

# Nov2021 tagged dunfell build for RPI4 extender

## Host Setup

- For Host SetUp details refer this link - [How to Build#SettinguptheHostEnvironment](#)

NOTE: Observing fetch errors in VMs with Ubuntu14.x. Thus, suggesting to use VMs with Ubuntu16.x or higher.

## Repo Configuration

In order to use Yocto build system, the repo tool must be properly installed on the machine.

To install Repo make sure you have a /bin directory in your home directory and that it is included in your path

```
$ mkdir ~/bin

$ PATH=~/.bin:$PATH

$ curl http://commondatastorage.googleapis.com/git-repo-downloads/repo > ~/bin/repo

$ chmod a+x ~/bin/repo
```

**Note:** it is also recommended to put credentials in ~/.netrc when interacting with repo.

A sample ~/.netrc file is illustrated below

```
machine code.rdkcentral.com login YOUR_USERNAME password YOUR_PASSWORD
```

## Building

Note: Cloning the code before login once to [code.rdkcentral.com](#), user would get the Authentication error, even though the account is in good standing and has all the required access. Please login to [code.rdkcentral.com](#) before attempting to clone.

Create workspace directory

```
$ mkdir <workspace dir>

$ cd <workspace dir>
```

Follow below instructions,

```
$ repo init -u https://code.rdkcentral.com/r/reference/manifests -m rpi-tags/rpi4_rdkb_extender_3Dec21.xml -b master

$ repo sync -j4 --no-clone-bundle

$ MACHINE=raspberrypi4-rdk-extender source meta-cmf-raspberrypi/setup-environment

$ bitbake rdk-generic-extender-image
```

Note. The kernel Image and root filesystem will be placed under <workspace dir>/build-\*/tmp/deploy/images/\*extender/ directory

## Flashing Procedure

Following command can be used to flash the RPI image to sd card using linux machine . bmap tool should be available in linux

```
bzip2 -d <path to ImageName.wic.bz2>  
sudo -E bmaptool copy --nobmap <path to ImageName.wic> <path to SD card space>
```

Example:

```
$ bzip2 -d rdk-generic-extender-image-raspberrypi4-rdk-extender.wic.bz2  
$ sudo -E bmaptool copy --nobmap rdk-generic-extender-image-raspberrypi4-rdk-extender.wic /dev/sdb
```