

Yocto BSP and Poky SDK Build Guide

Version 1.1.1

Display Audio

Solution Team



Release information

The following changes have been made to this document.

Change History

Date	Change
08 Dec. 2017	First release for v1.0.0
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Chap 1. Yocto BSP

1.1 Introduction

We release the source compilation and fusing script files of kernel and u-boot developed by Nexell using Yocto Poky system.

The meta-nexell layer is configured to minimize the dependency on the host PC compile environment of the 3rd party or end-user and to reduce the difficulty in configuring the root file system.

1.2 Features and Functionality

- linux kernel, u-boot, bl1 build & release
- Binary files packaging & fusing scripts
- Available Image type
 - QT5

1.3 Build and configuration

1.3.1 Source download

```
$ mkdir myrepo
$ cd myrepo
$ repo init -u https://nx\_customer:nx\_customer@gitlab.com/nexell\_yocto/manifest.git -b nexell_yocto_r2
$ repo sync
```

1.3.2 Yocto environment setup

```
$ ./tools/yocto_build_environment.sh
```

1.3.3 Yocto build

1.3.3.1 Fully build

```
$ ./tools/build.sh s5p4418-daudio-ref qt
```

1.3.3.2 Clean build

```
$ ./tools/build.sh s5p4418-daudio-ref qt -c
```

1.3.3.3 Help

```
$ ./tools/build.sh -h
```

1.3.4 Fusing

If you need usb boot.

Set the boot mode switch on the debug board to usb boot mode.

On the host PC side.

*Notice : If the firmware is already fused, skip this step.

```
$ cd yocto/out/ result-s5p4418-dauidio-ref-qt/tools  
$ ./standalone-uboot-by-usb-download.sh
```

On the target board side (u-boot console)

```
$ fastboot 0
```

On the host PC side

```
$ ./standalone-fastboot-download.sh
```

For more information.

```
$ ./standalone-fastboot-download.sh -h
```

Chap 2. Poky SDK toolchain

2.1 Description

You need a toolchain to develop an app or library outside the Yocto environment.

2.2 SDK build

```
$ ./tools/build.sh s5p4418-audio-ref qt -s
```

2.3 SDK toolchain installation

```
$ cd yocto/out/SDK-result-s5p4418-qt  
$ ./poky-glibc-x86_64-nexell-qt-sdk-cortexa9hf-neon-toolchain-2.5.1.sh
```

2.4 Environment setup

```
$ source /opt/poky/2.5.1/environment-setup-cortexa9hf-neon-poky-linux-gnueabi
```
