



# Makerbase

Guangzhou Qianhui Information technology Co., Ltd

## MKS Robin2 Motherboard Manual

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Document Version

1.0

Release Date: 2018-11-15

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## Version Update

version	modified time	modification	Remark
V1.0.0	2018.11	original version	

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## I Overview

MKS Robin2 is a motherboard for market demand, which assemble with 3.5 inch TFT touch screen already. It is easy for users to configure the firmware and update via SD card. This controller is suitable for 3D printing manufacturers.



## II Futures

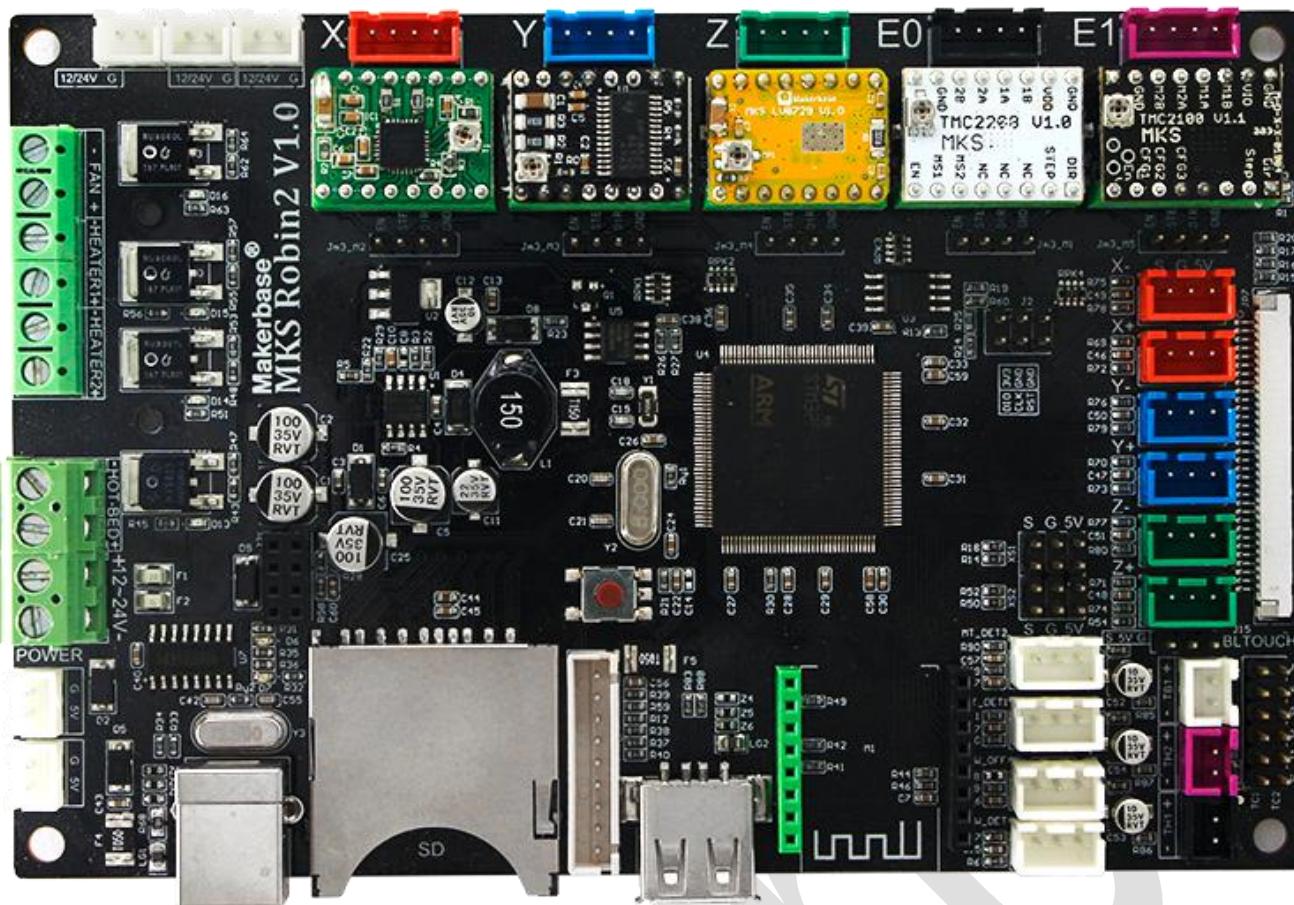
1. Support online switching 7 languages.
2. Use 32-bit high-speed ARM chip STM32F407, better than Robin and other mega 2560
3. With 3.5 inch touch screen, simple operation interface and high sensitivity
4. Support external wifi module, controlled by mobile phone APP(Android or IOS system) or computer web page.
5. Easy to update firmware via SD card
6. Available to self-design booting logo and all button, available to custom at least 13 buttons.
7. Replace stepper drivers freely, support 4988,8825,2100,2208 and other drivers, support external drivers. Stepper motor driver supports 128 micro stepping
8. High quality 4-layer PCB and special designed for cooling.
9. Adopt high quality MOSFET with better cooling effect;
10. 12V-24V power input;
11. Support 24V power input, reduce heated bed current to 1/4 which solves mosfet heat problem efficiently
12. Support the following functions: resume from the break point, power save, power detection, filament detection and auto off.
13. Support G-code printing in Chinese.
14. Support U disk printing and preview printing models
15. Support BL touch auto-leveling.

### III Motherboard Parameter

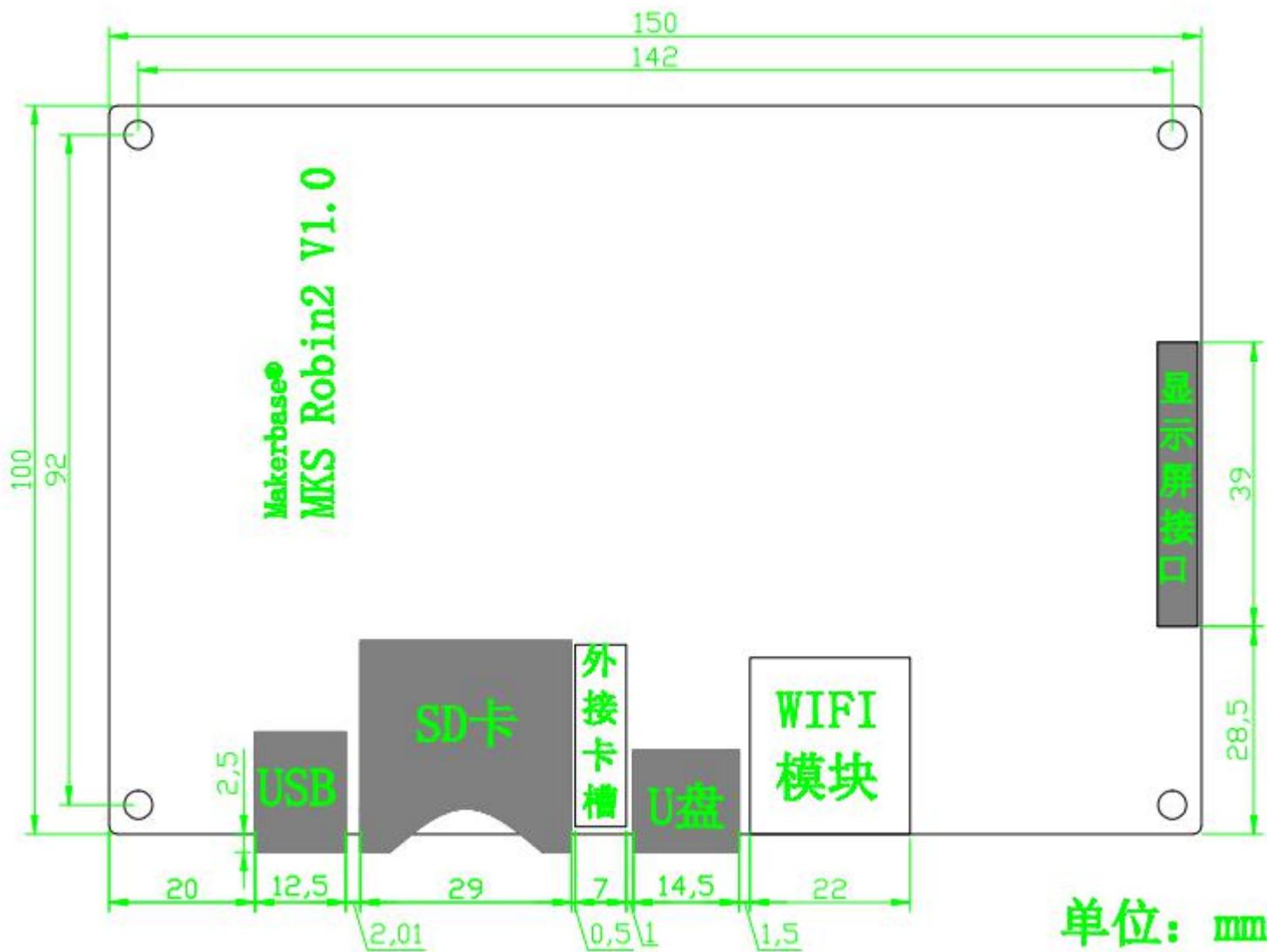
Item:	MKS Robin2	Processor:	STM32
Outer size:	150mm*100mm	Hole size:	142mm*92mm
Input voltage:	12V~24V 5A~15A	Stepper driver:	4988, 8825, 8729, 2100, 2208
Temperature sensor port :	NTC 100K、31855	Screen:	3.5 英寸
Support Print format:	G-code	Support machine:	XYZ、delta、kossel、Ultimaker、corexy
Recommended software:	Cura、Simplify3d、Prontierface、Repetier-Host	Firmware update:	SD card

## IV Connection Instruction

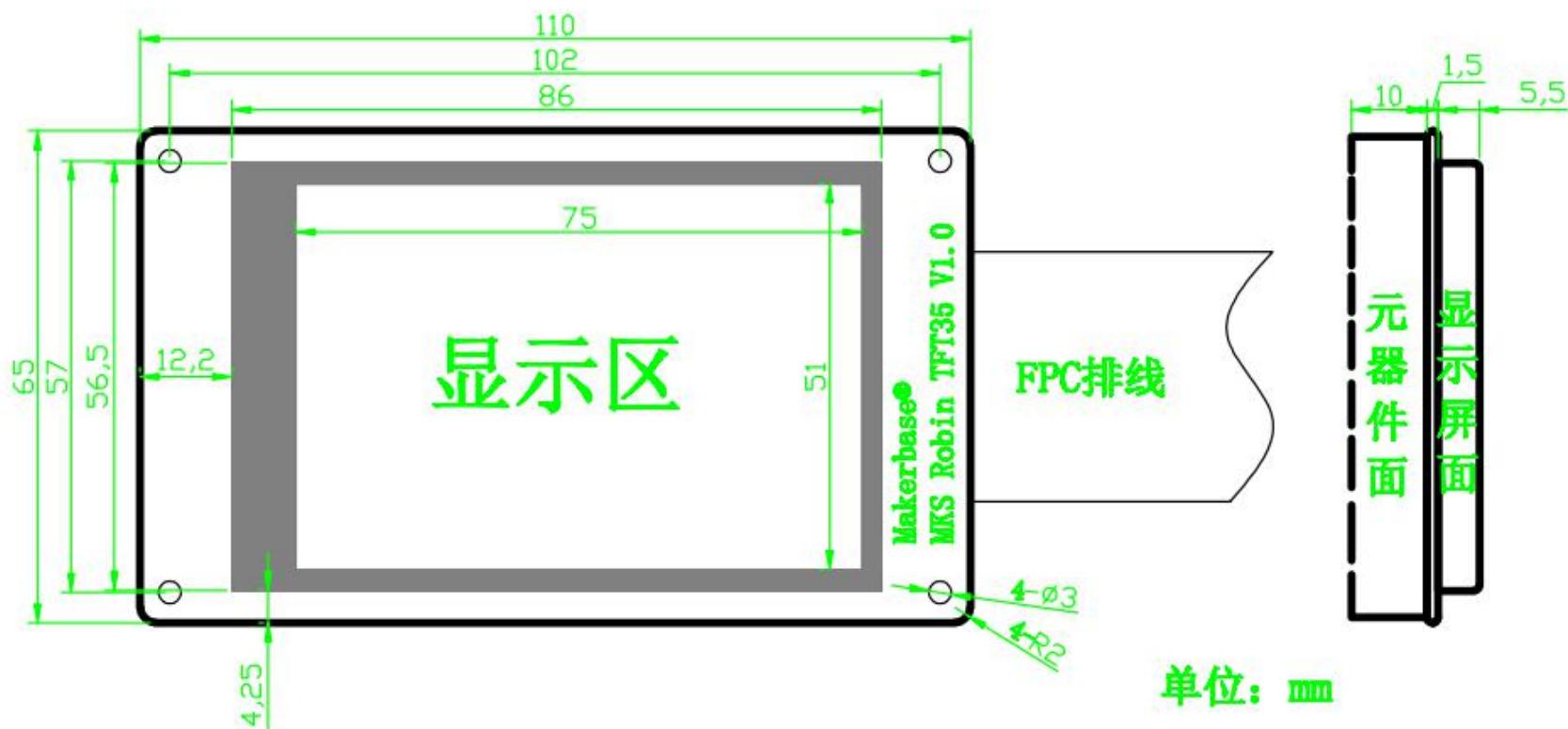
### 4.1 MKS Robin2



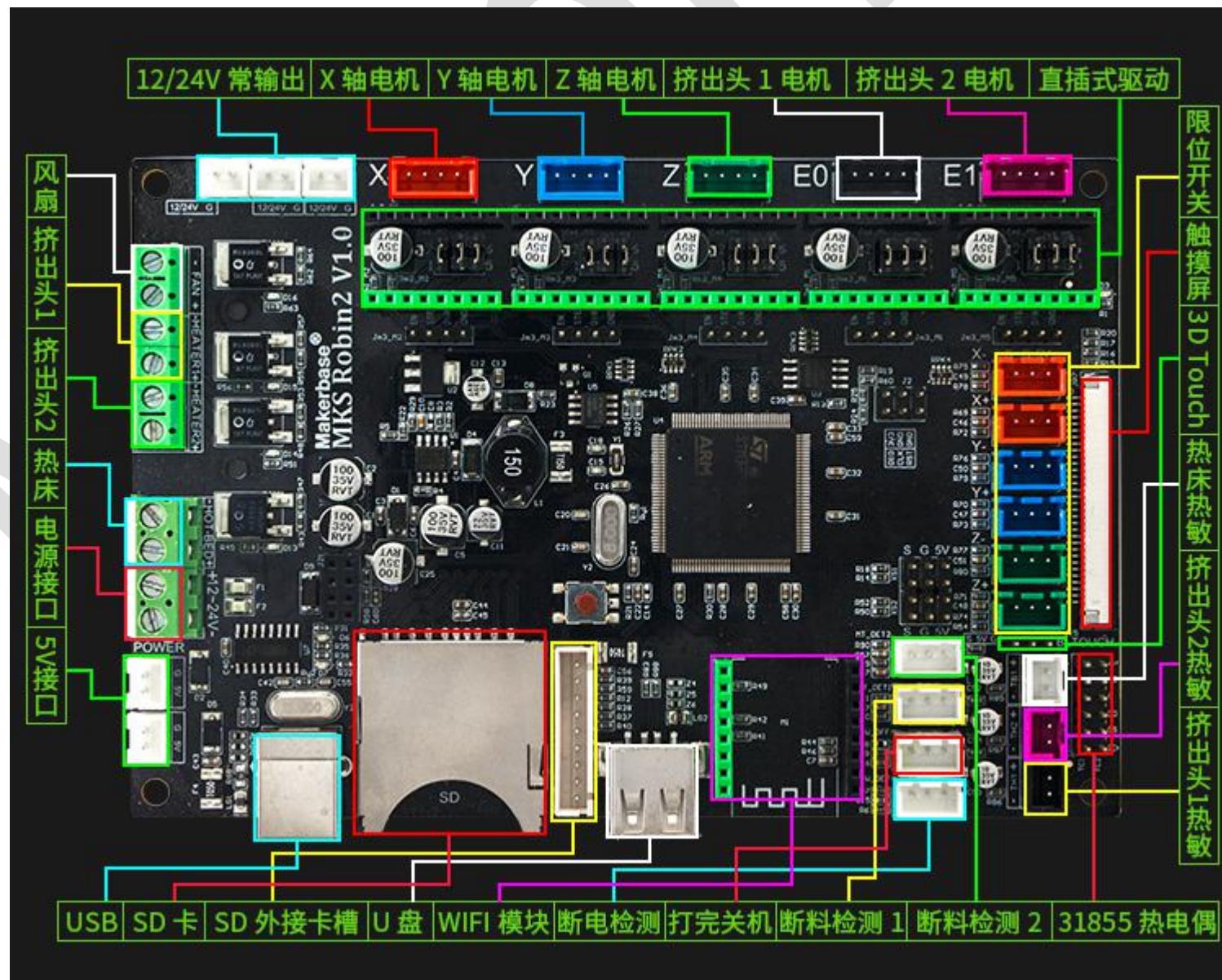
### 4.2 MKS Robin2 motherboard Installation Dimensional Drawing



