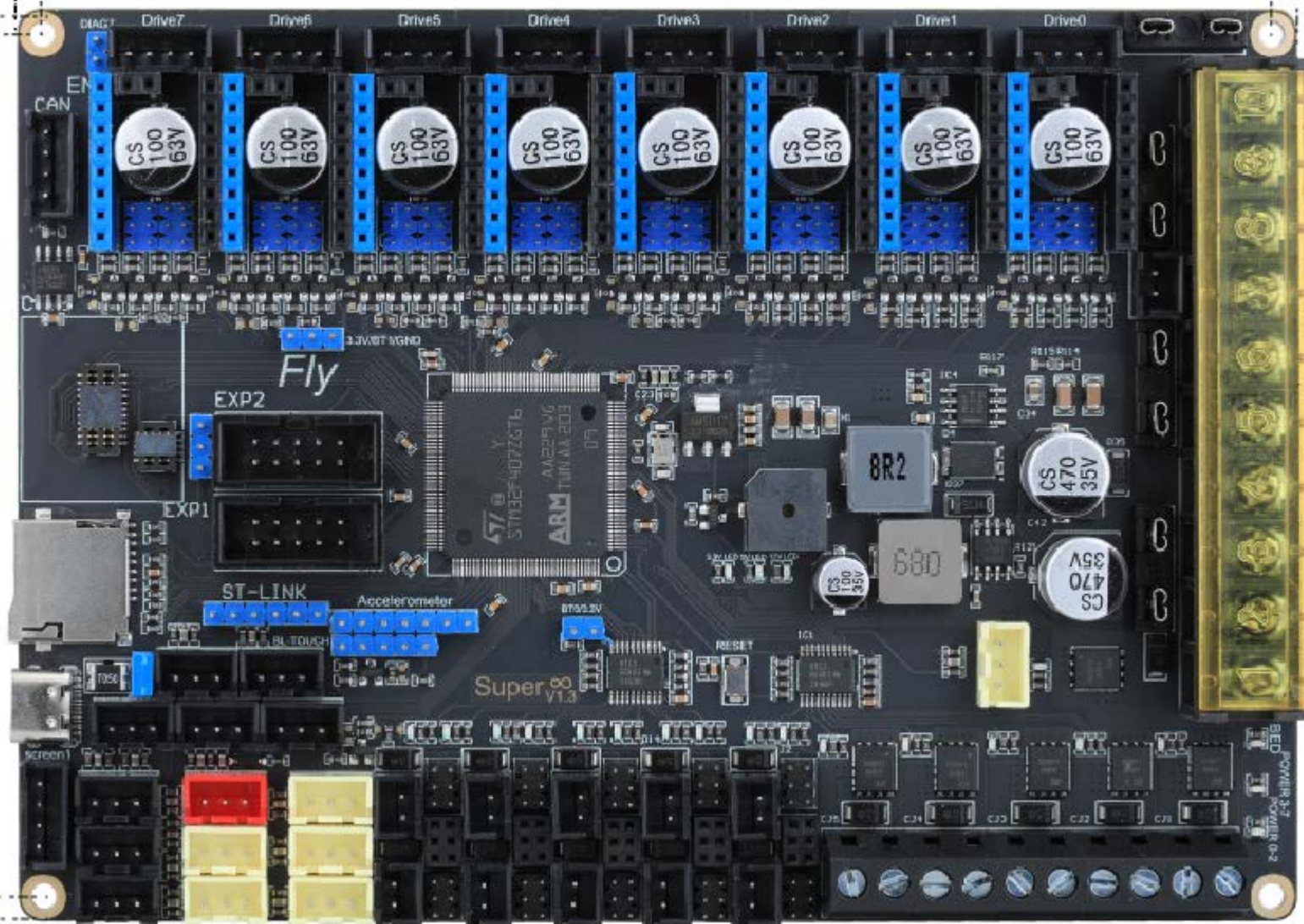
POWER 3.7
POWER 0.2

109.68mm

103.45mm

155.58mm

149.38mm



8 drives support high voltage

Uncontrollable fan

CAN Port

EXP Port

Accelerometer
Bltouch

USB Power

USB

Serial
Screen

Thermistor

HV Probe IN

Limit Switch

