

# 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
16 Nov. 2018	Second release for v1.1.0
18 Feb 2019	Third release for v1.1.1

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# Table of contents

<b>Chap 1.</b>	<b>Yocto BSP</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Features and Functionality.....	1
1.3	Build and configuration.....	1
<b>Chap 2.</b>	<b>Poky SDK toolchain</b>	<b>3</b>
2.1	Description .....	3
2.2	SDK build .....	3
2.3	SDK toolchain installation .....	3
2.4	Environment setup.....	3

# 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-daudio-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

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### 2.1 Description

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

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### 2.2 SDK build

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

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### 2.4 Environment setup

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

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