



Thundercomm TurboX C410/610 Open Kit

## Quick Start Guide

Rev. V1.1.2

DN: tc-g-2111.2

## Package List



Power Adapter (except Japan)<sup>(1)</sup>



Open Kit Board  
(With C410/C610 SOM)



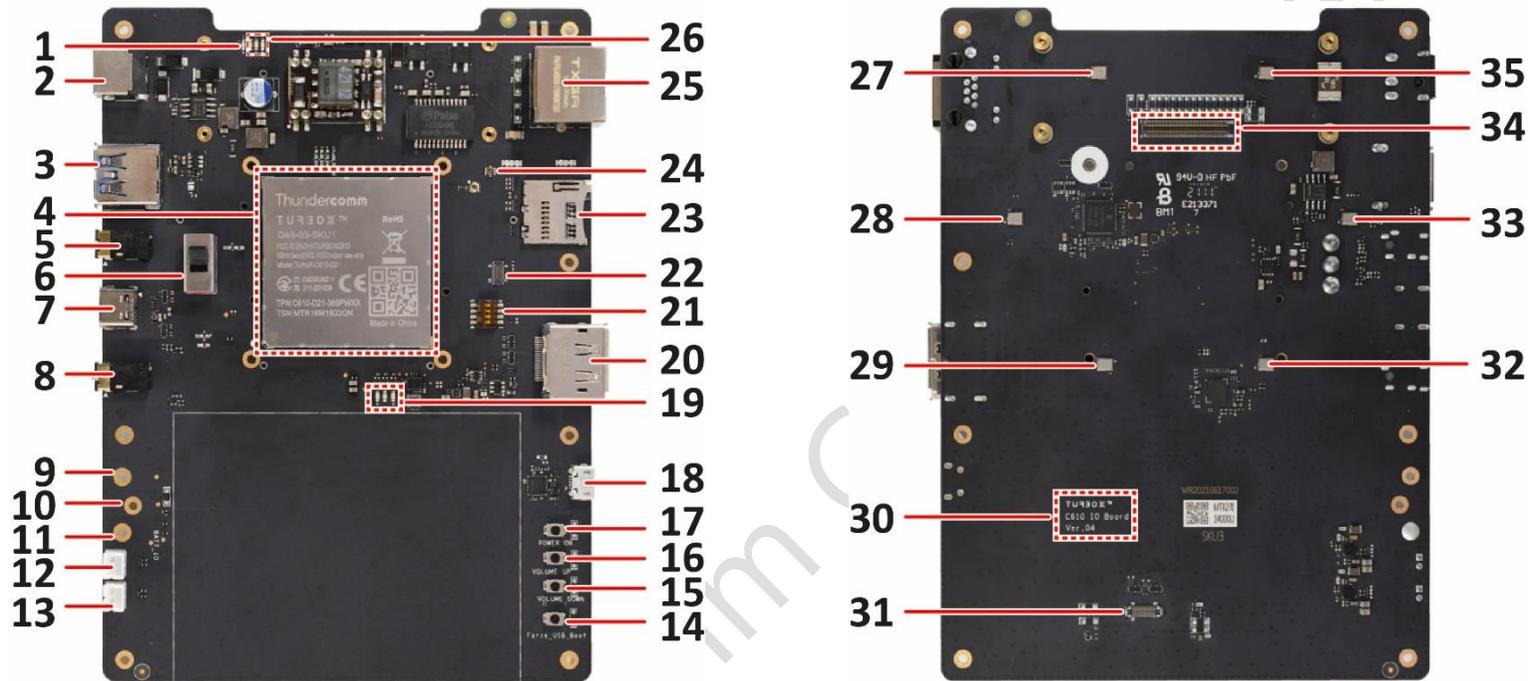
Wi-Fi/BT Antenna (x1)

### NOTE:

(1). Due to PSE regulations, there is no in-box adapter for the products sold to Japan. Please contact your distributor if you have any needs.

