

# Eragon 660 SBC | Development Kit



Based on the Qualcomm® Snapdragon™ 660 Processor (SDA 660)



# eragon

660

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 and defense, security and surveillance, medical and healthcare, industrial and home Automation, consumer electronics and more.

eInfochips is a Qualcomm Snapdragon Technology Partner (STP) offering turnkey product designs on multiple Snapdragon SoCs and have enabled global customers with Qualcomm based product designs.

## Engineering Highlights

- 20+** Years of experience in system design
- 1700+** Engineering professionals
- 10** Design centers spread across USA & India
- 500+** Product designs
- 35+** Product designs on Qualcomm
- 15M+** Product deployments across globe
- ISO 9001 and CMMi L3** compliant processes

## eInfochips Eragon 660

Eragon 660 is a Single board computer (SBC) based on Qualcomm® Snapdragon™ 660 (SDA 660) System on Chip (SoC) and offers Qualcomm® Artificial Intelligence Engine (AIE), Qualcomm Spectra™ ISP, Qualcomm® Kryo™ CPU built on ARM Cortex technology, and Qualcomm® Hexagon™ DSP with Hexagon Vector eXtensions (HVX) for the first time in the 600 tier. Eragon 660 suits best for intensive compute applications with low power consumption. The SBC can be further customized by eInfochips to match specific customer requirements.

Eragon 660 Development Kit is the combination of SBC and expansion board that enables OEMs and engineers to evaluate performance of Snapdragon 660 for their product designs and helps them to accelerate their time to market.

