



Thundercomm TurboX C6115 Development Kit

## Quick Start Guide

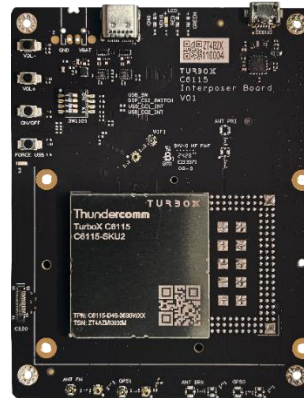
Rev. V1.0

DN: tc-X-2110

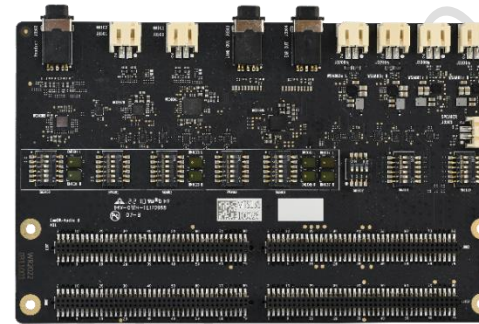
## Package List



Main IO Board



Interposer Board  
(with C6115 SOM)



Audio board



Sensor Board



Wi-Fi/BT Antenna



GPS Antenna



Speaker x2



Camera Module



LCD Touch Panel <sup>(1)</sup>



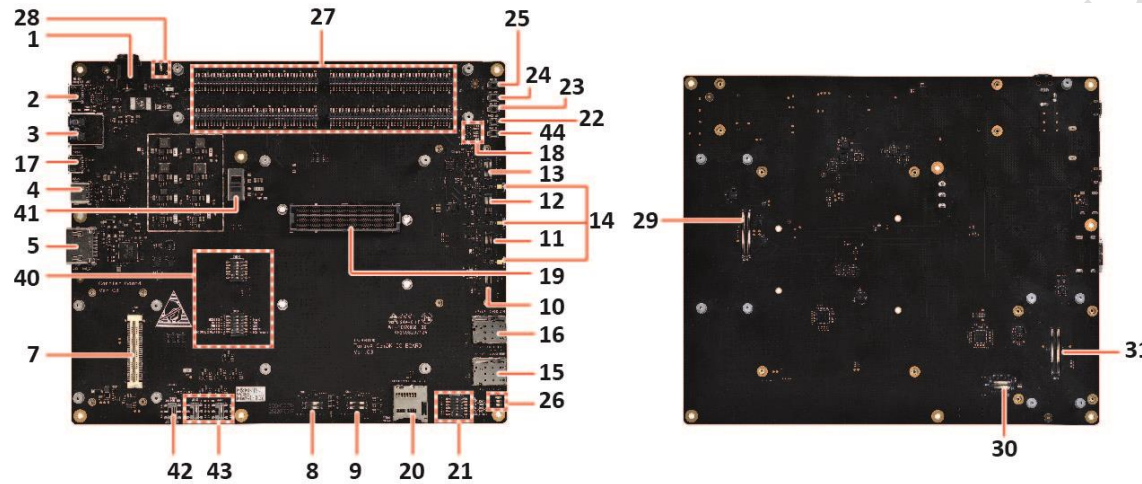
Power Adapter (except Japan) <sup>(2)</sup>

### NOTES:

- (1). All the listed parts are included in advanced DK package. LCD Touch Panel is not included in standard DK package.
- (2). Due to PSE regulations, there is no inbox 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).

