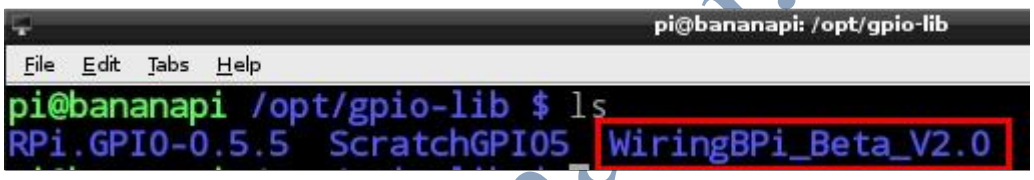
BananaPi uses DVK-511

74LVC8T245

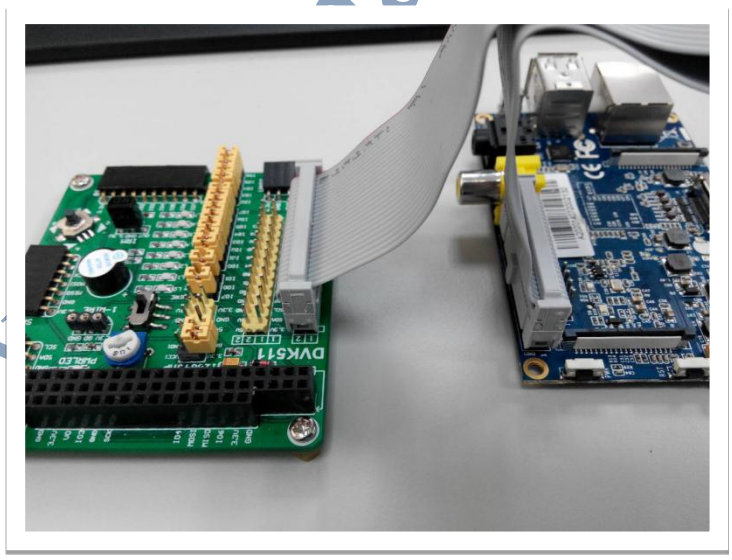
By Justin Chen

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.

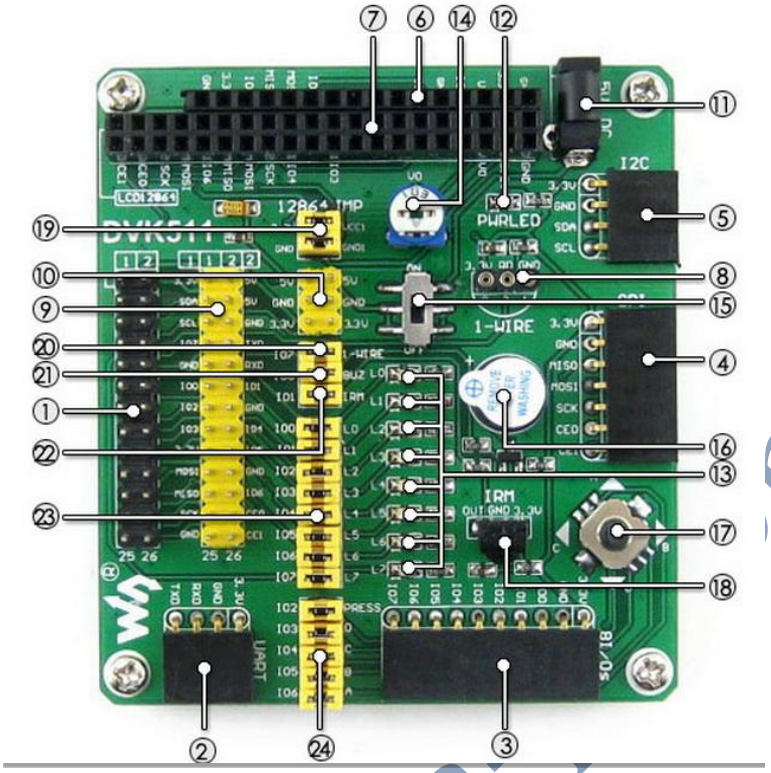
2. The Image burn in SD card has preload the customized WiringPi Lib before, if download WiringPi Lib by yourself, you will need to modify it, otherwise it can't use; WiringPi Lib can find in /opt/gpio-lib.