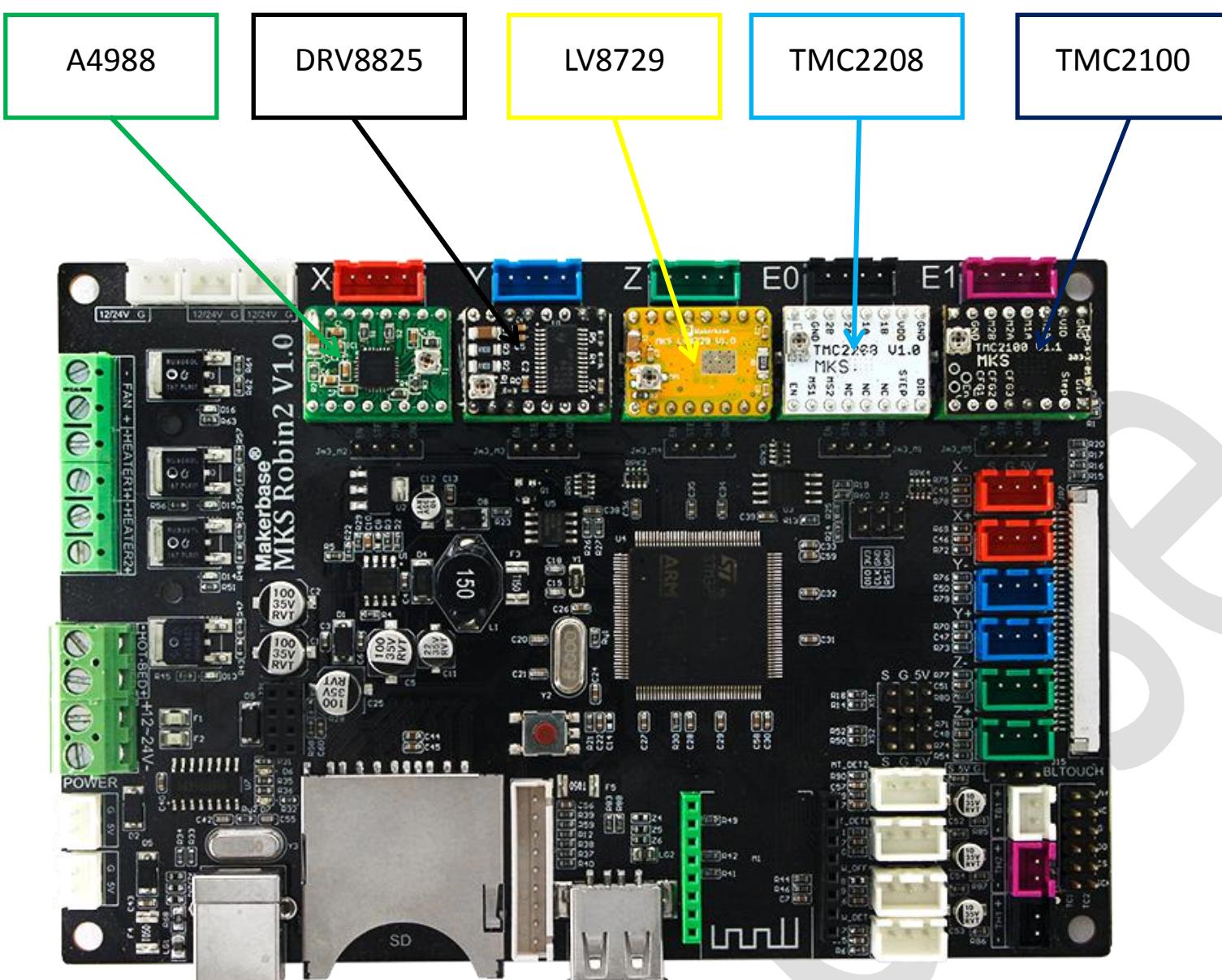
#### **4.3 MKS Robin TFT35 Installation Dimensional Drawing**



#### **4.4 System Connection Diagram**



#### 4.5 Drivers and motherboard Connection Diagram



The following parameter is only suitable for our company's motherboard.

Driver micro step chart:

4988 driver				8825 driver				8729 driver			
M1	M2	M3	micro step	M1	M2	M3	micro step	M1	M2	M3	micro step
Low	Low	Low	Full Step	Low	Low	Low	Full Step	Low	Low	Low	Full Step
High	Low	Low	1/2 Step	High	Low	Low	1/2 Step	High	Low	Low	1/2 Step
Low	High	Low	1/4 Step	Low	High	Low	1/4 Step	Low	High	Low	1/4 Step
High	High	Low	1/8 Step	High	High	Low	1/8 Step	High	High	Low	1/8 Step
High	High	High	1/16 Step	Low	Low	High	1/16 Step	Low	Low	High	1/16 Step
				High	Low	High	1/32 Step	High	Low	High	1/32 Step
				Low	High	High	1/32 Step	Low	High	High	1/64 Step
				High	High	High	1/32 Step	High	High	High	1/128 Step

The TMC2208 driver's chip internally uses a Differential Evolution Algorithm to extend the 16 micro steps to 256 micro steps. The baseline micro step value is 16.

It is recommended to use 16 micro steps, which have a very good mute effect. Buyers can also adjust it according to the chart below.

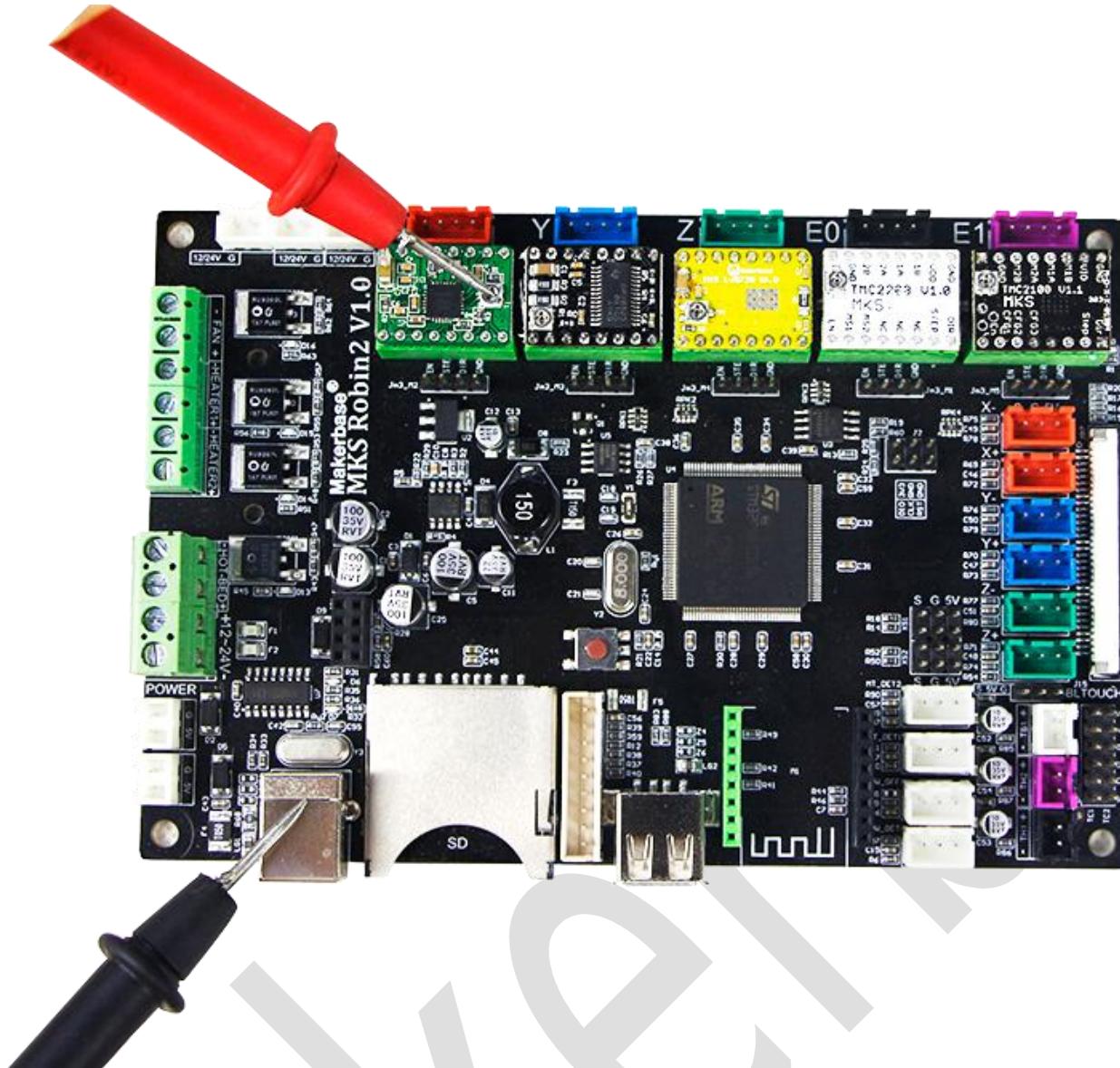
TMC2208 Micro Step Chart		
M1	M2	Micro Step
high	low	1/2 Step
low	high	1/4 Step
low	low	1/8 Step
high	high	1/16 Step

TMC2100 driver owns an obvious mute effect, the driver micro step value by default is 16, which has an obvious mute effect and wouldn't be affected by the transformation of the external jumper resistance.

Default current and maximum current for each driver

	A4988	DRV8825	LV8729	TMC2208	TMC2100
Default current	1A	1.3A	0.8A	0.707A	0.5A
Maximum current	2A	2.5A	1.5A	1.414A	1A
Formula	$I=V_{ref}/0.8$	$I=V_{ref}*2$	$I=V_{ref}*2$	$I=V_{ref}/1.414$	$I=V_{ref}*1.9/2.5$

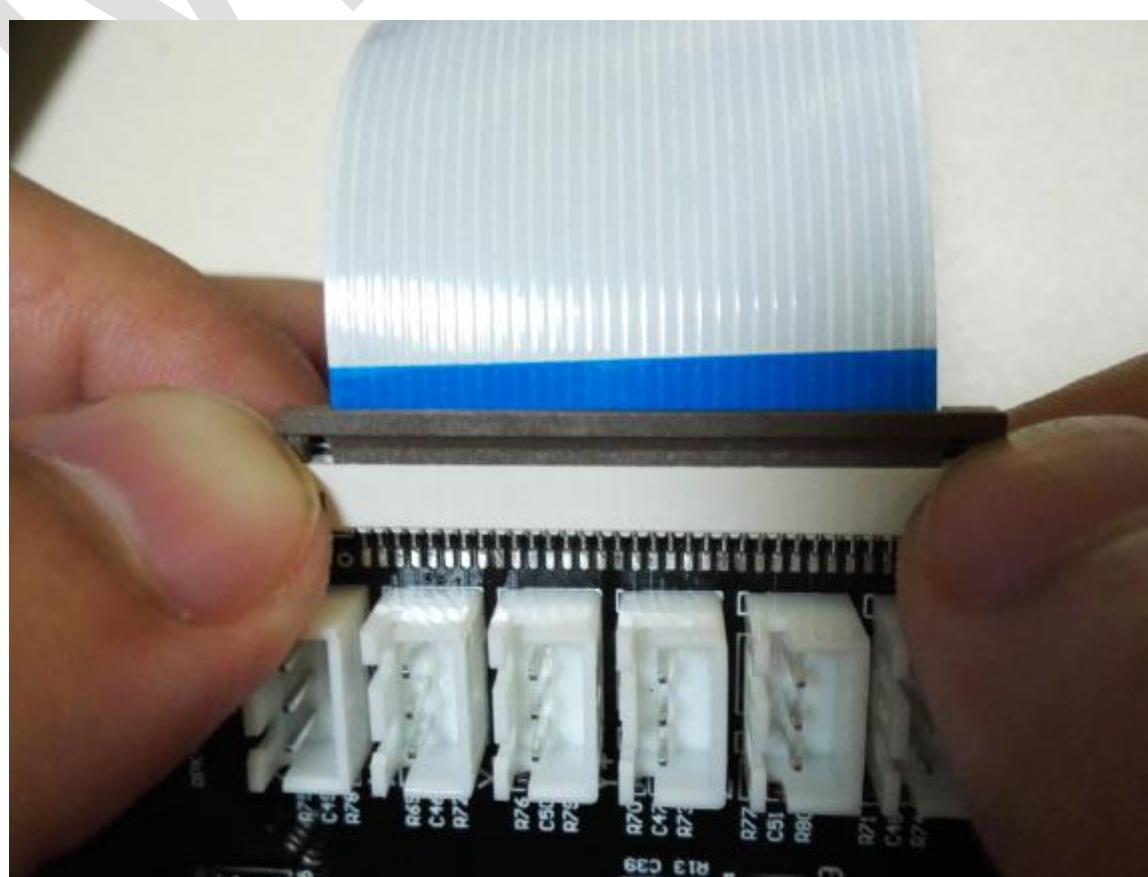
The driver current must be converted by measuring its voltage. the method of measuring the voltage (Vref) refers to the following figure.



The Vref can be adjusted according to the running condition of the motor, and the knob of the driver can be adjusted (clockwise to increase and counterclockwise to decrease).

Note: Before the adjustment knob, you need to cut down power to prevent the driver or the motherboard from burning out.

When connecting the FFC flexible cable, use the double thumb to open the buckle, put the FFC cable well, and fasten the buckle, as shown below.



## V Firmware update

All robin2 motherboard firmwares is the latest, no need to update

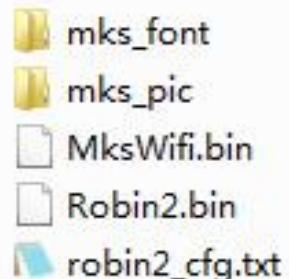
### 5.1 Ways to get MKS Robin2 firmware

- ★ Get firmware from customer service staff or technical support staff;
- ★ Download in the QQ discussion group:232237692
- ★ Download via this address: <https://github.com/makerbase-mks?tab=repositories>

### 5.2 Ways to update firmware

5.2.1 Copy the latest upgrade program to the SD card root directory, including:

- 1, firmware Robin2.bin,
- 2, the configuration file Robin2\_cfg.txt,
- 3, the picture folder mks\_pic,
- 4, WIFI firmware MksWiFi.bin,
- 5, the font folder mks\_font as shown on the right:



Be careful not to modify the file name. You do not need to copy MksWiFi.bin without the WIFI module.

