



CUBIEBOARD
<http://cubieboard.org>

A80 2D desktop acceralation and hardware video decode

Cubieboard4 linaro desktop

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1. Summary

This docs mainly introduce how to make cubieboard4 linaro desktop support 2D Desktop acceration and hardware video decode.

2. Build image.

Get source and build image ,please refer:

<http://dl.cubieboard.org/model/cc-a80/Doc/ubuntu-linaro/Cubieboard4-Linux-Sdk-Guide.pdf>

Note:

Before build image, You should patch : A80_disp_colorkey_20150303.patch to make kernel support display colorke.

Download the patch and a80-xf86-video-fbturbo for 2D desktop acceralation:

http://dl.cubieboard.org/model/cca80/Source/linux/commom/a80-xf86-video-fbturbo_colorkey.tar.gz

```
sam@sam-System-Product-Name:~/Downloads$ sudo tar -zxvpf a80-xf86-video-fbturbo_colorkey.tar.gz
xf86-video-fbturbo_colorkey.tar.gz
xf86video.tar.gz
A80_disp_colorkey_20150303.patch
```

```
$ cp A80_disp_colorkey_20150303.patch linux-3.4
```

```
$ cd linux-3.4
```

```
$ patch -p1 > A80_disp_colorkey_20150303.patch
```

3. Install a80-xf86-video-fbturbo

There is two way to install : 1 Use the library directly that we have built ; 2 Build library in cubieboard4

3.1. Use the library directly that we have built

```
$ sudo tar -zxvpf xf86video.tar.gz
```

```
$ cp fbturbo_drv.la fbturbo_drv.so /usr/lib/xorg/modules/drivers
```

```
$ cp xorg.conf /etc/X11/xorg.conf
```

3.2. Build library in cubieboard4

Install build environment

```
# tar -zxvpf xf86-video-fbturbo_colorkey.tar.gz
# apt-get build-essential xorg-dev xutils-dev x11proto-dri2-dev libltdl-dev libtool automake
libdrm-dev
```

build

```
#autoreconf
#-vi ./configure --prefix=/usr
#make
```

Install

```
#make install
# cp xorg.conf /etc/X11/xorg.conf
```

4. Install vlc with video hardware decode library

4.1. Copy vlc file to cubieboard4 lubuntu system

vlc.tar.gz is the vlc file that have install hardware decode library basen on OpenMax , copy vlc file to /usr direction. Downloading link :

<http://dl.cubieboard.org/model/cc-a80/Source/linux/commom/vlc.tar.gz>

```
$ sudo tar -zxvpf vlc.tar.gz
$ cp -rf vlc/* /usr
```

4.2. Change mode

```
#vim /etc/udev/rules.d/50-cedar.rules
```

```
KERNEL=="cedar_dev", MODE="0766"
KERNEL=="ion", MODE="0766"
```