



T U R B O X

C4290/CM4290 SOM

Face Payment

Robotics

Rugged Handheld

Smart Retail

Vehicle APP

The CM4290/C4290 SOM (System On Module) is designed based on the Qualcomm® QCM4290/QCS4290 platform. It brings high-value features to mid-tier devices, designed to support advanced graphics, fast LTE connectivity, triple ISPs for advanced dual-camera experience, dedicated compute DSP for computer vision and video post-processing, etc. The form factor of the module is 35mm*35mm (C4290) and 51mm*35mm (CM4290) LGA package which can be fit into devices including handy terminal, POS, retail devices, robotics, dash camera, PDA, tablets, etc. CM4290/C4290 SOM is an ideal platform for both industrial and consumer applications requiring high data rates multimedia function, and can help to rapidly develop cost-effective cellular devices to the market.

Overview

C4290/CM4290 Applications



Rugged Handheld



Vehicle APP



Face Payment



Intelligent Retail



Industrial Robot

C4290/CM4290 SOM Features

Hexagon 683 DSP with dual-HVX512

Compatible with BLE 5.1

Support up to 3 cameras

C4290/CM4290 SOM

1080P@60FPS video record and play

Wi-Fi 802.11a/b/n/ac LTE support

Kryo™ 260 CPU:4 x A73@ 2.0GHz + 4 x A53@1.8GHz

Specifications

Category	Description
Chipset	4290
Features	Complete stand-alone system module with APU, PMU, memory, LTE (optional), Wi-Fi, BT
Platform	Qualcomm® Kryo™ 260 CPU, 4 x Gold @ 2.0GHz + 4 x Silver @ 1.8GHz
	Qualcomm® Adreno™ 610 GPU @950MHz
	Qualcomm® Hexagon™ 683 2x HVX @1.0GHz
Memory	Discrete, LPDDR4x 2GB + eMMC 5.1 16GB
Connectivity	WLAN 1×1, 802.11a/b/g/n/ac, Bluetooth 5.1
WWAN(CM4290 Only)	LTE Cat13 2 × 20 CA at 400 Mbps DL and 150 Mbps UL capability
GNSS	Reserve GNSS_IQ to extend support Qualcomm WGR7640
	Gen 9 VT2; GPS, GLONASS, BeiDou, Galileo, QZSS, and SBAS
Encode	1080P@60FPS (H.264/H.265)
Decode	1080P@60FPS (H.264/H.265/VP9)
Display Interfaces	1x MIPI-DSI 4-lane; FHD+(1080*2520)@60FPS
Camera Interfaces	3x MIPI-CSI, 4-lane, 2.5 Gbps per lane;
	3 x ISP (13 MP + 13 MP)/(25 MP + 5 MP) at 30 FPS or (16 MP + 16 MP) at 24 FPS
Other Interfaces	1 x SoundWire; 1 x USB 3.1; 1 x SD Card; 3 x I2S; 7 x QUP; GPIOs
Operation Temperature	-25°C ~ +75°C
Voltage	3.8V ~ 4.2V
Dimensions	C4290: 35mm x 34mm x 2.9mm, Wi-Fi Version
	CM4290: 35mm x 51mm x 2.9mm, LTE + Wi-Fi Version
OS Support	Android R