Bluetooth Porting Guide (NXBT100 module)

Version 1.0.<u>1</u>0

Display Audio

Solution Team



Release information

The following changes have been make to this document.

Change History

Date	Change
07 Dec 2017	First release for v1.0.0
18 Feb 2019	Second release for v1.0.1

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Chap 1. Configuration

1.1 Supported Bluetooth module

NXBT100, Azurewave

0, Azurewave

1.11.2 Path

 $kernel/kernel-4.4.x/arch/arm/configs/s \\ 5p4418_daudio_ref_defconfig$

1.21.3 Kernel configuration

Enter configuration mode as follows.

\$ cd kernel/kernel-4.4.x

\$ make ARCH=arm s5p4418_daudio_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 BCM434545 driver



Configuration

- <*> RF switch subsystem support —>
 - [*] RF switch input support
 - <*> Generic rfkill regulator driver
 - <*> GPIO RFKILL driver

Apply config file as follows.

\$ make ARCH=arm savedefconfig

 $\c cp defconfig arch/arm/configs/s5p4418_daudio_ref_defconfig$



Chap 2. Porting

2.1 DTSI setting

2.1.1 Path

 $kernel/kernel-4.4.x/arch/arm/boot/dts/s \\ 5p4418-daudio_ref-common.dts \\ i$

2.1.2 Bluetooth control

```
bt_control {
    compatible = "broadcom,bcm434545bt";
    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 = "gpioc-7";
    nexell.pin-function = <1>;
    nexell.pin-pull = <2>;
    nexell.pin-strength = <0>;
};
```