MKS MINI LCD12864 firmware modification

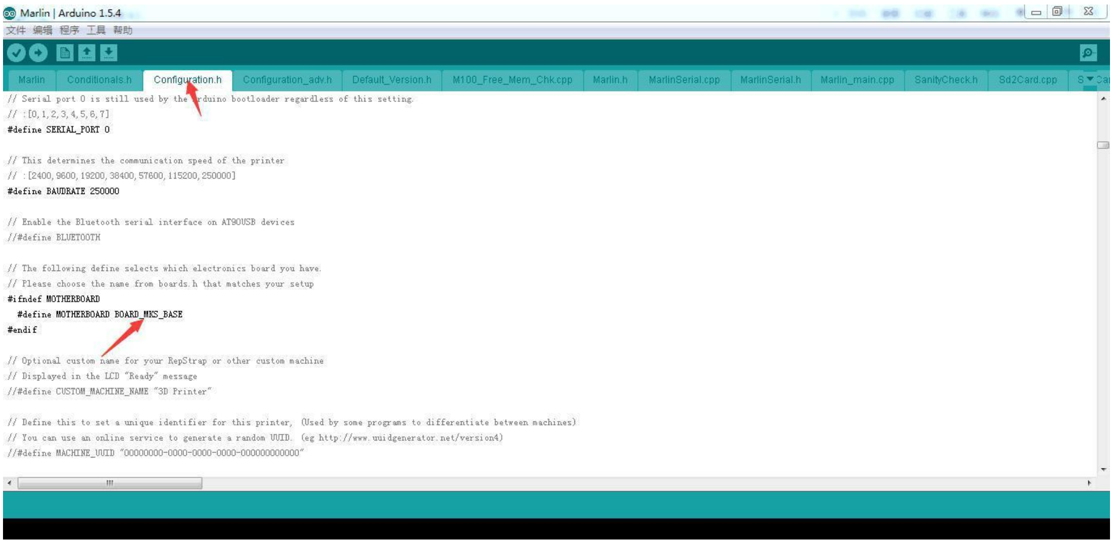
Some older firmware versions may not be available. Please download the latest firmware from GitHub Https://github.com/thingsmart/Marlin-RC

On the basis of the Marlin-RC.zip modification:

In this firmware, marlin folder file by default is an XYZ machine, if is the delta machine, can copy the firmware "marlin / example_configurations / delta / generic" folder "Configuration.h" and "Configuration_adv.h" the two files to the Marlin folder, replace the original two files, and then modify as described below method

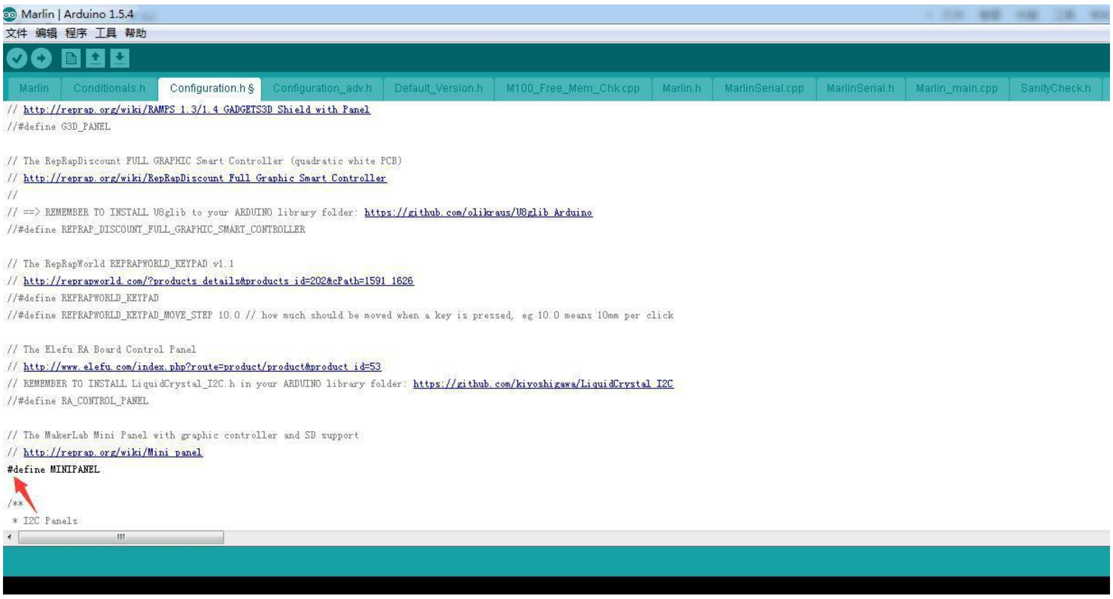
1. Find the motherboard type in configuration.h

