

RDK-C rdk-next Yocto 3.1 dunfell build for Raspberrypi

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1. Host Setup

Refer the link for host setup details :[Host Setup](#)

2. Build Setup

2.1. Initialization

```
$ repo init -u https://code.rdkcentral.com/r/rdkcmf/manifests -m rdkc-nosrc.xml -b dunfell
                                     ( or )
$ repo init -u https://code.rdkcentral.com/r/rdkcmf/manifests -m rdkc-extsrc.xml -b dunfell
```

2.2. Download/Sync

```
$ repo sync -j `nproc` --no-clone-bundle --no-tags
```

2.3. Layer Cherrypick

This is the temporary steps,once the changes get merged in rdk-next then we will remove this cherry pick details

Below changes are needed for libcamera

```
cd meta-cmf-raspberrypi
1. git fetch https://code.rdkcentral.com/r/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi refs/changes/96/77096/2 && git cherry-pick FETCH_HEAD
2. git fetch https://code.rdkcentral.com/r/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi refs/changes/77/76077/4 && git cherry-pick FETCH_HEAD

cd meta-cmf-camera
1. git fetch https://code.rdkcentral.com/r/rdk/components/generic/rdk-oe/meta-cmf-camera refs/changes/98/77098/1 && git cherry-pick FETCH_HEAD
```

2.4. Environment Setup

RPI3 B+

Environment Setup

```
$ MACHINE=raspberrypi3-rdk-camera source meta-cmf-raspberrypi/setup-environment
```

RPI0

Environment Setup

```
$ MACHINE=raspberrypi0-rdk-camera source meta-cmf-raspberrypi/setup-environment
```

2.5. Building

```
$ bitbake rdk-generic-camera-image
```

2.6. Source Code Cherrypick

This is the temporary steps,once the changes get merged in rdk-next then we will remove this cherry pick details

3. Flash Procedure

```
$ bzcat "Image Name" | sudo dd of="Device Name" bs=4M iflag=fullblock oflag=direct conv=fsync
```

Example:

```
bzcat rdk-generic-camera-image_default_20201127105606.rootfs.wic.bz2 | sudo dd of=/dev/sdc bs=4M  
iflag=fullblock oflag=direct conv=fsync
```