Thundercomm TurboX CT7280 Development Kit User Guide

Contents

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Thundercomm TurboX CT7280 Development Kit

PRODUCT INFORMATION

The Thundercomm TurboX CT7280 Development Kit is a set of hardware components that allow developers to build and test software applications. The kit includes the following components:

- CT7280 Main Board + SC7280 QCARD
- Speaker (x2)
- Wi-Fi/BT Antenna (x2)
- Cellular Antenna (x4)

Main Board Interface List

1. Power on button
2. Finger print connector
3. Micro USB connector (for UART debug)
4. Integrated microphone (Bottom-Port MIC)
5. Integrated microphone (Top-Port MIC)
6. Right speaker connector
7. Left speaker connector
8. Volume up button
9. Volume down button
10. SC7280 QCARD
11. TF card slot
12. SIM card slot
13. DIP switch 2 (SW4402)
14. DIP switch 1 (SW4401)
15. M.2 connector for NVME SSD
16. Green LED
17. Touch PAD connector
18. Audio jack (AUX out)
19. RGB LEDs
20. Keyboard connector
21. Type-C USB 3.1 connector 1
22. Blue LED
23. Type-C USB 3.1 connector 2
24. Type-A USB 3.0 connector
25. Red LED
26. Type-A USB 2.0 connector
27. Battery connector
28. EDP CSI connector

Let’s Get Started

Follow the steps below to boot up your device:

1. Connect LCD to the QCARD LCD socket with a dedicated cable.
   NOTE: It is strictly prohibited to plug or unplug the LCD interface while it is still charged.
2. Connect the speaker, touch pad, and fingerprint as needed.
   NOTE: It is strictly prohibited to plug or unplug the above components while they are still charged.
3. Set the DIP switches. DIP switch 1 (SW4401): All bits off. DIP switch 2 (SW4402): Bits 1, 2, 3 off; Bit 4 on.
4. After the power is connected, the Green LED (connector 16) lights up.
5. Long press the Power on button (connector 1) to boot up the device. The Blue LED (connector 22) lights up and the screen displays an icon.

NOTES:

- A USB keyboard and mouse can be used for Windows operations.
- The TYPE-C port can be used to power the system or charge the battery.
- Please use normal shutdown process to avoid forced power off.

Contact

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- **Address:** 1601 McCarthy Blvd Suite R-12 Milpitas CA,95035
- **Support software and documentation downloads:** www.thundercomm.com

Package List

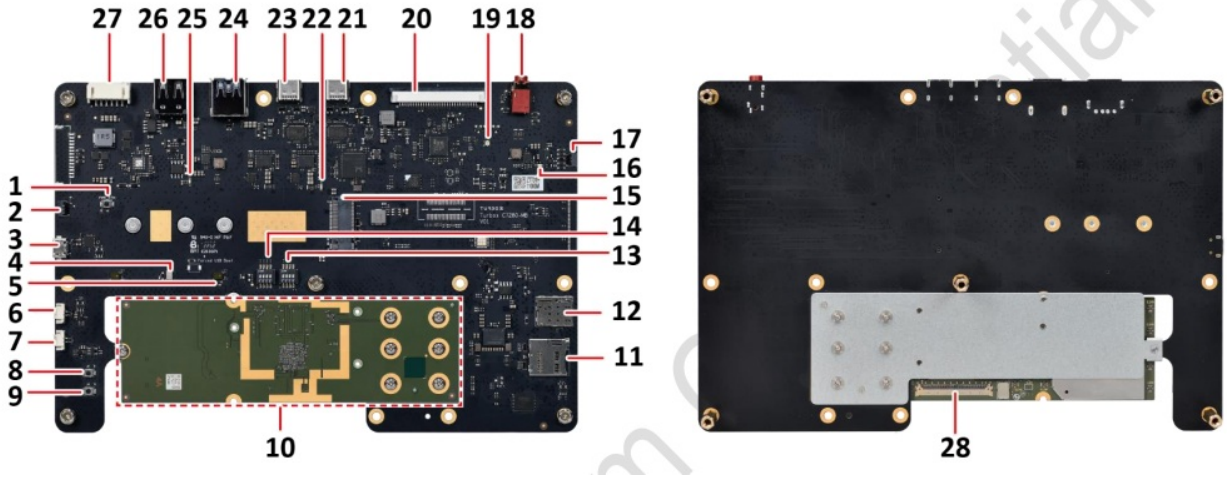
CT7280 Main Board + SC7280 QCARD

Speaker (x2)

Wi-Fi/BT Antenna (x2)

Cellular Antenna (x4)

Main Board Interface List



1. Power on button	15. M.2 connector for NVME SSD
2. Finger print connector	16. Green LED
3. Micro USB connector (for UART debug)	17. Touch PAD connector
4. Integrated microphone (Bottom-Port MIC)	18. Audio jack (AUX out)
5. Integrated microphone (Top-Port MIC)	19. RGB LEDs
6. Right speaker connector	20. Keyboard connector
7. Left speaker connector	21. Type-C USB 3.1 connector 1
8. Volume up button	22. Blue LED
9. Volume down button	23. Type-C USB 3.1 connector 2
10.SC7280 QCARD	24. Type-A USB 3.0 connector
11.TF card slot	25. Red LED
12.SIM card slot	26. Type-A USB 2.0 connector
13.DIP switch 2 (SW4402)	27. Battery connector
14.DIP switch 1 (SW4401)	28. EDP CSI connector

Let’s Get Started

Follow the steps below to boot up your device.

1. Connect LCD to the QCARD LCD socket with a dedicated cable.
   NOTE: It is strictly prohibited to plug or unplug the LCD interface while it is still charged.
2. Connect the speaker, touch pad, and fingerprint as needed.
   NOTE: It is strictly prohibited to plug or unplug the above components while they are still charged.
3. Set the DIP switches.
   - DIP switch 1 (SW4401): All bits off.
   - DIP switch 2 (SW4402): Bits 1, 2, 3 off; Bit 4 on
4. Connect the battery or a power supply of 8V±5%/2A or higher or higher to the Battery connector (connector 27).

NOTES:

- Connect the power cable to a power source or battery. The red wire connects to the positive terminal and the black wire connects to the negative terminal of the power source. Please use a wire with AWG20 or higher current capacity.
- The polarity should not be reversed, and the voltage should not exceed 8.4V.
- The power cable should not exceed 50cm in length.

5. After the power is connected, the Green LED (connector 16) lights up.
6. Long press the Power on button (connector 1) to boot up the device. The Blue LED (connector 22) lights up and the screen displays an icon.

NOTES:

- A USB keyboard and mouse can be used for Windows operations.
- The TYPE-C port can be used to power the system or charge the battery.
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Documents / Resources

	Thundercomm TurboX CT7280 Development Kit [pdf] User Guide CT7280, TurboX CT7280 Development Kit, TurboX CT7280, CT7280 Development Kit, TurboX Development Kit, Development Kit

References

- Thundercomm - World leading IoT product and solution provider
- Thundercomm - World leading IoT product and solution provider