# Aikri QCS8250 System On Module (SoM)

Based on the Qualcomm® QCS8250 SoC







1	Al and ML Applications
2	4K Camera
3	Medical Imaging / Medical
4	Machine Vision
5	Digital Signage / HMI
6	Collaboration System
7	Robotics
8	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 QCS8250 SoM

The Aikri 8250 System on Module (SoM) is based on Qualcomm® QCS8250 System on Chip (SOC). This SoM integrates Kryo™ 64-bit Octa-core 585 CPU, Adreno<sup>™</sup> 650 GPU, Hexagon<sup>™</sup> 698 HVX DSP, Spectra<sup>™</sup> 480 camera ISP and Qualcomm's nextgen Al-Engine to maximize performance for compute intensive camera and AI applications on the edge.

The SoM coupled with 2x2 802.11ax WiFi-6, BT 5.0, multiple CSI cameras, full featured USB-C and high-fidelity audio provide excellent processing capabilities of multiple video streams up to 4K240 decode/4K120 encode.

The Aikri 8250 SoM enables OEMs to use a readily available design solution for their compute application needs 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







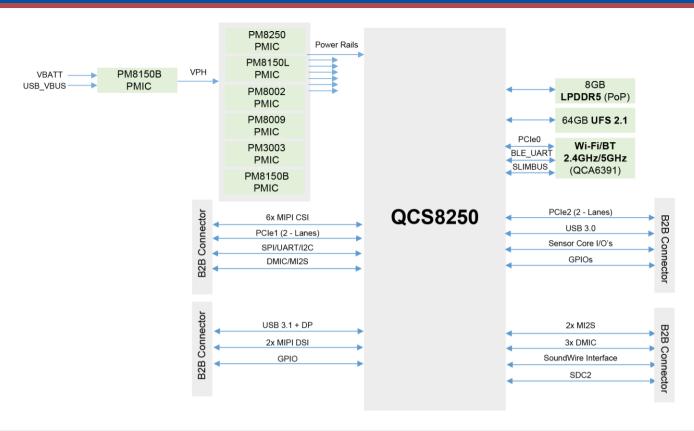




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Aikri QCS8250 SoM			
Processors	Qualcomm® QCS8250  • 8x Kryo™ 585 – Quad Kryo gold cores @up to 2.8 GHz; Quad Kryo silver cores @1.8GHz  • Adreno™ 650 GPU at 545 MHz; Adreno 5 <sup>th</sup> gen UHD VPU; Adreno 995 DPU  • Hexagon DSP with quad-HVX) and Hexagon Coprocessor (Hexagon CP) 2.0  • Dedicated neural processing unit NPU230, for performance and always-on neural network (NN) use cases  • Spectra™ 480 ISP		
Al Performance (INT 8)	15 TOPS		
Memory	8GB LPDDR5 PoP, 64GB UFS 3.1		
Wireless	<ul> <li>Qualcomm® Wi-Fi via QCA6391 WLAN 2 x 2 802.11ax DBS (WiFi 6); Bluetooth5.1</li> <li>2x UFL connectors on SoM</li> </ul>		
Display Interfaces	<ul> <li>2x MIPI-DSI 4-lane D-PHY 1.2 at 1.5 Gbps per lane</li> <li>USB-C with DisplayPort v1.4 at 8.1 Gbps/lane</li> </ul>		
Camera Interface	6x MIPI-CSI 4-lane - D-PHY 1.2 at 2.5 Gbps per lane supported.		
Audio Interfaces	<ul> <li>2x MI2S</li> <li>3x DMIC</li> <li>1x SoundWire</li> </ul>		
I/O Interfaces	<ul> <li>2x PCIe Gen3 2-lane</li> <li>GPIOs, SPIs, I2Cs, I3C, UARTs; GPIO connections to sensor core DSP</li> </ul>		
Operating Environment	Input voltage: 3.6V	Operating temperature: -30 to +85° C	
Mechanical Specification	• SoM: 59.7mm x 32.2mm		
Software and OS	• Linux		
Orderable Parts	<ul> <li>System On Module (SoM): Aikri-82X-50AS-8</li> <li>Development kit: Aikri-82X-50AD-8</li> <li>Camera interface card: EIC-DB-CAM-OVS (camera sensors not included)</li> </ul>		









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