

Kawai CA99/CA79 Open Source Software

■ Build Instructions

1. Install Ubuntu16.04.6

Download link : <http://releases.ubuntu.com/16.04.6/ubuntu-16.04.6-desktop-amd64.iso>

2. Install OpenJDK7 and support packages

1) Install openjdk7

```
$ sudo add-apt-repository ppa:openjdk-r/ppa  
$ sudo apt-get update  
$ sudo apt-get install openjdk-7-jdk
```

2) Install support packages

```
$ sudo apt-get install openssh-server  
$ sudo apt-get install -y git flex bison gperf build-essential libncurses5-dev:i386  
$ sudo apt-get install libx11-dev:i386 libreadline6-dev:i386 libgl1-mesa-dev g++-multilib  
$ sudo apt-get install tofrodos python-markdown libxml2-utils xsltproc zlib1g-dev:i386  
$ sudo apt-get install dpkg-dev libsdll1.2-dev libesd0-dev  
$ sudo apt-get install git-core gnupg flex bison gperf build-essential  
$ sudo apt-get install zip curl zlib1g-dev gcc-multilib g++-multilib  
$ sudo apt-get install libc6-dev-i386  
$ sudo apt-get install lib32ncurses5-dev x11proto-core-dev libx11-dev  
$ sudo apt-get install lib32z-dev ccache  
$ sudo apt-get install libgl1-mesa-dev libxml2-utils xsltproc unzip m4
```

3. Download source code, prepare to compile it

1) Download the three source code files (git.tar.gza, git.tar.gzab, git.tar.gzac)

2) Decompress the source code:

```
$ mkdir ~/CAOS1  
$ cp git.tar.gza* ~/CAOS1/  
$ cd ~/CAOS1/  
$ cat git.tar.gza* > git.tar.gz  
$ tar -zxvf git.tar.gz  
$ git reset --hard
```

4. Build Android

1) Build UBoot:

```
$ cd u-boot  
$ make rk3128_defconfig  
$ make
```

After compilation has finished, get uboot.img and RK3128MiniLoaderAll_V2.31.bin.

2) Build Kernel:

```
$ cd ~/CAOS1/kernel/  
$ make rk3128-sdk.img  
$ make -j8
```

After compilation has finished, get kernel.img and resource.img.

3) Build Android:

```
$ cd ~/CAOS1/  
$ source build/envsetup.sh  
$ lunch //select rk312x-userdebug  
$ make -j8  
$ ./mkimage.sh  
$ cd ~/CAOS1/rockdev/Image-rk312x
```

After compilation has finished, get boot.img, misc.img, recovery.img, and system.img.