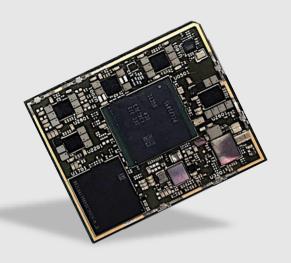
Aikri QCS8550 System On Module (SoM)









1	AI and ML Applications
2	4K Camera
3	Telehealth / Medical
4	Collaboration
5	Machine Vision
6	Digital Signage / HMI
7	Video Conferencing Systems
8	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.

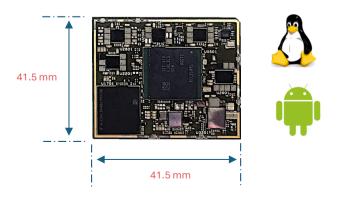
eInfochips Aikri QCS8550 SoM

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, Spectra™ ISP with cognitive triple 18-bit ISPs and onboard Wi-Fi 7 and Bluetooth 5.3 to provide very high edge AI processing capabilities with integrated connectivity in a compact form factor.

The Aikri 8550 LGA SoM enables OEMs and engineers to evaluate performance of 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





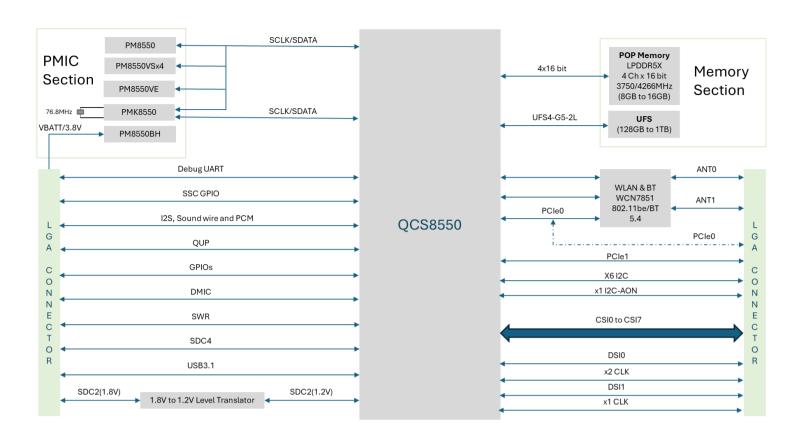




Aikri QCS8550 System On Module (SoM)

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	16GB LPDDR5, 256GB UFS.		
Wireless	 Qualcomm® Wi-Fi via WCN7851 WLAN 802.11be (WiFi 7); Bluetooth 5.3 2x UFL connector on SoM 		
Display Interfaces	2x MIPI-DSI 4-lane - D-PHY 1.2 at 1.5 Gbps per lane; split link supported		
Camera Interface	 6x MIPI-CSI 4-lane; 2x MIPI-CSI 2-lane - D-PHY 1.2 at 2.5 Gbps per lane supported; 6x CCI i2C. 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 Gen4 GPIOs, SPIs, I2Cs, I3C, UARTs; GPIO connections to sensor core DSP 		
Operating Environment	Input voltage: 3.6V	• Operating temperature: -25 to +85° C	
Mechanical Specification	• SoM: 41.5mm x 41.5mm LGA		
Software and OS	• Linux, Kernel 5.15	Android 13	
Orderable Parts	Linux	Android	
	Aikri-85X-50LS-16-W - SOM with 16GB/256GB memory	Aikri-85X-50AS-16-W - SOM with 16GB/256GB memory	









Qualcomm Adreno and Qualcomm Quick Charge are products of Qualcomm Technologies, Inc. Qualcomm, Snapdragon, Adreno and Quick Charge are trademarks of Qualcomm Incorporated, registered in the United States and other countries. Used with permission. eInfochips reserves the right to make changes to the information, text, graphics or other items contained within this material at any time, without any prior notice. eInfochips will make their best effort, however cannot commit to keep this material up-to-date. To be assured that you have the latest material, you are encouraged to contact sales@einfochips.com. All brands, logos, product names and service names are trademarks or registered trademarks of their respective companies or organizations