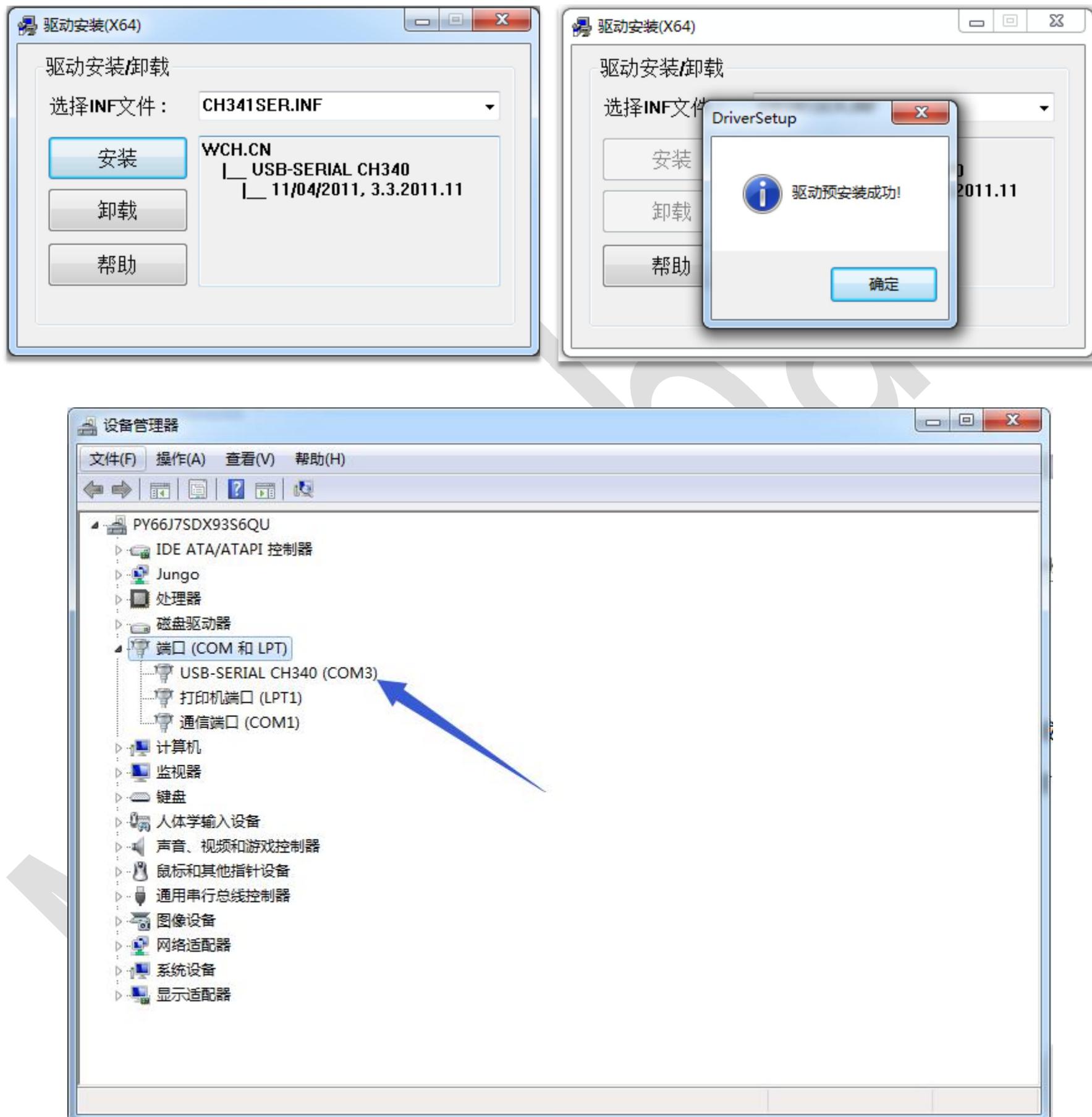
5.2.2 Insert into the SD card slot of the motherboard, re-power on, hear a drop ~ a short beep, the update process is displayed on the touch screen, and the update can be completed after about 30S;

5.2.3 Click on "Settings About" to view the current firmware version;

5.2.4 It is recommended to delete the picture folder and the font folder after the update is completed, to avoid repeating the update of the picture and font at the next boot.

## VI USB Driver Installation

MKS Robin2 motherboard adopts CH340 driver, you can get USB driver files from customer service or technicians, double-click on install USB driver files, after the driver is installed, connect USB to Robin2 into USB port, right click "My Computer", select "Device Management", USB port information (as shown):



## VII Machine Parameter and Function Configuration

### 7.1 Booting setting

```
#===== 基本设置 ======

>MACHINETPYE 0      # 机型选择,0:Cartesian; 1:DELTA ; 2:COREXY

>HAS_TEMP_BED 1     # 热床使能 0:禁用,1:使能

>EXTRUDERS 1        # 挤出头数量

>Z2_STEPPER_DRIVERS 0  #使能双Z轴;      0:禁用;  1:启用;
>Z2_ENDSTOPS 0       #使能Z轴双限位;  0:禁用;  1:启用;
>Z2_USE_ENDSTOP 0    #Z轴第二个限位接口; 0:不使用; 1:X_MAX; 2:X_MIN

# XYZ轴移动行程(单位 mm)
>X_MIN_POS 0
>Y_MIN_POS 0
>Z_MIN_POS 0
>X_MAX_POS 210
>Y_MAX_POS 210
>Z_MAX_POS 180

# 暂停时XYZ停留位置
>FILAMENT_CHANGE_X_POS 5  # X轴暂停位置(绝对作为值)
>FILAMENT_CHANGE_Y_POS 5  # Y轴暂停位置(绝对作为值)
>FILAMENT_CHANGE_Z_ADD 5  # Z轴暂停位置(相对作为值)

#第二挤出头的偏移.
>HOTEND_OFFSET_X 20.00   # X偏移(单位mm).
>HOTEND_OFFSET_Y 5.00    # Y偏移(单位mm).



#===== 语言设置 ======
>cfg_language_adjust_type 1 #语言切换方式配置(1:屏幕按钮切换语言,0:配置文件选项切换语言).

>cfg_language_type 1 #语言(1:简体中文;2:繁体中文;3:英文;4:俄语;5:西班牙语;6:法语;7:意大利语) ,
#此配置只有在cfg_multiple_language设置为0时有效.
```

## 7.2 Base parameter setting

```

# 电机方向设置.
>INVERT_X_DIR      1
>INVERT_Y_DIR      0
>INVERT_Z_DIR      1
>INVERT_E0_DIR     0
>INVERT_E1_DIR     0

# 移动参数设置
>DEFAULT_X_STEPS_PER_UNIT 80.6 #默认X轴脉冲 (steps/mm)
>DEFAULT_Y_STEPS_PER_UNIT 80.4 #默认Y轴脉冲 (steps/mm)
>DEFAULT_Z_STEPS_PER_UNIT 400   #默认Z轴脉冲 (steps/mm)
>DEFAULT_E0_STEPS_PER_UNIT 90    #默认E0轴脉冲 (steps/mm)
>DEFAULT_E1_STEPS_PER_UNIT 90    #默认E1轴脉冲 (steps/mm)

>DEFAULT_X_MAX_FEEDRATE 200    #默认X轴移动速度 (mm/s)
>DEFAULT_Y_MAX_FEEDRATE 200    #默认Y轴移动速度 (mm/s)
>DEFAULT_Z_MAX_FEEDRATE 4     #默认Z轴移动速度 (mm/s)
>DEFAULT_E0_MAX_FEEDRATE 70    #默认E0轴移动速度 (mm/s)
>DEFAULT_E1_MAX_FEEDRATE 70    #默认E1轴移动速度 (mm/s)

===== 限位开关设置 =====

>MIN_SOFTWARE_ENDSTOPS 1       #最小软限位; 0:禁用; 1:启用.
>MAX_SOFTWARE_ENDSTOPS 1       #最大软限位; 0:禁用; 1:启用.

# 限位开关信号设置
>X_MIN_ENDSTOP_INVERTING 0    # X_MIN限位开关常开/常闭设置.
>Y_MIN_ENDSTOP_INVERTING 0    # Y_MIN限位开关常开/常闭设置.
>Z_MIN_ENDSTOP_INVERTING 0    # Z_MIN限位开关常开/常闭设置.
>X_MAX_ENDSTOP_INVERTING 1    # X_MAX限位开关常开/常闭设置.
>Y_MAX_ENDSTOP_INVERTING 1    # Y_MAX限位开关常开/常闭设置.
>Z_MAX_ENDSTOP_INVERTING 1    # Z_MAX限位开关常开/常闭设置.
>Z_MIN_PROBE_ENDSTOP_INVERTING 0 # Z_PROBE限位开关常开/常闭设置..
>FIL_RUNOUT_INVERTING 0       # 断料开关常开/常闭设置.

# 指明限位开关的是否使用.
>USE_XMIN_PLUG 1             # 1:使用; 0:未使用
>USE_YMIN_PLUG 1             # 1:使用; 0:未使用
>USE_ZMIN_PLUG 1             # 1:使用; 0:未使用
>USE_XMAX_PLUG 0             # 1:使用; 0:未使用
>USE_YMAX_PLUG 0             # 1:使用; 0:未使用
>USE_ZMAX_PLUG 0             # 1:使用; 0:未使用

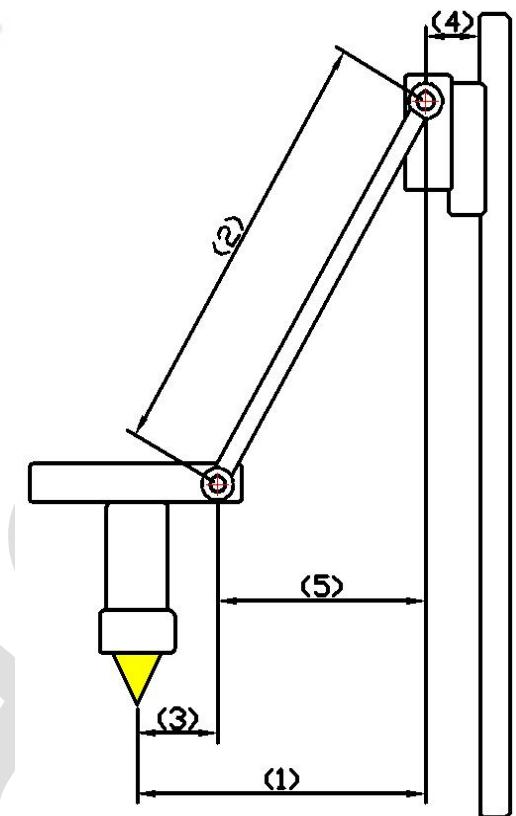
===== 回零设置 =====

>X_HOME_DIR -1              # X轴回零方向; 1=MAX, -1=MIN :[-1,1]
>Y_HOME_DIR -1              # Y轴回零方向; 1=MAX, -1=MIN :[-1,1]
>Z_HOME_DIR -1              # Z轴回零方向; 1=MAX, -1=MIN :[-1,1]
>HOMING_FEEDRATE_XY 2400    # XY回零速度 (mm/m)
>HOMING_FEEDRATE_Z 600       # Z回零速度 (mm/m)
>HOME_Y_BEFORE_X 0           # 执行G28时XY的回零顺序,0:X先回零,Y后回零; 1: Y先回零,X后回零

```

### 7.3 Delta parameter setting

```
#===== 三角洲设置 =====
>DELTA_SEGMENTS_PER_SECOND 40      #默认
>DELTA_DIAGONAL_ROD 346.75        2
>DELTA_SMOOTH_ROD_OFFSET 211.5    #打印机中心到垂直支撑杆的距离.
>DELTA_RADIUS 169                 5
>DELTA_HEIGHT 299.5               #Z轴回零时挤出头与打印平台的距离
>DELTA_PRINTABLE_RADIUS 197       1
>DELTA_CALIBRATION_RADIUS 100     #调平范围半径
>DELTA_EFFECTOR_OFFSET 28         3
>DELTA_CARRIAGE_OFFSET 14.5       4
```



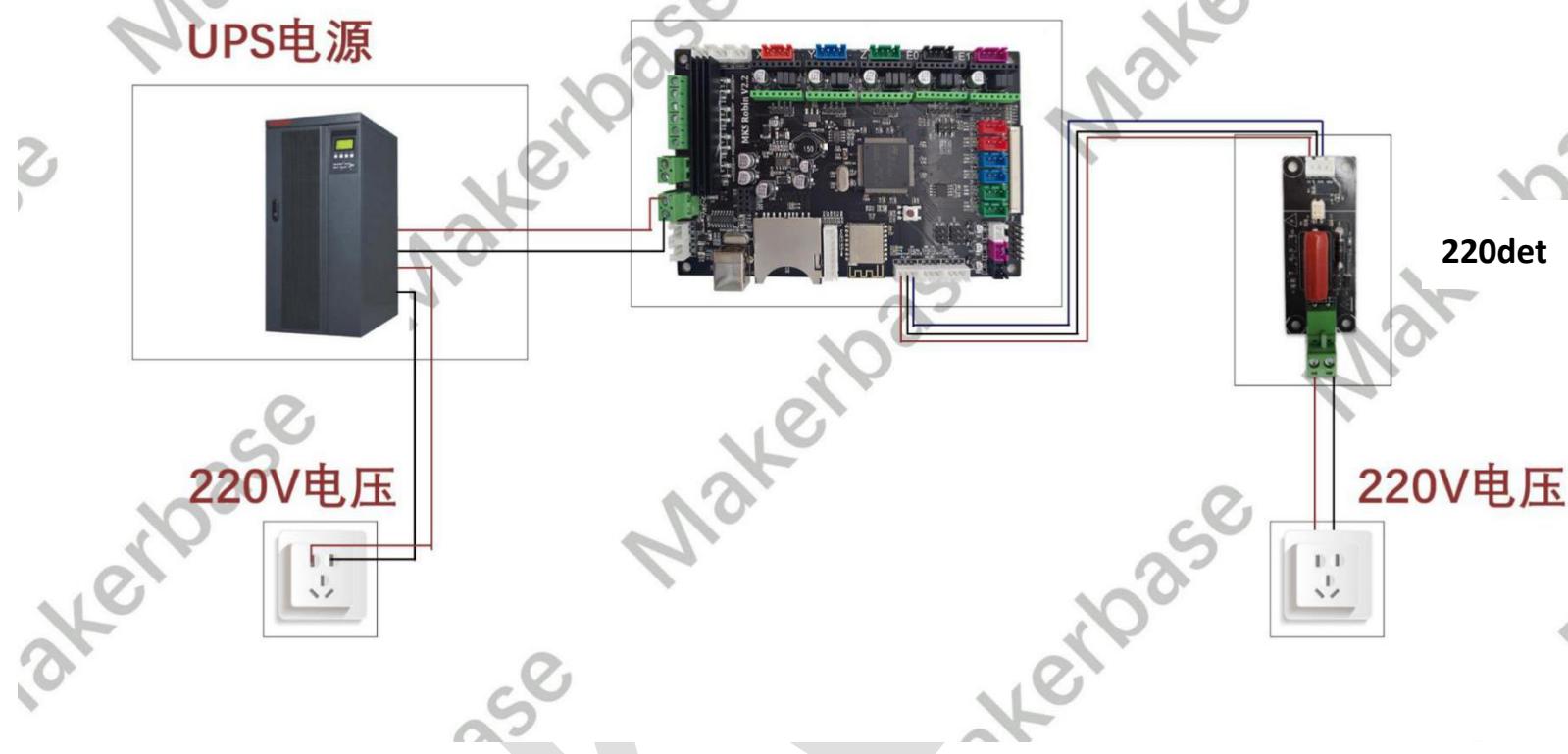
## 7.4 Resume from the break point

The motherboard supports resuming from the break point function. If you need higher requirements, you can add an UPS knob for the following reasons:

### a. Without UPS knob

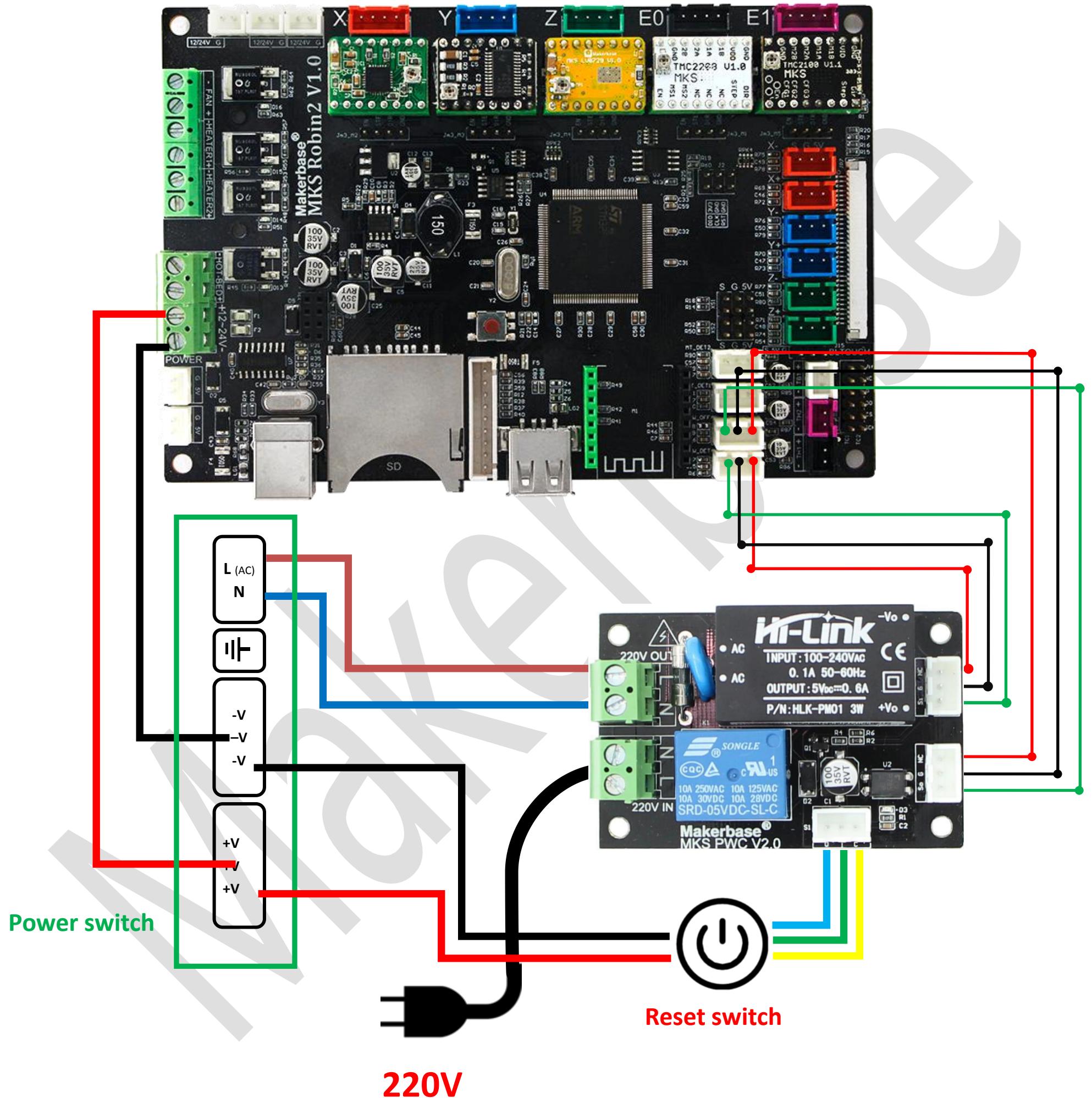
If attaching accidental power outage during printing, The printer can continue to print when it is turned back on. ( although the motor cannot work after power outage, the print head is still staying on the model, which may cause the model blurred. If you need a more complete power-off treatment, the UPS knob may help you.)

