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 libglib2.0-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/source

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

7 setup yocto env, imx8mq only support wayland backend

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