Board Type Select "BOARD_MKS_BASE"



```
// Serial port 0 is still used by the Arduino bootloader regardless of this setting.
// :[0,1,2,3,4,5,6,7]
#define SERIAL_PORT 0

// This determines the communication speed of the printer
// :[2400,9600,19200,38400,57600,115200,250000]
#define BAUDRATE 250000

// Enable the Bluetooth serial interface on AT90USB devices
//#define BLUETOOTH

// The following define selects which electronics board you have.
// Please choose the name from boards.h that matches your setup
#ifndef MOTHERBOARD
  #define MOTHERBOARD BOARD_MKS_BASE
#endif

// Optional custom name for your RepStrap or other custom machine
// Displayed in the LCD "Ready" message
//#define CUSTOM_MACHINE_NAME "3D Printer"

// Define this to set a unique identifier for this printer, (Used by some programs to differentiate between machines)
// You can use an online service to generate a random UUID. (eg http://www.uuidgenerator.net/version4)
//#define MACHINE_UUID "00000000-0000-0000-0000-000000000000"
```

2. Display Type Selection:



```
// http://reprap.org/wiki/RAMPS_1.3/1.4_GADGETS3D_Shield_with_Panel
//#define G3D_PANEL

// The RepRapDiscount FULL GRAPHIC Smart Controller (quadratic white PCB)
// http://reprap.org/wiki/RepRapDiscount_Full_Graphic_Smart_Controller
//
// ==> REMEMBER TO INSTALL U8glib to your ARDUINO library folder: https://github.com/olikraus/U8glib_Arduino
//#define REPRAP_DISCOUNT_FULL_GRAPHIC_SMART_CONTROLLER

// The RepRapWorld REPRAPWORLD_KEYPAD v1.1
// http://reprapworld.com/?products_details&products_id=202&cPath=1591_1626
//#define REPRAPWORLD_KEYPAD
//#define REPRAPWORLD_KEYPAD_MOVE_STEP 10.0 // how much should be moved when a key is pressed, eg 10.0 means 10mm per click

// The Elefu RA Board Control Panel
// http://www.elefu.com/index.php?route=product/product&product_id=53
// REMEMBER TO INSTALL LiquidCrystal_I2C.h in your ARDUINO library folder: https://github.com/kiyoshigawa/LiquidCrystal_I2C
//#define RA_CONTROL_PANEL

// The MakerLab Mini Panel with graphic controller and SD support
// http://reprap.org/wiki/Mini_panel
#define MINIPANEL

/**
 * I2C Panels
```