### b. With USP knob

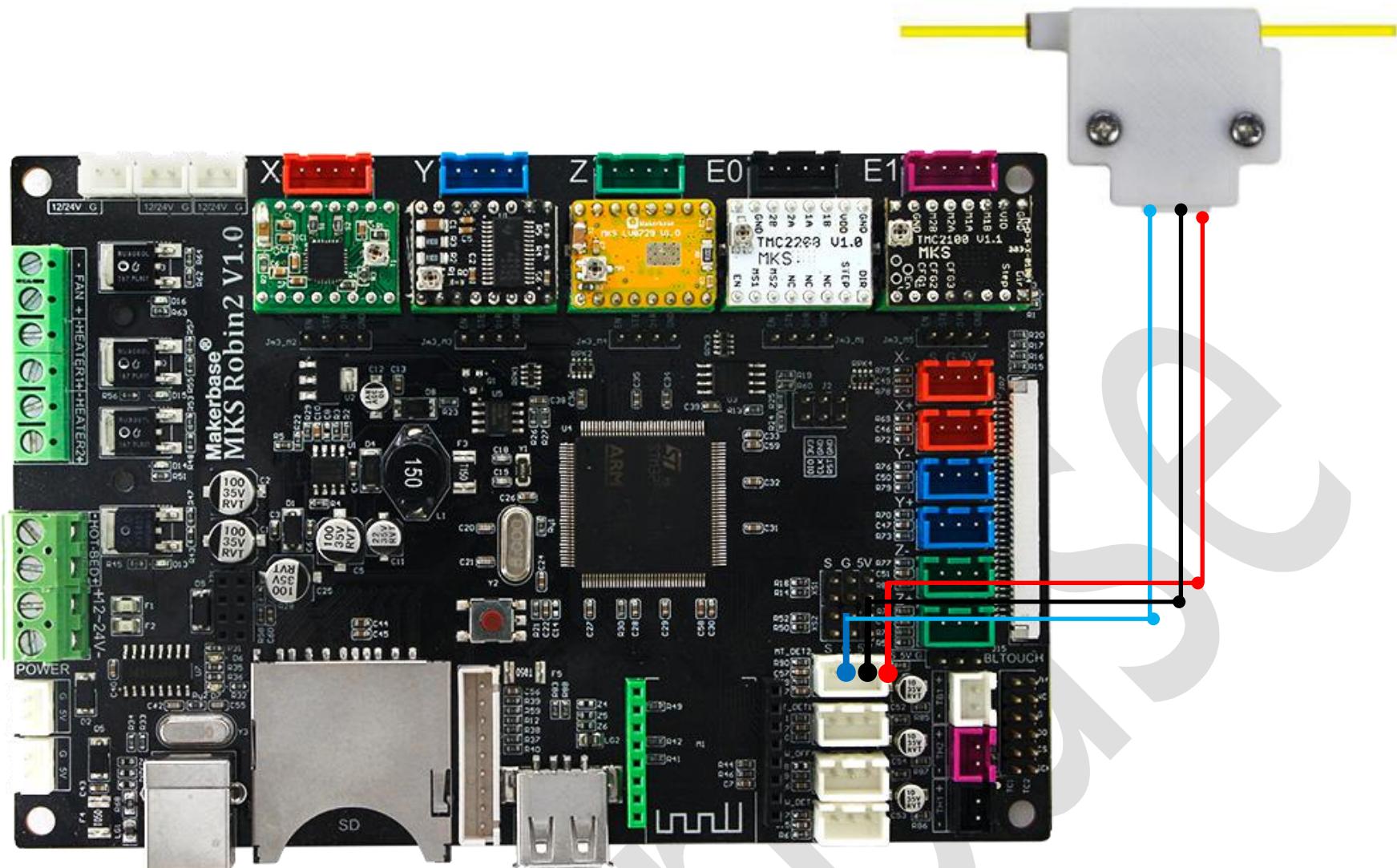


As above figure shows, 220det (Power detection module) is connected motherboard PW\_DET port to 220V (power switch).

## 7.5 Auto off



## 7.6 Filament detection



## 7.7 Refueling

The refueling function is easy for you to replace consumables. You can also set the reversing head rotation speed and minimum temperature in the configuration file after pressing “pause” in the printing midpoint, as shown below.

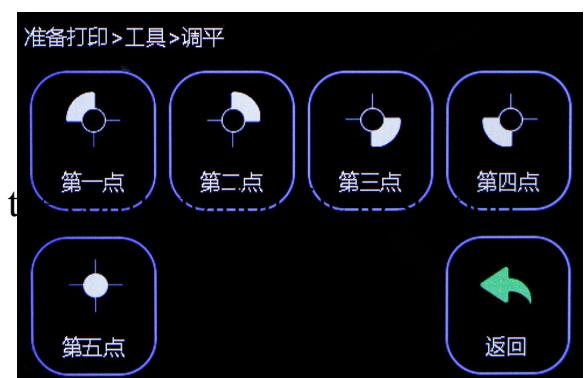
```
>cfg_filament_load_length 100      # "换料"进料的长度,最长为2000mm ,超过此长度电机不动
>cfg_filament_load_speed 800      # "换料"进料速度配置(mm/min)
>cfg_filament_load_limit_temperature 200      # "换料"进料最低限制温度配置

>cfg_filament_unload_length 100      # "换料"退料的长度,最长为2000mm ,超过此长度电机不动
<cfg_filament_unload_speed 800      # "换料"退料速度配置(mm/min)
>cfg_filament_unload_limit_temperature 200      # "换料"退料最低限制温度配置
```

## 7.8 Manual leveling and auto-leveling

Manual leveling: Manual leveling can be used on common model structures (MB, I3, etc.), you can select three-point leveling, four-point leveling or five-point leveling in the configuration file that needs to be leveled on the heated bed. ,As shown below

```
#####
# 调平功能 #####
>cfg_leveling_mode 0      # 调平模式配置《1:自动调平 ; 0:手动调平》
#####
# 手动调平 #####
>cfg_point_number 5      # 手动调平的个数:(可设3,4,5个点)
Automatic leveling: The machine with the leveling device can be set in the configuration file.
>cfg_point1:20,20
>cfg_point2:200,20
>cfg_point3:200,200      # 手动调平时的5个点的位置坐标
>cfg_point4:20,200
>cfg_point5:110,110
```



Auto-leveling function, you can also select three-point leveling, four-point leveling or multi-level leveling.  
(Robin2 supports BL touch automatic leveling)

```
#===== 自动调平 =====
>cfg_auto_leveling_cmd:G28;G29;

#===== Z探针设置 =====
>BLTOUCH      0 # 0:禁用BLTOUCH; 1:启用BLTOUCH
#选择探针连接的接口 Z-Min 或 Z-Max.
>Z_MIN_PROBE_PIN_MODE  0 # 0 : NULL; 1: ZMIN; 2: ZMAX

#探针偏移设置
>Z_PROBE_OFFSET_FROM_EXTRUDER 0 # Z偏移: -below +above [the nozzle]
>X_PROBE_OFFSET_FROM_EXTRUDER 0 # X偏移: -left +right [of the nozzle]
>Y_PROBE_OFFSET_FROM_EXTRUDER 0 # Y偏移: -front +behind [the nozzle]
>XY_PROBE_SPEED    4000 # 探针在xy轴方向的移动速度(mm/m)
>Z_PROBE_SPEED_FAST   600    # Speed for the first approach when double-probing (with PROBE_DOUBLE_TOUCH)
>Z_PROBE_SPEED_SLOW    300    # Speed for the "accurate" probe of each point
```

### Attention

1. Both I3 machine and Delta support auto-leveling

## 7.8 Resuming from the break point

**Resuming from the break point function:** When you spend a lot of time printing a model, accidentally, a wrong operation causes the printer stopping, but you don't want to waste this printed model. You can use the this function to help you. As shown in the figure below, you need to follow the steps.

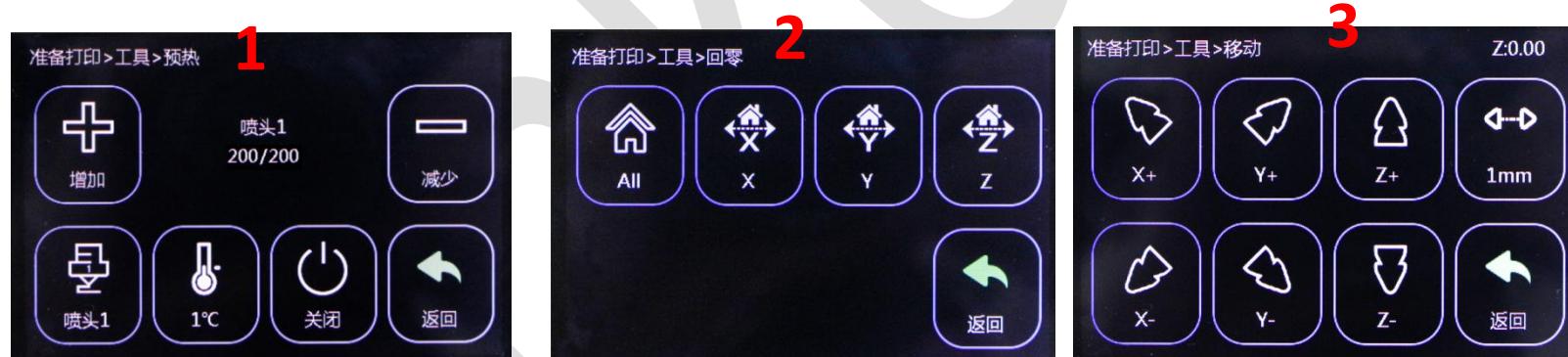
a. First click on the “预热”  to set the extrusion head and the hot bed target temperature (the hot bed target temperature can be ignored without the hot bed), as shown in Figure 1, Figure 2;

b. When the temperature reaches the target temperature, click to “归零” , select zero, and let each axis return to zero, as shown in Figure 3; (Note! If the model fails to print until the breakpoint is selected, if there is a power failure in the middle Must be zeroed, such as non-zero operation in case of constant power)

C. After the angles return to the zero point, move the Z axis to move the nozzle to the layer where printing stops. As shown in Figure 4 and Figure 5, it is time to test the eyesight.

d. Click on “设置”  , then click the breakpoint to continue to play, select the file to print the breakpoint, as shown in Figure 6, Figure 7.

That is, after selecting the file, you can wait for printing, as shown in Figure 8. (After selecting the model, the bigger the model, the more complicated it is, the longer it waits.)



4



6

5

7

## 7.10 Preview printing module

**MKS Robin2 has two ways to preview printing module:**

First: MKS Host software developed by our company supports preview function, and its preview effect is shown in the figure below. MKS Host installation information and instructions can be obtained from customer service, technical support, or downloading from the website.



Second: Install the MKS plug-in developed by our company to the Cura also supports preview function. The preview effect is shown as the following figure. The MKS plug-in information and instructions can be obtained from customer service, technicians, or download on website.



The files sliced by mks host are saved and used on the touch screens of TFT35 and TFT70 to have a preview function.

If installing plug-in, the file needs to be saved as a TFT file (optional drop-down option when saving) to implement the preview function.

Download address: <https://github.com/makerbase-mks?tab=repositories>

## VIII Network Printing Function

Only with MKS Robin-WIFI module can MKS Robin2 motherboard support network printing.

### 8.1 Printing mode

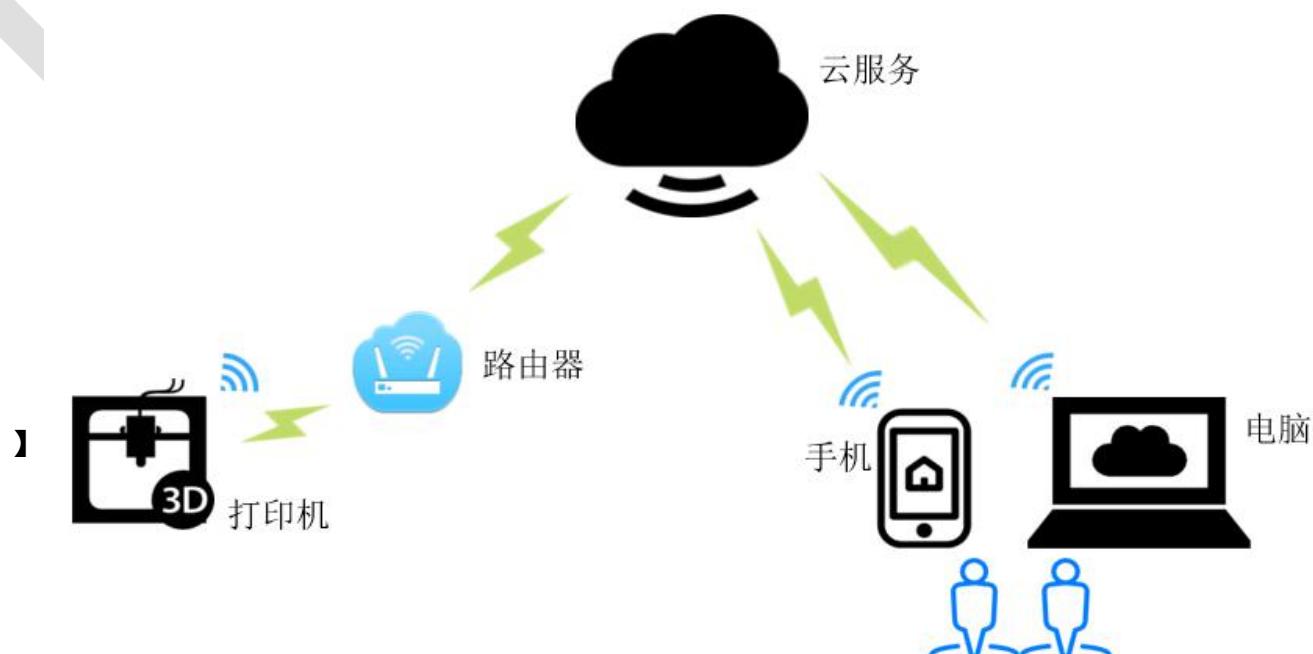
1. **Cloud printing mode:** It is recommended to use in a WIFI environment. After the network connection of the WIFI module is configured, the printer can become a cloud online printer. The printer can be controlled via the APP or MKS Cloud website at any locations of the world. It is also possible to control the printer via a host computer (Printron, etc.) in the LAN.
2. **LAN printing mode:** It is recommended to use this function if you have a WIFI router, but it cannot be connected to the Internet or the network speed is slow (if with cloud printing mode, printer response speed is too slow). After the WIFI module is connected, the printer can be controlled by the mobile APP or host computer in the LAN.
3. **AP printing mode:** When the printer is in the following situations:

- 1, without a WIFI router;
- 2, the WIFI module is not configured;
- 3.the WIFI module is configured, but the network environment is not good and cannot be connected to the router.

The above three cases will make printer enter AP printing mode by default. At this time, the WIFI module will create a hot spot "MKSWIFI-XXXX" (open a hots pot, no password). You can control the printer through APP, browser, or host computer.

