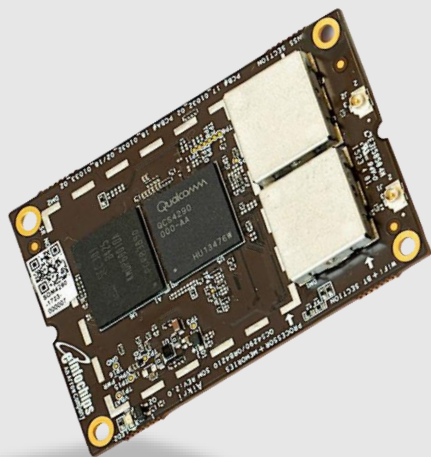


# Aikri QCS4290 System On Module (SoM)

Based on the Qualcomm® QCS4290 SoC



- 1 Surveillance Cameras
- 2 Robotics
- 3 Industrial Handhelds
- 4 Telehealth / Medical Devices
- 5 Digital Signage / HMI
- 6 Security Panels

## About eInfochips

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.

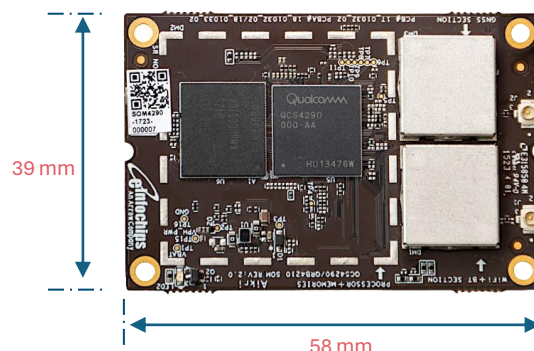
## eInfochips Aikri QCS4290 SoM

The Aikri 4290 System on Module (SoM) is based on the Qualcomm® QCS4290 processor. This SoM integrates a 64-bit Octa-Core Qualcomm® Kryo™ 260 application processor (Quad Gold cores operating at 2.0 GHz and Quad Silver cores at 1.8 GHz), Hexagon™ DSP, Adreno™ 610 GPU, and Spectra™ 340T image signal processor to provide a cost-effective module that delivers greater performance, improved graphics, and better-quality images .

The Aikri 4290 SoM has onboard calibrated 802.11ac 1x1 Wi-Fi, Bluetooth 5.0 and location and offers secure connections. It enables OEMs to use a readily available design solution for their next-gen products, 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



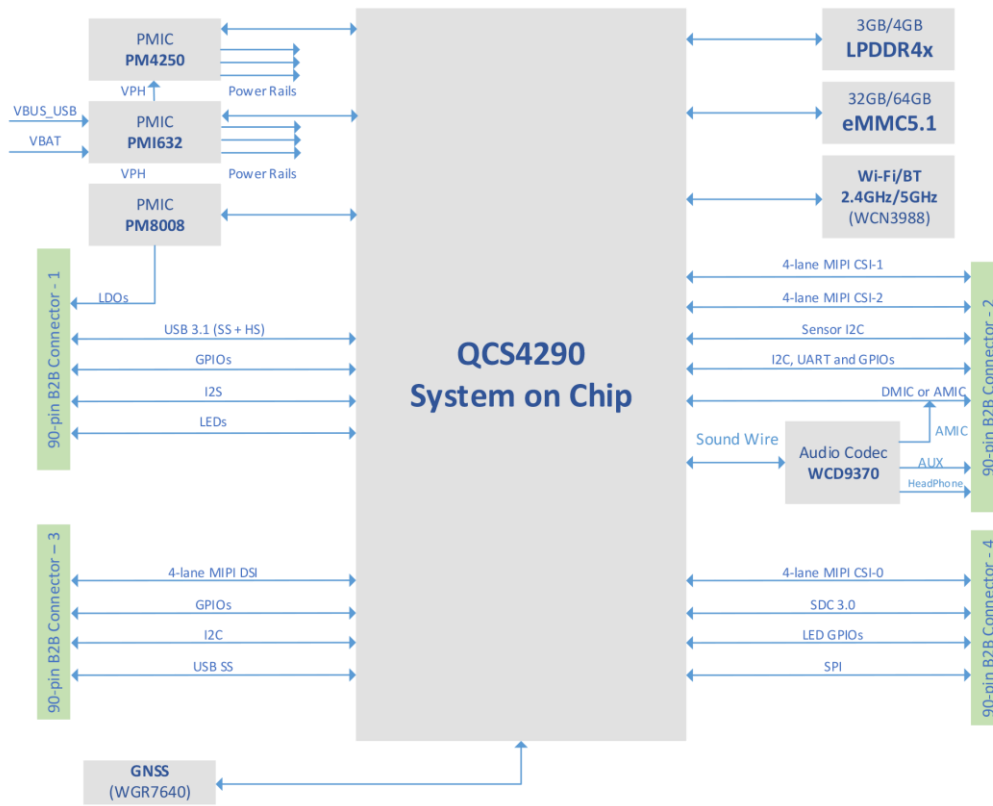
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ENRICHING LIVES  
THROUGH  
ENGINEERING  
EXCELLENCE