HEAT 4-0

+ DRIVE
- 3-7 POWER

+ DRIVE
- 0-2 POWER

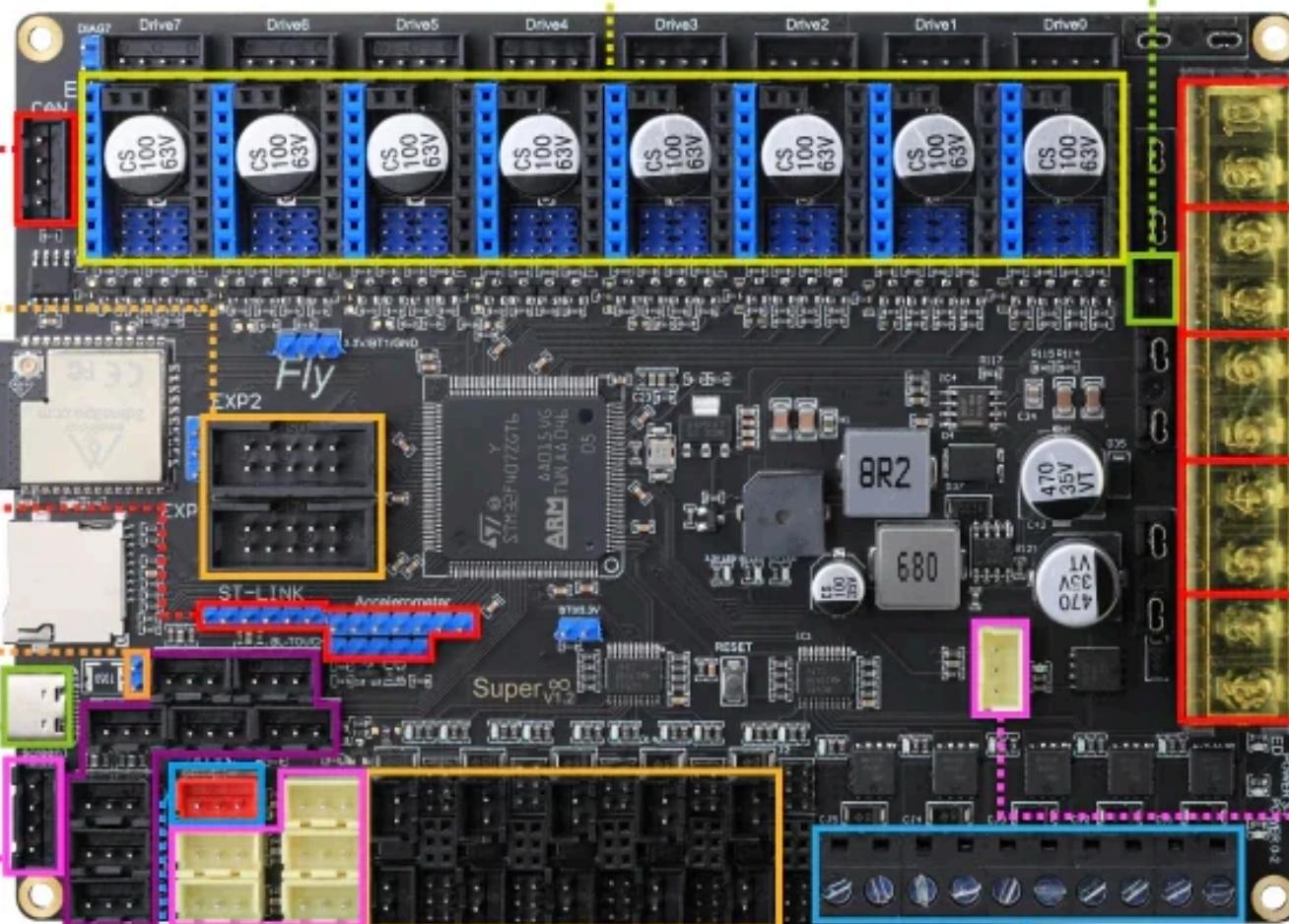
+ Motherboard
/heat Power
- 12V/24V

- BED Power
+ 12V/24V
MAX 30V

+ BED OUT
-

Thermistor

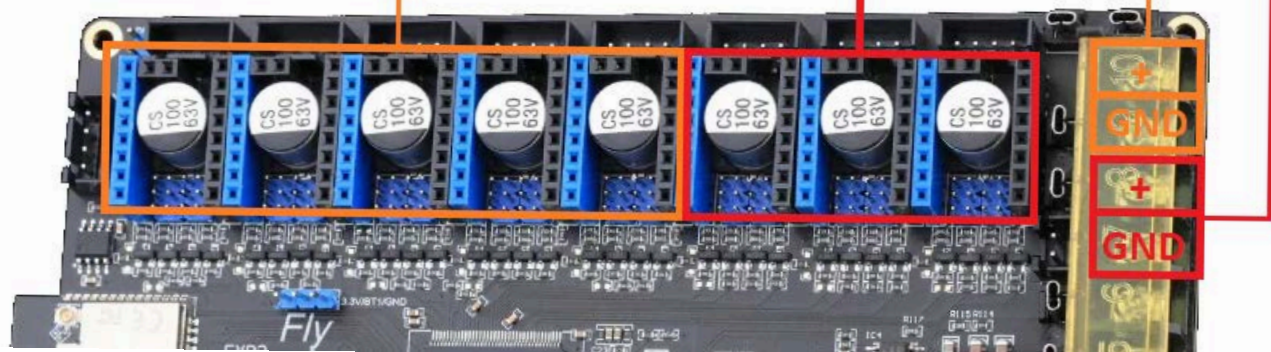
FAN9
FAN7
FAN5
FAN3
FAN1
FAN8
FAN6
FAN4
FAN2
FAN0