Voltage input to DK: typical 12V. Power adapter:  $\geq 2A$ . DC in jack size: 2.5mm x 5.5mm (inner diameter x outer diameter).

# Board Layout

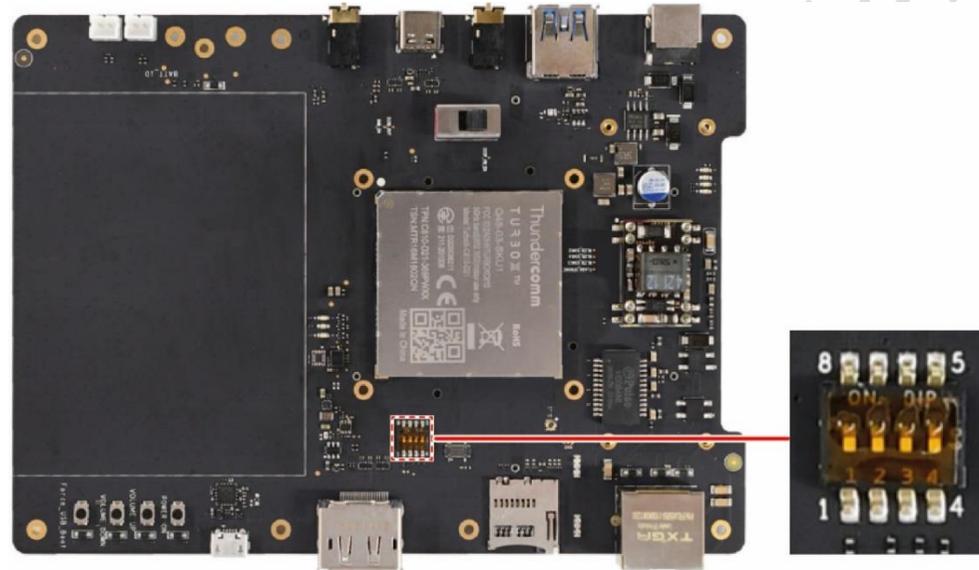


1. Power LED	13.Speaker connector 2	25.Ethernet connector
2. DC in jack	14.Force USB Boot button	26.PMIC RGB LED
3. USB 3.1 Type-A connector (USB 2.0 protocol only)	15.Volume down button	27.Digital microphone 1
4. Heat sink fixing hole	16.Volume up button	28.Digital microphone 2
5. Line in connector	17.Power on button	29.Digital microphone 3
6. Power source selective switch	18.UART debug connector	30.Hardware version
7. USB 3.1 Gen1 Type C connector	19.GPIO LED	31.LCD connector
8. Headset connector	20.DisplayPort	32.Digital microphone 4
9. VBAT + pad	21.Boot config switch	33.Digital microphone 5
10.BAT thermal pad	22.JTAG debug connector	34.Camera MEZZ board connector
11.VBAT - pad	23.Micro SD card slot	35.Digital microphone 6
12.Speaker connector 1	24.Wi-Fi/BT antenna connector	-

## Boot Config Switch

Switches 1 to 4 function together as a whole, i.e., the **boot config switch** (item 21) on the board. Combination of their ON/OFF status defines the access sequence of system files for booting the device.

Refer to the table below for detailed information.

