# BananaPi uses DVK-511

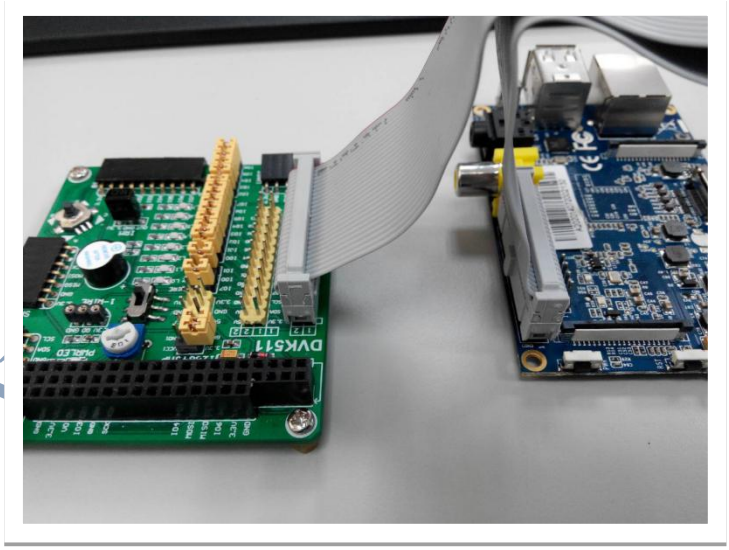
# LCD_1602

By Justin Chen

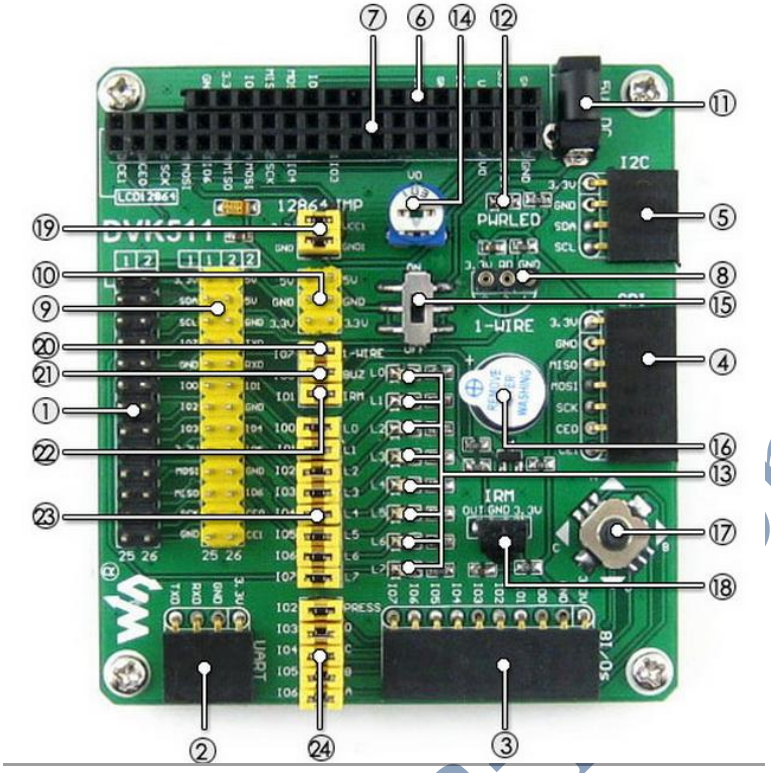
1. First go to website http://www.bananapi.com/ download BananaPi customized Raspbian Image; about how to burn the image into SD http://www.bananapi.com/index.php/download?layout=edit&id=42.

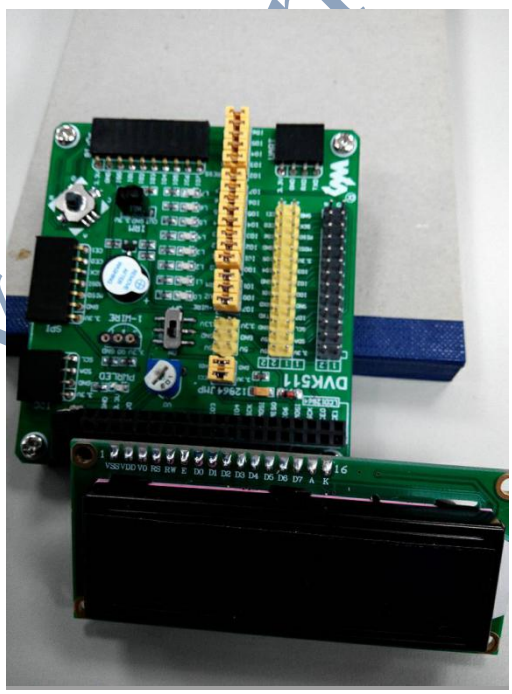
2. The Image burn in SD card has preload the customized WiringPi Lib before, if download WiringPi Lib by yourself, you will need to modify it, otherwise it can't use; WiringPi Lib can find in /opt/gpio-lib.