### 8.2 Cloud printing mode

1、 figure:



Features: Control printers via APP at any locations of the world

## 2、 WIFI configuration

### 2.1MKS Robin2 -WIFI configuration

WIFI configuration is as below figure:

Robin2_config.txt	instruction
#wifi mode(0:sta;1:ap) >cfg_wifi_mode:0	STA made
#wifi name >cfg_wifi_ap_name:test	Change wifi name to the same as router
#wifi password >cfg_wifi_key_code:12345678	Change wifi password to the same as router password
#clouding service function(0:forbidden;1:function) >cfg_cloud_enable:1 #clouding service address >cfg_wifi_cloud_host:www.baizhongyun.cn #clouding port >cfg_cloud_port:10086	By default

## 3、 Firmware update

### 3.1 Copy the latest upgrade program to the root directory of the SD card, and re-upgrade the motor.

The upgrade program includes:

- 1、 configuration file: Robin2\_config.txt
- 2、 motherboard firmware: Robin2.bin
- 3、 WIFI firmware: MksWiFi.bin
- 4、 Image folder: mks\_pic
- 5、 Folder: mks\_font

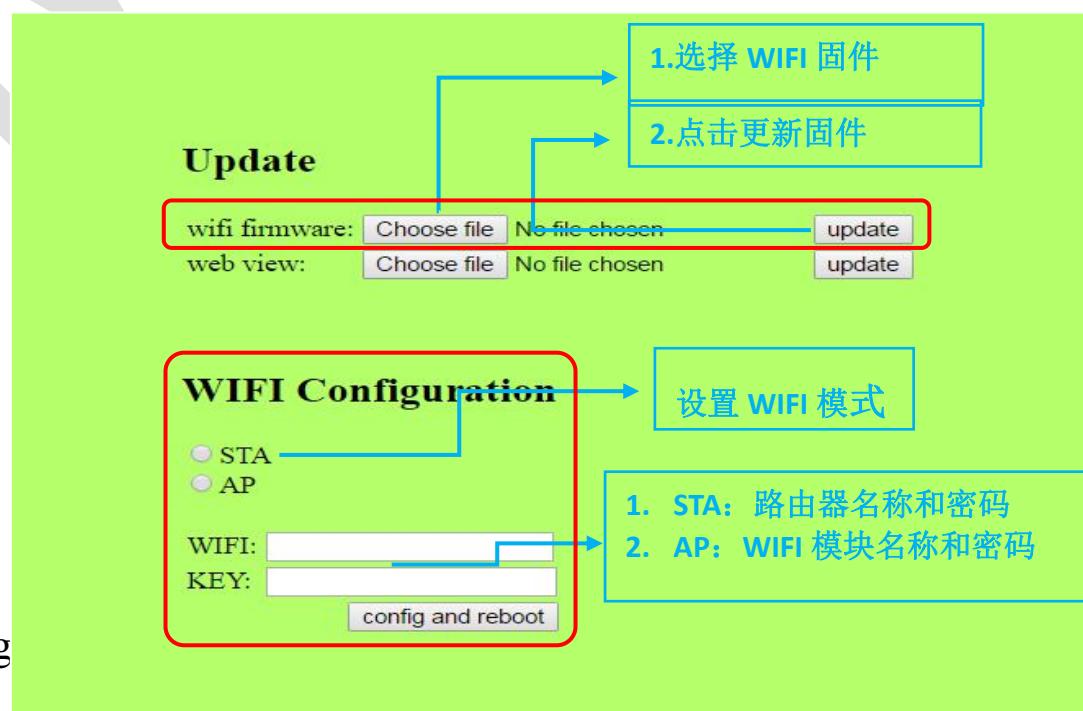
#### 3.1 Attention

- a. Document name can't be modified, which will cause update failure.

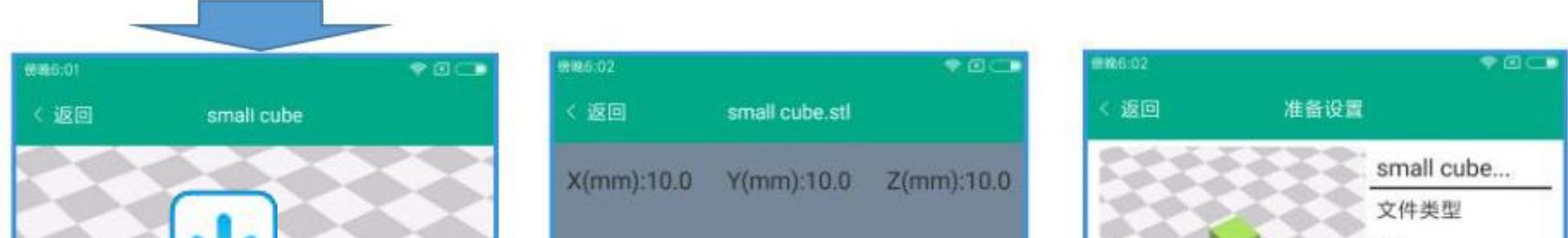
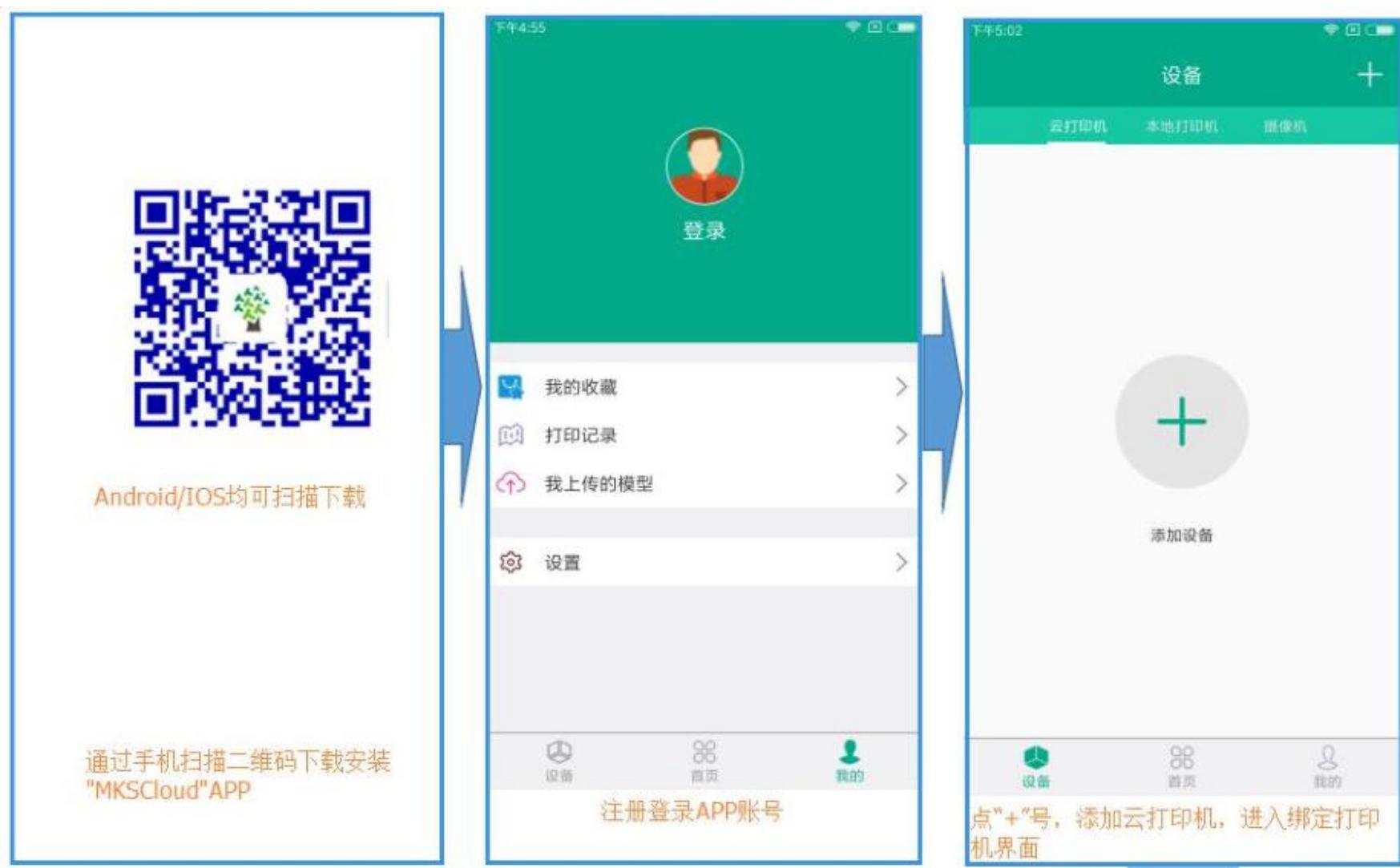
#### 3.2 After program upgrading, document name will change.

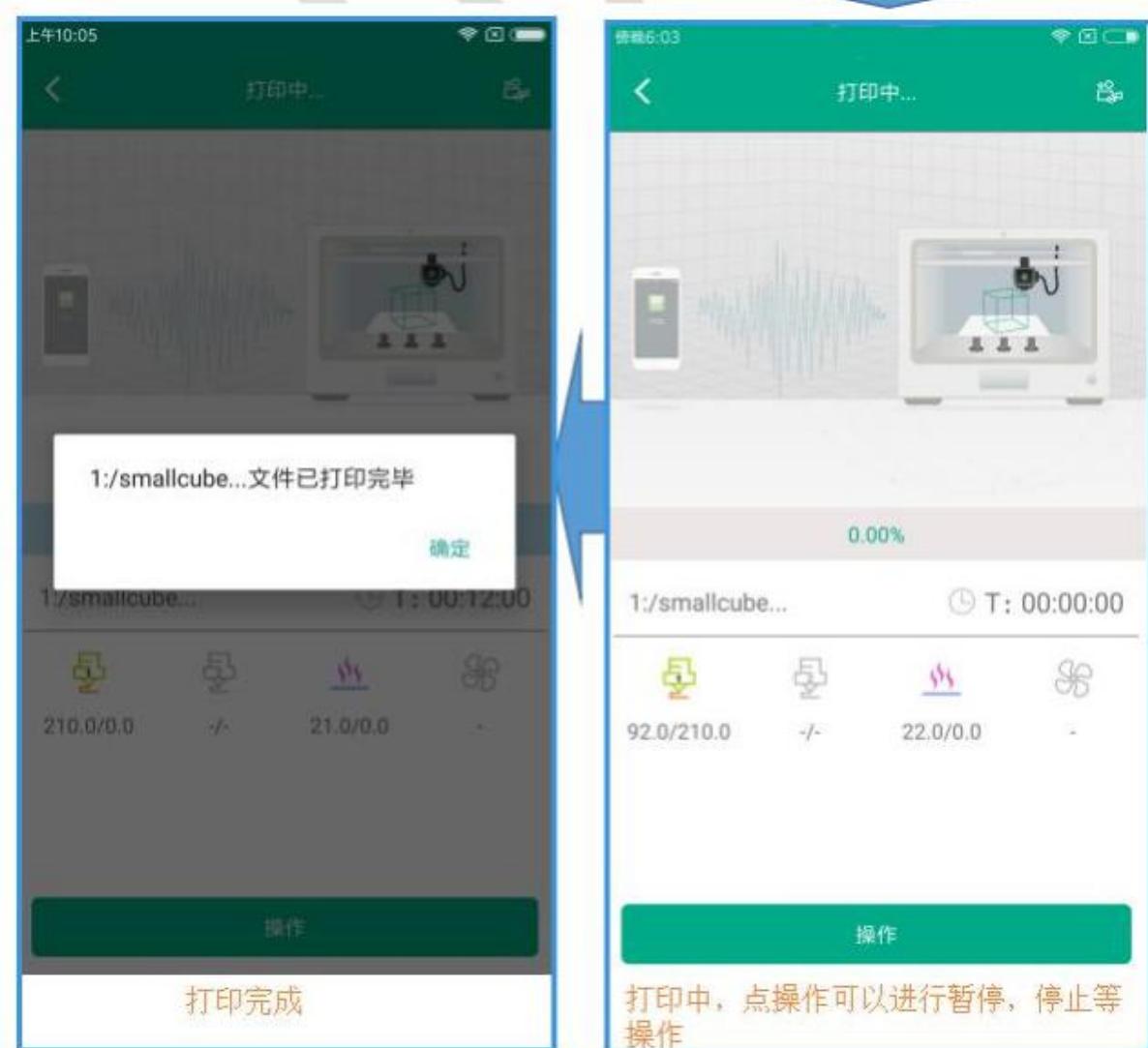
#### 3.3 WIFI firmware can also be updated through the WEB side. In the same LAN, enter the IP address on the computer browser and enter the web page to update the firmware interface, as shown below:

### 3.4



## 4、 APP Printing





### 8.3 LAN printing

#### 1. figure



**Feature:** It can be used within the LAN

#### 2.WIFI configuration

##### 2.2MKS Robin2 -WIFI configuration

WIFI configuration is as below figure:

Robin2_config.txt	instruction
#wifi mode(0:sta;1:ap) >cfg_wifi_mode:0	STA mode
#wifi name >cfg_wifi_ap_name:test	Change wifi name to the same as router
#wifi password >cfg_wifi_key_code:12345678	Change wifi password to the same as router password
#clouding service function(0:forbidden;1:function) >cfg_cloud_enable:1 #clouding service address >cfg_wifi_cloud_host:www.baizhongyun.cn #clouding port >cfg_cloud_port:10086	By default

#### 3 Firmware update

##### 3.1 Copy the latest upgrade program to the root directory of the SD card, and re-upgrade the motor.

The upgrade program includes:

- 1、configuration file: Robin2\_config.txt
- 2、motherboard firmware: Robin2.bin
- 3、WIFI firmware: MksWiFi.bin
- 4、Image folder: mks\_pic

5、Folder: mks\_font

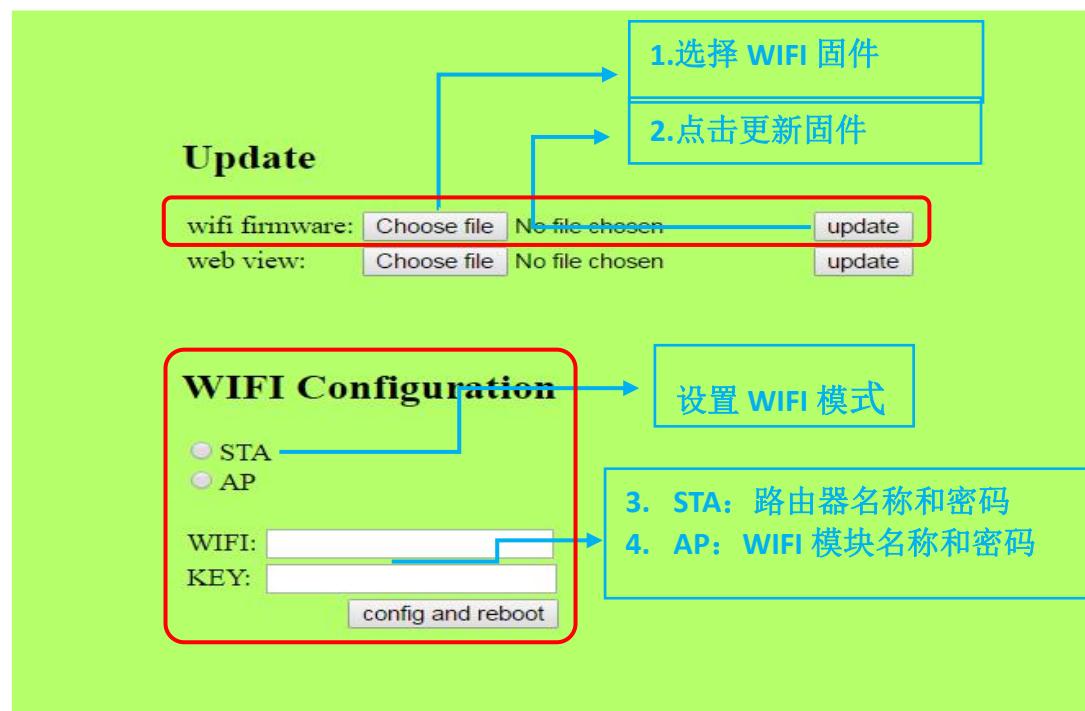
### 3.5 Attention

b. Document name can not be modified, which will cause update failure.