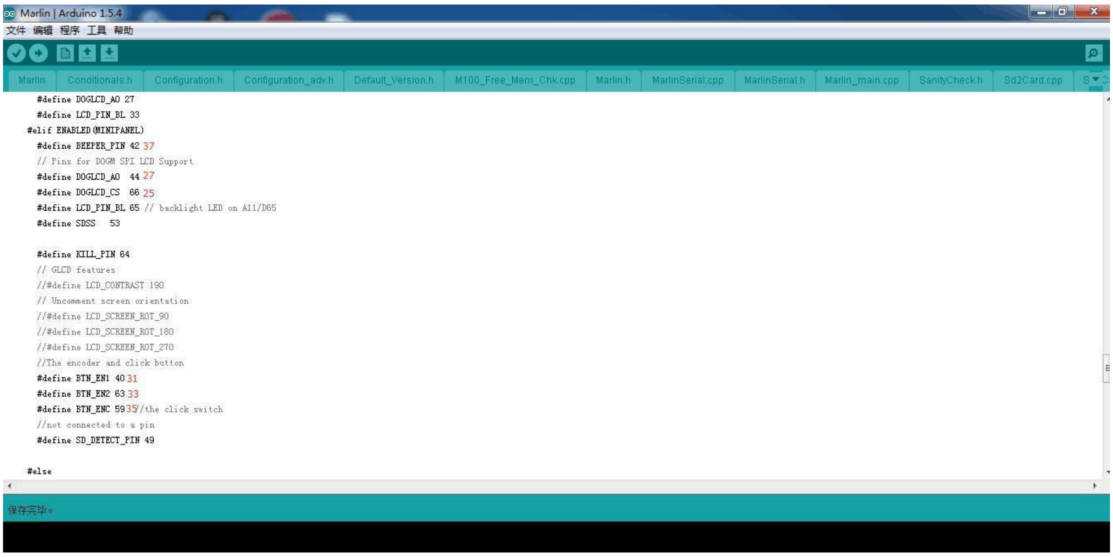
3. Find pins_RAMPS_13.h

#elif ENABLED (MINIPANEL) part is the modified as follows: (red part of the words on behalf of the need to modify)

```
#elif ENABLED(MINIPANEL)

#define BEEPER_PIN 42

// Pins for DOGM SPI LCD Support

#define DOGLCD_A0 44 #define

DOGLCD_CS 66

#define LCD_PIN_BL 65 // backlight LED on A11/D65

#define SDSS     53

#define KILL_PIN 64

// GLCD features

//#define LCD_CONTRAST 190

// Uncomment screen orientation

//#define LCD_SCREEN_ROT_90

//#define LCD_SCREEN_ROT_180

//#define LCD_SCREEN_ROT_270

//The encoder and click button

#define BTN_EN1 40

#define BTN_EN2 63

#define BTN_ENC 59 //the click switch

//not connected to a pin

#define SD_DETECT_PIN 49
```

Modified to: (blue word means the modified part)

