



Features

- SOM (System on Module) is integrated with Qualcomm® QCS6490 SoC
- Video: 4K@60FPS video decoding; 4K@30FPS video encoding
- AI Performance: 12.5 TOPS
- Peripheral Interfaces, including GPIO, UART, I²C, I³C, SPI, DSI, USB 3.1, and PCI-E
- Long-term supply with Qualcomm solution
- Wide-range operating temperature (-25°C~75°C)

Specifications

Form Factor	SOM Module (System-on-Module)
Processor	Qualcomm® QCS6490 Qualcomm® Kryo™ CPU 670 Qualcomm® Adreno™ GPU 642L, Adreno 633 VPU, Adreno DPU 1075 Qualcomm® Compute Hexagon™ DSP with dual HVX, Hexagon Co-processor (Hexagon CP) 2.0 and Hexagon Tensor Accelerator Qualcomm® Spectra™ 570L image processing
System Memory	6GB
Flash Memory	128GB
Display	1x MIPI-DSI 4-lane; FHD+ (1080x2520) 8L@144FPS; 4K@60FPS display support over DisplayPort
Video Codec	4K@30FPS for H.264/H.265 4K@60FPS for H.264/H.265/VP9
Graphics	N/A
Audio Interface	N/A
LAN	N/A
USB	1x USB 3.1 with DP, 1x USB2.0, 1x PCI-E Gen3 2-lane, 2x SoundWire, 1x SDC for SD card, 3x DMIC Interfaces, GPIOs, QUPs (UART/I2C/SPI)
Image Capture Interface	N/A
Serial Interface	N/A
Media Interface	N/A
PCI-E	N/A
SATA	N/A
GPIO	N/A
I ² C	N/A
Others	Camera Interfaces: 5x 4-lane MIPI CSI D-PHY (2x of them are compatible with 3-trio MIPI CSI C-PHY for cameras up to 48M) Voltage: 3.4V~4.5V, Typ. 3.8V Form Factor: LGA
CAN Bus	N/A
Dimensions	36mm x 49mm (1.4" x 1.9")

Environment	Humidity: 0 % to 90 % RH at 60° C (non-condensing) Shock: Non-Operating: 1G, 15 mins (x-, y-, z-axis) Vibration: Non-operating: 3 Hz to 500 Hz, 15 mins
Operating Temperature	-25°C ~ +75°C #
OS Support	Android 12/13, Ubuntu
Certification	CE/ FCC Class-A

Ordering Information

RM-QCS6490-S	Industrial-grade SOM (System-on-Module), Qualcomm® QCS6490, 6GB LPDDR4, 128GB eMMC
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