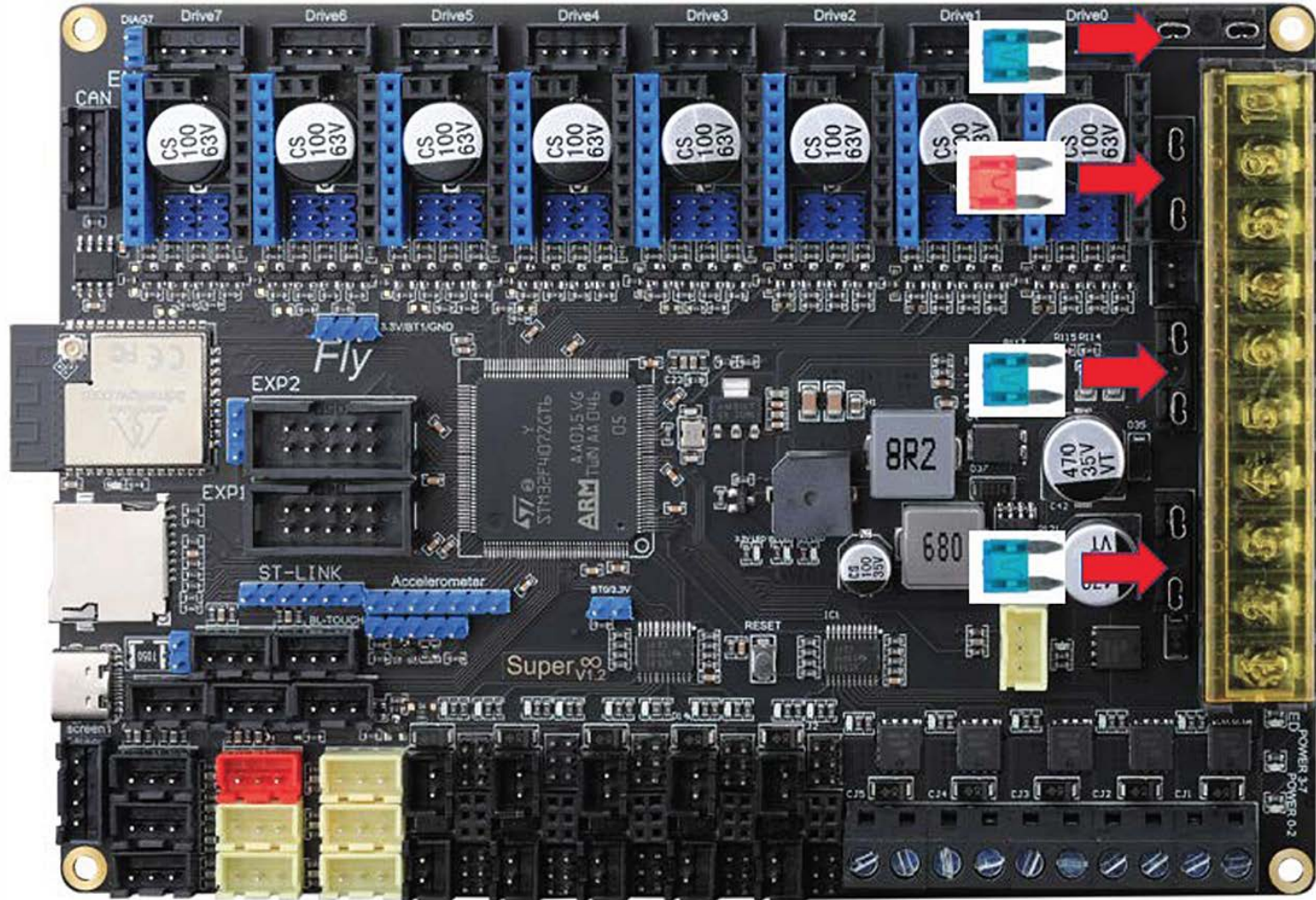


Driver Power

7 6 5 4 3

2 1 0






```
TMC MISO PB5
TMC MOSI PB4
TMC SCK PB3
```

CANL CANH	CAN
	5V
	GND
	PB8
	PB9

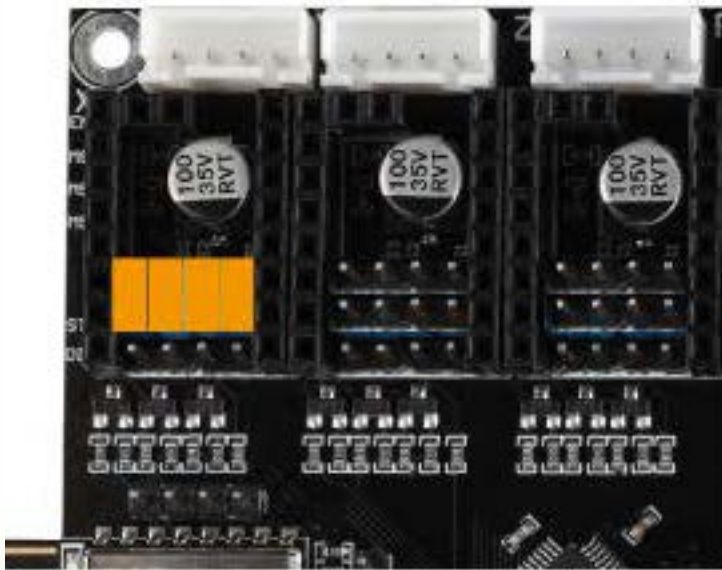
EXP1				
GND	PG14	PC14	PB2	PE12
5V	PG13	PC13	PG8	PE13

SCREEN
PA10
PA9
GND
5V

PG10	-	+
IO2		
PC0	-	+
ADC_4		
PF9	-	+
ADC_2		
FAN9		
+		
PD15		
FAN7		
+		
PD12		
FAN5		
+		
PB11		
FAN3		
+		
PA3		
FAN1		
+		
PA1		
PG11	-	+
IO1		
PF10	-	+
ADC_3		
PF5	-	+
ADC_1		
FAN8		
+		
PD14		
FAN6		
+		
PB10		
FAN4		
+		
PA15		
FAN2		
+		
PA2		
FAN0		
+		
PA0		
PG12	-	+
IO0		
PF3	-	+
HV IN		
PF4	-	+
ADC_0		
ST-LINK		
RESET	PA14	PA13
GND	3.3V	5V
BLTOUCH		
GND	5V	PC6
GND	PC3	
SERVO		
PROBE		
PG9	-	+
IO3		
PD7	-	+
IO4		
PF8	-	+
IN7		
ACCELEROMETER		
5V	GND	PD0
PD1	PD3	PD4
PD5		
HEAT4		
HEAT3		
HEAT2		
HEAT1		
HEAT0		
ADC5		
PC1		
-		
5V		
PD6	-	+
IO5		
PA8	-	+
IO6		



