

RISE X4 6490 SOM



Introducing RISE X4 6490 SOM, powered by Qualcomm® QCS6490 Processor with re-engineered Hexagon™ processor, offering astonishing performance up to 12 TOPS with minimal power consumption. Ideal for rugged handhelds, EDGE AI box, Security cameras & industrial robots, seamlessly integrating USB 3.1, PCIe for edge computing.



(1) 45mm x 45mm

(2) Customized Carrier Board Support

(3) On Board Wireless Module Support

Product Features

 Triple ISP Camera & five concurrent cameras Support

 Robust enterprise Wi-Fi 6 and Wi-Fi 6E connectivity

 AI performance of up to 12 TOPS

 Enhanced interfaces and peripherals

 Extended-life software and hardware

 On board location connectivity

Industries We Serve

 Automotive

 Security & Surveillance

 Biotech

 Semiconductor

 Health Care

 Industry 4.0

Platform	Qualcomm™ QCS6490
CPU	Kyro Prime: 1 x High-performance core clocked up to 2.7 GHz Kyro Gold: 3 x High-performance cores running at 2.4 GHz Kyro Silver: 4 x Low-power cores operating at 1.9 GHz
GPU	Adreno graphics processing unit (GPU) 643 Support for OpenGL ES 3.2, OpenCL 2.0, Vulkan 1.x, DX FL 12
DSP	Qualcomm® Hexagon™ DSP1980 MPPS
Memory/Storage	8GB LPDDR5, 128GB UFS3.1
Connectivity	WLAN: 802.11 a/b/g/n/ac/ax over PCIe with DBS, 2x2 MIMO (Wi-Fi 6E) Bluetooth® 5.2 Uplink/Downlink MU-MIMO, 4K QAM, 160 MHz channels (5 & 6 GHz) GPS, GLONASS, NavIC, BeiDou, Galileo, QZSS, and SBAS
Camera Interfaces	3 IFE + 2 IFE lite, 5 concurrent MIPI CSI configurable in 4 + 4 + 4 + 4 + 4 configuration Qualcomm Spectra 570 L supports 36 + 22 MP at 30 fps/3 × 22 MP 30 fps ZSL. It also supports connectivity to multiple cameras due to 5 C-PHY/D-PHY interfaces
Display	Adreno 1075 DPU, On-device Display Resolution: FHD+ (1080 x 2520 pixels) 8L @ 120 fps, 1x DSI D-PHY (4-lane), DP 1.4 SST
Video Performance	Up to 4K60 decode for H.264/H.265/VP; Up to 4K30 encode for H.264/H.265; Support for HDR10 and HDR10+ playback
Other Interfaces	PCIe, USB3.1 Type C, Display port, USB 2.0, SDC, I2C, SPI, I2S, I3C, UART, DMIC input, GIPOs
Supply voltage	SOM Input Voltage: 3.4V ~ 4.5V, Typ. 3.9V 12V/5A DC Main Supply (supplied using carrier board)
Operating Environment	-40 to +55 °C
Operating System	Android & Qualcomm LINUX
Mechanical Specification	SOM: 45mm x 45mm