



Thundercomm TurboX C410/610 Open Kit

Quick Start Guide

Rev. V1.1.1

DN: tc-g-2111.1

Package List



12V/2A AC Power Adaptor (HTE)

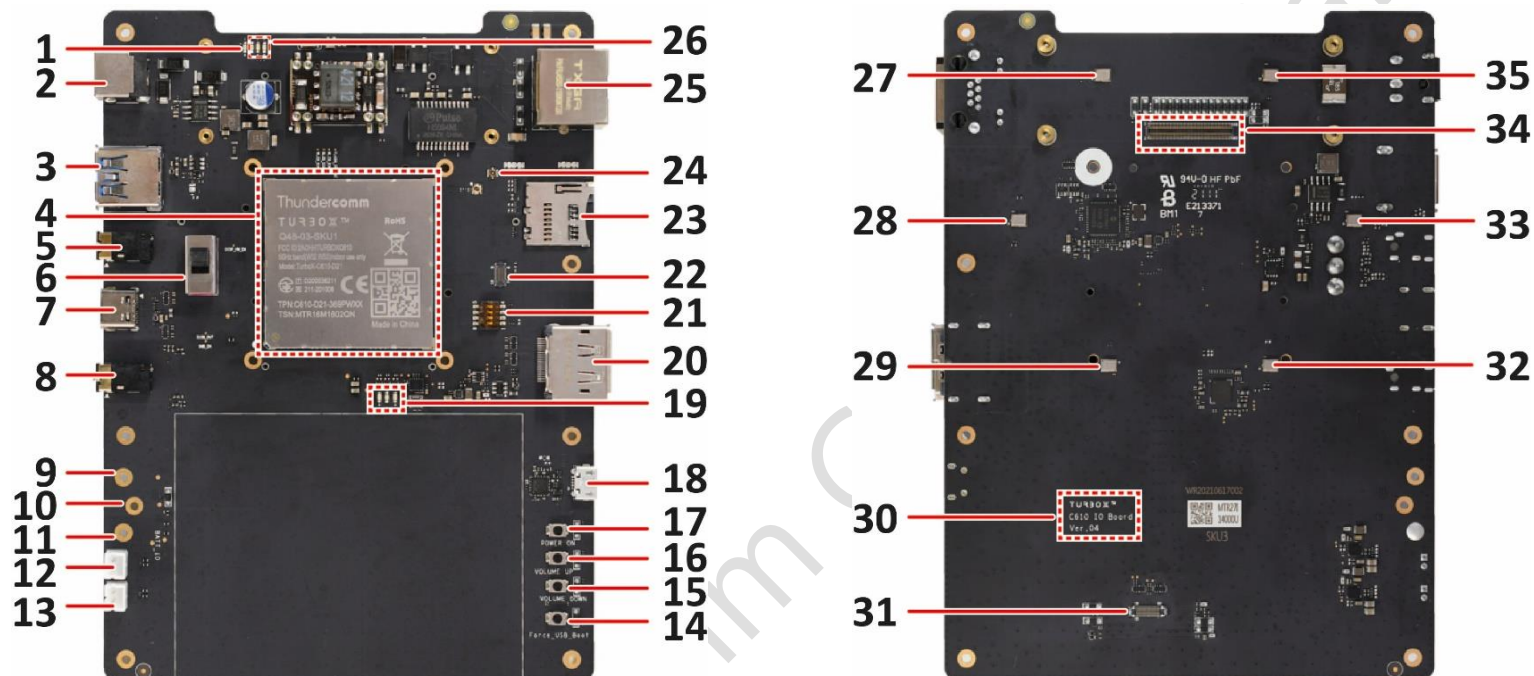


Open Kit Board
(With C410/C610 SOM)



Wi-Fi/BT Antenna (x1)