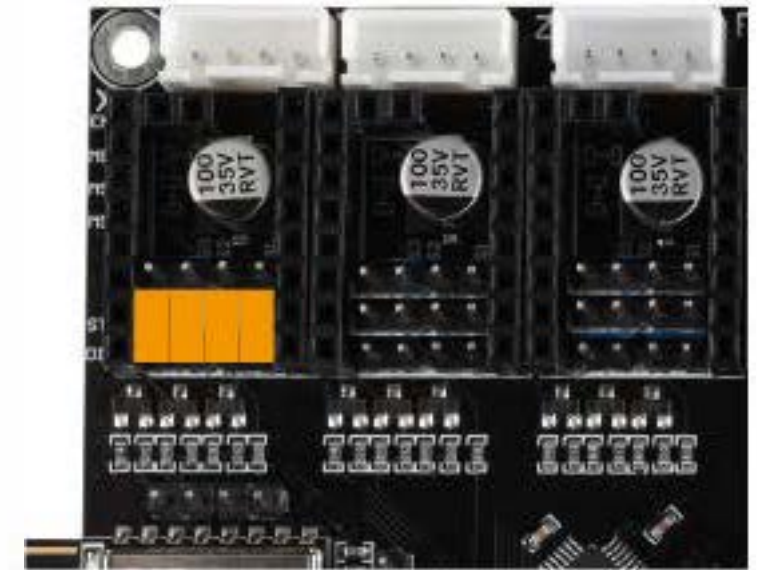
Interface description



- Normal jumper mode

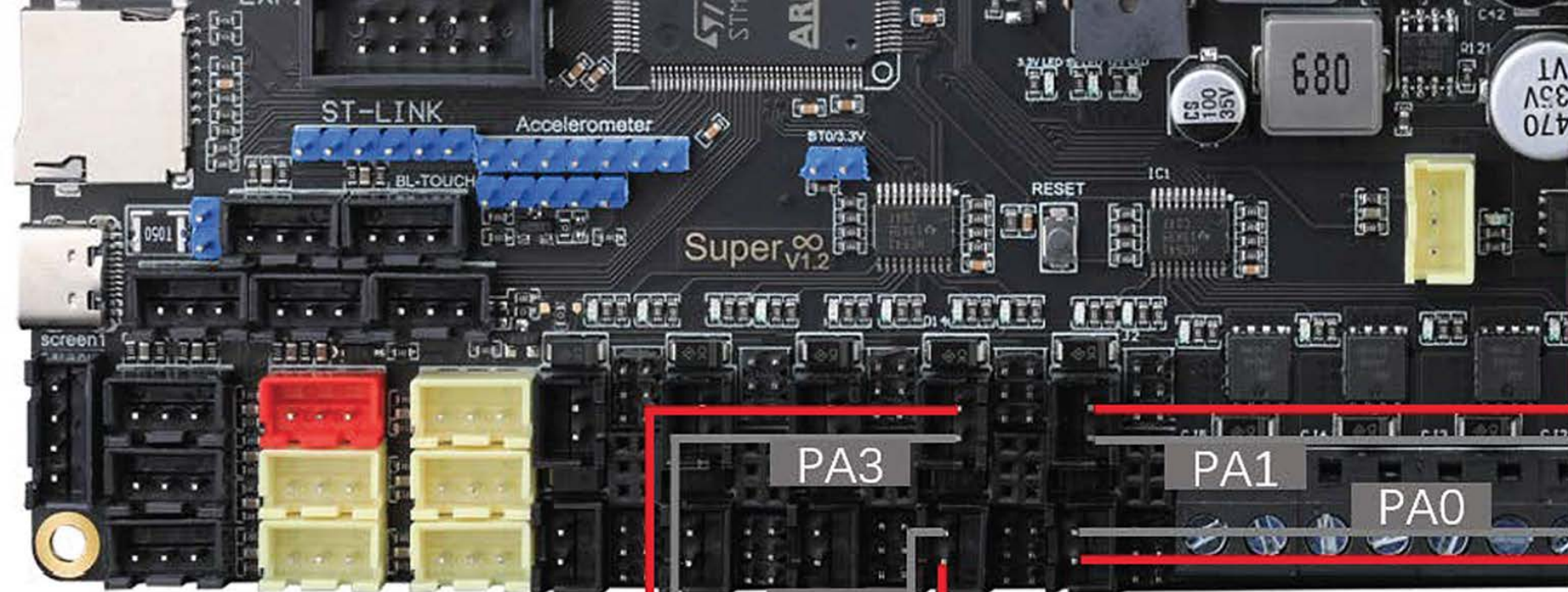


- UART mode



- SPI mode

UART: The driver supporting UART communication can set the current size and mute/anti shake mode of the driver through UART