3. Connect the DVK511 to the BananaPi.

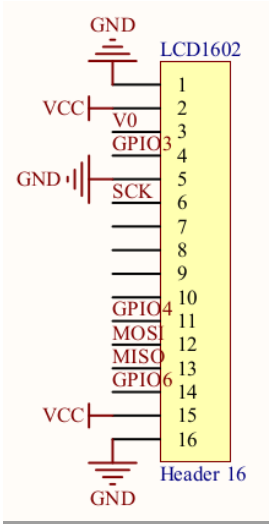


4. To DVK511 sixth jack (Character LCD interface: for connecting character LCDs like LCD1602) connected LCD1602 display.

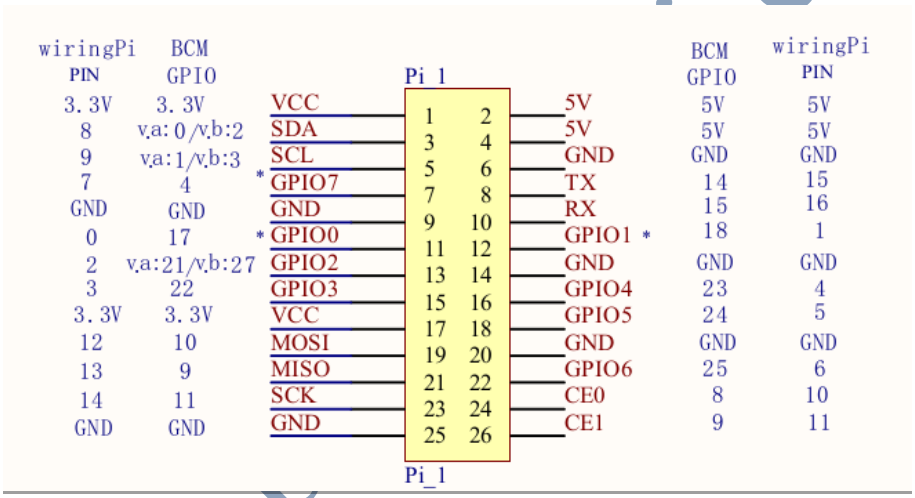


5. Seeboths LCD1602 & WiringPi Lib& BananaPi GPIO PIN ‘s pin foot correspond to understand diagram corresponding to each PIN corner.




The LCD1602 PINpin foot correspond picture




The WiringPi Lib&BananaPi GPIO PIN

From the LCD1602 PIN correspondence chart we can see:

PIN 1 , 15, 16 and 2, 5 are grounded power source;

PIN 3 V0 pin is DVK511 pin, no need additional definitions;

PIN 4 is GPIO3 and the corresponding pin WiringPi Lib is PIN3;

PIN 6 is SCK and the corresponding pin WiringPi Lib is PIN14;

PIN 11 is GPIO4 and the corresponding bit WiringPi Lib is PIN4;

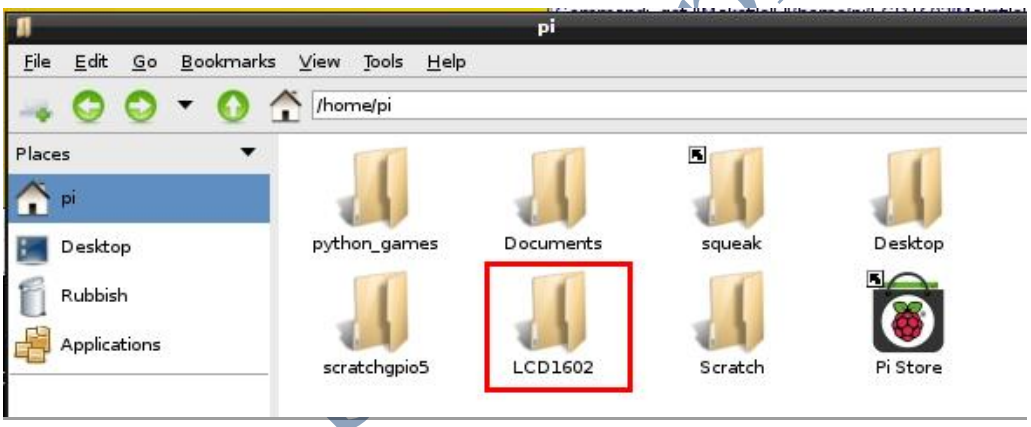
PIN 12 is MOSI and the corresponding WiringPi Lib is PIN12;

PIN 13 is MISO and the corresponding WiringPi Lib is PIN13;

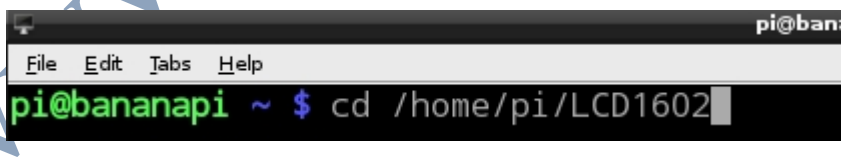
PIN 14 is GPIO6 and the corresponding bit WiringPi Lib is PIN6;

PIN 7 , 8 , 9 , 10 did not use, so this is four pin without any extra definition.

6. This use LCD1602 Sample Code to verify its functionality, open File Manager software LCD1602 folder to copy to the home directory.

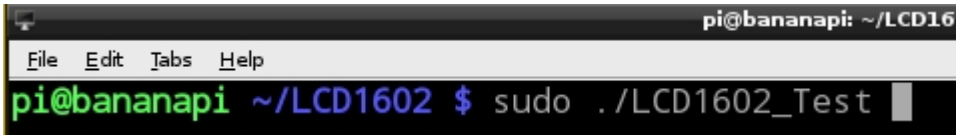




Then open LXTerminal switch to LCD1602 folder directory.




Compile LCD1602 sample code; make instruction execution.


Run and start LCD1620 screen.



7. Watch the LCD1620 on the screen DVK511 can see the output subtitles.


8. After completed instruction , if the screen did not display ,we can try to mobilize the potentiometer to adjust the screen contrast of LCD1602.