Board Layout

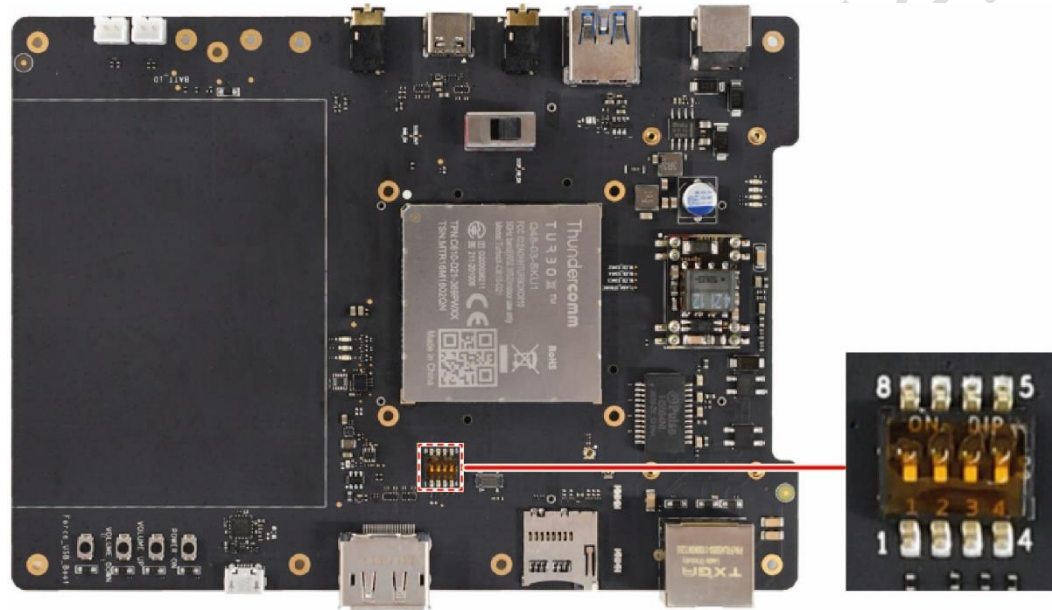


1. Power LED	13.Speaker connector 2	25.Ethernet connector
2. 12V DC in jack	14.Force USB Boot button	26.PMIC RGB LED
3. USB 3.1 Type-A connector (USB 2.0 protocol only)	15.Volume down button	27.Digital microphone 1
4. Heat sink fixing hole	16.Volume up button	28.Digital microphone 2
5. Line in connector	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.

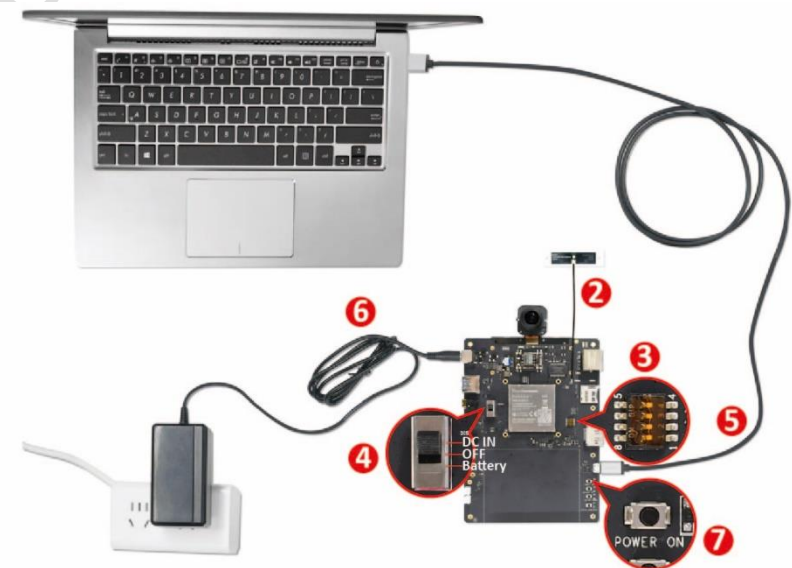


Switch 1	Switch 2	Switch 3	Switch 4	System File Access Sequence
OFF	OFF	OFF	OFF	1. eMMC 2. Micro SD on SDC2 3. USB on USB3.1 (SS/FS/FS)
ON	OFF	OFF	OFF	1. Micro SD on SDC2 2. eMMC
OFF	ON	OFF	OFF	Micro SD on SDC2
OFF	OFF	ON	OFF	USB on USB3.1 (SS/FS/FS)
OFF	OFF	OFF	ON	UFS HS-G1 3.1

Let's Get Started

Follow the steps below to boot up your device.