PA3

PA1

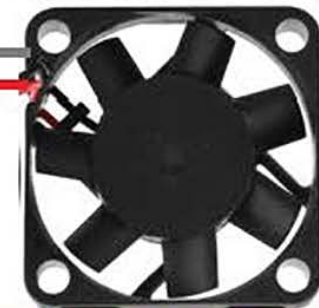
PA0

PA2



电器仓通风风扇 *2
Electronics Fans *2

喉管散热风扇
HOTEND
COOLING FAN

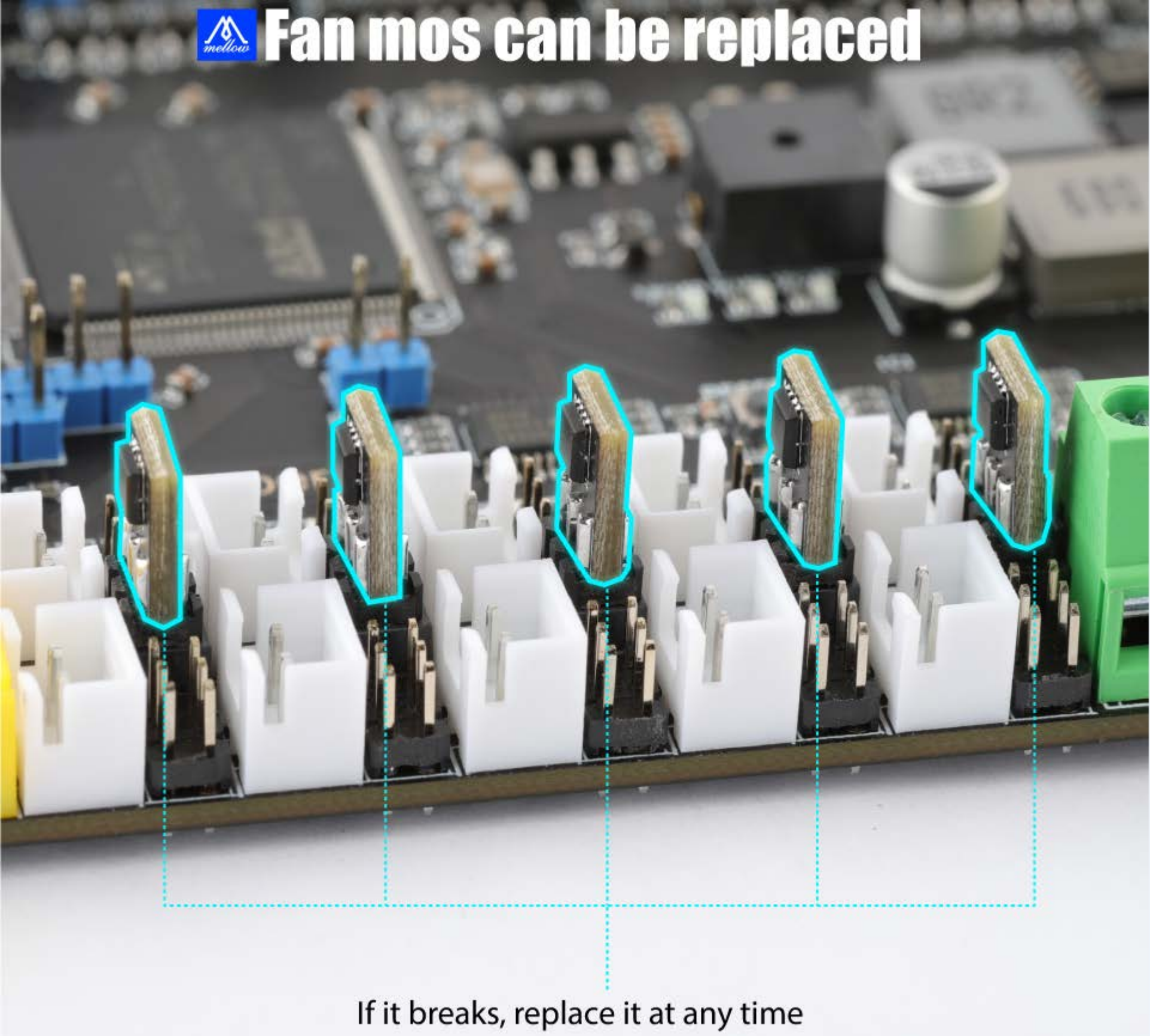


