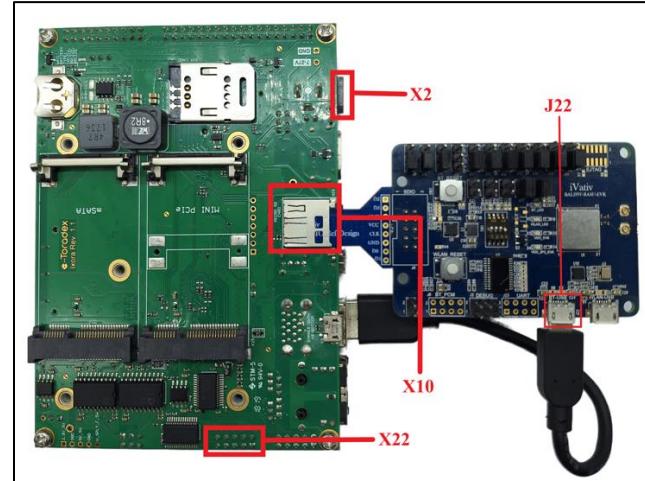


EVIA SDIO EVK & EVIA M.2 SDIO EVK

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 SDIO EVK
 - 1 x USB to RS232 converter and DB9 Female Adapter
 - 1 x MHF4 flag antenna
- ❖ Insert the EVIA SDIO EVK in X10 (micro SD card) 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
 - \$ ifconfig wlan0 up
 - \$ iw dev wlan0 scan
 - \$ iw dev wlan0 connect <ESSID>
 - \$ iw dev wlan0 link
 - \$ udhcpc -i wlan0
 - \$ ping <AP_IPv4_Address>



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

- \$ killall wpa_supplicant
- \$ killall hostapd
- \$ iw dev
- \$ rfkill unblockall
- \$ ifconfig wlan0 up
- \$ iw dev wlan0 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 wlan0 -c /etc/wpa_supplicant.conf -B
- \$ iw dev wlan0 link
- \$ udhcpc -i wlan0
- \$ 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

Serial line	Speed			
/dev/ttyUSB0	115200			
Connection type:				
<input type="radio"/> Raw	<input type="radio"/> Telnet	<input type="radio"/> Rlogin	<input type="radio"/> SSH	<input checked="" type="radio"/> Serial