

Ingenic®

How to use Buildroot

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How to use Buildroot

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Release history

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1 Overview

Buildroot is a set of commands about Makefiles and patches, it can do for your target system to produce a root file system. This document provides information on how to make rootfs for Newton.

This document includes following information:

- How to get the source code of Buildroot
- How to configure
- How to compile

This document is written for the system software engineers.

2 How to Use Buildroot

2.1 Get Buildroot Source Code

2.1.1 Download repo

```
$ mkdir newton-rootfs
$ cd newton-rootfs
$ wget http://git.ingenic.cn:8082/bj/repo
$ chmod +x repo
```

2.1.2 Download the Buildroot source

```
$ ./repo init -u http://git.ingenic.cn:8082/gerrit/linux/manifest.git -b newton-master
$ ./repo sync
```

The source code is located in source/buildroot.

2.2 Configuring and Compiling Buildroot

2.2.1 Choose the Configuration for Newton

```
$ cd source/buildroot
$ make ingenic_newton_defconfig
```

2.2.2 modify configuration

```
$ make menuconfig (or make xconfig)
```

First, configure the path of the cross-compilation toolchain, for example:

```
Toolchain --->
                (/directory_foo/binaries/toolchain/mips-gcc472-glibc216/bin)
```

Then, configure the modules according to your requirement.

Finally, save and quit.

2.2.3 Build rootfs

```
$ make
```

That will generate file named rootfs.ext2 under output/images.

You can find more detail on the website of Buildroot.