模型冷却风扇
PART
COOLING FAN





Fan mos can be replaced



If it breaks, replace it at any time



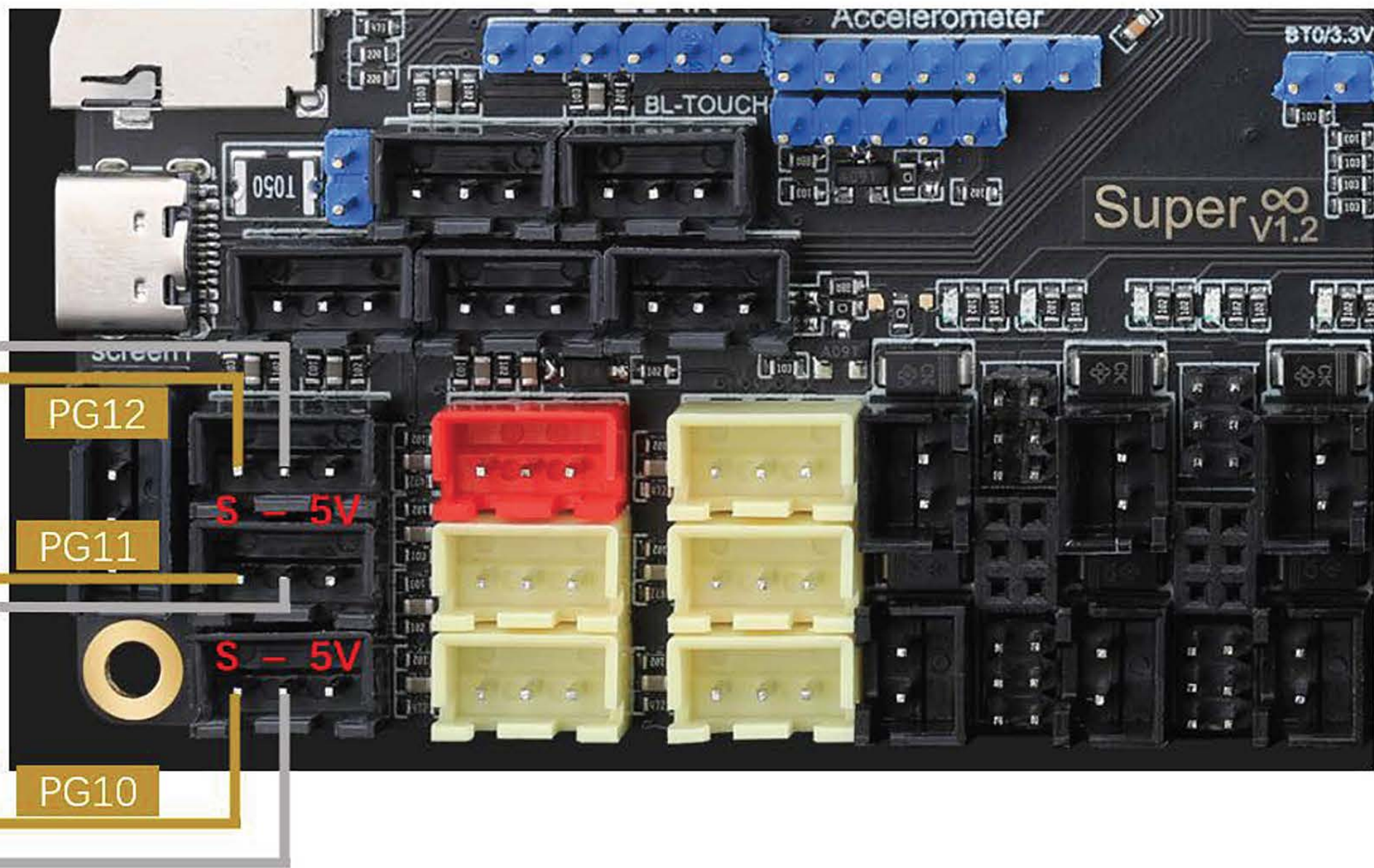
X限位
X_endstop

