

BananaPi uses DVK-511

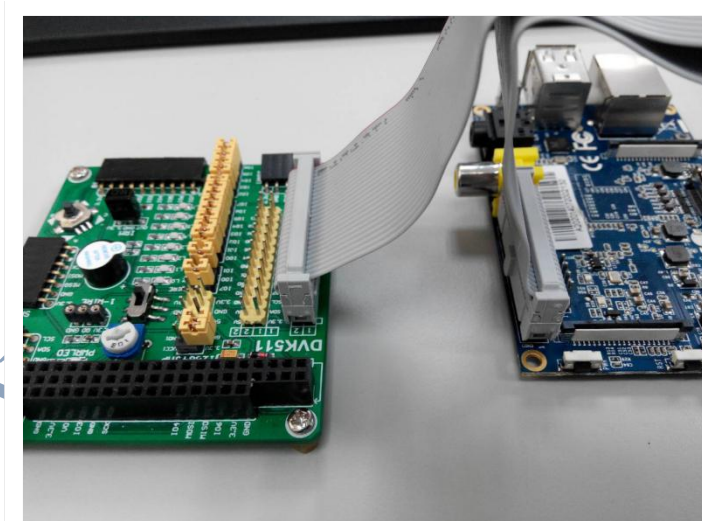
LCD2.2" color display

By Justin Chen

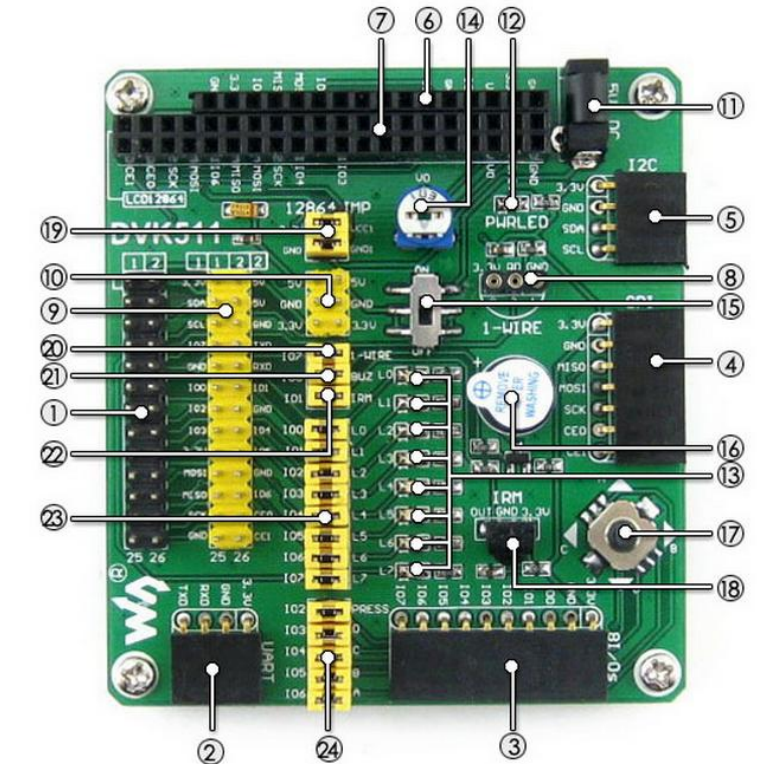
1. First go to website <http://www.bananapi.com/> download BananaPi customized Raspbian Image; about how to burn the image into SD
<http://www.bananapi.com/index.php/download?layout=edit&id=42>.
2. The Image burn in SD card has preload the customized WiringPi Lib before, if download WiringPi Lib by yourself, you will need to modify it, otherwise it can't use; WiringPi Lib can find in /opt/gpio-lib.

```
pi@bananapi: /opt/gpio-lib
File Edit Tabs Help
pi@bananapi /opt/gpio-lib $ ls
RPI.GPIO-0.5.5 ScratchGPIO5 WiringBPi_Beta_V2.0
```

3. Banana Pi connect Adapter plate DVK511, as below picture showed.



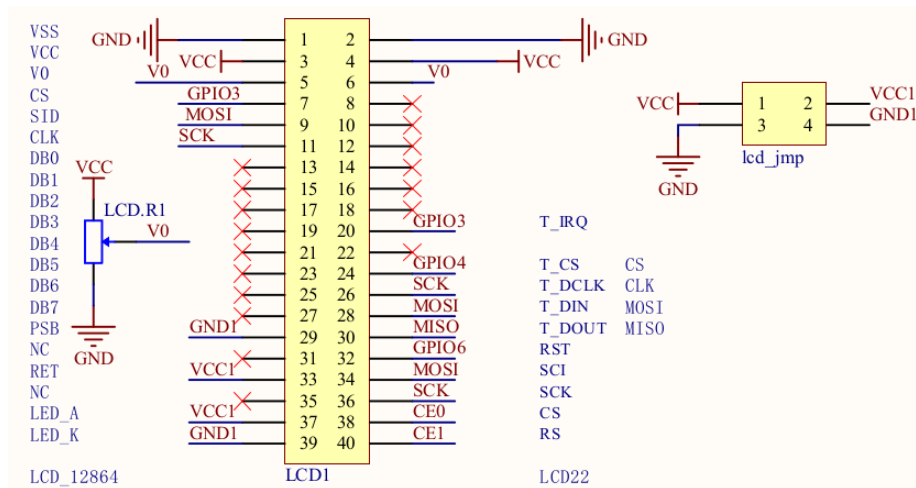
4. To let DVK511's seventh socket (Character LCD interface: for connecting character LCDs like LCD1602) connect to LCD2.2" color display, and meanwhile need to remove the jumper of nineteen socket.



