

Setup Yocto for Rototype ECP mx8mq build env on Ubuntu 18.04

1 prepare common tools

```
sudo apt update
```

```
sudo apt upgrade
```

```
sudo apt install git gitk build-essential vim curl wget software-properties-common apt-transport-https ca-certificates
```

2 install build-deps

```
sudo apt install binfmt-support qemu qemu-user-static debootstrap debianutils kpartx gpart lvm2 \  
dosfstools binutils gawk git-core diffstat unzip texinfo chrpath socat autoconf automake xterm \  
sed cvs subversion coreutils texi2html bc docbook-utils help2man make gcc g++ gcc-multilib \  
desktop-file-utils libtool libgl1-mesa-dev libarchive-dev lib32ncurses5-dev libsdl1.2-dev \  
libegl1-mesa libgl1-mesa-dev libglu1-mesa-dev mercurial groff asciidoc u-boot-tools mtd-utils \  
device-tree-compiler ccrypt xz-utils cpio iputils-ping python python-git python-m2crypto \  
python-pysqlite2 python3 python3-pip python3-pexpect python3-git python3-jinja2 \  
bison flex libssl-dev kmod fakeroot lzop
```

3 setting git configuration

```
git config --global user.email "<your mail>"
```

```
git config --global user.name "<your name>"
```

4 install repo

```
mkdir -p ~/bin
```

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

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

```
PATH=${PATH}:~/bin
```

5 clone default NXP BSP

```
mkdir -p ~/imx-yocto-bsp
```

```
cd ~/imx-yocto-bsp
```

```
repo init -u https://source.codeaurora.org/external/imx/imx-manifest -b imx-linux-hardknott -m imx-5.10.35-2.0.0.xml
```

```
repo sync -j10
```

6 pull meta-rototype-ecp source code

```
cd ~/imx-yocto-bsp/sources
```

```
git clone git://github.com/rfacch74/meta-rototype-ecp.git;protocol=https
```

7 setup yocto env, imx8mq only support wayland backend

```
cd ~/imx-yocto-bsp
```

```
DISTRO=ecp-imx-wayland MACHINE=imx8mq-ecp source imx-setup-release.sh -b build-rototype-ecp
```

8 build first image and toolchain

```
bitbake-layers add-layer ../sources/meta-rototype-ecp
```

```
bitbake rototype-evaluation-image
```

8 Setup for the next build

```
cd ~/imx-yocto-bsp
```

```
source setup-environment build-rototype-ecp
```