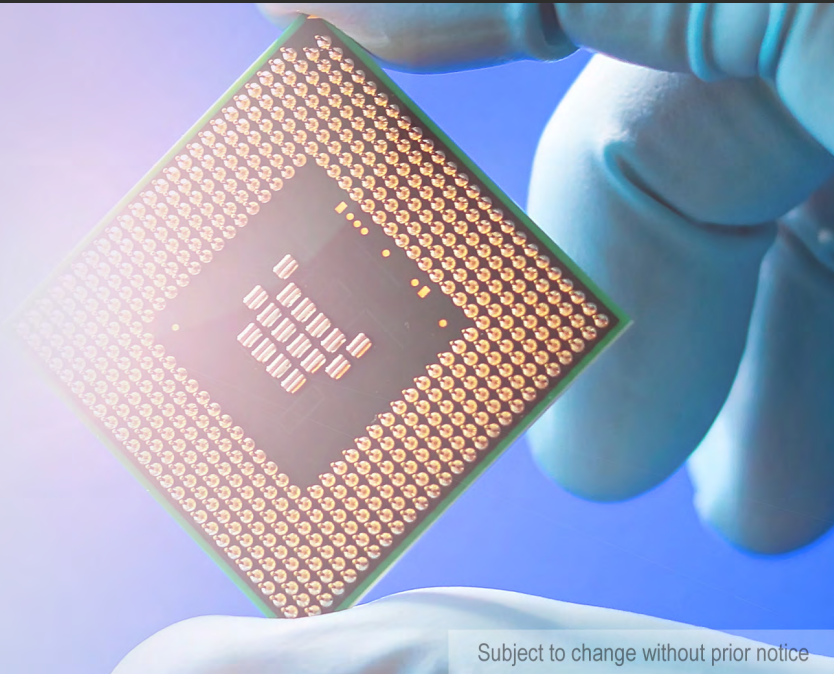


Aikri QCS4290 Development Kit

Based on the Qualcomm® QCS4290 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 & defense, 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 QCS4290 Dev Kit

eInfochips Aikri QCS4290 development kit is based on Qualcomm® QCS4290 System on Chip and delivers greater performance, better graphics, and broader connectivity options.

QCS4290 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), Qualcomm® Hexagon™ DSP, Qualcomm® Adreno™ 610 GPU, and Qualcomm® Spectra™ 340T image signal processor. It supports Wi-Fi 5 and enhanced Bluetooth 5.1 which offers battery-saving and enhanced security for robust connections.

QCS4290 development kit enables OEMs and engineers to evaluate performance of QCS4290 for their next-gen designs while minimizing design risk factors and reducing design cycle time with early time to market.

