

BananaPi uses DVK-511

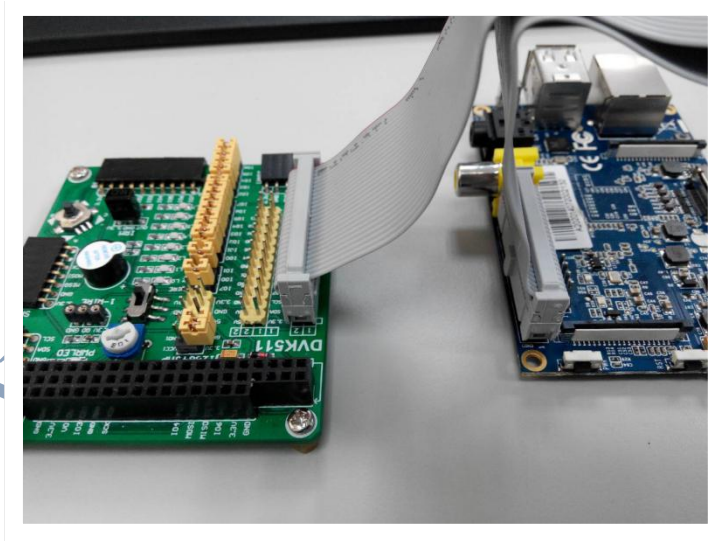
AT45DB

By Justin Chen

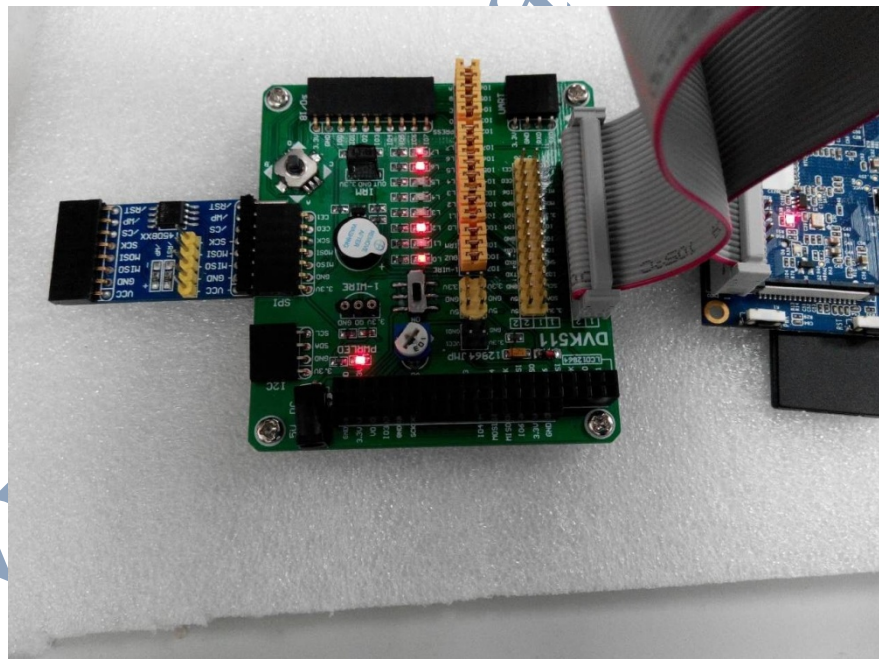
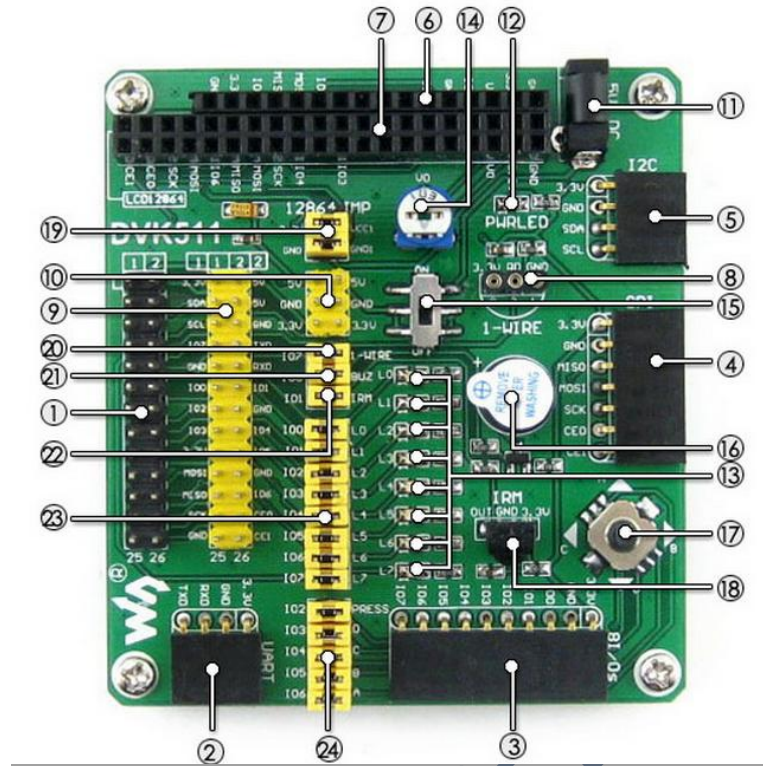
1. First go to the website <http://www.bananapi.com/> download BananaPi customized Raspbian Image; about how to burn the image into SD card <http://www.bananapi.com/index.php/download?layout=edit&id=42>)
2. The Image burn in SD card has preload the customized WiringPi Lib before, if download WiringPi 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
```

