

# TURBOX C865C SOM

AR/VR

Industrial Drone

Industrial Robot

Medical Device

Video Conference

TurboX C865C SOM (System on Module) is a high-performance intelligent module based on Qualcomm® QCS8250 processor. It has integrated Android and the advanced 7nm Fin FET processor, a customized 64-bit Octa-core Qualcomm® Kryo™ 585 application processor.

TurboX C865C SOM supports wide-range Wi-Fi, Wi-Fi6 (Wi-Fi 802.11 a/b/g/n/ac/ax) . It supports one 4K@60FPS or two 4K@30FPS display, as well as multi-camera concurrency. It also integrates multiple audio and video input/output interfaces. TurboX C865C SOM provides a variety of GPIO, I2C, UART and SPI standard interfaces.

In addition, it supports four 4-lane MIPI-CSIs (D-PHY) and one 3-lane MIPI-CSI (C-PHY) together with SOM common standard protocol interfaces such as USB3.1, PCIe2.1/3.0 and I2S.

TurboX C865C SOM provides convenient and stable system solutions for IoT (Internet of Things) application. It can be embedded into devices including VR/AR, Robot, Smart Camera, AI devices, drones and medical devices.

## Overview

### C865C SOM Applications



Video Conference



Industrial Robot



Medical Machine

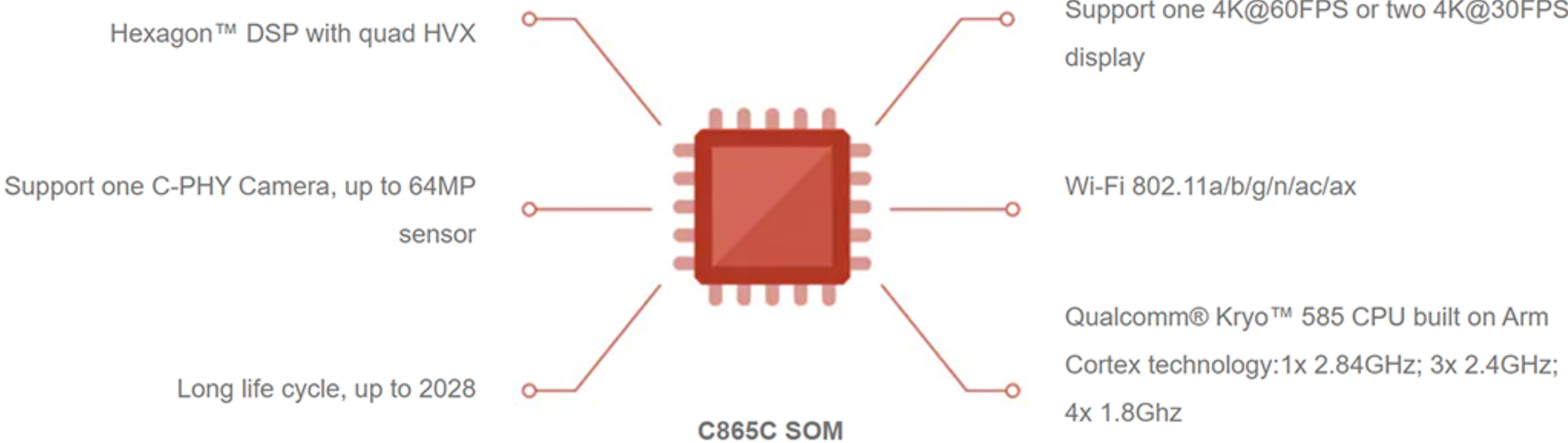


Industrial Drone



VR/AR

### C865C SOM Features



## Specifications

| Category              | Description   |
|-----------------------|---|
| Platform              | Snapdragon™ QCS8250<br>Qualcomm® Kryo™ 585<br>Qualcomm® Adreno™ 650 GPU, Adreno 665 VPU, Adreno 995 DPU<br>Qualcomm® Hexagon™ DSP with quad HVX<br>Qualcomm Spectra™ 480 image processing |
| Connectivity          | Wi-Fi: QCA6391 (802.11 a/b/g/n/ac/ax, 2×2 MIMO)   |
| Encode                | 8K@30FPS (H.264/H.265/VP8)  |
| Decode                | 8K@60FPS (H.264/H.265/ VP8/VP9)   |
| Display Interfaces    | 2x MIPI-DSI 4-lane ; Support 5040*2160@60FPS  |
| Camera Interfaces     | 4x MIPI-CSI D-PHY, 4-lane, 2.5 Gbps per lane; up to 25 MP sensors;<br>1x MIPI-CSI C-PHY, 3-lane, 10.26 Gbps/trio on three trios per port; up to 64MP sensor;                              |
| Other Interfaces      | 2x RF connector for Wi-Fi, 2 x USB 3.1, 2 x SSC I/F for sensor, 1 x PCIE 1 lane, 1 x PCIE 2 lane, 1 x SDC for SD card, 3 x DMIC interface, GPIOs, UARTs                                   |
| Operating Environment | Operation Temperature: -25°C ~ +75°C<br>Operation Humidity: 5%~95%, non-condensing  |
| Format                | LCC   |
| Voltage               | 3.2V ~ 4.35V  |
| Dimension             | 36.5mm x 52mm x 4.55mm  |
| Operating System      | Android 10  |

## RELATED PRODUCTS



C865C Development Kit

AR/VR Industrial Drone Industrial Robot

Medical Device Video Conference



C865 SOM

Automated Guided Vehicle  
Consumption/Entertainment Robot  
Industrial Control Industrial Robot  
Self-driving Vehicle for logistics  
Service Robot



C865 Development Kit

Automated Guided Vehicle  
Consumption/Entertainment Robot  
Industrial Control Industrial Robot  
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