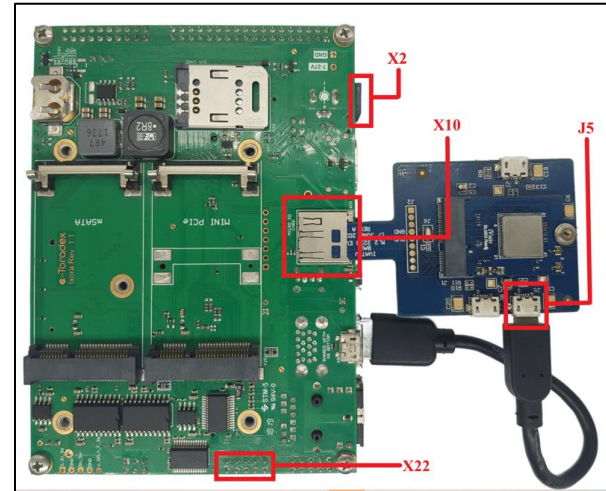


BALI M.2 / EVIA M.2 SDIO CARD EVK

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 SDIO M.2 card
 - 1 x BALI M.2 EVB
 - 1 x USB to RS232 converter and DB9 Female Adapter
 - 1 x Micro USB cable
 - 1 x MHF4 flag antenna
- ❖ Insert the M.2 SDIO card into the M.2 EVB. Insert the J2 (micro SD) of M.2 EVB into the X10 (micro SD card) slot of Ixora board
- ❖ Connect the micro USB cable between the J5 (SDIO-BT) port of M.2 EVB and USB port of Ixora.
- ❖ 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 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
- \$ ifconfig wlan0 up
- \$ iw dev wlan0 scan
- \$ sudo 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 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