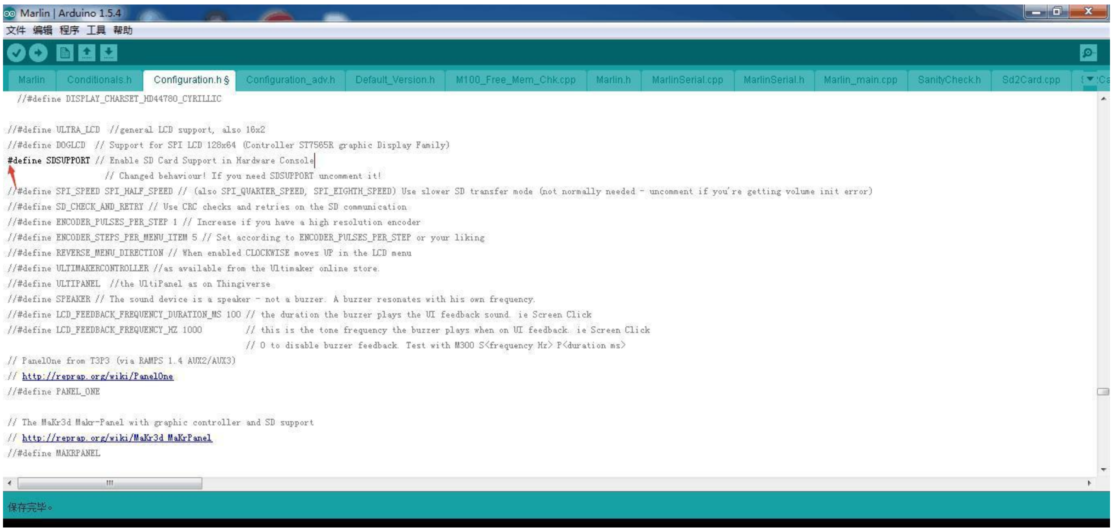
```
#elif ENABLED(MINIPANEL)

#define BEEPER_PIN 37

// Pins for DOGM SPI LCD Support

#define DOGLCD_A0 27 #define

DOGLCD_CS 25

#define LCD_PIN_BL 65 // backlight LED on A11/D65

#define SDSS    53

#define KILL_PIN 64

// GLCD features

//#define LCD_CONTRAST 190

// Uncomment screen orientation

//#define LCD_SCREEN_ROT_90

//#define LCD_SCREEN_ROT_180

//#define LCD_SCREEN_ROT_270

//The encoder and click button

#define BTN_EN1 31

#define BTN_EN2 33

#define BTN_ENC 35 //the click switch

//not connected to a pin

#define SD_DETECT_PIN 49
```



```
    #define DOGLCD_A0 27
    #define LCD_PIN_BL 33
  #elif ENABLED(MINIPANEL)
    #define BEEPER_PIN 42 37
    // Pins for DOGM SPI LCD Support
    #define DOGLCD_A0  44 27
    #define DOGLCD_CS  66 25
    #define LCD_PIN_BL 65 // backlight LED on A11/D65
    #define SDSS   53

    #define KILL_PIN 64
    // GLCD features
    //#define LCD_CONTRAST 190
    // Uncomment screen orientation
    //#define LCD_SCREEN_ROT_90
    //#define LCD_SCREEN_ROT_180
    //#define LCD_SCREEN_ROT_270
    //The encoder and click button
    #define BTN_EN1 40 31
    #define BTN_EN2 63 33
    #define BTN_ENC 59 35//the click switch
    //not connected to a pin
    #define SD_DETECT_PIN 49

  #else
```

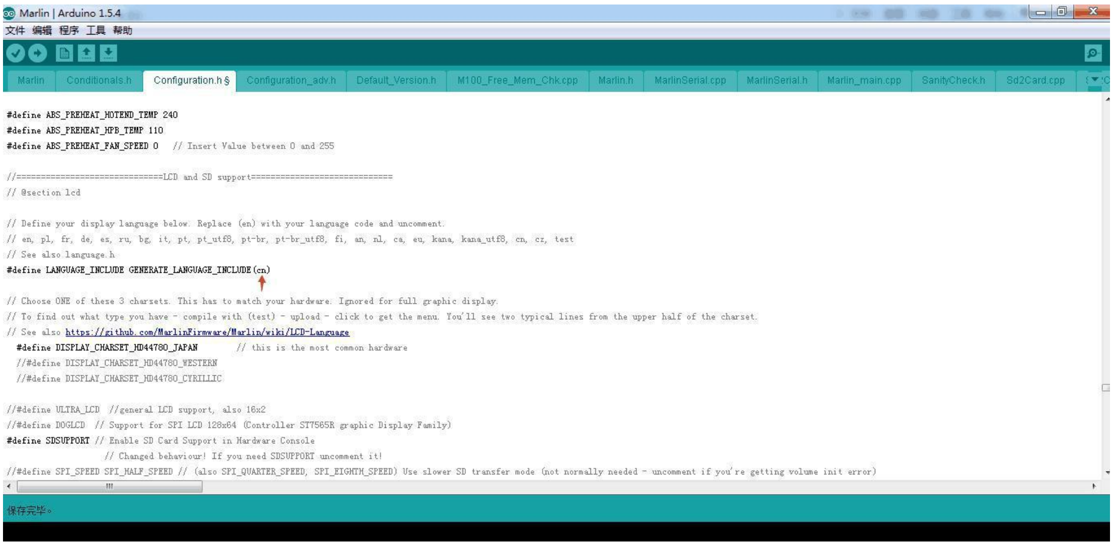
Also need to pay attention to the place:

