

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	Kryo Prime: Single high-performance core clocked up to 2.7 GHz Kryo Gold: 3 high-performance cores running at 2.4 GHz Kryo Silver: 4 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	Hexagon DSP with dual HVX and 2K HMX (12 TOPS) Clock Speed 1.4 GHz
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