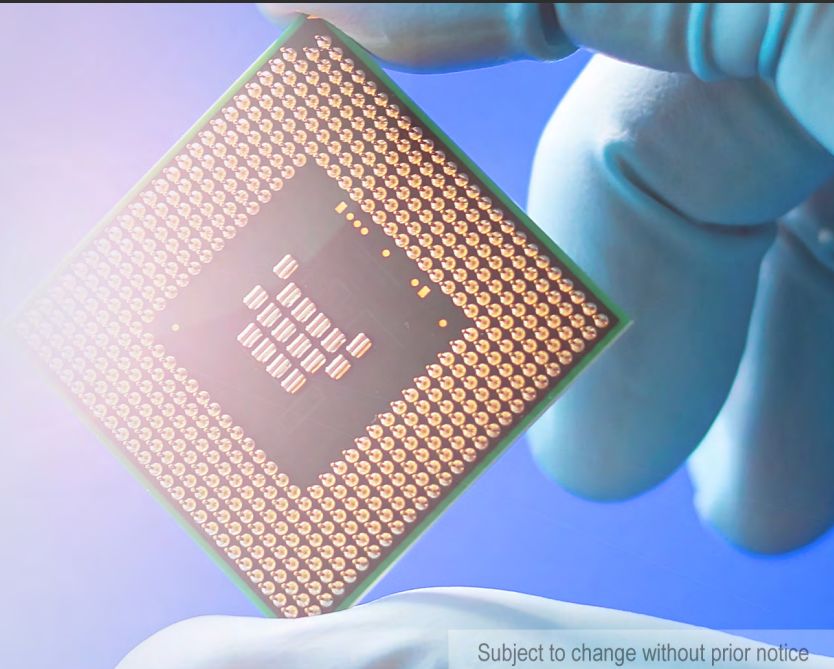


# Aikri QCS6490 System on Module (SoM)

Based on the Qualcomm® QCS6490 SoC



Subject to change without prior notice

## About eInfochips

eInfochips is product engineering services company offering technology consulting and product design services in multiple industry verticals like aerospace & defence, security and surveillance, medical and healthcare, industrial and home Automation, consumer electronics and more.

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 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

## eInfochips Aikri QCS6490 SoM

eInfochips Aikri QCS6490 SoM is based on Qualcomm® QCS6490 System on Chip and delivers greater performance, better graphics, and broader connectivity options.

QCS6490 integrates a 64-bit Octa-Core application processor at 2.7 GHz (Gold+), 2.4GHz (3 x Gold), 1.9GHz (4 x Silver) Qualcomm® Kryo™ 670 CPU, Qualcomm® Adreno™ GPU 643, Qualcomm® Hexagon™ DSP with Hexagon Vector eXtensions (HVX) and Hexagon Tensor Accelerator, and Qualcomm® Spectra™ ISP 570L image-processing engine for the ultimate photography experiences.

QCS6490 SoM supports Wi-Fi 6E and enhanced Bluetooth 5.0 which offers battery-saving and enhanced security for robust connections. QCS6490 SoM enables OEMs and engineers to evaluate performance of QCS6490 for their next-gen designs while minimizing design risk factors and reducing design cycle time with early time to market.

