**Android OS** : KitKat4.4.3 downloaded from Freescale

# Apply the patch

* Goto Fresh KitKat4.4.3 Android Build Top

$ **cd <Android\_src>**

<android\_src>$ **patch –p1 < <path\_to\_the\_source\_dir\_given\_by\_zumi>/Marvel-Wifi-Support.patch**

(**Note:** Above patch(0001-marvel-wifi-8787.patch) should applied only on newly downloaded Android **KitKat4.4.3** from Freescale. Don’t apply patches to the costumized BSP, in that case Please refer the tar file kitkat\_wifi\_support.tar.gz from source directory. kitkat\_wifi\_support.tar.gz contains only themodified file to support wifi and bluetooth. By seeing those files you can make changes in your costumised BSP to support wifi and bluetooth. Above patch is only for **sabresd\_6dq**, **sabresd\_6sx** and **evk\_6sl**. If you are using some other evaluation kit of IMX, edit the particular BoardConfig.mk file according to <android\_src>**/device/fsl/sabresd\_6dq/BoardConfig.mk)**

* If you are using Freescale kernel 3.10.53 enable the following config in kernel config

CONFIG\_HOSTAP (IEEE 802.11 for Host AP (Prism2/2.5/3 and WEP/TKIP/CCMP)

CONFIG\_CFG80211 (cfg80211 - wireless configuration API)

* if you are using Freescale kernel 3.0.35

Refer Kernel config file attached in source directory given by zumi

# Adding Marvell Driver Source file

* Goto hardware/imx/wlan/

<android\_src>$ **cd hardware/imx/wlan/**

* Untar the marvel.tar.gz as follows

<android\_src>/hardware/imx/wlan/$ **tar –xvzf /< path\_to\_the\_source\_dir\_given\_by\_zumi >/marvel.tar.gz**

* Untar the libbt-mrvl.tar.gz as follows

<android\_src>/hardware/imx/**$ tar –xvzf /< path\_to\_the\_source\_dir\_given\_by\_zumi >/libbt-mrvl.tar.gz**

* Goto Android Top directory and build the entire android BSP.
* Then goto **<android\_src>/hardware/imx/wlan/marvel/** and give command **mm -B**
* Then again goto Android top directory and build android image again.

# **FAQ**

1. Changes in make menuconfig is not updating in ".config" after building the top android source

-- This is because altered .config is not copied to defconfig, So .config file should be copied to defconfig of respective boards if you made any changes in .config otherwise no need to copy.

2. CFG80211 error while loading wifi driver. what is the reason for this error?

-- This is because CONFIG\_CFG80211=m, That need to be enable CONFIG\_CFG80211=y in .config

3. Drivers are not exist in system/lib/modules/ after building the top android source

-- Because marvel wlan\_src is not build so need to build marvel wlan\_src by go to the directory hardware/imx/ and than give the command mm -B

4. wifi driver is loaded successfully but wifi is not scanning what is the reason?

-- This is due to wifi-direct. so need to remove the permission for wifi-direct in /<android\_src>/device/fsl/imx6/<board.mk> and also check for android.hardware.wifi-direct.xml file inside /<android\_src>/out/target/product/<board>/system/etc/permissions/ directory. if it is present delete it and than compile top android directory.