



# Aikri QRB4210 Display Development Kit

Based on the Qualcomm® QRB4210 SoC



# **About elnfochips**

elnfochips 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 4210 Display Dev Kit

The Aikri 4210 display dev kit is powered by Qualcomm® QRB4210 based Aikri System on Module. This SoM integrates 64-bit Octa-Core Qualcomm® Kryo™ 260 application processor, Hexagon™ DSP with dual HVX, Adreno™ 610 GPU, and Spectra™ 340T image signal processor.

The Aikri 4210 SoM, coupled with 1x1 802.11ac WiFi, Bluetooth 5.1, full featured USB-C interfaces with HD display capability and high-fidelity audio, enables OEMs and engineers to create next-gen designs with the shortest turnaround time, while minimizing design risk factors.

The Aikri 4210 display dev kit supports rendering of dual concurrent FHD+ displays with 10-bit end-to-end, and Qualcomm® True Palette Display feature, that works behind the scenes and enhances your display's appearance through an intelligent color adjustment and gamut-mapping system to make colors look vibrant and true to life. This system can also be completely powered from battery power.

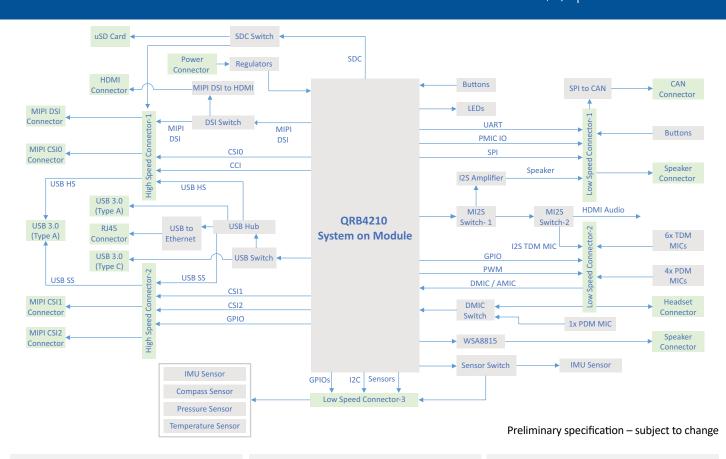
Robotics

Industrial Handhelds

Telehealth / Medical Devices

Digital Signage / HMI





## System on Module (SoM)

eInfochips <u>Aikri-42X-10LS-3</u> based on Qualcomm® QRB4210

## **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 Nominal
- 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**

• Linux, Yocto Dunfell, Kernel 5.4

## **Kit Contents**

- 1x Aikri-42X-10LS-3 SoM
- 1x carrier board
- 1x Mezzanine board
- 1x quick start guide

## **Orderable Part**

Development kit: <u>Aikri-42X-10LD-3-1</u>

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