

Introducing RISE X 8550 SOM, powered by Qualcomm® QCS8550 Processor with re-engineered Hexagon™ processor, offering astonishing performance up to 48 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) 34 mm x 36mm

(2) Customized Carrier Board Support

(3) BGA Package

(4) Small Form Factor



Use Cases



Autonomous Mobile Robots



Video Collaboration



Industrial Drones



Cloud Gaming



Camera EDGE AI BOX



Video Trans-coding



Low Light Camera



Android Tablet

Industries We Serve



Automotive



Security & Surveillance



Biotech



Semiconductor



Health Care



Industry 4.0

Platform	Qualcomm™ QCS8550
CPU	Qualcomm® Kryo™
GPU	Adreno™ GPU740, Adreno8550 VPU, Adreno DPU 1295
Memory/Storage	8GB LPDDR5 pop package, 128GB UFS 3.1
Camera Interfaces	MIPI-CSI: 7x 4-lane CSIs (4/4/4/4/4) support with, 108MP / 36+64/36+36 +36 MP at 30fps ZSL, 12 MP at 240 fps fast shutter sensor support – PHY and RAW dump 200 MP non-ZSL Spectra ISP
Display	Supports dual MIPI DSI ports, with support for split-link for fold use case External panel support: DisplayPort v1.4 with MST (2x 4K60 10-bit or 1x 8K30 with DSC) Maximum resolution for internal panel: Support up to 3480 × 2160 at 120 Hz, 3360 × 1600 at 144 Hz
Video Performance	Video decode up to 4K240/8K60 Up to 4K60 Video encode up to 4K120/8K30 Concurrent 4K60 decode and 4K60 encode for wireless display Native decode support for H.265 Main 10, H.265 Main, H.264 High, and VP9 profile 2 Native encode support for H.265 Main 10, H.265 Main, H.264 high formats
Other Interfaces	2x PCIe, USB3.1 Type C, 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/TBD DC Main Supply (supplied using carrier board)
Operating Environment	-30 to +55 °C
Operating System	Android
Mechanical Specification	SOM: 34mm x 36mm