Aikri 8550 Linux Development Kit

Based on the Qualcomm® QCS8550 SoC





- **Autonomous Robots**
- **Edge Al gateways**
- Retail
- Video collaboration
- **Healthcare** 5
- **Industrial Drones**

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.

elnfochips Aikri 8550 Smart camera Dev Kit

The Aikri 8550 smart camera dev kit is Powered by Qualcomm®'s QCS8550 based Aikri System on Module(SoM). 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, with multiple camera and display interfaces provides concurrent processing capabilities of multiple video streams up to 4K120 decode/encode to enable smart camera usecases on this dev kit. The Aikri 8550 dev kit enables OEMs and engineers to evaluate performance of QCS8550 and create next-gen designs with the shortest turnaround time, while minimizing design risk factors

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





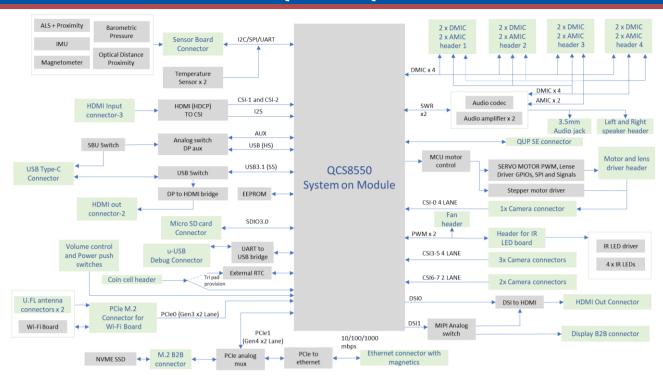




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<a>AIkri

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Aikri QCS8550 SoM		
Processors	ARM Cortex-X3 compliant octo-core (1 prime + 4 gold + 3 silver), Hexagon DSP with HVX and HMX, Adreno™ 740 GPU, 1295 DPU and 8550 VPU, and Spectra™ ISP	
Memory	8GB LPDDR5, 128GB UFS	
Al Performance (INT 8)	48 TOPS	
Aikri QCS8550 Dev K	it	
Display Interfaces	1x HDMI Out port (MIPI_DSI to HDMI) 1x USB-C Alt DP	1x HDMI Input port (MIPI_CSI to HDMI) - CSI1 and CSI2 ports
Camera Interface	• 4x 4-lane CSIs on 30-pin connectors; 2x 2-lane CSIs; IMX586 on CSI0, IMX476 on CSI3	
Sensor Interface (Sensor board)	IMU Sensor Barometric Pressure Sensor PCBA Temperature Sensor	Magnetometer SensorAmbient Light SensorSmall aperture proximity sensor
Audio Interfaces	Input: 8x DMICs and 2x AMICs for audio capture. 3.5mm Audio headset jack (WCD9375 Codec). Bluetooth Audio Capture. MI2S Interface	Output: • Stereo WSA Speaker output (Audio Daughter Board). • 3.5mm Audio headset jack (WCD9375 Codec). • Stereo External MI2S Audio Amplifier • Bluetooth Audio playback • MI2S interface Audio out over HDMI out (DSI to HDMI bridge chip).
I/O Interfaces	 1x PCIe Gen3 M.2 Key-E; 1x PCIe Gen4 M.2 Key-M 1x MicroSD Card I2C, SPI, GPIOS, UARTS 1x USB-C, 1x USB Micro B 	 1x 10/100/1000 Mbps RJ45 Ethernet (PCle to LAN) 4x User LEDs Battery connector 1x RTC
Operating Environment	Input voltage: 12V	Operating temperature: -20 to +60° C
Mechanical Specification	• SoM: 40.27mm x 33.41mm LGA	Carrier board: 172mm x 75mm
Software and OS	• Linux, Kernel 5.15	
Dev Kit Contents	1x Aikri-85X-50LS-8 SoM1x Carrier board	 2x Camera modules, 1x Sensor board, 2x DMIC boards 12V power adapter; USB cable
Orderable Parts	• Linux dev kit : Aikri-85X-50LD-8-4	









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