

EVIA USB EVK & EVIA M.2 USB EVK

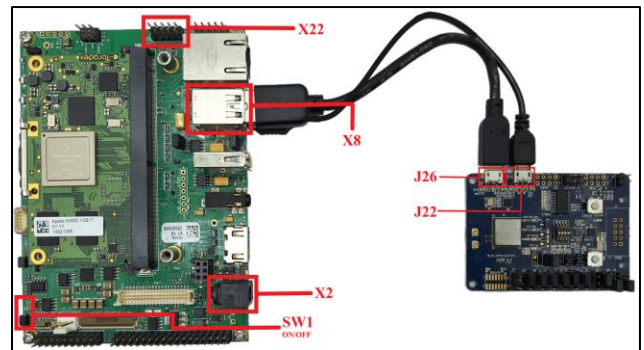
802.11 ac/a/b/g/n hosted Wi-Fi Module EVK

- ❖ Unpack the Kit and make sure the following items are available.
 - 1 x Toradex Ixora board and power adapter
 - 1 x EVIA USB EVK
 - 1 x USB to RS232 converter and DB9 Female Adapter
 - 1 x Micro USB cable
 - 1 x MHF4 flag antenna
- ❖ Connect the micro USB cables between the EVIA EVK J26 (WLAN-USB) port and USB port 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
- ```

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 wlan50DE19896801
 ifindex 8
 wdev 0x300000001
 addr 10:34:56:78:91:01
 type managed

```
- \$ rfkill unblockall
  - \$ 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 AP in **secure mode**:

- \$ killall wpa\_supplicant
  - \$ killall hostapd
  - \$ iw dev
- ```

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 wlan50DE19896801
        ifindex 8
        wdev 0x300000001
        addr 10:34:56:78:91:01
        type managed
  
```
- \$ rfkill unblockall
 - \$ 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 network 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>
- ** Detecting Serial port**
- Run the below command to know detected serial port (highlighted with red box)

```

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

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

