



Website: <http://cubieboard.org>

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CB2-dualcard Android Compilation Guide

Version	Autor	Checked
V0.1	Payne	Aaron



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1. Set up the compilation environment of android

1.1 install JDK

```
$wget dl.cubieboard.org/software/tools/android/jdk1.6.0_45.tar.gz
```

Unpack :

```
$sudo tar -xvf jdk1.6.0_45.tar.gz
```

```
$ sudo vim ~/.bashrc
```

add :

```
JAVA_HOME=/jdk-path/jdk1.6.0_45
```

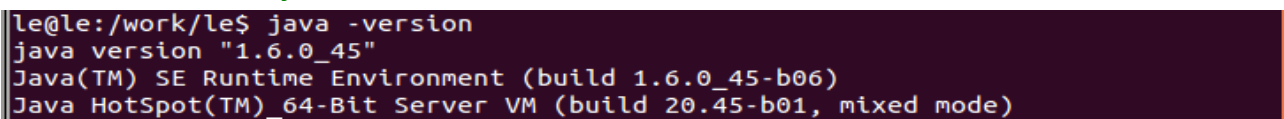
```
export JRE_HOME=/jdk-path/jdk1.6.0_45/jre
```

```
export PATH=$JAVA_HOME/bin:$JRE_HOME/bin:$PATH
```

jdk-paththe: path of Download unpacked JDK

Which saved enforced and verify success:

```
$source ~/.bashrc&&java -version
```



```
le@le:/work/le$ java -version
java version "1.6.0_45"
Java(TM) SE Runtime Environment (build 1.6.0_45-b06)
Java HotSpot(TM) 64-Bit Server VM (build 20.45-b01, mixed mode)
```

Pictured above prove successful

1.2 Compile the required package of installation (Ubuntu 12.04) :

```
$sudo apt-get update
```

```
$sudo apt-get upgrade
```

```
$sudo apt-get install build-essential u-boot-tools uboot-mkimage binutils-arm-linux-gnueabi
```

```
$sudo apt-get install gcc g++ gcc-arm-linux-gnueabi gcc-arm-linux-gnueabi-g++-multilib
```

```
$sudo apt-get install cpp-arm-linux-gnueabi libusb-1.0-0 libusb-1.0-0-dev wget fakeroot
```

```
$sudo apt-get install kernel-package zlib1g-dev libncurses5-dev build-essential
```

```
$sudo apt-get install texinfo texlive ccache zlib1g-dev gawk bison flex gettext uuid-dev
```

```
$sudo apt-get install ia32-libs git gnupg flex bison gperf build-essential zip
```

```
$sudo apt-get install curl libc6-dev x11proto-core-dev libx11-dev:i386 lib32ncurses5-dev
```

```
$sudo apt-get install libreadline6-dev:i386 mingw32 tofrodos python-markdown
```

```
$sudo apt-get install libxml2-utils xsltproc zlib1g-dev:i386 libgl1-mesa-dev
```



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2. Download the package of android source code

1) github

```
git clone https://bitbucket.org/cubietech/a20-android4.2_lichee.git
```

```
git clone https://bitbucket.org/cubietech/a20-android4.2_android.git
```

2) To download the source code package in baidu cloud:

http://dl.cubieboard.org/model/commom/android-source/a20/A20_android.tar.gz

http://dl.cubieboard.org/model/commom/android-source/a20/A20_lichee.tar.gz

3. Kernel compilation

```
$ cd lichee/linux-3.4
```

```
$ sudo cp arch/arm/configs/cubieboard2_config .config
```

```
$ ./build.sh -p sun7i_android
```

```
u-boot
arm-linux-gnueabi-objcopy -O srec u-boot u-boot.srec
arm-linux-gnueabi-objcopy --gap-fill=0xff -O binary u-boot u-boot.bin
make[1]:正在离开目录 `/work/le/a20-android/lichee/u-boot'
INFO: build u-boot OK.
INFO: build rootfs ...
INFO: skip make rootfs for android
INFO: build rootfs OK.
INFO: build lichee OK.
```

4. Compilation Android

```
$ cd android
```

```
$ source build/envsetup.sh
```

```
$ lunch
```

Type 15 (choose sugar_cubieboard2-eng)

```
le@le: /work/le/a20-android/android
Lunch menu... pick a combo:
 1. full-eng
 2. full_x86-eng
 3. vbox_x86-eng
 4. full_mips-eng
 5. full_grouper-userdebug
 6. full_tilapia-userdebug
 7. mini_armv7a_neon-userdebug
 8. mini_armv7a-userdebug
 9. mini_mips-userdebug
10. mini_x86-userdebug
11. full_maguro-userdebug
12. full_manta-userdebug
13. full_toroplus-userdebug
14. full_toro-userdebug
15. sugar_cubieboard2-eng
16. sugar_cubietruck-eng
17. sugar_evb-eng
18. sugar_ref001-eng
19. sugar_standard-eng
20. wing_evb_v10-eng
21. full_panda-userdebug

Which would you like? [full-eng]
```

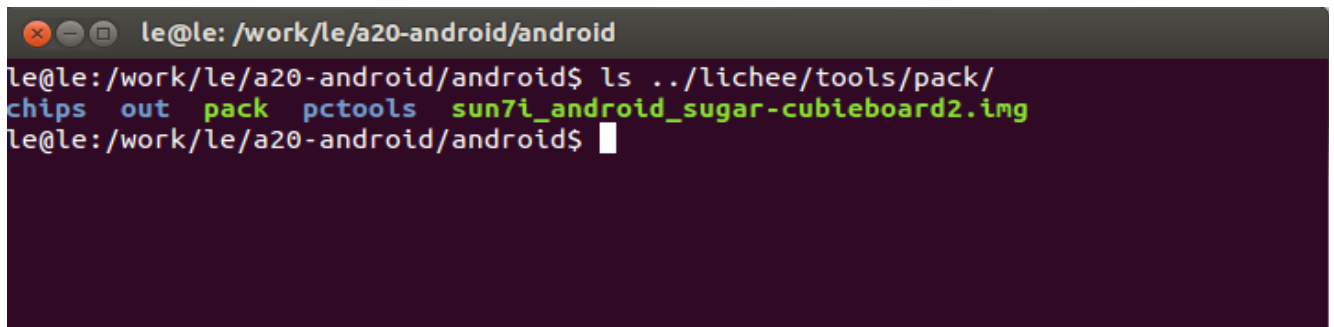
```
$ extract-bsp
```

```
$ make -j8
```

```
$ cp ../lichee/tools/pack/chips/sun7i/bin/boot0_sdcard_sun7i.bin  
../lichee/tools/pack/chips/sun7i/bin/boot0_nand_sun7i.bin
```

```
$ pack
```

You can find image on lichee/tools/pack:



```
le@le: /work/le/a20-android/android  
le@le:/work/le/a20-android/android$ ls ../lichee/tools/pack/  
chips  out  pack  pctools  sun7i_android_sugar-cubieboard2.img  
le@le:/work/le/a20-android/android$
```

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