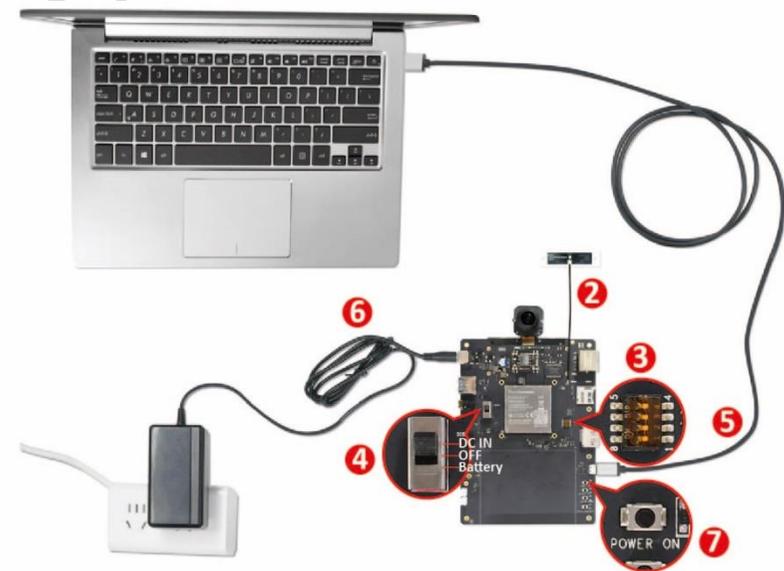


Switch 1	Switch 2	Switch 3	Switch 4	System File Access Sequence
OFF	OFF	OFF	OFF	1. eMMC 2. Micro SD on SDC2 3. USB on USB3.1 (SS/FS/FS)
ON	OFF	OFF	OFF	1. Micro SD on SDC2 2. eMMC
OFF	ON	OFF	OFF	Micro SD on SDC2
OFF	OFF	ON	OFF	USB on USB3.1 (SS/FS/FS)
OFF	OFF	OFF	ON	UFS HS-G1 3.1

## Let's Get Started

Follow the steps below to boot up your device.

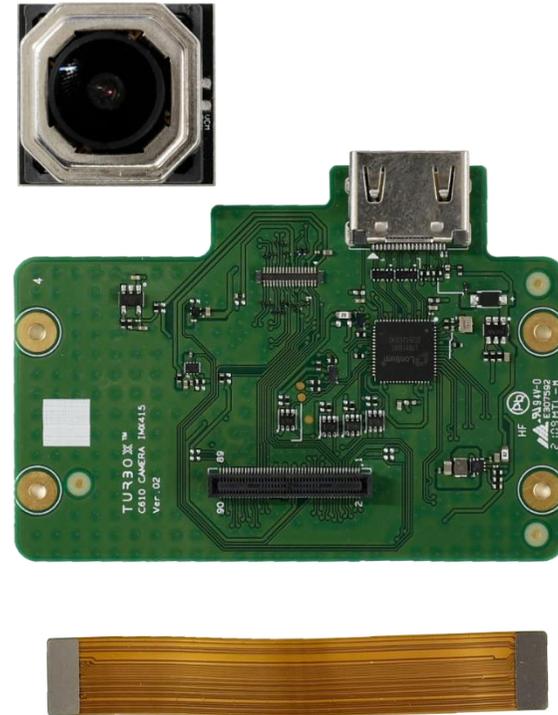
1. Take out C410/C610 Open Kit board carefully from the package.
2. Connect the antenna to the **Wi-Fi/BT antenna connector** (connector 24).
3. Toggle the **Boot config switch** (item 21) 1-4 to the OFF position.
4. Toggle the **Power source selective switch** (item 6) to DC IN (uppermost position of the switch).
5. Connect the board to a computer via **UART debug connector** (connector 18).  
➤ **NOTE:** **UART debug connector** (connector 18), as a debug interface, can be connected if the debug function is needed.
6. Connect the power adapter to the board via **12V DC in jack** (connector 2).
7. Press the **power on button** (connector 17) to boot up the device.  
➤ **NOTE:** Connect the board to PC through **USB 3.1 Gen1 USB Type-C connector** (connector 7) if you need the adb function.



## Optional Camera Modules



Sony IMX577 Camera Module Kit



Sony IMX415 Camera Module Kit

Thundercomm Co., Ltd.

Refer to the steps below for connecting the optional camera modules.