SD card in the configuration.h need to be enabled, otherwise can not read the card. As shown below, remove the double slash .



```
  //#define DISPLAY_CHARSET_HD44780_CYRILLIC

//#define ULTRA_LCD  //general LCD support, also 16x2
//#define DOGLCD  // Support for SPI LCD 128x64 (Controller ST7565R graphic Display Family)
#define SDSUPPORT // Enable SD Card Support in Hardware Console
                  // Changed behaviour! If you need SDSUPPORT uncomment it!
//#define SPI_SPEED SPI_HALF_SPEED // (also SPI_QUARTER_SPEED, SPI_EIGHTH_SPEED) Use slower SD transfer mode (not normally needed - uncomment if you're getting volume init error)
//#define SD_CHECK_AND_RETRY // Use CRC checks and retries on the SD communication
//#define ENCODER_PULSES_PER_STEP 1 // Increase if you have a high resolution encoder
//#define ENCODER_STEPS_PER_MENU_ITEM 5 // Set according to ENCODER_PULSES_PER_STEP or your liking
//#define REVERSE_MENU_DIRECTION // When enabled CLOCKWISE moves UP in the LCD menu
//#define ULTIMAKERCONTROLLER //as available from the Ultimaker online store.
//#define ULTIPANEL  //the UltiPanel as on Thingiverse
//#define SPEAKER // The sound device is a speaker - not a buzzer. A buzzer resonates with his own frequency.
//#define LCD_FEEDBACK_FREQUENCY_DURATION_MS 100 // the duration the buzzer plays the UI feedback sound. ie Screen Click
//#define LCD_FEEDBACK_FREQUENCY_HZ 1000         // this is the tone frequency the buzzer plays when on UI feedback. ie Screen Click
                                                 // 0 to disable buzzer feedback. Test with M300 S<frequency Hz> P<duration ms>
// PanelOne from T3P3 (via RAMPS 1.4 AUX2/AUX3)
// http://reprap.org/wiki/PanelOne
//#define PANEL_ONE

// The MaKr3d Makr-Panel with graphic controller and SD support
// http://reprap.org/wiki/MaKr3d_MaKrPanel
//#define MAKRPANEL
```