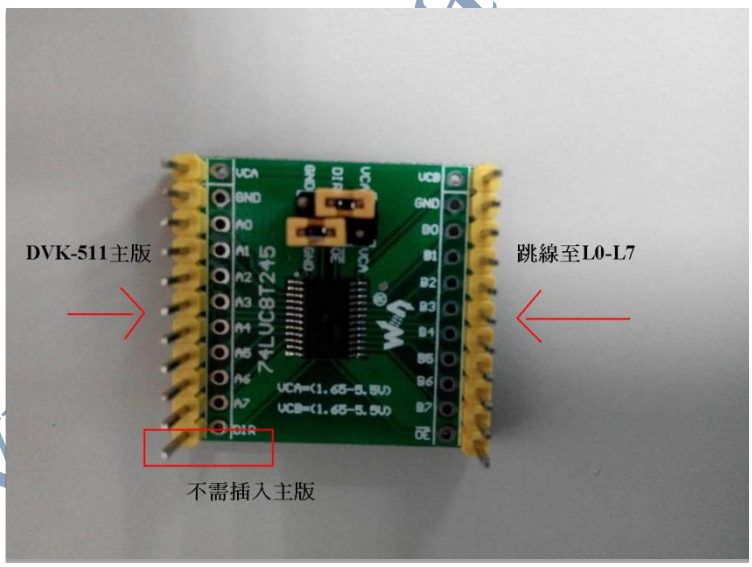


3. BananaPi connect pinboard of DVK511。

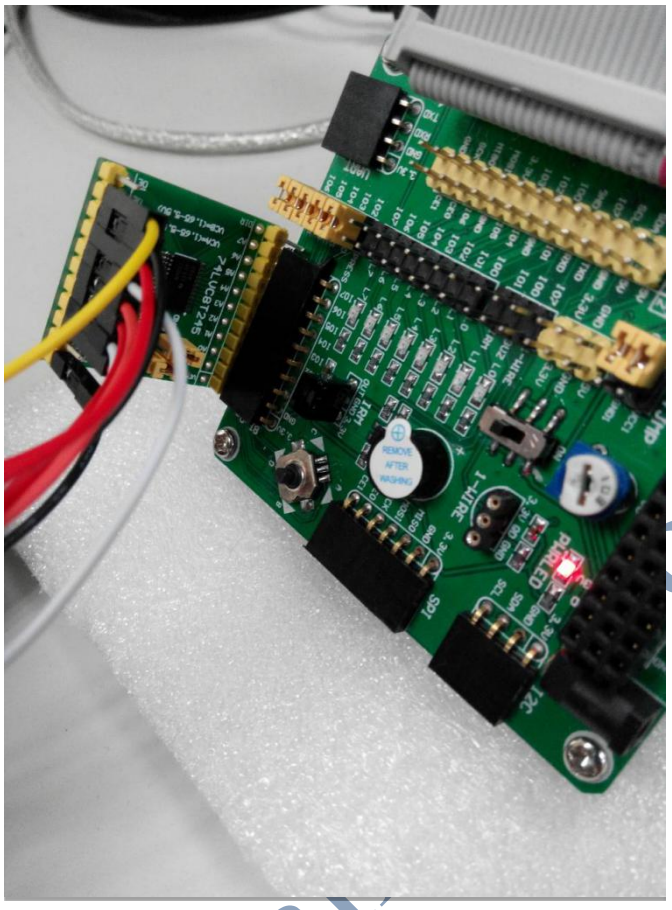


4. Insert 74LVC8T245 level traslator into 8I/Os Interface jack，remove thrity-two jack User LEDs jumper(LED L0-L7) from DVK-511motherboard,which don't have influence this function.74LVC8T245level traslator manily used for convert3V into 5V。