Surveillance Cameras

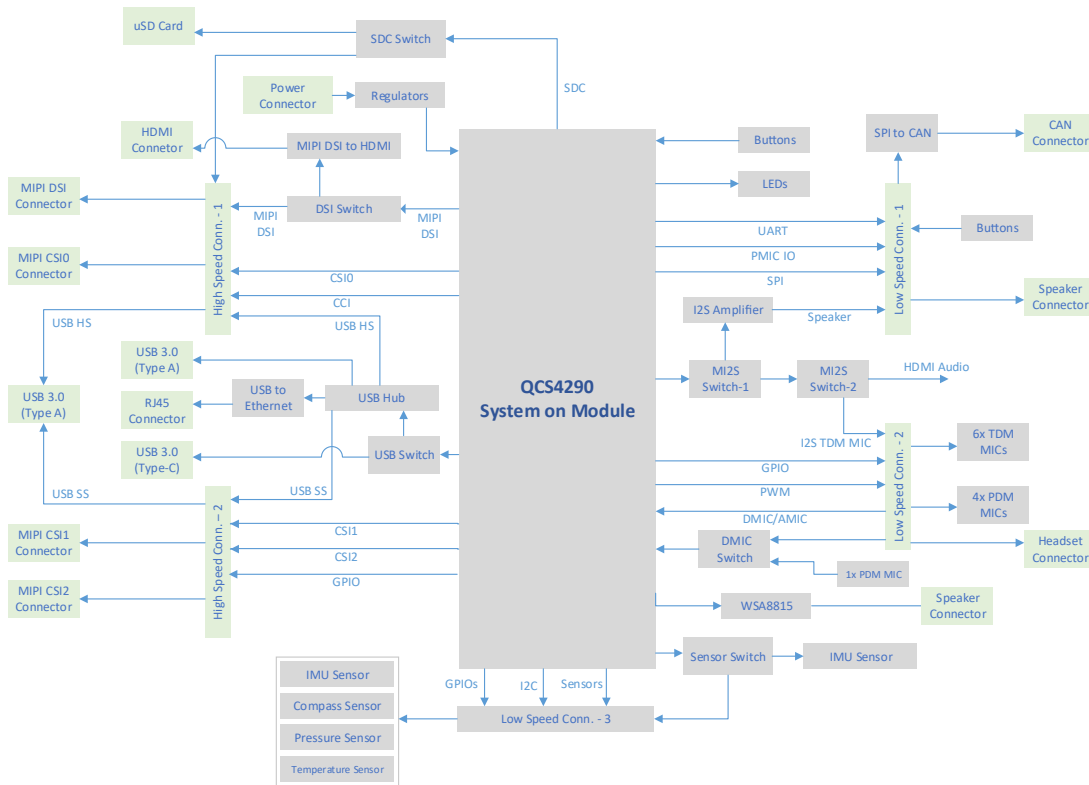
Robotics

Industrial Handhelds

Telehealth / Medical Devices

Digital Signage / HMI

Security Panels



Preliminary specification – subject to change

System on Module (SoM)

eInfochips Aikri-42X-90AS based on Qualcomm® QCS4290

CARRIER BOARD

Display Interfaces

- HDMI™ display up to 1080p@60
- DSI to HDMI LT9611UXC bridge chip - video and audio

Sensor Interface

- 1x IMU sensor

Audio Interfaces

- 1x PDM DMIC
- Mono speaker amplifier (WSA8815)
- Stereo I2S amplifiers
- HDMI - audio out

I/O Interfaces

- 1x USB 3.1 Type-C
- 1x USB 3.0 Type-A ports
- 1x MicroSD Card
- 1x 10/100/1000 Mbps Ethernet Port via USB 3.0 to Ethernet
- 1x MicroUSB for Console
- 6x User LEDs

Others

- High-speed and low-speed expansion headers (for connecting Mezzanine Board)

MEZZANINE BOARD

Display Interfaces

- 1x MIPI-DSI 4-lane
- 1080p@60 LCD with touch - with LCD backlight control

Camera Interface

- 3x 4-lane CSIs (4/4/4, 4/4/2/1)
- D-PHY 2.5 Gbps/lane

Audio Interfaces

- 4x PDM MICs
- 6x TDM MICs
- 1x Headset Jack
- 2x I2S Speaker connectors

Sensor Interface

- 1x IMU sensor
- 1x Compass sensor
- 1x Pressure sensor
- 1x Temperature sensor

I/O Interfaces

- 1x USB 3.0 Type-A
- GPIOs (low speed expansion connector)
- Battery connector
- 1x CAN (SPI to CAN)

Operating Environment

- Input voltage: 12V
- Operating temperature: -20 to +60° C

Mechanical Specification

- Carrier board: 85mm x 54mm, 96board CE specification dimensions with headers
- Mezzanine board: 85mm x 54mm, 96board CE specification dimensions with headers

Operating System

- Android 12, Kernel 4.19

Kit Contents

- 1x Aikri-42X-90AS SoM
- 1x Carrier board
- 1x Mezzanine board
- 1x Quick start guide

Orderable Part

- Development kit: Aikri-42X-90AD

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.

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.