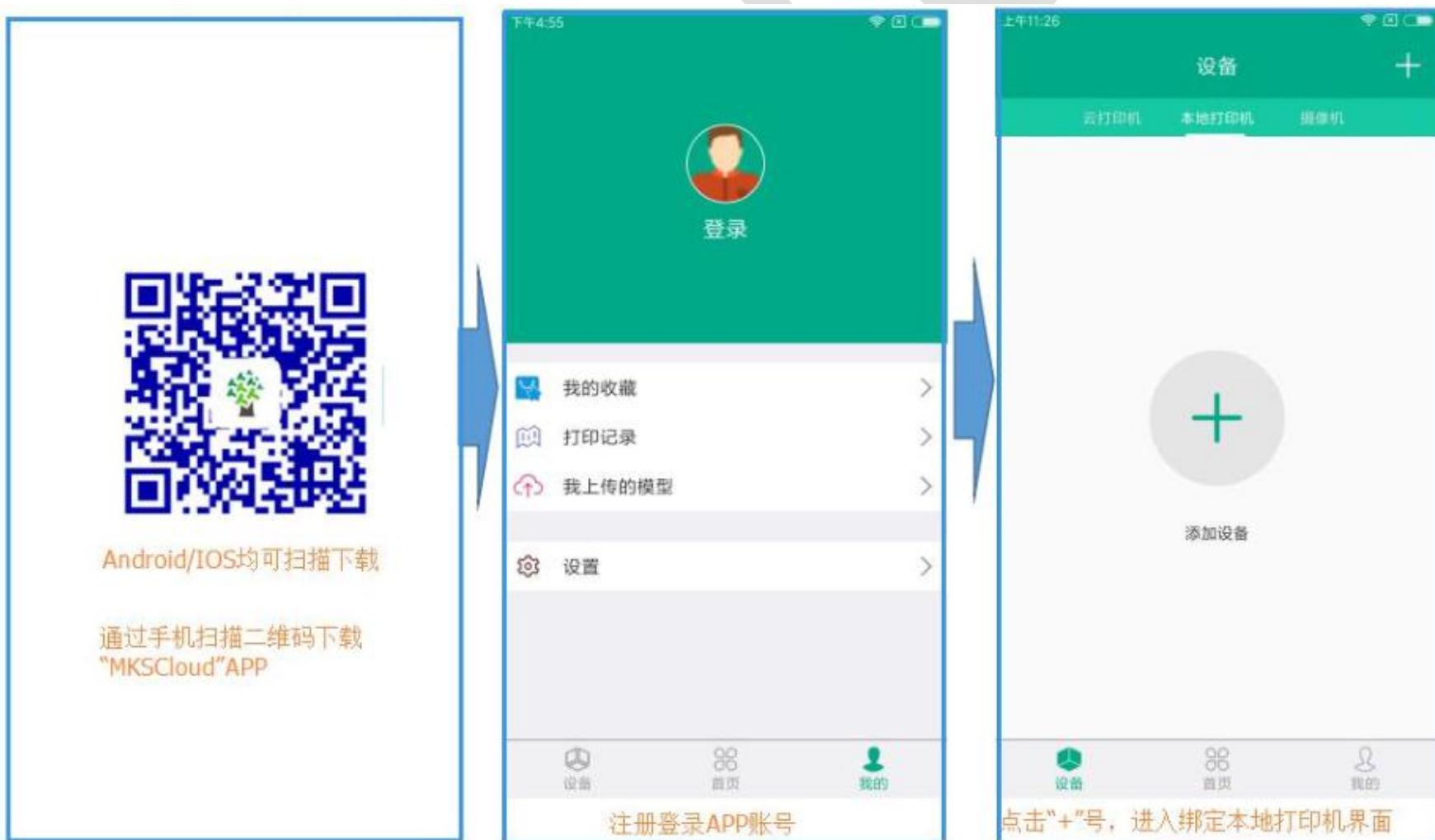
3.6 After program upgrading, document name will change.

3.7 WIFI firmware can also be updated through the WEB side. In the same LAN, enter the IP address on the computer browser and enter the web page to update the firmware interface, as shown below:

3.8



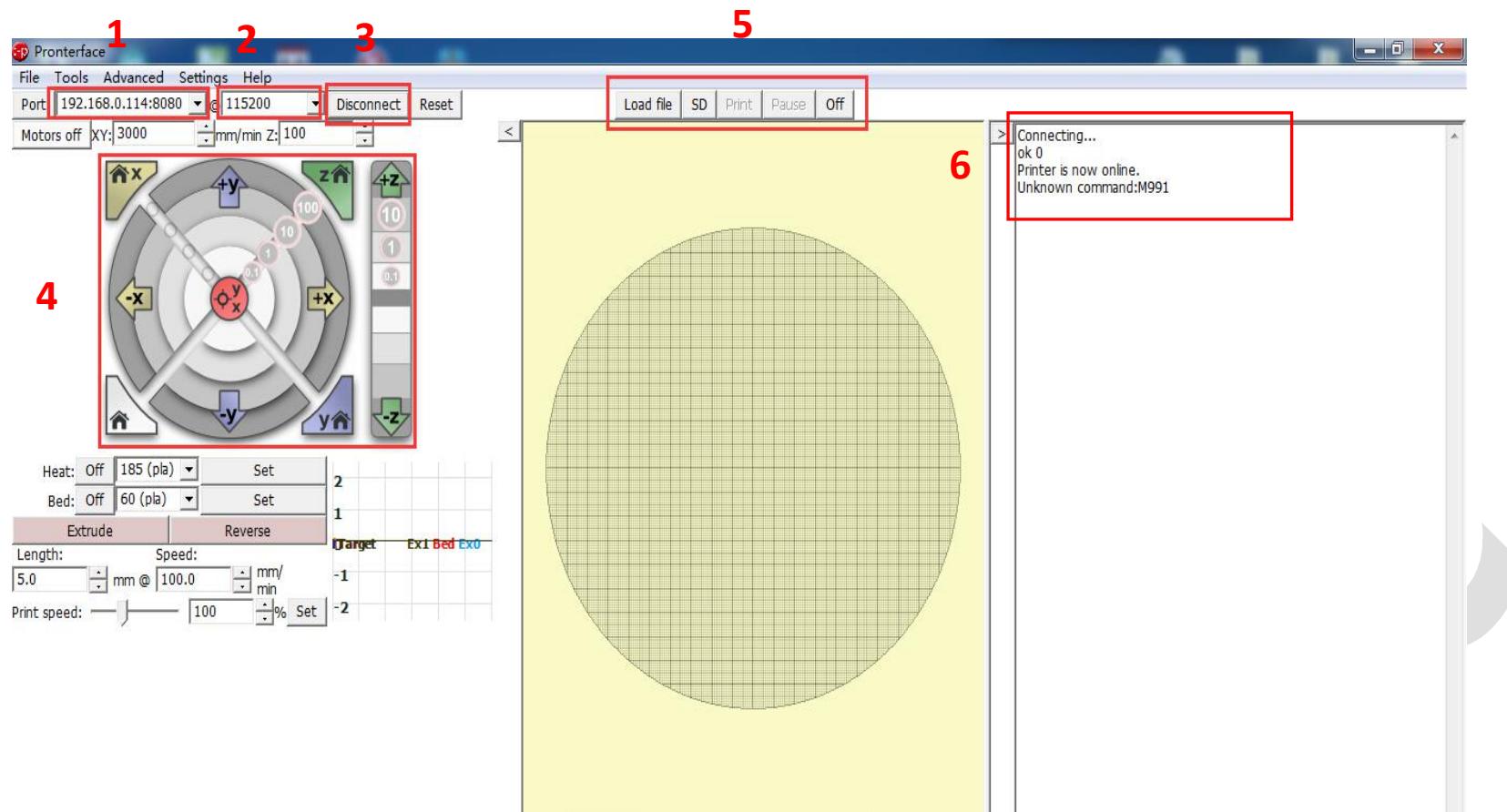
## 4. APP printing





## 5. Host Computer Printing

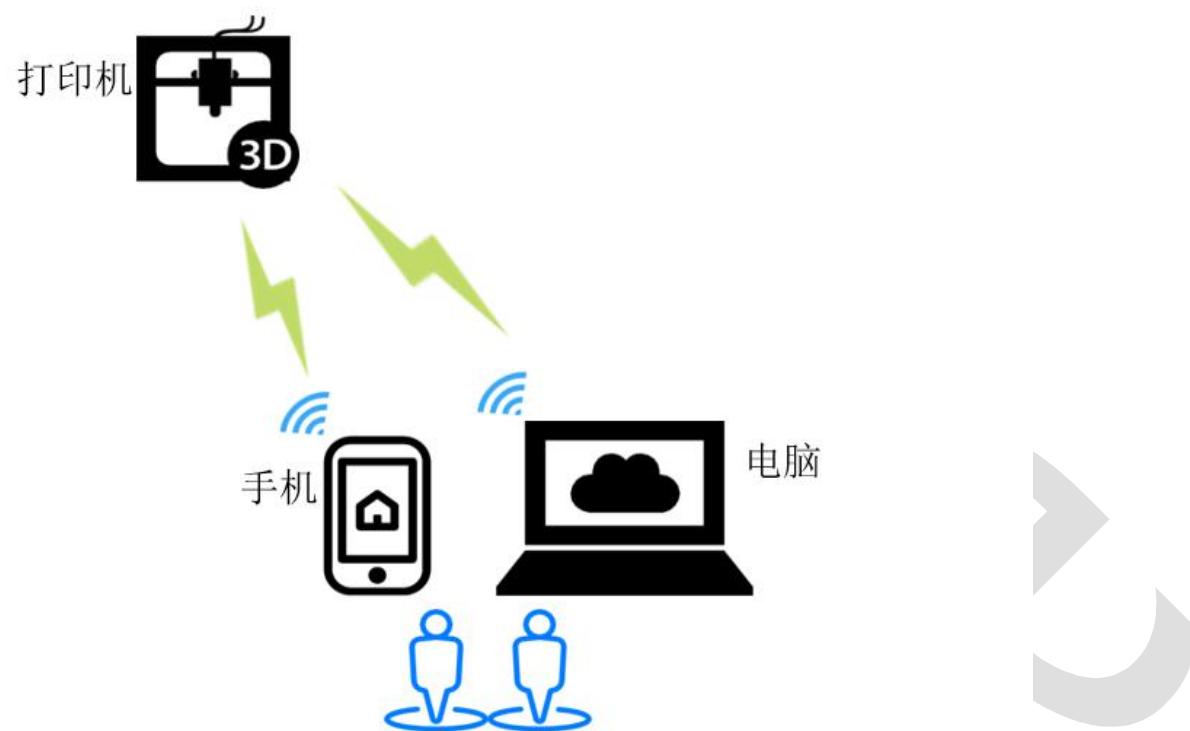
## 5.1 Printrun Pinting



- (1) Fill in the "IP address +: 8080" here, the IP address can be viewed in the setting "WIFI, the IP address in the above figure is 192.168.0.114, so fill in: 192.168.0.114:8080;
- (2) The baud rate is selected to be 115200;
- (3) Click to connect;
- (4) After the icon color becomes darker, it means that the connection is successful;
- (5) You can choose SD file to print or select the file on the computer to print (select the computer file to print when printing one instruction, so the printing effect is not good, and it is not stable, this method is not recommended)
- (6) Check the information returned by the printer.

## 8.4 AP printing mode

1、 figure:



Features: WIFI module will create a hot spot "MKS WIFI-XXXX" (open a hot spot, no password), you can access the hot spot to control the printer.

2、 WIFI configuration

### 2.1 MKS Robin2-WIFI configuration

Robin2_config.txt	instruction
#wifi mode(0:sta;1:ap) >cfg_wifi_mode:0	STA mode
#wifi name >cfg_wifi_ap_name:test	Change wifi name to the same as router
#wifi password >cfg_wifi_key_code:12345678	Change wifi password to the same as router password
#clouding service function(0:forbidden;1:function) >cfg_cloud_enable:1 #clouding service address >cfg_wifi_cloud_host:www.baizhongyun.cn #clouding port >cfg_cloud_port:10086	By default

## 3 Firmware update

3.1 Copy the latest upgrade program to the root directory of the SD card, and re-upgrade the motor.

The upgrade program includes:

- 1、 configuration file: Robin2\_config.txt
- 2、 motherboard firmware: Robin2.bin
- 3、 WIFI firmware: MksWiFi.bin
- 4、 Image folder: mks\_pic
- 5、 Folder: mks\_font

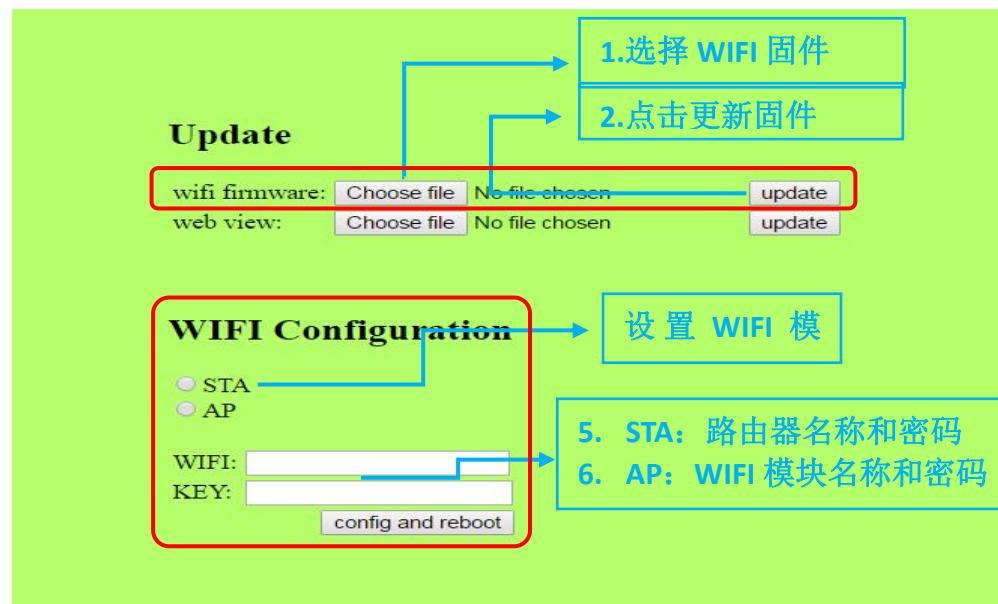
### 3.2 Attention

A. Document name can not be modified, which will cause update failure.

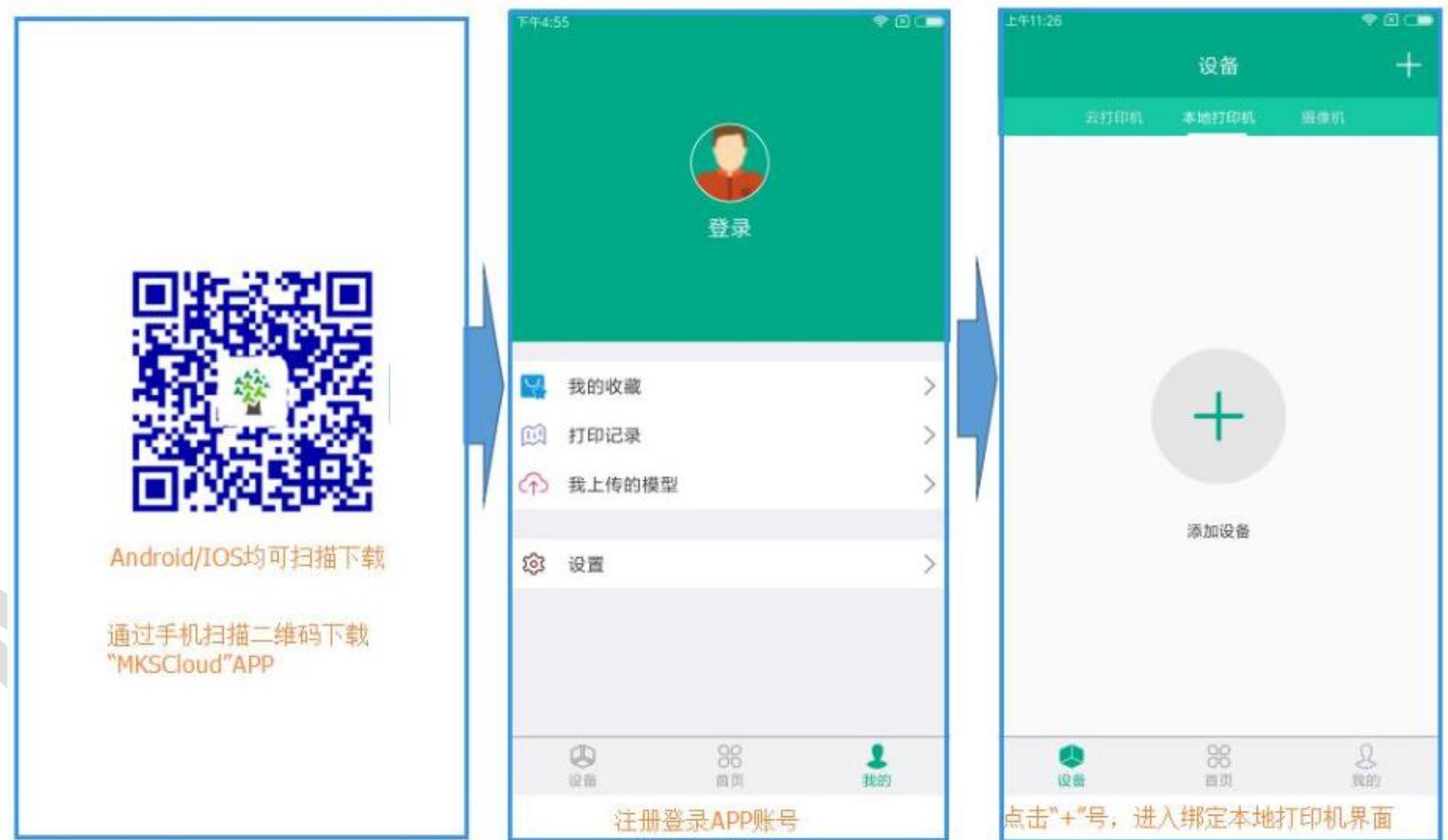
B. After program upgrading, document name will change.