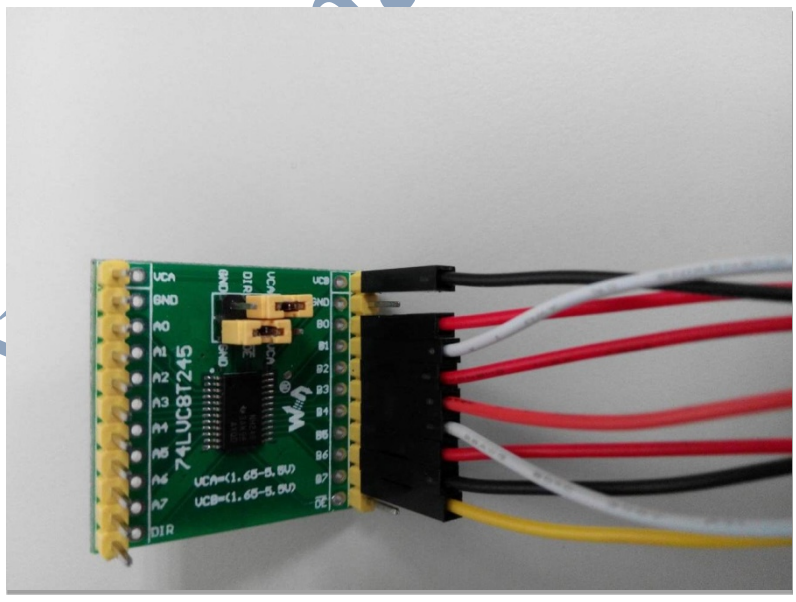




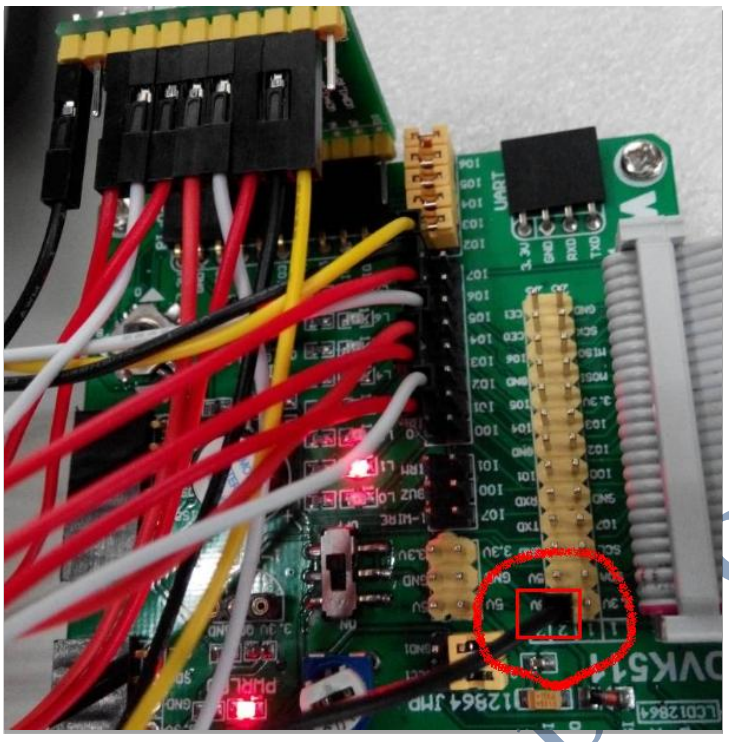
VCA need connect DVK-511 motherboard 8I/Os Interface PIN butt joint one by one



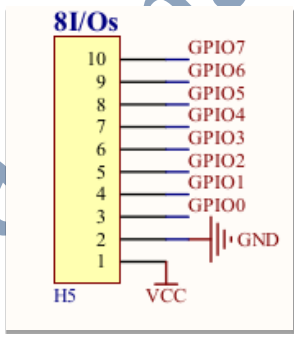
VCB the side need jump to DVK5-511's LED L0-L1



