

RISE Z1 8550 SOM



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™ 670 CPU

GPU Adreno™ GPU740, Adreno8550 VPU, Adreno DPU 1295

Memory/Storage 8GB LPDDR5 pop package, 128GB UFS

Camera Interfaces MIPI-CSI: 7x 4-lane CSIs (4/4/4/4/4) support with, 108MP / 36 64 MP / 3x36 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