

EVIA hmPCIe/mPCIe USB 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 adaptor
 - 1 x EVIA USB PCIe card
 - 1 x USB to RS232 converter and DB9 Female Adapter
 - 1 x MHF4 flag antenna

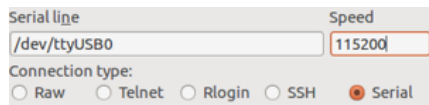
- ❖ Insert the USB PCIe card into the X25 slot of Ixora board
- ❖ Mount Female DB9 adapter on X22 port of Ixora board and then Connect USB RS232 adapter between PC USB port and female DB9 adapter.

- ❖ Check for the detected serial port on PC by running the below command

```
$ dmesg
```

```
usb 1-1.6: pl2303 converter now attached to ttyUSB0
```

- ❖ Download PuTTY and open it, change the configurations as following



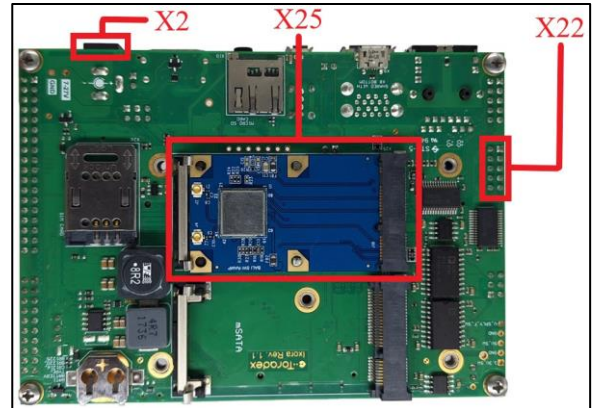
- ❖ Power the Ixora board by connecting power adaptor to X2.
- ❖ Press On/Off button SW1 on Ixora Carrier Board to power-up the board and check the LED1, it should be ON.
- ❖ Power ON the Access Point with Known ESSID in open mode
- ❖ After boot up, login with password "root", follow the below commands to connect to AP in **open mode**:

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

```
ivativ2@ivativ2-HP-EliteBook-8470p:~$ iw dev phy#3
```

```
Interface p2p0
  ifindex 9
  wdev 0x300000002
  addr 12:34:56:f8:91:01
  type managed
Interface wlx50DE19896801
  ifindex 8
  wdev 0x300000001
  addr 10:34:56:78:91:01
  type managed
```

- \$ 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 below commands to connect to AP in **secure mode**:

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

```
ivativ2@ivativ2-HP-EliteBook-8470p:~$ iw dev phy#3
```

```
Interface p2p0
  ifindex 9
  wdev 0x300000002
  addr 12:34:56:f8:91:01
  type managed
Interface wlx50DE19896801
  ifindex 8
  wdev 0x300000001
  addr 10:34:56:78:91:01
  type managed
```

- \$ 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 <interface name> -c /etc/wpa_supplicant.conf -B
- \$ iw dev <interface name> link
- \$ udhcpc -i <interface name>
- \$ ping <AP_IPv4_Address>