# SOP of Build Image from Consumer Release O2 HomeBox 6641

User Guide

Version 1.0

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# **Revision History**

Date	Release	Author	Document
2014/09/19	1.0	Irene Wang	File created.

#### 1. Introduction

The following instructions show you how to build an image from the source code of the consumer release package. Please note that the following instruction with '\$' symbol ahead means typing the instruction in shell command.

# 2. Preliminary requirements

You must have Linux environment to build an image from the consumer release package. The version of Linux kernel must be 2.6 series at least. We use Ubuntu Server 12.04 LTS distribution as an example to illustrate pre-install tools and packages you need to check in your environment before building the image. We recommend you use the Linux distribution we suggest to setup your environment for reducing compatible problems.

- links
- make
- gcc
- bison
- gawk
- automake
- flex
- zlib1g-dev
- g++
- For building these packages, you need a computer with internet environment.

To install packages under Ubuntu, type the following command:

\$ sudo apt-get install links make gcc bison gawk automake flex zlib1g-dev g++ Answer 'y' to start the installation.

Because some Linux distribution will use dash as shell, instead of bash, it will cause some build code problem. Please also change your shell command to bash:

\$ sudo ln -sf/bin/bash/bin/sh

# 3. Instructions for Building the Image

# 3.1 Decompress the consumer release package

Assume your consumer release package name is HomeBox6641\_consumer\_release.tar.gz: \$\frac{tar zxvf HomeBox6641\_consumer\_release.tar.gz}{}

Decompressing to current directory or to an existing directory:

#### \$ tar zxvf HomeBox6641\_consumer\_release.tar.gz -C existing\_directory

After decompressing, you will now have three files in your directory:

\$ ls

HomeBox6641\_consumer.tar.gz

consumer\_install

uclibc-crosstools-gcc-4.4.2-1.tar.bz2

The first one is the source code. The second one is the installing script. The third one is the binary package for toolchain.

#### 3.2 Getting root privilege

Because we need to install toolchain and source code, so please get your account with root privilege.

\$ sudo su

#### 3.3 Execute the install script

\$./consumer\_install

And you will see:

```
This script installs BCM963xx DSL router components onto your Linux PC. The installation will overwrite existing files. You will be prompted before a component is installed.

**This script may create directories and overwrite existing files. Therefore, you will need to have root privilages to run this script.

**Press 'y' to continue: y

The bcm963xx DSL router source files are ready to be installed at /home/wespe/bcm/P2812HNU_51c_0BM/release/out/bcm963xx_router. Existing source files, in any, will be overwritten.

**Press 'y' to install the bcm963xx DSL router source files: y

Creating directory /home/wespe/bcm/P2812HNU_51c_0BM/release/out/bcm963xx_router.

Installing files from /home/wespe/bcm/P2812HNU_51c_0BM/release/out/bcm963xx_4.02L.03_consumer.tar.gz.

The BCM963xx DSL router toolchain is ready to be installed at /home/wespe/bcm/P2812HNU_51c_0BM/release/out/toolchains/uclibc-crosstools-gcc-4.2.3-3. Existing toolchain files, if any, will be overwritten.

Press 'y' to install the BCM963xx toolchain: y
```

Press 'y' for the confirmation.

# 3.4 Build the router image

When complete installation, switch to the source code directory:

\$ cd HomeBox6641\_router

Build the image:

\$ make PROFILE=DSL-2492GNAUID-B3CC

Once you success the building procedure, you will find the image in *HomeBox6641\_router/images*.