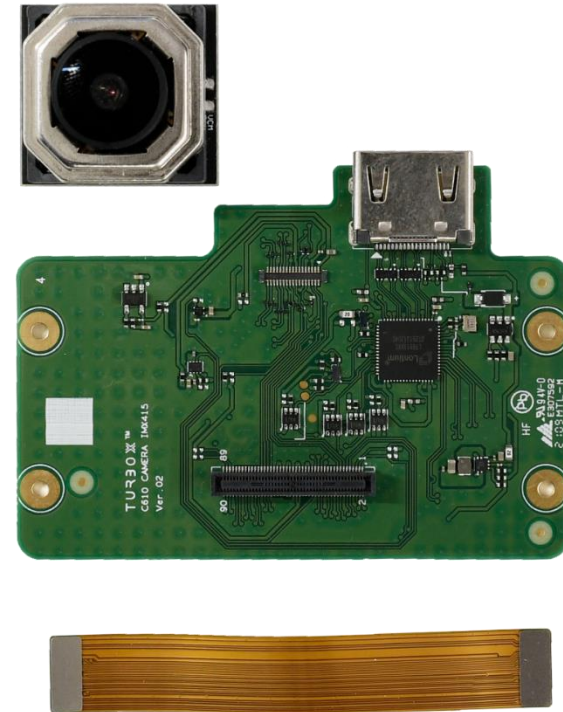
1. Take out C410/C610 Open Kit board carefully from the package.
2. Connect the antenna to the **Wi-Fi/BT antenna connector** (connector 24).
3. Toggle the **Boot config switch** (item 21) 1-4 to the OFF position.
4. Toggle the **Power source selective switch** (item 6) to DC IN (uppermost position of 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 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

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

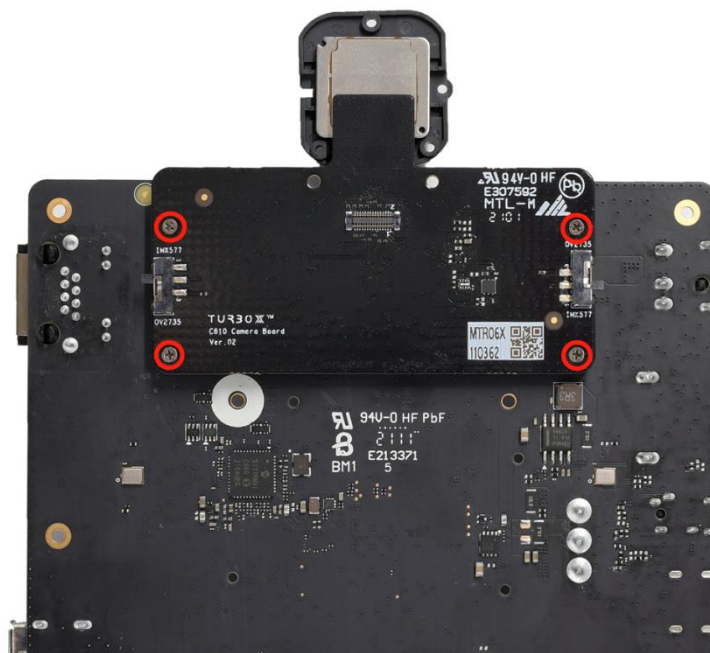
- **Connect Sony IMX577 camera module**

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**.

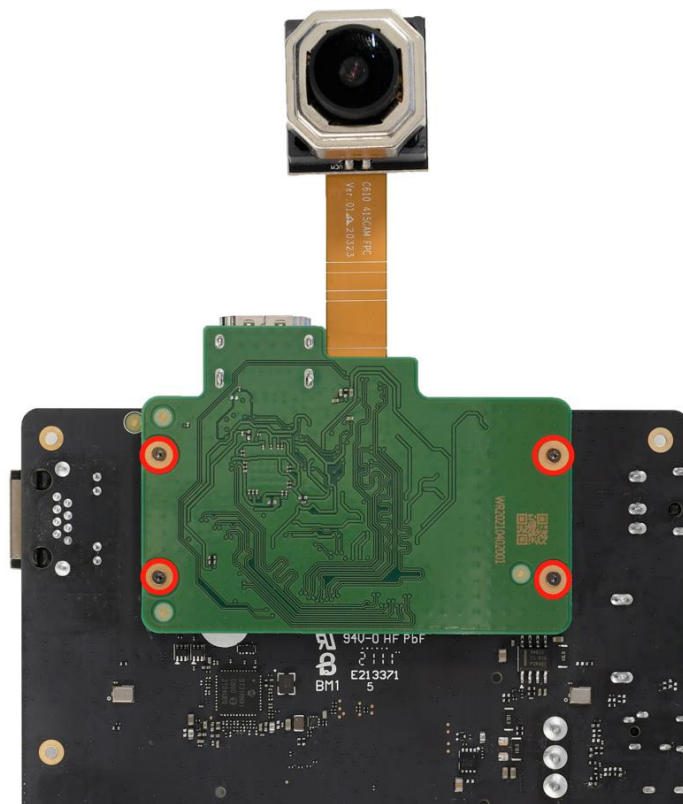
- **Connect the IMX415 camera module**

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**.

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