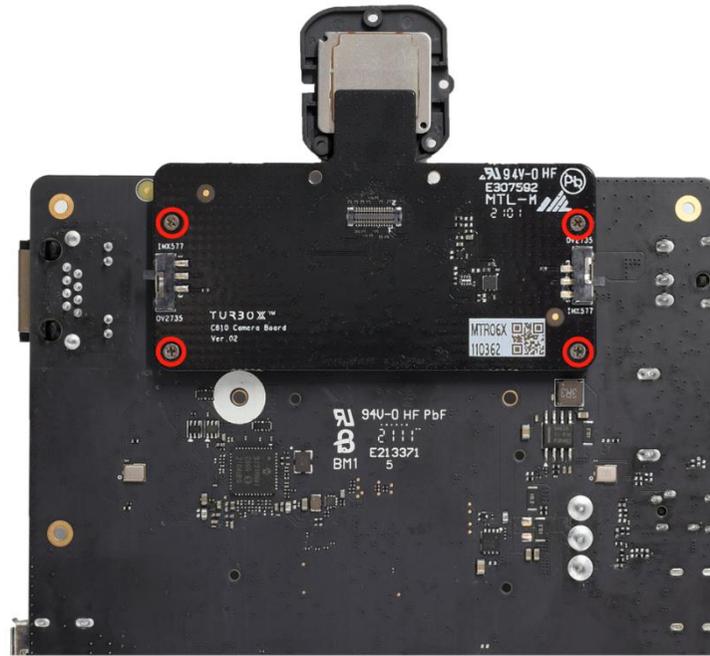
- **Connect Sony IMX577 camera module**

Step 1. Connect the camera module to the Mezz A board.



Step 2. Follow the sub-steps below.

- 1) Align the location holes of the four screws (M1.4) of Mezz A board to the screw holes of four copper nuts of the Open Kit board.



2) Press the nuts to fasten the connection of high-speed connectors.

3) Fix the mezzanine board with screws.

Step 3. Preview the camera stream on the **Snapdragon camera App**.

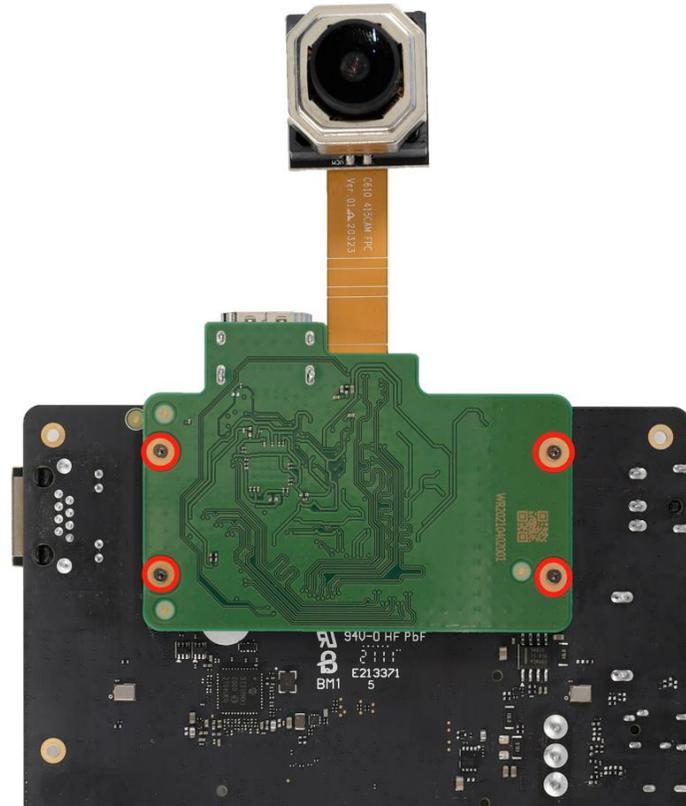
- **Connect the IMX415 camera module**

Step 1. Connect the Mezz A board to the camera module.



Step 2. Follow the sub-steps below.

- 1) Align the location holes of the four screws (M1.4) of Mezz B board to the screw holes of four copper nuts of the Open Kit board.



2) Press the nuts to fasten the connection of high-speed connectors.

3) Fix the mezzanine board with screws.

Step 3. Preview the camera stream on the **Snapdragon camera App**.

Step 4. Test HDMI IN feature with the **hadminin\_1920x1080 App**.

## Contact us

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