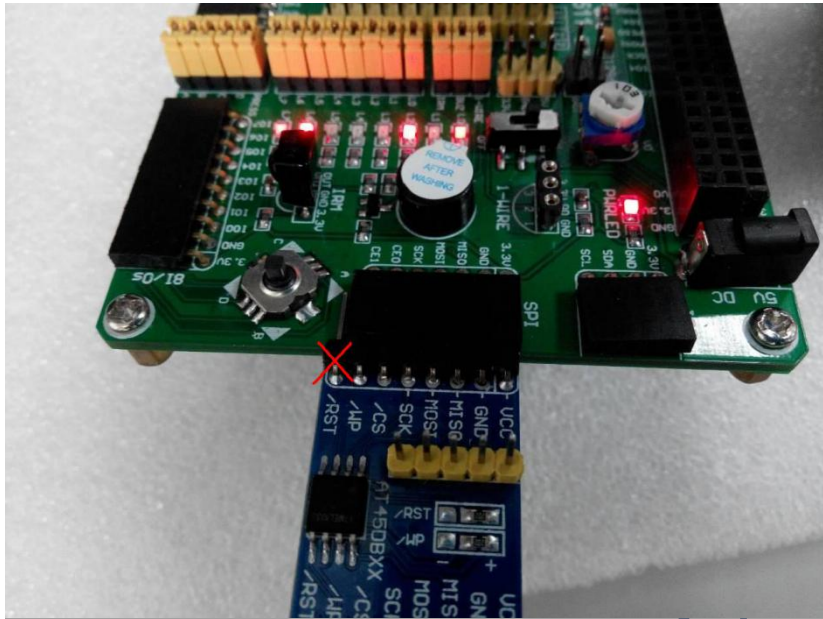
3. Connect the DVK511 to the BananaPi.



4. The fourth jack on is SPI Interface, you can plug AT45DB device inside this interface.



5. AT45DB device's RST pin no need connect with DVK-511.



6. Check AT45DB picture to know about each pin's correspond.

SPI		
VCC	1	VCC
GND	2	GND
MISO	3	MISO
MOSI	4	MOSI
SCK	5	SCK
CE0	6	CE0
CE1	7	CE1
SPI		

AT45DB PIN picture

7. Start LXTerminal software, first check whether there are mounted SPI modules, run Ismod command to see the current system mounted modules.