Transportation & Logistics

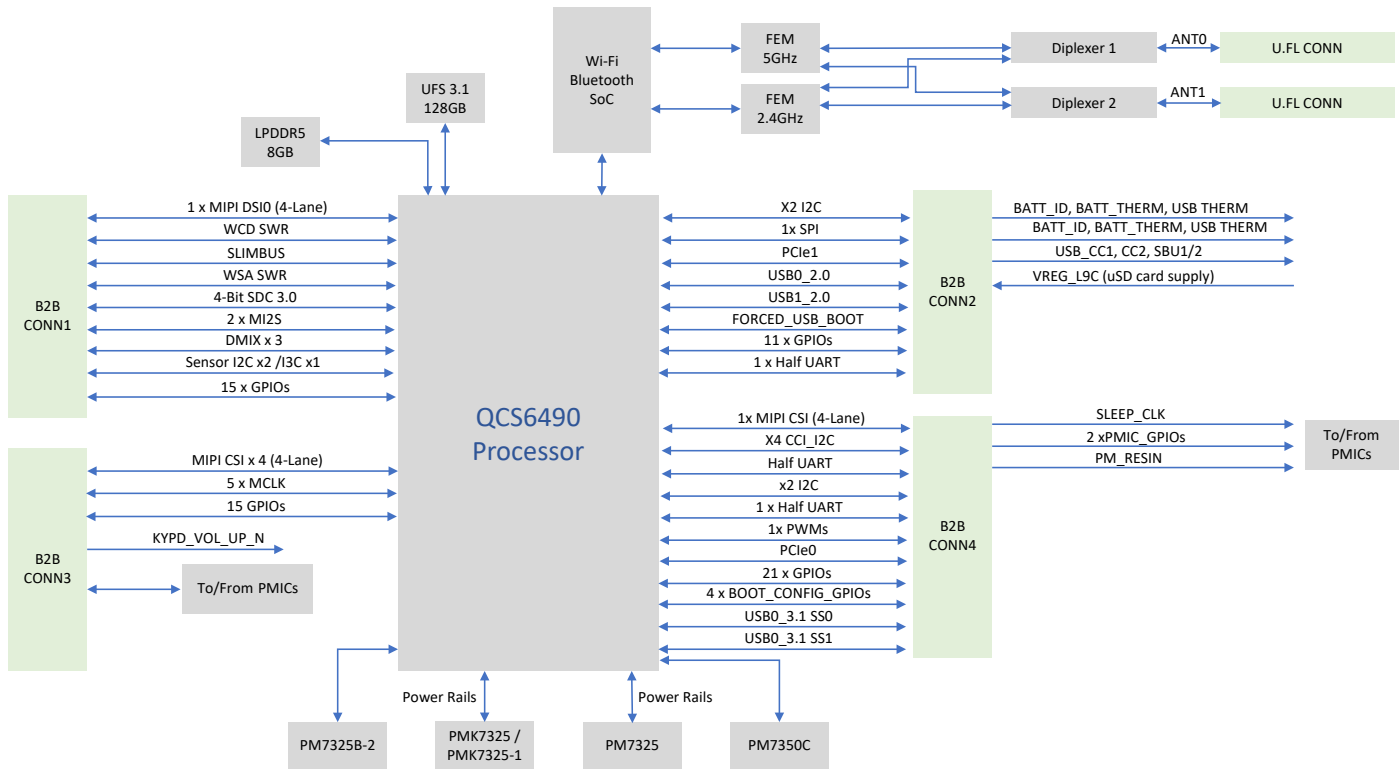
Smart Warehousing

Retail

Manufacturing

Healthcare

Ecommerce



Preliminary specification – subject to change

### Processor

- Qualcomm® QCS6490
- Octa-core Kryo™ CPU 670
- Quad high-performance Gold+ core at 2.7GHz
- Quad low power silver cores at 1.9GHz
- Qualcomm® Hexagon™ DSP with Hexagon Vector eXtensions (HVX) and Hexagon tensor Accelerator
- Qualcomm® Adreno™ (GPU 643) for better graphics performance and power efficiency
- Qualcomm Spectra™ ISP 570L image-processing engine for the ultimate photography and videography experiences
- Adreno 633 VPU for high-quality, ultra-HD video encode and decode
- Adreno DPU 1075 for on-device and external ultra HD display support

### Memory / Storage

- 8GB LPDDR5
- 128GB UFS

### Connectivity

#### Wi-Fi

- Qualcomm® Wi-Fi via WCN6856 802.11a/b/g/n/ac/ax

### Bluetooth

- Bluetooth 5.2/BLE

### PCIe

- 2x PCIe

### USB

- 1x USB 3.1

### Audio

- SWR, I2S, SLIMBUS

### MIC

- 3x DMIC

### Camera

- Spectra 570L ISP
- 5x 4-lane CSIs (4/4/4/4/4) D-PHY 1.2 or C-PHY 1.2

### Display

- 1x 4-lane DSI DSC1.2, D-PHY 1.2, or C-PHY 1.0
- FHD+, 10 bit DisplayPort, eight hardware layers, improved HDR10+
- Wide color Gamut, Qualcomm® Low-Power picture Enhancement display feature
- Qualcomm® True Palette display feature, VESA DSC 1.2

### Video

#### Encode:

- Up to 4K30 for H.264/H.265

#### Decode:

- Up to 4K60 for H.264/H.265/VP9

### Sensors

- SPI, I2C, I3C, GPIO connections to sensor core DSP

### Others

- USB 3.1; SDIO; I2S; UART, I2C, I3C, SPI
- GPIO

### Operating Environment

- Input Voltage: 3.7V
- Operating Temperature: -25 to +65 °C

### Mechanical Specification

- SOM: 65mm x 40mm

### Operating System

- Android 13.0# and Linux\*

### Orderable Part

- System On Module (SOM): Aikri-64X-90AS-8# and Aikri-64X-90LS-8\*
- Development kit: Aikri-64X-90AD-8

eInfochips, an Arrow company, is a leading global provider of product engineering and semiconductor design services. With over 500+ products developed and 40M deployments in 140 countries, eInfochips continues to fuel technological innovations in multiple verticals. The company's service offerings include digital transformation and connected IoT solutions across various cloud platforms, including AWS and Azure.

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