

BALI mPCIe/hmPCIe CARD EVK

EVIA mPCIe/hmPCIe CARD EVK

802.11 ac/a/b/g/n hosted Wi-Fi + BT 5.0 CARD EVK

- ❖ Unpack the Kit and make sure the following items are available.
 - 1 x Toradex Ixora board and power adapter
 - 1 x BALI/EVIA PCIe card
 - 1 x USB to RS232 converter and DB9 Female Adapter
 - 1 x MHF4 flag antenna
 - ❖ Insert the PCIe card into the X25 slot of Ixora board
 - ❖ Mount Female DB9 adapter on X22 port of Ixora board and then Connect USB RS232 adapter between PC USB port and female DB9 adapter.
 - ❖ Check for the detected serial port on PC and open it using PuTTY.
- **For more information see at the end of the document
- ❖ Power the Ixora board by connecting power adaptor to X2
 - ❖ Press On/Off button SW1 on Ixora Carrier Board to power-up the board and check the LED1, it should be ON.
 - ❖ Power ON the Access Point with Known ESSID in open mode
 - ❖ After boot up, login with password "root", follow the below commands to connect to AP in **open mode**:

- \$ killall wpa_supplicant
- \$ killall hostapd
- \$ iw dev
- \$ rfkill unblockall

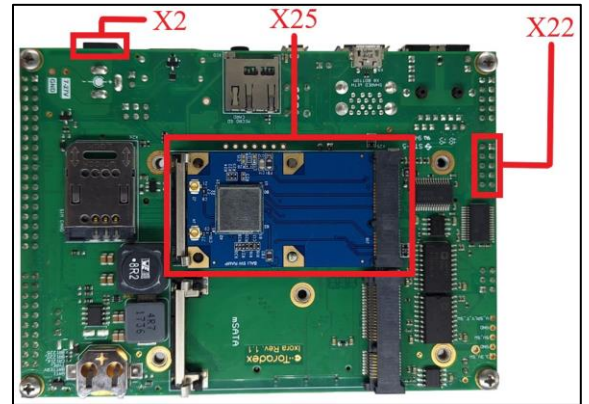
```
root@apalis-imx6:~# iw dev
phy#0
Interface wlp1s0
ifindex 6
wdev 0x1
addr 50:de:19:89:70:da
type managed
txpower 0.00 dBm
```

- \$ ifconfig <interface name> up
- \$ iw dev <interface name> scan
- \$ iw dev <interface name> connect <ESSID>
- \$ iw dev <interface name> link
- \$ udhcpc -i <interface name>
- \$ ping <AP_IPv4_Address>

❖ Follow the below commands to connect to BT peripheral

NOTE: EVIA doesn't support BT

- \$ hciconfig -a
- \$ hciconfig -a hci0 up
- \$ hciconfig -a hci0 piscan
- \$ hcitool -i hci0 scan
- \$ hcitool -i hci0 cc <MAC address of BT peripheral>
- \$ hcitool -i hci0 con



❖ Follow the below commands to connect to AP in **secure mode**:

- \$ killall wpa_supplicant
- \$ killall hostapd
- \$ iw dev
- \$ rfkill unblockall

```
root@apalis-imx6:~# iw dev
phy#0
Interface wlp1s0
ifindex 6
wdev 0x1
addr 50:de:19:89:70:da
type managed
txpower 0.00 dBm
```

- \$ ifconfig <interface name> up
 - \$ iw dev <interface name> scan
 - \$ vi /etc/wpa_supplicant.conf
 - Edit and save the configuration file
- wpa_supplicant.conf content as below

```
ctrl_interface=/var/run/wpa_supplicant
update_config=1
network={
ssid="replace with your network name" proto=RSN
#for WPA2-PSK
key_mgmt=WPA-PSK
auth_alg=OPEN
pairwise=CCMP
group=CCMP
psk="replace with your password"
}
```

- \$ wpa_supplicant -D nl80211 -i wlan0 -c /etc/wpa_supplicant.conf -B
- \$ iw dev <interface name> link
- \$ udhcpc -i <interface name>
- \$ ping <AP_IPv4_Address>
- **** Detecting Serial port**
- Run the below command to know detected serial port (highlighted with red box)