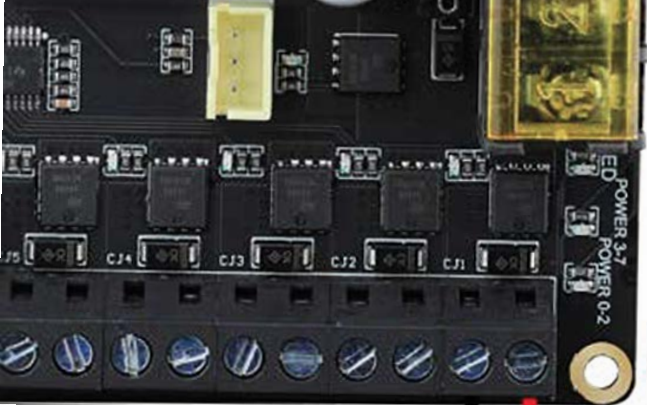


Y限位
Y_endstop



Z限位
Z_endstop

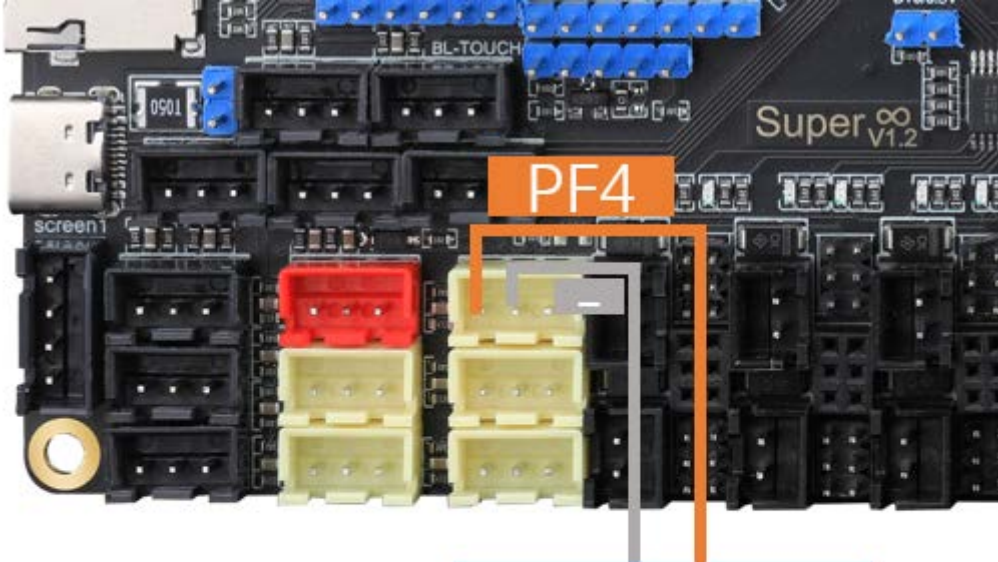




Extruder Heater

PBO





PF4

喷头热敏
Nozzle
thermistor