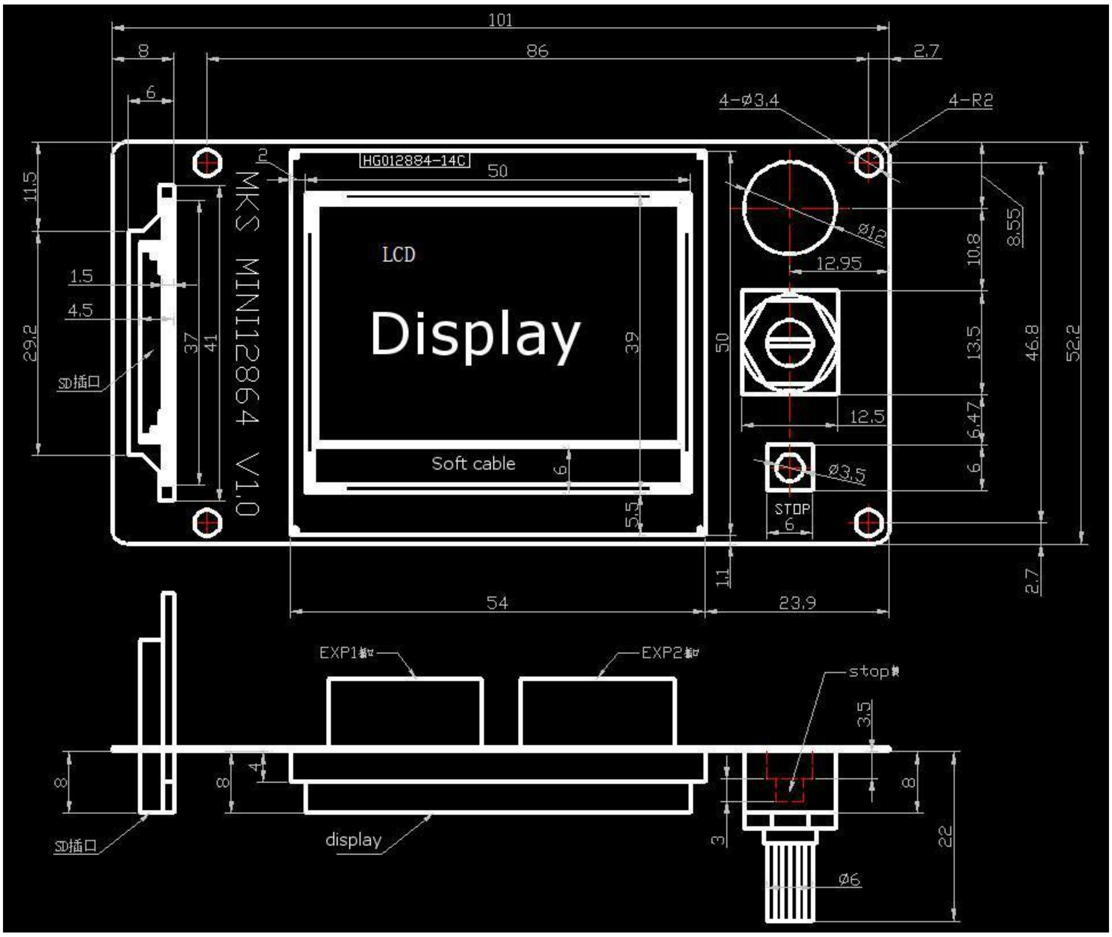
In the configuration.h, the arrow inside the brackets to "en" is English, "cn" is Chinese, but also support other languages, can be changed then need to re-compile the programming process!!



```
#define ABS_PREHEAT_HOTEND_TEMP 240
#define ABS_PREHEAT_HPB_TEMP 110
#define ABS_PREHEAT_FAN_SPEED 0   // Insert Value between 0 and 255

//=============================LCD and SD support=============================
// @section lcd

// Define your display language below. Replace (en) with your language code and uncomment.
// en, pl, fr, de, es, ru, bg, it, pt, pt_utf8, pt-br, pt-br_utf8, fi, an, nl, ca, eu, kana, kana_utf8, cn, cz, test
// See also language.h
#define LANGUAGE_INCLUDE GENERATE_LANGUAGE_INCLUDE(cn)

// Choose ONE of these 3 charsets. This has to match your hardware. Ignored for full graphic display.
// To find out what type you have - compile with (test) - upload - click to get the menu. You'll see two typical lines from the upper half of the charset.
// See also https://github.com/MarlinFirmware/Marlin/wiki/LCD-Language
  #define DISPLAY_CHARSET_HD44780_JAPAN        // this is the most common hardware
  //#define DISPLAY_CHARSET_HD44780_WESTERN
  //#define DISPLAY_CHARSET_HD44780_CYRILLIC

//#define ULTRA_LCD  //general LCD support, also 16x2
//#define DOGLCD  // Support for SPI LCD 128x64 (Controller ST7565R graphic Display Family)
#define SDSUPPORT // Enable SD Card Support in Hardware Console
                  // Changed behaviour! If you need SDSUPPORT uncomment it!
//#define SPI_SPEED SPI_HALF_SPEED // (also SPI_QUARTER_SPEED, SPI_EIGHTH_SPEED) Use slower SD transfer mode (not normally needed - uncomment if you're getting volume init error)
```

Other configuration parameters with the old version of the firmware is the same, no longer described!

Dimensions:


101
8
86
2.7
6
4-Ø3.4
4-R2
2
HG012884-14C
50
MKS MINI12864 V1.0
LCD
Display
Soft cable
11.5
1.5
4.5
29.2
SD插口
37
41
39
50
Ø12
12.95
10.8
8.55
13.5
46.8
52.2
12.5
6.47
6
Ø3.5
STOP
6
5.5
1.1
54
23.9
2.7
EXP1插座
EXP2插座
stop键
3.5
4
8
8
8
3
22
Ø6
SD插口
display