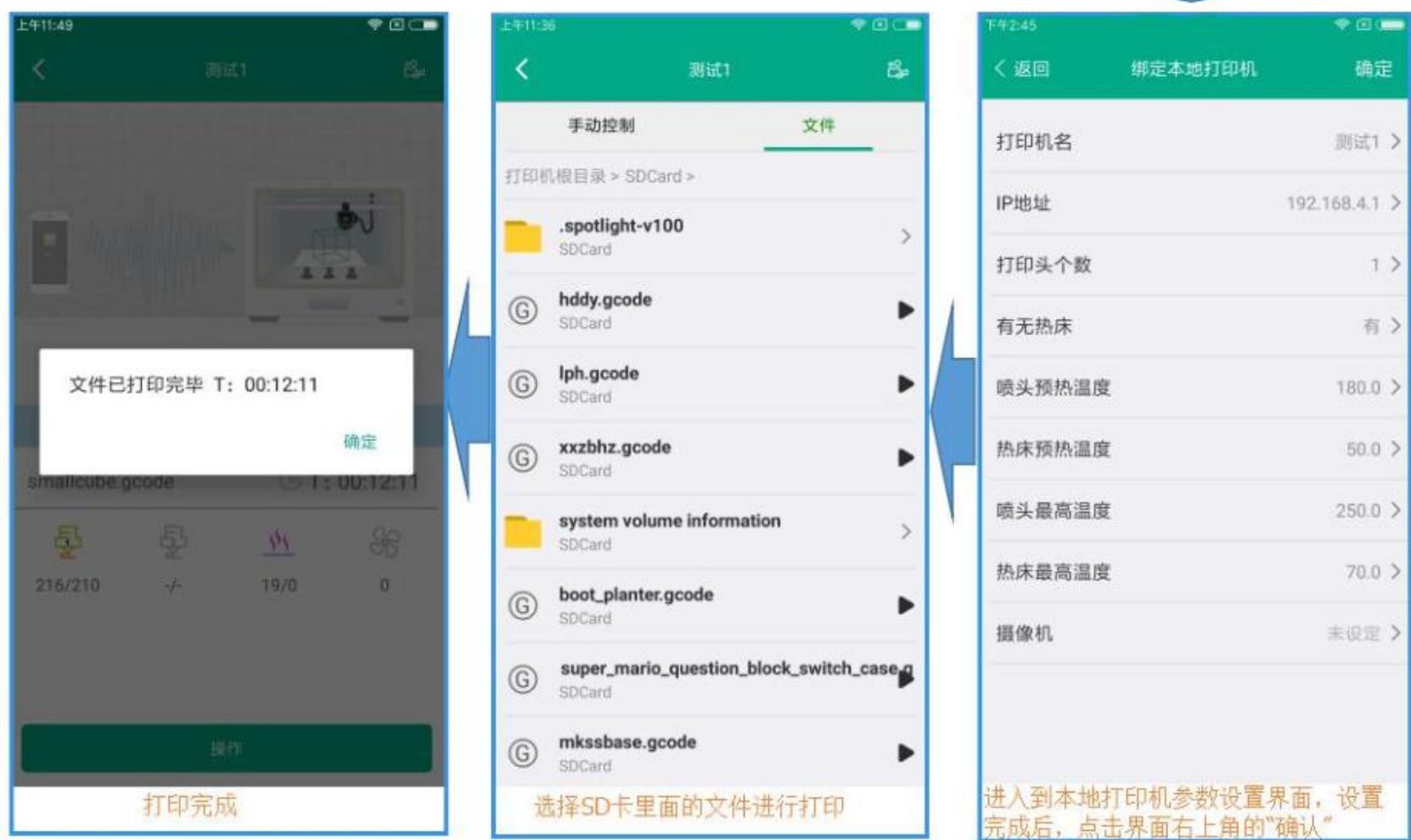
3.3 WIFI firmware can also be updated through the WEB side. In the same LAN, enter the IP address on the computer browser and enter the web page to update the firmware interface, as shown below:

3.9



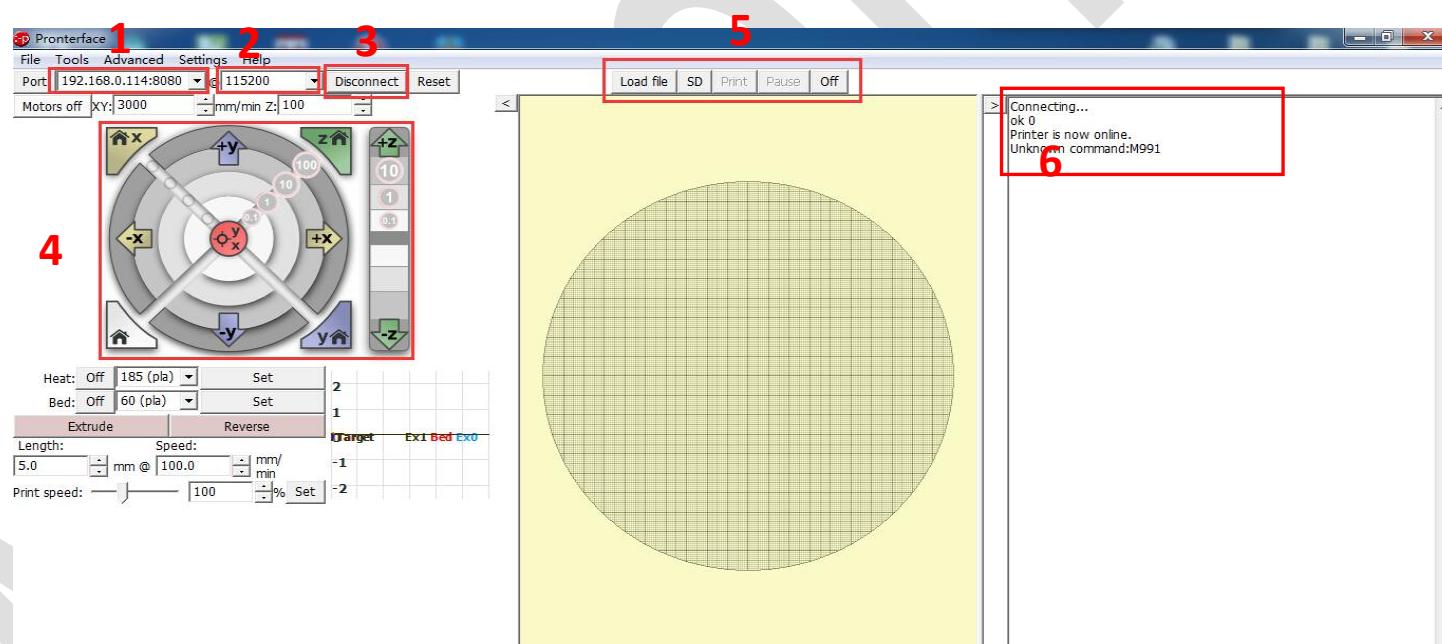
### 4. APP printing





## 5. Host Computer Printing

### 5.1 Printron Pinting



- (1) Fill in the "IP address +: 8080" here, the IP address can be viewed in the setting "WIFI", the IP address in the above figure is 192.168.0.114, so fill in: 192.168.0.114:8080;
- (2) The baud rate is selected to be 115200;
- (3) Click to connect;
- (4) After the icon color becomes darker, it means that the connection is successful;
- (5) You can choose SD file to print or select the file on the computer to print (select the computer file to print when printing one instruction, so the printing effect is not good, and it is not stable, this method is not recommended)
- (6) Check the information returned by the printer.

## 8.5 Model Library Web Site

Model Library Web Site: <https://baizhongyun.cn/home/index>

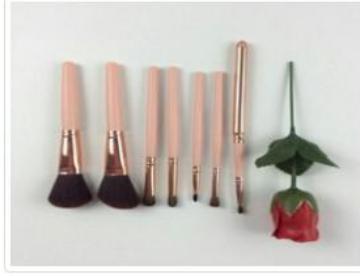
welcome friends to upload their favorite models and instruction.

首页 模型分类 在线建模 专题订阅 上传模型 下载软件 登陆 / 注册 CN+

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464 7 ★ 13



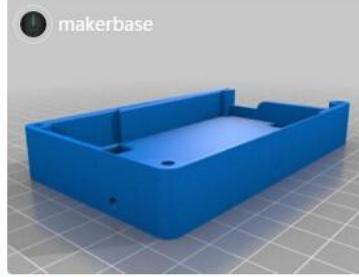
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592 3 ★ 5



躺着的小猪猪 [7个月前上传](#)

93 3 ★ 3



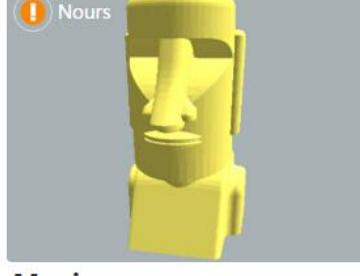
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160 2 ★ 2



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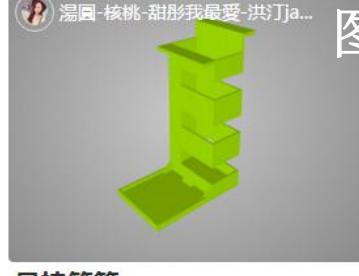
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184 0 ★ 0



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模型交流群: 156492164(满)

489095605

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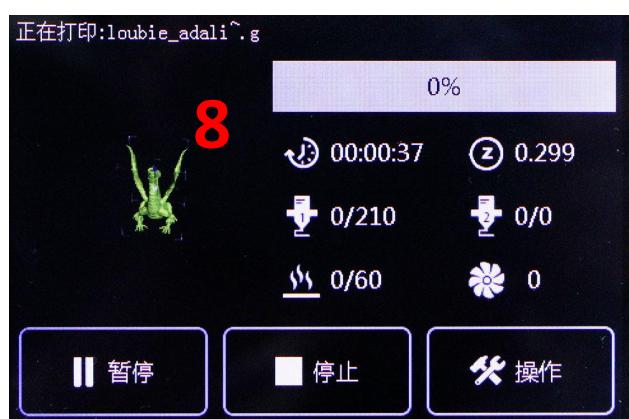
## IX TFT Touch Screen Interface Setting

### First:Rules :

If customer need customized icons he must follow the rules below.

1、including:

- A. Booting logo;
- B. Button figure (figure below“1” and “2”) (including icon and character) ;
- C. Screen background color (figure“3”, black by default) ;
- D. Title text color (figure“4”, white by default) ;
- E. Temperature color (figure“5”, blue by default) ;
- F. Temperature color (figure“6”, white by default) ;
- G. "Select File" interface, the font color of the file name; (see "7" below, default white);
- H. "Select File" interface, the font background color of the file name; the recommended color is the same as the picture;
- I. "8" below, default white);



- 2、Customized LOGO image, 16dpp, width = 480 pixels, height = 320 pixels;
- 3, customized button picture, 16dpp, width = 117 pixels, height = 140 pixels;
4. Customized picture names must be named according to the appendix;
- 5, the custom color value is hexadecimal, in the order of 3 primary colors blue, green, red;
- 6, customize the function button of the "More" menu, you can customize up to 7 function buttons;

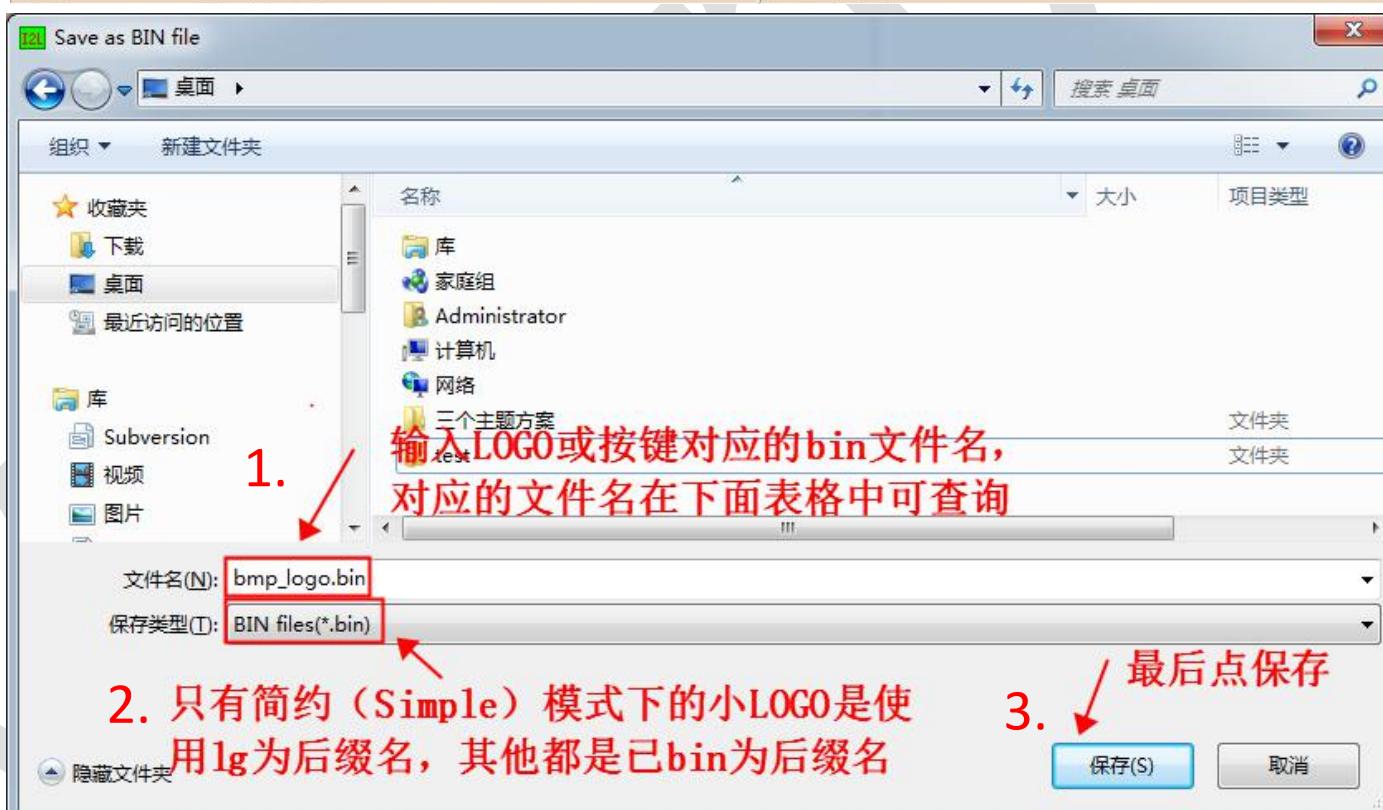
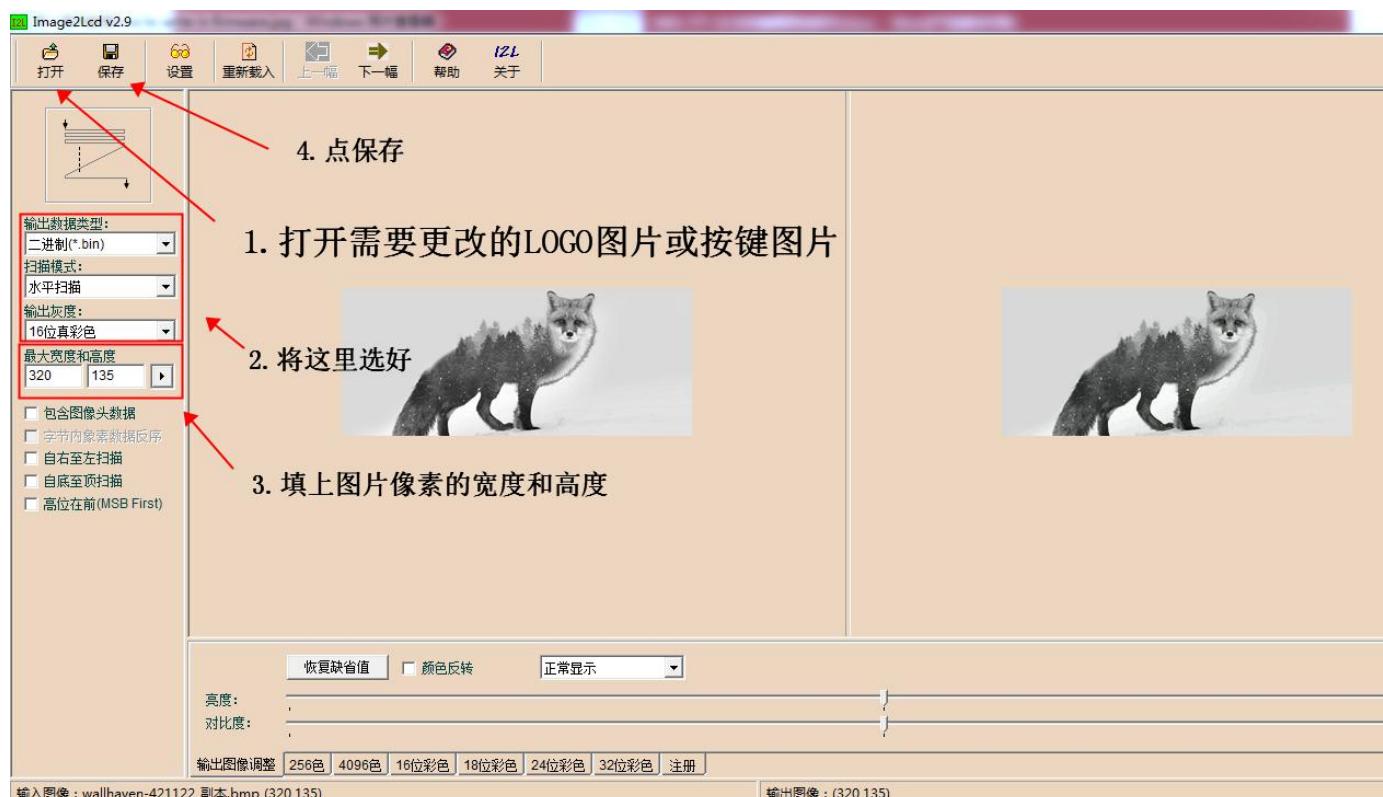
7, customize the "more in print" function button, you can customize up to 6 function buttons;