Aikri QCS4290 SoM	
Processors	Qualcomm® QCS4290 <ul style="list-style-type: none"> <li>64-bit Octa-core Kryo™ 260                             <ul style="list-style-type: none"> <li>Quad high-performance Gold cores at 2.0 GHz with 1 MB L2 cache</li> <li>Quad low-power Silver cores at 1.8 GHz with 512 KB L2 cache</li> </ul> </li> <li>Dedicated Hexagon™ Dual HVX compute DSP</li> <li>Integrated low- power island (LPI) DSP, shared between sensors and audio for always-on functionality</li> <li>Adreno™ 610 GPU at 950 MHz with 64-bit Addressing</li> <li>Spectra™ 340T ISP</li> </ul>
Memory	4GB LPDDR4x, 64GB eMMC
Wireless	<ul style="list-style-type: none"> <li>Qualcomm® Wi-Fi via WCN3988 WLAN 1 × 1 802.11ac; Bluetooth5.1 (1x UFL connector on SoM)</li> </ul>
Location	Standalone, GPS, GLONASS, BDS, NAVIC, QZSS, SBAS and GALILEO based on WGR7640 (1x UFL connector on SoM)
Display Interfaces	1x MIPI-DSI 4-lane - D-PHY 1.2 at 1.5 Gbps per lane; split link supported
Camera Interface	<ul style="list-style-type: none"> <li>3x MIPI-CSI 4-lane - D-PHY 1.2 at 2.5 Gbps per lane supported.</li> <li>3× ISP (13 MP + 13 MP or 25 MP + 5 MP) at 30 fps ZSL</li> </ul>
Audio Interfaces	<ul style="list-style-type: none"> <li>1x MI2S Port</li> <li>2x Tx and 2x Rx data lines SoundWire interface for PM4125 PMIC codec</li> <li>Stereo channel headset support from PM4125 PMIC codec</li> <li>1x SLIM bus port interface to WCN3950 BT audio</li> <li>Analog out (AUX_OUT) lines (1x pair) from PM4125 PMIC codec to RUN WSA8815 speaker amplifier.</li> </ul>
I/O Interfaces	<ul style="list-style-type: none"> <li>1x USB-C 3.1</li> <li>GPIOs, SPIs, I2Cs, I3C, UARTs; GPIO connections to sensor core DSP</li> </ul>
Operating Environment	<ul style="list-style-type: none"> <li>Input voltage: 3.6V</li> <li>Operating temperature: -30 to +85° C</li> </ul>
Mechanical Specification	<ul style="list-style-type: none"> <li>SoM: 58mm x 39mm x 4mm*/5.41mm# with 4x 90-pin board to board connectors</li> <li>*Stacking height #Standalone height</li> </ul>
Software and OS	<ul style="list-style-type: none"> <li>Android 12 Kernel 4.19</li> </ul>
Orderable Parts	<ul style="list-style-type: none"> <li>System On Module (SOM): Aikri-42X-90AS-4</li> <li>Development kit: Aikri-42X-90AD-4</li> <li>Camera interface card: EIC-DB-CAM-OVS (camera sensors not included)</li> </ul>