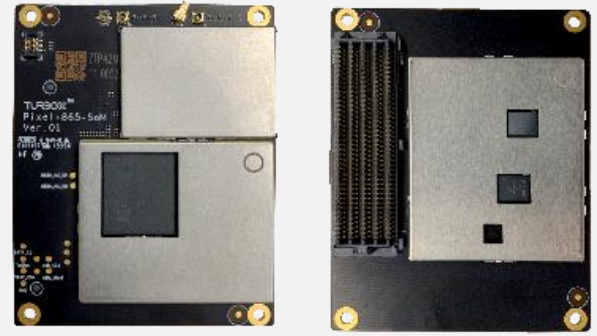


# TurboX C865 SOM

A cutting-edge computing module with 5G network supported and end-to-end solution integrated.



Thundercomm C865 SOM is a small size(45mm x 56mm), production ready, pre-certified(CE, FCC, RoHS)module, powered by 7nm Qualcomm Snapdragon premium-tier processor SM8250, support SA/NSA dual mode 5G network with T55 module via PCIE interface. C865 SOM is suitable for high performance, low power consumption, robotics, XR device and other high performance required products.

It provides pre-tested HW and SW OS/BSP, rich interface and valid AVL, and reference IO board. It can speed your product development.

## Applications



Medical Image



Smart City



Robot



Digital Signage



VR/AR

## Features

5th generation Qualcomm AI Engine is 2x more powerful than its predecessor

15 TOPS AI performance while using lower power

All-new Qualcomm® Hexagon™ Tensor Accelerator

New CV-ISP operates at 2 Gigapixels per second

No limit HD slow-motion video capture at 960 FPS

First Dolby Vision for video capture on mobile

Kyro CPU provides 25% faster performance

True 10-bit HDR gaming and first-ever updatable GPU drivers on mobile

C865 SOM

## C865 SOM Specifications

Category	Description
Platform	Snapdragon™ SM8250 Qualcomm® Kryo™ 585 Qualcomm® Adreno™ 650 GPU, Adreno 665 VPU, Adreno 995 DPU Qualcomm® Hexagon™ DSP with quad HVX Qualcomm Spectra™ 480 image processing
Memory	LPDDR5(POP) + UFS, 6GB + 128GB
Connectivity	Wi-Fi/BT supports (802.11 a/b/g/n/ac/ax BT5.1)
Encode	8K@30fps (H.264/H.265/VP8)
Decode	8K@60fps (H.264/H.265/ VP8/VP9)
Display Interfaces	2x MIPI-DSI 4-lane ; 5040*2160@60fps
Camera Interfaces	6x MIPI-CSI, 4-lane, 2.5 Gbps per lane; supports CMOS and CCD sensors Up to 64 MP sensors
Other Interfaces	1 x Sound Wire, 2x RF connector for Wi-Fi/BT, 2 x USB 3.1, 2 x SSC I/F for sensor, 2 x PCIE, 1 x UART, 1 x SDC for SD card, 6 x DMICs, 2 x Speakers, GPIOs
Operating Environment	Operation Temperature: -20°C ~ 70°C Operation Humidity: 5%~95%, non-condensing
Voltage	3.8V ~ 4.2V
Dimension	B2B Connector: 45 x 56 x 9mm
OS Support	Android 10

## C865 Development Kit

### Sensor

- 6-axis IMU sensor
- ALS sensor

### Audio

- WCD9335 Codec:  
Line in/out, Dual Speaker,  
Headset

### Display

- DP Out

### Connectivity

- Wi-Fi & BT
- On-board Antenna for Wi-Fi & BT

### Peripheral

- 2 x DSI interfaces
- 6 x CSI interfaces
- USB 3.1
- Key
- SD Card
- LED
- FAN
- Expansion Connector:  
I2S,Uart



Empowering Every IoT Device  
with Our Technology

6540 Lusk Blvd. Suite C166 San Diego CA 92121

Email: [service@thundercomm.com](mailto:service@thundercomm.com)

Tel: +86-10-62662686

[www.thundercomm.com](http://www.thundercomm.com)