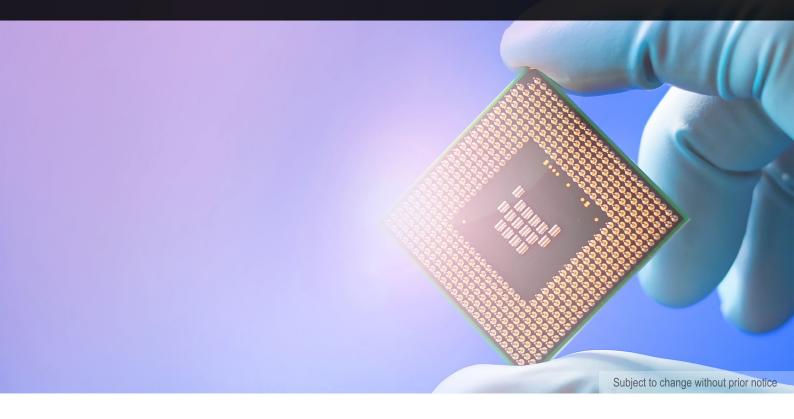
# **QCS610 Development Kit**



## Based on the Qualcomm® QCS610 SoC



## **About elnfochips**

eInfochips is product engineering services company offering technology consulting and product design services in multiple industry verticals like aerospace and 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

- 25+ years of experience in system design
- 2300+ professionals for HW and SW design
- 30+ B\$ corporations as customers
- 7 design centres in USA and India
- 500+ products across applications
- 200+ designs on Android and Linux
- ISO 9001 and CMMi L3 compliant processes

## eInfochips QCS610 Development Kit

eInfochips QCS610 Development Kit is based on powerful Qualcomm® QCS610 Octa-core SoC. The kit is a combination of Qualcomm® QCS610 based SoM and a carrier board. The kit comes with a pre-built Linux BSP that can help in early prototyping and parallel software development.

QCS610 development kit an ideal platform to kick start development and testing of devices for various solutions listed besides. It offers faster time to market to original equipment manufacturers (OEMs), hardware/software vendors and developers.

With 50+ Qualcomm based designs, eInfochips also offers turnkey engineering services based on QCS610 as per customer specific requirements with optimizations in software BSP performance.

**Enterprise Security Cameras** 

**IP Cameras** 

**Dash Cam and Body Cam** 

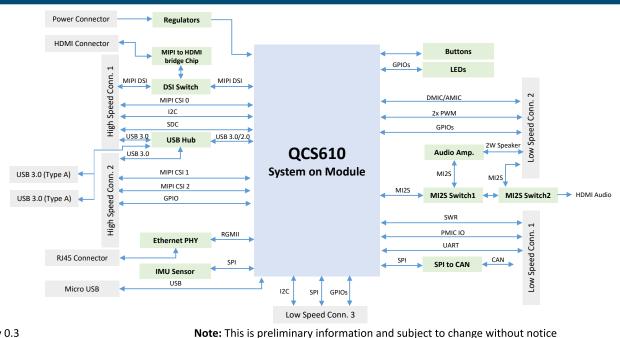
**Audio/Video Collaboration** 

Home/Industrial **Automation** 

**Tele-diagnostics** 

Smart Display, Videoconferencing

**Industrial IoT** 



Datasheet Rev 0.3

## Processor

- Qualcomm® QCS610
- 64-Bit Octa-core Kryo™ 460
- Hexagon™ DSP with dual HVX
- Adreno™ 612 GPU
- Spectra™ 230 Dual 14-bit ISP

#### Memory / Storage

- 2GB\*\* / 4GB# LPDDR4x (Max Support 8GB)
- ■16GB eMMC 5.1

#### **Connectivity**

#### Wi-Fi:

- Qualcomm® Wi-Fi via WCN3980 802.11a/b/g/n/ac 2.4/5.0 GHz
- U.FL Antenna via carrier board

#### Bluetooth:

Support BT 5.0 + HS and backward compatible

## USB

1x Type-C USB 3.1 (USB 3.1 & USB 2.0 capable)

#### Sensors

IMU (Accelerometer + Gyro-meter) On Main board

#### **GPS**

- SDR660G
- GPS (Tested)
- GLONASS, BeiDou, Galileo (Not tested)

#### Camera

- 3x 4-Lane MIPI CSI D-PHY or 3x 3-Trio MIPI CSI C-PHY
- 1x MIPI CSIO and CSI1 on HS connector-1
- 2x MIPI CSI2 on HS connector-2

#### Audio

- Qualcomm® WCD9341 audio codec
- 1x Headset headphone output
- 3x Digital MIC Input
- 3x Analog MIC input
- Codec Support: MP3; AAC; HE AAC v1, v2

#### **Display**

- 1x 4-Lane MIPI DSI DPHY
- Up to FHD+ resolution support
- 1x MIPI DSIO on HS connector-1
- 1x HDMI via MIPI DSI to HDMI bridge
- Color depth 30-bit pp; TFT, LTPS, CSTN

#### Video

#### **Encode:**

- H.264 BP/MP/HP, VP8, HEVC Main Codec Support
- Video encode up to 3840  $\times$  2160 at 30 fps or 4096  $\times$  2160 at 24 fps

#### Decode:

- H.264 BP/MP/HP, MPEG-2 MP, VP8, VP9, HEVC Main Codec Support
- Video decode up to 3840 × 2160 at 30 fps or 4096 × 2160 at 24 fps

#### **Others**

- 1x UART
- SPI/I2C/UART/I2S/ and GPIOs via HS and LS connectors
- 1x Power LED
- 5x User LED
- 1x Gigabit Ethernet
- 1x SDC 3.0

#### Mechanical specification

■ 85 mm x 54 mm

#### **Power Specification**

 Power supply input: 12V/5A input from 12V AC Power Adapter

#### **Operating System**

Qualcomm Linux Development Platform

#### **Kit Contents**

- Main board with QCS610 SoM
- Set-up Guide

#### **Orderable Part Numbers**

## Parts with 2GB\*\* Memory:

- Development Kit: EIC-QCS610-210
- SoM: EIC-QCS610-200

#### Parts with 4GB# Memory:

- Development Kit: EIC-QCS610-215
- SoM: EIC-QCS610-205

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