# Development Introduction

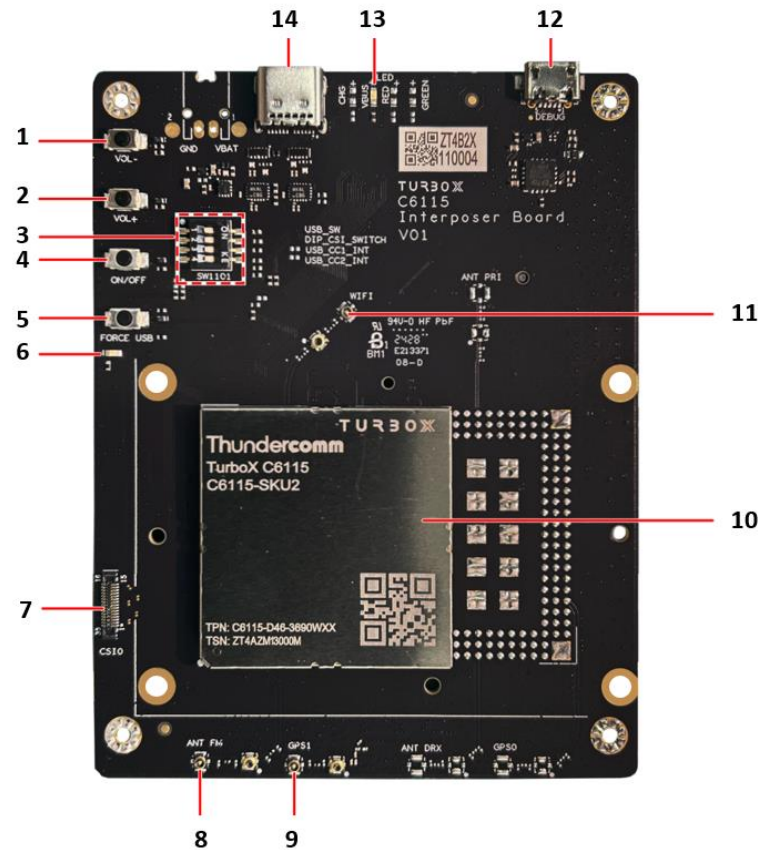
## Main Board



1	DC in jack	11	Camera interface #3 (NC) *	20	SD card slot	29	90-pin B2B connector, for camera interface extension
2	UART debug port, UART to USB	12	Camera interface #0	21	6-pin switch, boot configuration	30	LCD0 interface
3	USB Type-A port *	13	Camera interface #1	22	Key, Force USB boot button	31	90-pin B2B connector, for display interface extension *
4	USB Type-C port	14	LED4408, Flash LED #3 * LED4409, Flash LED #2 LED4410, Flash LED #1	23	Key, Volume up button	40	DIP switches for board function control
5	HDMI out interface, 2.0	15	Nano SIM card slot #2 *	24	Key, Volume down button	41	Power slide switch
7	PCIe expansion module connector *	16	Nano SIM card slot #1 *	25	Key, Power on button	42	<ul style="list-style-type: none"> <li>• VDISPO_P/M_OUT</li> <li>• VDISPO_P/M_OUT_B</li> </ul>
8	Camera interface #5 (NC) *	17	Micro USB port	26	RGB LEDs from PMIC	43	<ul style="list-style-type: none"> <li>• SW3601</li> <li>• SW3602</li> </ul>
9	Camera interface #4 (NC) *	18	RGB LEDs from GPIO *	27	<ul style="list-style-type: none"> <li>• Low-speed connector to low-speed expansion board</li> <li>• 4 x 80-pin B2B connector</li> </ul>	44	Home button *
10	Camera interface #2	19	500-pin connector to the Interposer Board	28	<ul style="list-style-type: none"> <li>• LED4401, indicating Main Board 4V2 OK</li> <li>• LED4403, indicating SOM power input OK</li> </ul>	-	

\* indicates that these interfaces are unavailable on C6115.