Above picture showed need remove the jumper of nineteen socket

5. Watching corresponding table of LCD2.2" color display and WiringPi Lib PIN to

get know each pins corresponding position.



Above picture showed LCD2.2" color display PIN's corresponding table

6. Open LXT erminial software, checking whether have on-hook SPI module, executed Ismod order to watching current on-hook module.

```

pi@bananapi:
File Edit Tabs Help
pi@bananapi ~ $ lsmod
Module              Size  Used by
mali_drm             2608   0
drm                 209350 1 mali_drm
mali                 111523   0
ump                  52535 1 mali
8188eu              497473   0

```

Currently there are no on-hook SPI module from above picture showed, using modprobe spi-sun7i order to checking on-hook module.

```

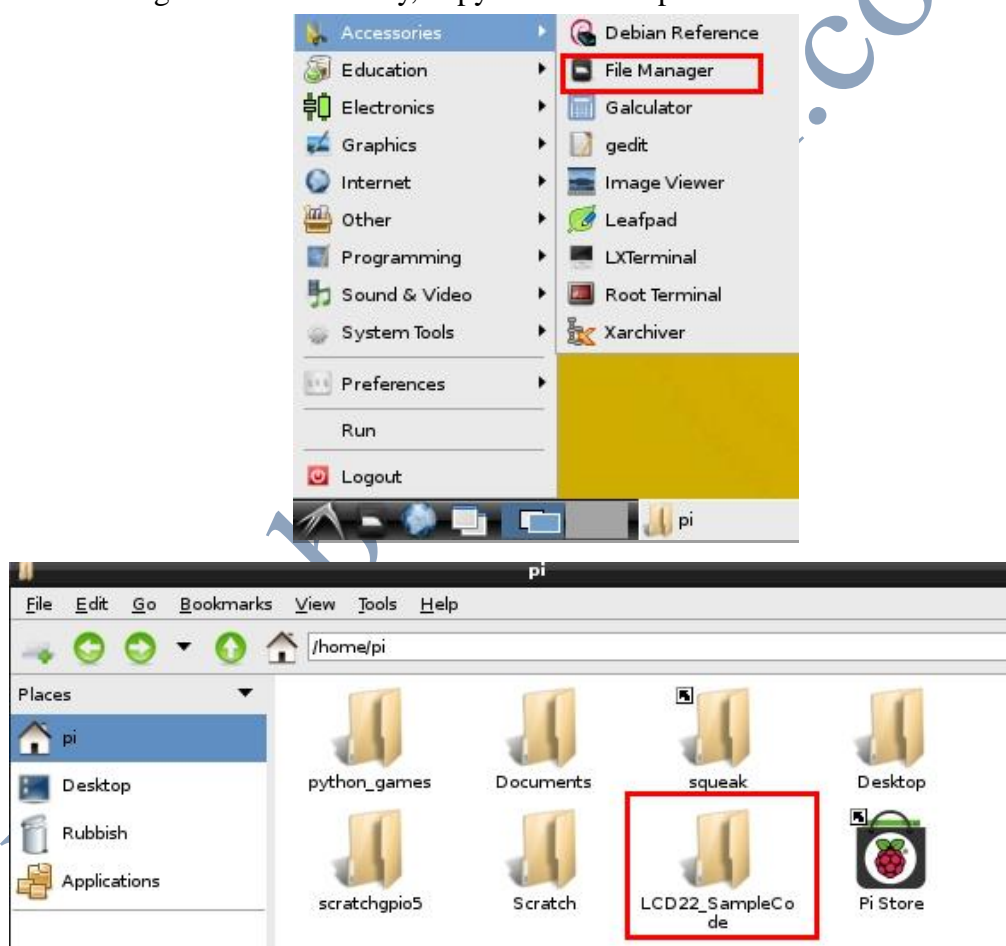
pi@bananapi:
File Edit Tabs Help
pi@bananapi ~ $ sudo modprobe spi-sun7i

```

Finished then using Ismod order to watching all on-hook module at current system.

```
pi@bananapi ~ $ lsmod
Module                Size  Used by
spidev                 6217  0
spi_sun7i              17802  0
mali_drm               2608  0
drm                   209350  1 mali_drm
mali                   111523  0
ump                    52535  1 mali
8188eu                 497473  0
```

7. Using LCD2.2" color display Sample Code to verify the functions, then open File Manager software. Firstly, copy LCD22 SampleCode file to Home Folder.



Second, open LXTerminal and change to LCD22 SampleCode file:

```
pi@bananapi: ~ $ cd /home/pi/LCD22_SampleCode
```


Translate and edit this file.




```
pi@bananapi: ~  
File Edit Tabs Help  
pi@bananapi ~/LCD22_SampleCode $ make
```

Run executive file, first let LCD2.2" color display initialize input:



```
pi@bananapi: ~/LCD22_SampleCode  
File Edit Tabs Help  
pi@bananapi ~/LCD22_SampleCode $ sudo ./LCD22_Test -I
```

Then input corresponding order let LCD2.2" color display show the word string:



```
pi@bananapi: ~/LCD22_SampleCode  
File Edit Tabs Help  
pi@bananapi ~/LCD22_SampleCode $ sudo ./LCD22_Test -T
```

8. Check LDC2.2" color display on the DVK511, you will see the output's caption.