```

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

```

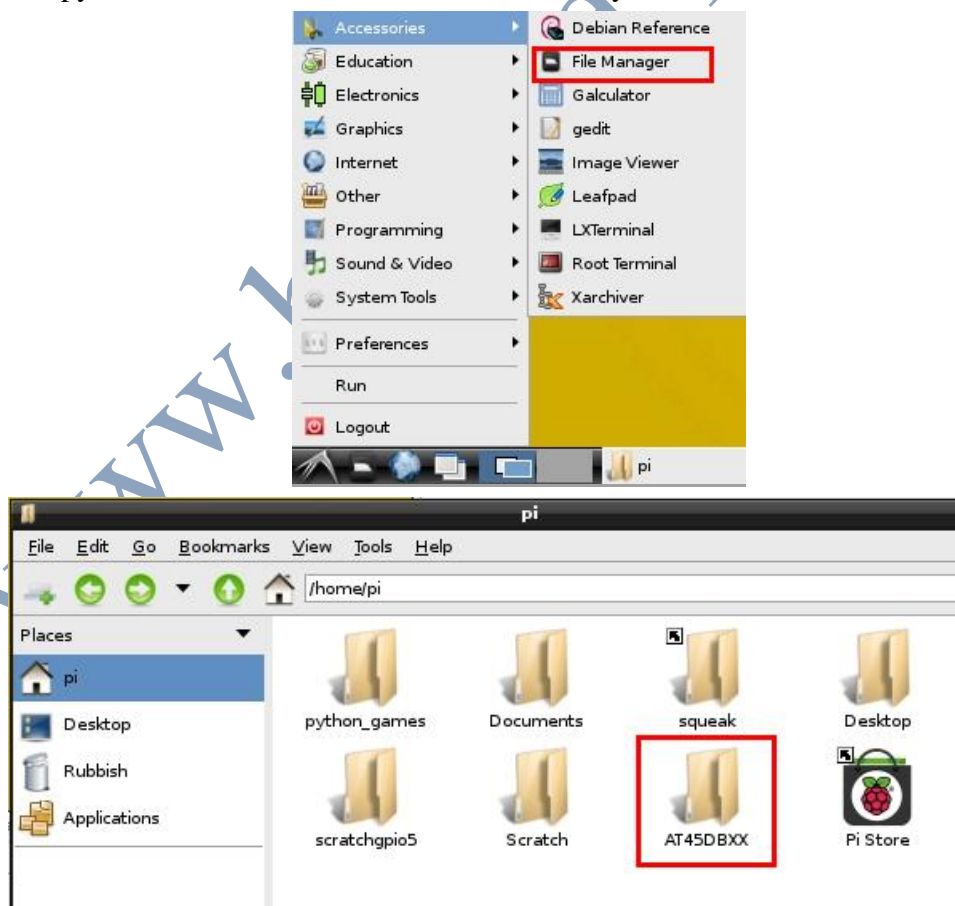
We can know from the above chart that currently no mount the SPI module, use modprobe spi-sun7i comment to mount the module.

```
pi@bananapi ~ $ sudo modprobe spi-sun7i
```

After finish it, then use Ismod command to see the current system mounted modules.

```
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
```

8. Use AT45DB sample code to verify its functionality, open File Manager software to copy the folder to AT45DBXX home directory.



Then open LXTerminal switch to AT45DBXX folder directory.

```
pi@bananapi ~ $ cd /home/pi/AT45DBXX
```

Compile AT45DB sample code;make instruction execution.

```
pi@bananapi ~/AT45DBXX $ make
```

Executive command and start AT45DB

```
pi@bananapi ~/AT45DBXX $ sudo ./spidev_id
```

9. Check the read ID.

```
pi@bananapi ~/AT45DBXX $ sudo ./spidev_id
spi mode: 0
bits per word: 8
max speed: 500000 Hz (500 KHz)
00 1F 24 00 00 00
00 00
```

ID is: 0x1F 0x24 0x00 0x00

10. If can't display the ID properly, please re-plug Device; and re-execute start the command.