

Porting Guide (NXBT100 module)

Version 1.0.0

Display Audio

Solution Team



Release information

The following changes have been made to this document.

Change History

Date	Change
07 Dec 2017	First release for v1.0.0

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Chap 1. Configuration

1.1 Path

kernel/kernel-4.4.x/arch/arm/configs/s5p4418_audio_ref_defconfig

1.2 Kernel configuration

Enter configuration mode as follows.

```
$ cd kernel/kernel-4.4.x
$ make ARCH=arm s5p4418_audio_ref_defconfig
$ make ARCH=arm menuconfig
```

Check the required items as follows.

```
[*] Networking support —>
    <*> Bluetooth subsystem support —>
        [*] Bluetooth Classic (BR/EDR) features
    <*> RFCOMM protocol support
        [*] RFCOMM TTY support
    <*> BNEP protocol support
        [*] Multicast filter support
        [*] Protocol filter support
    <*> HIDP protocol support
        [*] Bluetooth High Speed (HS) features
        [*] Bluetooth Low Energy (LE) features
        [*] Export Bluetooth internals in debugfs
        Bluetooth device drivers —>
            <*> HCI UART driver
            -*- UART (H4) protocol support
            [*] Broadcom protocol support
            <*> Enable BCM43454 driver
    <*> RF switch subsystem support —>
        [*] RF switch input support
    <*> Generic rkill regulator driver
```

<*> GPIO RFKILL driver

Apply config file as follows.

\$ make ARCH=arm savedefconfig

\$ cp defconfig arch/arm/configs/s5p4418_daudio_ref_defconfig

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Chap 2. Porting

2.1 DTSL setting

2.1.1 Path

kernel/kernel-4.4.x/arch/arm/boot/dts/s5p4418-audio_ref-common.dtsi

2.1.2 Bluetooth control

```
bt_control {
    compatible = "broadcom,bcm43455bt";
    gpios = <&gpio_c 7 0>;          /* GPIOC7 = BT_EN, output */
    pinctrl-names = "default";
    pinctrl-0 = <&bt_cfg_en>;
    status = "okay";
};
```

2.1.3 Pin configuration

```
bt_cfg_en:bt_cfg_en {
    nexell,pins = "gpio-7";
    nexell,pin-function = <1>;
    nexell,pin-pull = <2>;
    nexell,pin-strength = <0>;
};
```