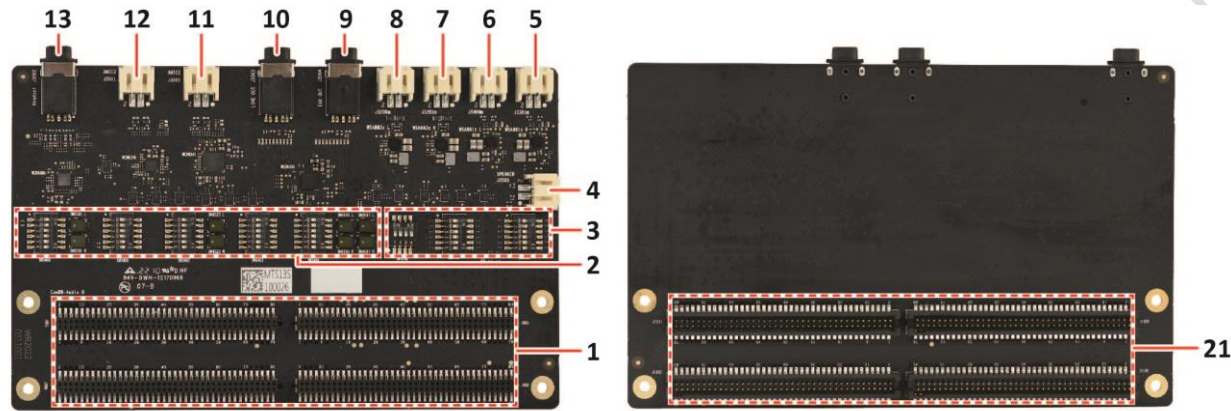
# Interposer Board



1	Key, Volume down button	6	Power supply indicator	11	Wi-Fi/BT antenna connector
2	Key, Volume up button	7	Camera module connector, CS10 *	12	UART debug port, UART to USB
3	DIP switches for board function control (including camera, USB)	8	FM antenna connector *	13	VBUS Green: indicating debug USB status
4	Key, Power on button	9	GPS antenna connector	14	Type-C for debug
5	Key, Force USB boot button	10	C6115 SOM	-	

\* indicates that these connectors are unavailable on C6115.

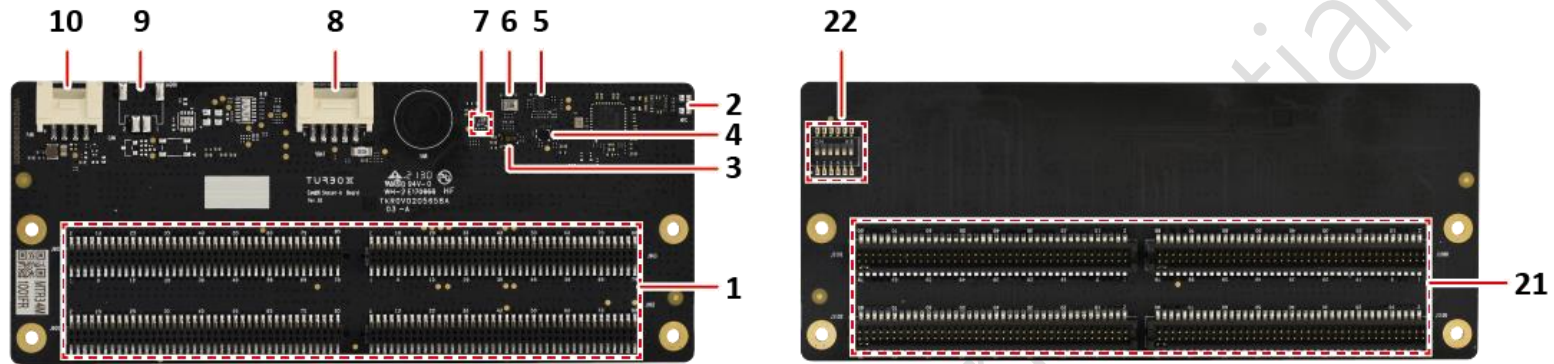
## Audio Board



1	<ul style="list-style-type: none"> <li>• Low-speed connector to low-speed expansion board</li> <li>• 4 x 80-pin B2B connector</li> </ul>	6	Left WSA881x speaker connector *	11	Analog microphone connector 1
2	DIP switch for DMIC connection selection	7	Right WSA883x speaker connector *	12	Analog microphone connector 3
3	DIP switch to control Audio Board configuration	8	Left WSA883x speaker connector *	13	Headset connector
4	Speaker connector	9	Ear out connector *	21	<ul style="list-style-type: none"> <li>• Low-speed connector to Main Board</li> <li>• 4 x 80-pin B2B connector</li> </ul>
5	Right WSA881x speaker connector	10	Line out connector	11	-

\* C6115 uses WSA8815 as the speaker amplifier, and thus J3301M and J3300M are available for C6115 speaker connection.

## Sensor Board



1	<ul style="list-style-type: none"> <li>• Low-speed connector to low-speed expansion board</li> <li>• 4 x 80-pin B2B connector</li> </ul>	5	ACC+GYRO sensor, LSM6DS3TR-C	9	CAN connector (NC)
2	NFC antenna connector	6	Pressure sensor, BMP280	10	FAN connector
3	ALS+ PROXIMITY sensor, TMD2755	7	SAR sensor (NC)	21	<ul style="list-style-type: none"> <li>• Low-speed connector to Main Board</li> <li>• 4 x 80-pin B2B connector</li> </ul>
4	Magnetic, AK09915C	8	Battery connector	22	DIP switch



## Contact us

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