Aikri QCS8550 System On Module (SoM)









- **4K Camera**
- Telehealth / Medical
- **Collaboration**
- **Machine Vision**
- Digital Signage / HMI
- **Video Conferencing Systems**
- **Robotics**
- **Telematics**

About elnfochips

eInfochips, an Arrow Electronics company, is a leading provider of digital transformation and product engineering services. eInfochips accelerates time to market for its customers with its expertise in IoT, AI/ML, security, sensors, silicon, wireless, cloud, and power. eInfochips being a Qualcomm Snapdragon Technology Partner (STP) offers turnkey product designs on multiple Snapdragon and other SoCs of Qualcomm® and have enabled global customers with Qualcomm based product designs.

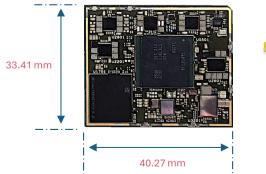
eInfochips Aikri QCS8550 SoM

The Aikri 8550 System on Module (SoM) is based on Qualcomm® QCS8550 System on Chip and delivers excellent heterogeneous computing, vivid graphics and video with optimized AI architecture for extreme edge Al processing. This LGA SoM integrates an ARM Cortex-X3 based Octa-Core Kryo™ CPU, Adreno™ 740 GPU, Hexagon™ DSP/HTP with HVX and HMX and Spectra™ ISP with cognitive triple 18-bit ISPs to provide very high edge AI processing capabilities.

The Aikri 8550 SoM enables OEMs and engineers to evaluate performance QCS8550 for their next-gen designs while minimizing design risk factors and reducing design cycle time with early time to market.

eInfochips Advantages

- ✓ 28 Years of experience in system design
- ✓ 10 Design centers worldwide
- √ 500+ Product designs
- √ 35+ Product designs on Qualcomm
- √ 15M+ Product deployments across globe
- ✓ ISO 9001, ISO13485, AS9100/EN9100, ISO26262 and CMMi L3 compliant processes









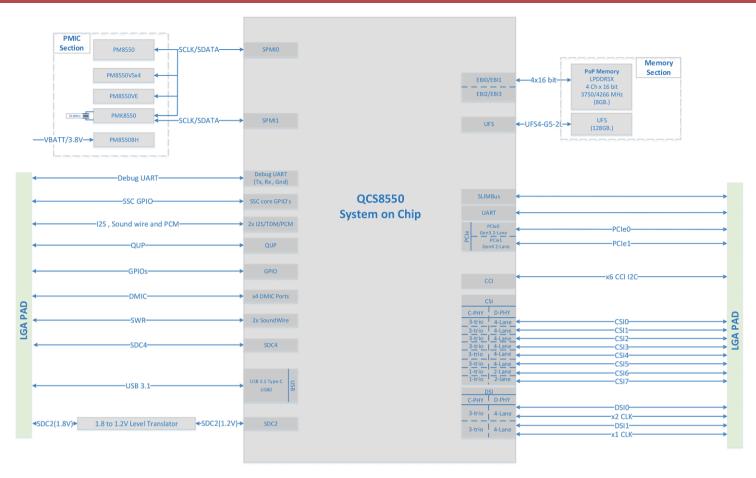




Aikri QCS8550 System On Module (SoM)

Based on the Qualcomm® QCS8550 SoC





Aikri QCS8550 SoM		
Processors	Qualcomm® QCS8550 • 64-bit ARM Cortex-X3 compliant octo-core (1 prime + 4 gold + 3 silver) • Adreno™ 740 GPU capable of rendering 4K@120 fps UI, 8550 VPU for 4K Encode/decode and 1295 DPU for 4K render • Qualcomm® Hexagon™ Tensor Processor (HTP) with Hexagon Vector eXtensions(HVX) and Hexagon Matrix eXtensions(HMX) • Spectra™ ISP	
Al Performance (INT 8)	48 TOPS	
Memory	8GB LPDDR5, 128GB UFS or 16GB LPDDR5, 256GB UFS.	
Display Interfaces	2x MIPI-DSI 4-lane - D-PHY 1.2 at 1.5 Gbps per lane; split link supported	
Camera Interface	 4x MIPI-CSI 4-lane; 2x MIPI-CSI 2-lane - D-PHY 1.2 at 2.5 Gbps per lane supported. 3x IFE + 2x IFE Lite; Always-On 	
Audio Interfaces	Soundwire, DMICs, MI2S	
I/O Interfaces	 1x USB-C 3.1 with DP 1x PCIe 2-lane Gen3; 1x PCIe 2-lane Gen4 GPIOs, SPIs, I2Cs, I3C, UARTs; GPIO connections to sensor core DSP 	
Operating Environment	Input voltage: 3.6V	• Operating temperature: -30 to +85° C
Mechanical Specification	• SoM: 40.27mm x 33.41mm LGA	
Software and OS	• Linux, Kernel 5.15	Android 13
Orderable Parts	Linux	Android
	Aikri-85X-50LS-8 – SOM with 8GB/128GB memory	Aikri-85X-50AS-8 - SOM with 8GB/128GB memory
	Aikri-85X-50LS-16 - SOM with 16GB/256GB memory	Aikri-85X-50AS-16 - SOM with 16GB/256GB memory









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