## Second: steps

### 1.1 Prepare tools

1. Img2Lcd software

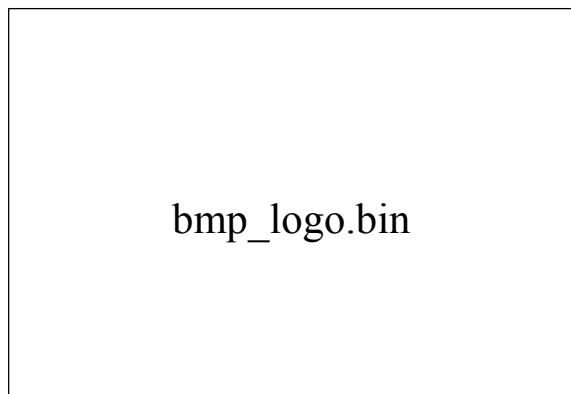
2.get the ai format file from customer service。



## 一、 LOGO and icon naming

Picture naming rules (note that some pictures are duplicates, just provide one)

### 1. Booting interface LOGO



bmp\_logo.bin



### 2. “prepare to print” interface:

预热: bmp_preHe at.bin	挤出: bmp_extruct .bin	移动: bmp_mov.bin	归零: bmp_zero.bin
调平: bmp_levelin g.bin	换料: bmp_filam entchange. bin	更多: bmp_more.bin	返回: bmp_return.bin



### 3. “预热” interface:

增加: bmp_Add.bin			减少: bmp_Dec.bin
预热对象: 热床: bmp_bed.bin	步进: 1 度: bmp_step1_degre .bin	关闭: bmp_speed0	返回: bmp_return.bin
喷头 1: bmp_extrul.bin	5 度: bmp_step5_		
喷头 2: bmp_extru2.bin	degree.bin		
	10 度: bmp_step10_		
	degree.bin		



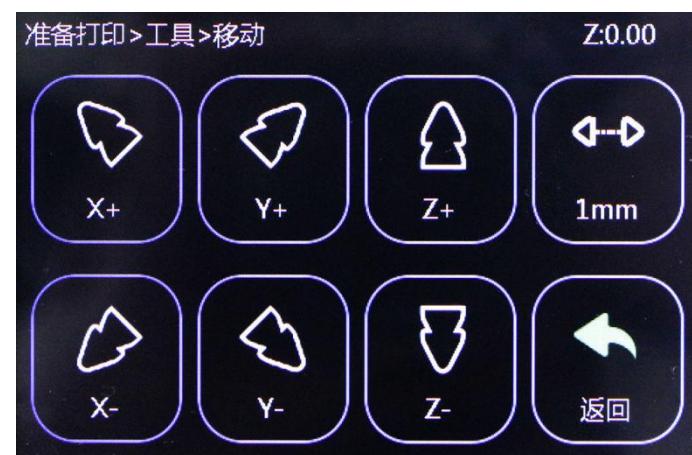
#### 4. “挤出” interface:

进料:			退料:
bmp_in.bin			bmp_out.bin
喷头 (E) :	步进:	速率:	返回:
E1:	1mm:	慢速:	bmp_return.bin
bmp_extrul.bn	bmp_step1_mm.bin	bmp_speed_slow.bin	
E2:	5mm:	常速:	
bmp_extru2.bn	bmp_step5_mm.bin	bmp_speed_normal.bin	
	10mm:	高速:	
	bmp_step10_mm.bin	bmp_speed_high.bin	



#### 5. “移动” interface:

X+: bmp_x Add.bin	Y+: bmp_yAdd. bin	Z+: bmp_zAdd .bin	步进: 0.1mm: bmp_step_move0_1.bin  1mm: bmp_step_move1.bin  10mm: bmp_step_move10.bin
X-: bmp_x Dec.bin	Y-: bmp_yDec. bin	Z-: bmp_zDec .bin	返回: bmp_return.bin



## 6. “归零” interface:

全部 (Home ): bmp_ze r oA.bin	X: bmp_zero X.bin	Y: bmp_zero Y.bin	Z: bmp_zeroZ.bin
			返回 (Back) : bmp_return.bin



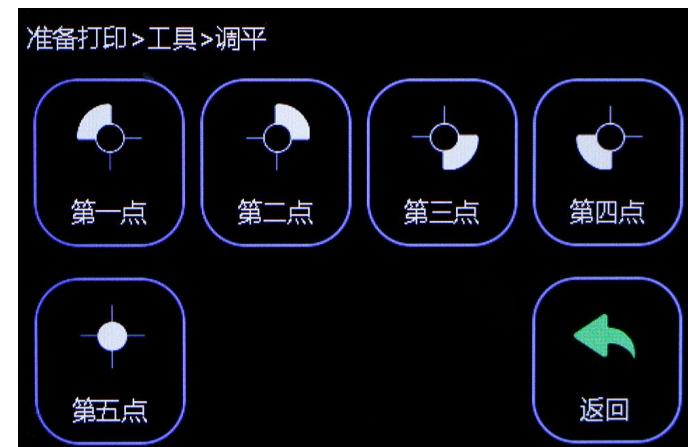
## 7. Language interface

简体未选择: bmp_simplified_cn.bin 简体选择: bmp_simplified_cn_sel.bin	繁体未选择: bmp_traditional_cn.bin 繁体选择: bmp_traditional_cn_sel.bin	英文未选择: bmp_english.bin 英文选择: bmp_english_sel.bin	俄语未选择: bmp_russian.bin 俄语选择: bmp_russian_sel.bin
西班牙语未选择: bmp_spanish.bin 西班牙选择: bmp_spanish_sel.bin	法语未选择: bmp_french.bin 法语选择: bmp_french_sel.bin	意大利语未选择: bmp_italy.bin 意大利语选择: bmp_italy_sel.bin	返回 (Back) : bmp_return.bin



## 8. “调平” interface

第一点: bmp_leveling1.bin	第二点: bmp_leveling2.bin	第三点: bmp_leveling3.bin	第四点: bmp_leveling4.bin
第五点: bmp_leveling5.bin			返回: bmp_return.bin



## 9. “Setting” interface

文件系统: bmp_fileSys. bin	wifi: bmp_wifi.bin	风扇: bmp_fan.bin	关于: bmp_about. bin
断点续打: bmp_breakp oint.bin	关闭电机: bmp_function 2.bin	语言: bmp_languag e.bin	返回: bmp_return. bin



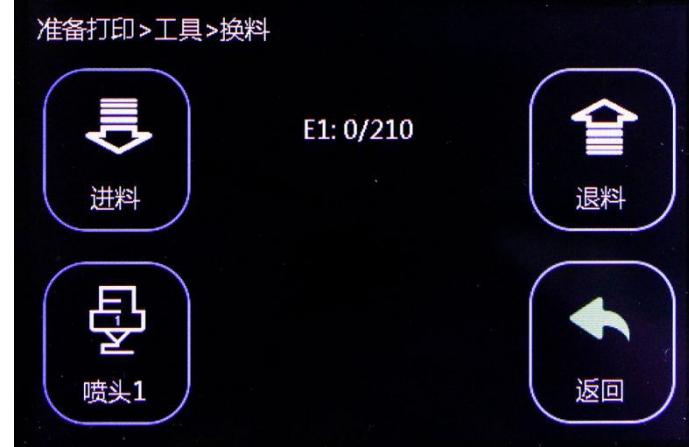
## 10. “Fan” interface

增加: bmp_Add.bi n			减少: bmp_Dec.bin
全速: bmp_speed 255.bin	半速: bmp_speed 127.bin	关闭: bmp_speed 0 .bin	返回: bmp_return. bin



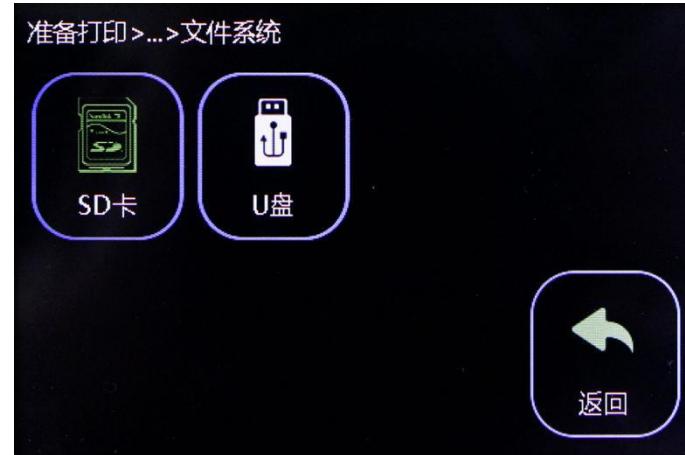
## 11. “Exchange material” interface:

进料: bmp_in.bin		退料: bmp_out.bin
喷头 1: bmp_extru1.bin		返回: bmp_return.bin
喷头 2: bmp_extru2.bin		



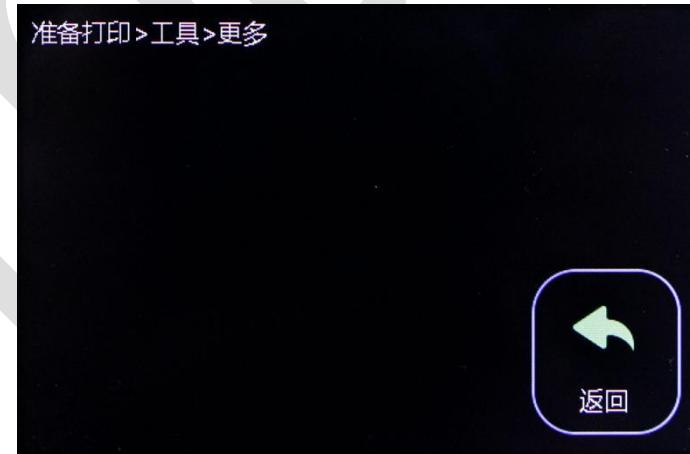
## 12. “Document system” interface:

<i>SD:</i> 未选择: <i>bmp_sd.bin</i> 被选择: <i>bmp_sd_sel.bin</i>	<i>U 盘 (udisk) :</i> 未选择: <i>bmp_usb.bin</i> 被选择: <i>bmp_usb_sel.bin</i>		
			<i>返回 (Back) :</i> <i>bmp_return.bin</i>



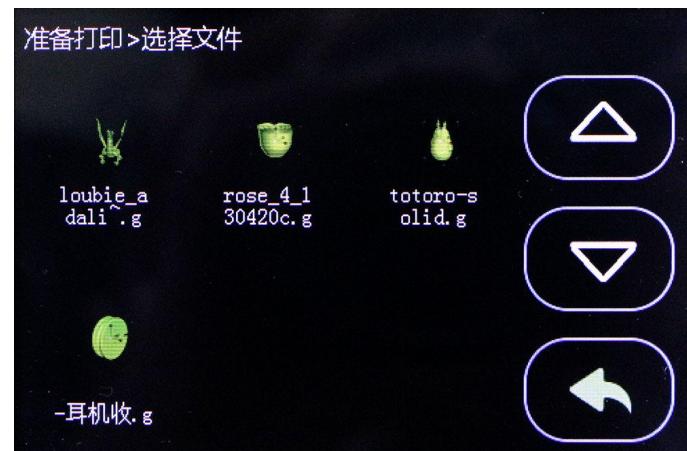
## 13. “More”interface

自定义 1: <i>bmp_custom1.bin</i>	自定义 2: <i>bmp_custom2.bin</i>	自定义 3: <i>bmp_custom3.bin</i>	自定义 4: <i>bmp_custom4.bin</i>
自定义 5: <i>bmp_custom5.bin</i>	自定义 6: <i>bmp_custom6.bin</i>	自定义 7: <i>bmp_custom7.bin</i>	返回: <i>bmp_return.bin</i>



## 14. “selecting file”interface:

文件: <i>bmp_file.bin</i>			上一页: <i>bmp_pageUp.bin</i>
			下一页: <i>bmp_pageDown.bin</i>
目录: <i>bmp_dir.bin</i>			返回: <i>bmp_return.bin</i>



### 15. “On printing” interface:

暂停: bmp_pause. bin	停止: bmp_stop.bin	操作: bmp_menu.bin



### 16. “Operation” Interface:

增加: bmp_Add.bin			减少: bmp_Dec.bin
移动: 未选择: bmp_mov.bin	挤出: 未选择: bmp_extruct.b in	步进: 1mm: bmp_step1_mm.bin 5mm: bmp_step5_mm.bin 10mm: bmp_step10_mm.bi n	返回: bmp_return.bin
被选择: bmp_mov_sel.bi n	被选择: bmp_extruct_s el.bin		

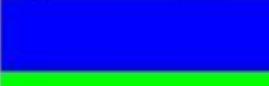
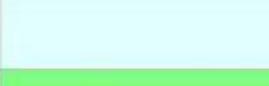
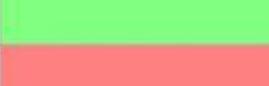


## 17. More interface in the printing operation

温度: bmp_temp.bin	风扇: bmp_fan.bi n	换料: bmp_filame_ntchange.bin	变速: bmp_speed.bin
更多: bmp_more.bin	自动关机: 被选择: bmp_auto_off.bin  未选择: bmp_manual_off.bin	自定义 4: bmp_morefu_nc4.bin	返回: bmp_return.bin



## Color to Hexadecimal Value

蓝色		0x0000FF
绿色		0x00FF00
红色		0xFF0000
黄色		0xFFFF00
浅蓝		0xE1FFFF
浅绿		0x80FF80
浅红		0xFF8080
青色		0x00FFFF
浅青色		0x80FFFF
浅黄色		0xFFFF80
深绿色		0x008000
深红色		0x800000
深蓝色		0x000080
深黄色		0x808000
黑色		0x000000
白色		0xFFFFFFFF

## X Technical Support and Guarantee

1, Power-on test has been done before shipment to insure normal use of product

2, Welcome to join QQ discussion group: 232237692

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Mr Tan: 15521395023

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