VCB First jack (VCB) need connect wtih DVK-5115V；

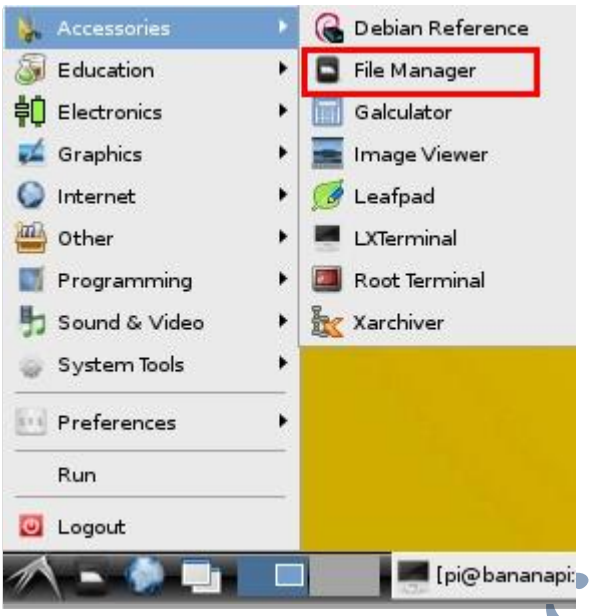


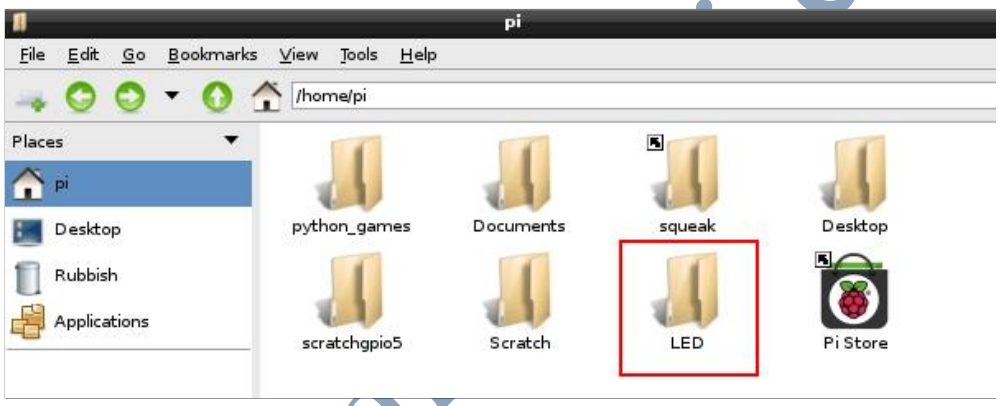
5. Check 8I/Os Buttons to know the definition of each pins。



8I/Os Buttons PIN layout

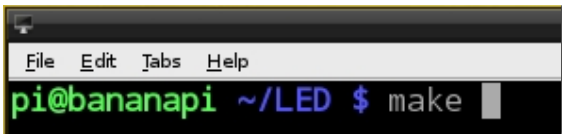
6. Use LED sample code to test the funtion，Open File Manager software copy LED Data copy to home catalog.



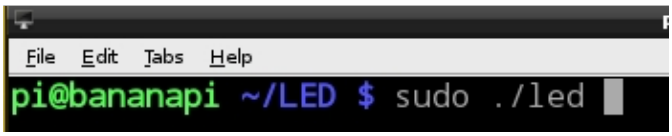


Next step Open LXTerminal switch to LED Data catalog.

Compile LED sample code.execute order



Running order 74LVC8T245 level switcher



7. Finally check if LED light flash- down on DVK-511 mainboard。
8. Knowing LED relative relationship of DVK-511 LED through wiringPi pins：

   L1corresponds to BananaPi GPIO17 PIN ,then Corresponding wiringPi named0；

   L2corresponds to BananaPi GPIO18 PIN,then Corresponding wiringPi named 1；

   L3 corresponds to BananaPi GPIO27 PIN,then corresponding wiringPI named 2；

   L4 corresponds to BananaPi GPIO22 PIN,then Corresponding wiringPi named3；

   L5corresponds to BananaPi GPIO23 PIN,then Corresponding wiringPi named 4；

   L6corresponds to BananaPi GPIO24 PIN,then Corresponding wiringPi named 5；

   L7corresponds to BananaPi GPIO25 PIN,then Corresponding wiringPi named 6；

   L0 corresponds to BananaPi GPIO4 PIN,then Corresponding wiringPi named 7；