3D Gaming

AR / VR

4K Cameras

Artificial Intelligence

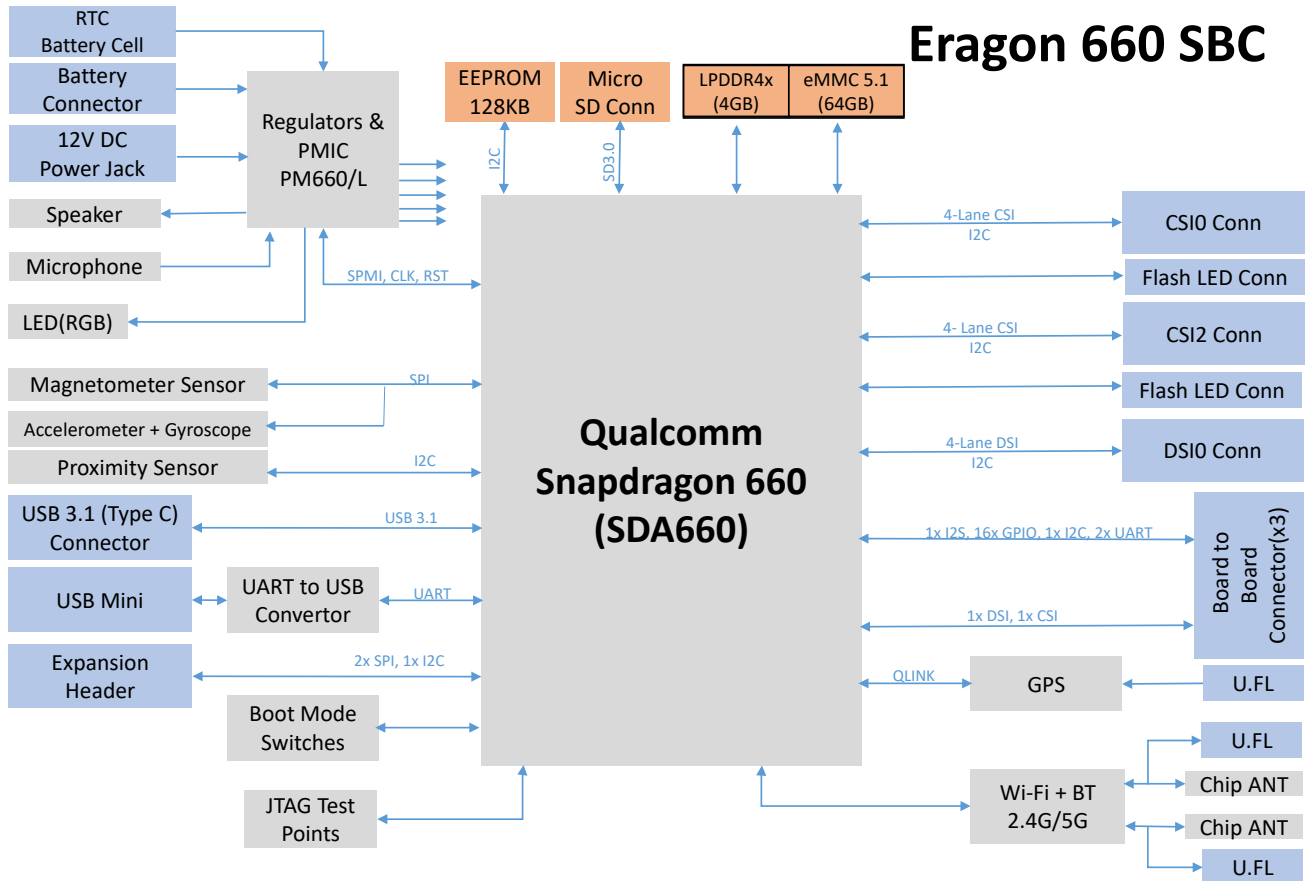
Human Machine Interface

Medical Imaging

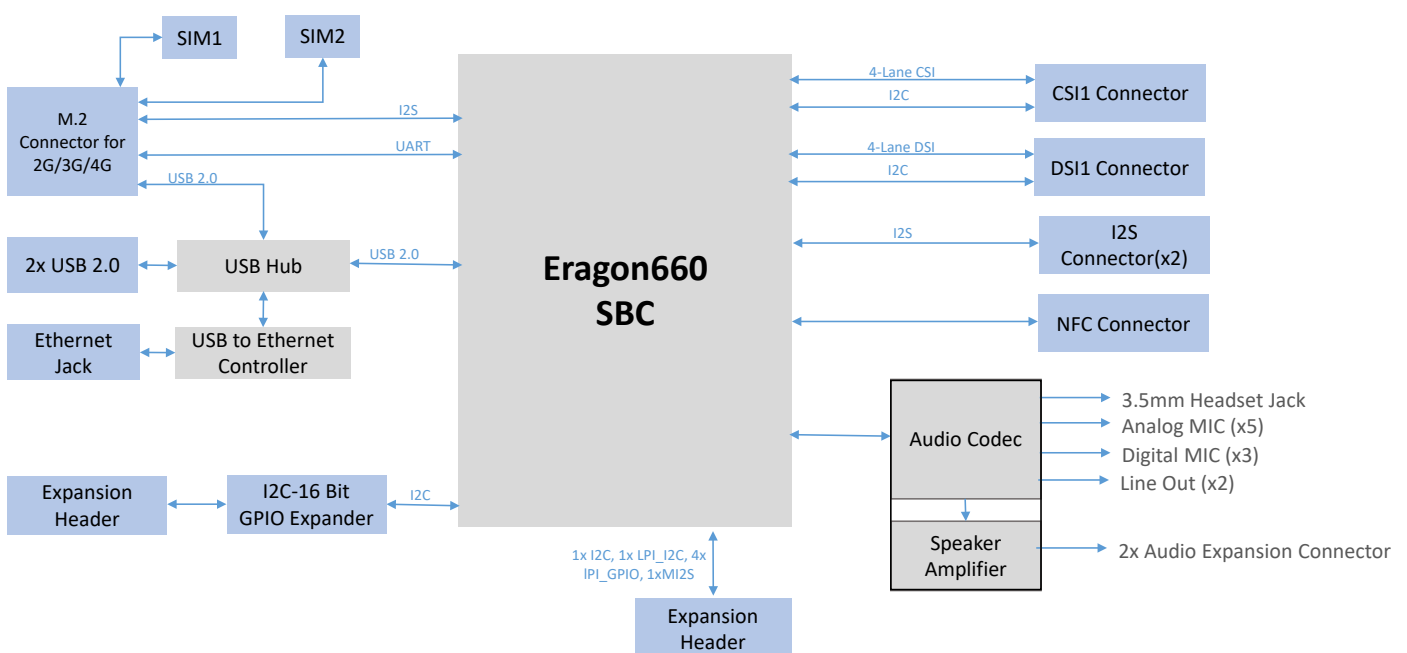
Machine Vision

Video Conferencing Systems

## Eragon 660 SBC



## Eragon 660 Development Kit





Datasheet Rev 1.0

### Processor

- Qualcomm® Snapdragon 660 (SDA660)
- Power Management IC with Battery Support

### Memory and Storage

- 4GB LPDDR4X Non-PoP Memory, 64GB eMMC 5.1 (eMCP)
- MicroSD

### Connectivity

#### Wi-Fi

- Qualcomm® Wi-Fi 802.11a/b/g/n/ac 2.4/5Ghz
- Antenna – U.FL connectors on SBC; Chip Antenna on SBC with 2x2 MIMO (Default)

#### Bluetooth

- Bluetooth 5.1 (Classic and BLE)

#### Location

- GPS (GNSS, GLONASS, BeiDou)
- U.FL connector on SBC

- Optional M.2 Based 4G LTE Module Support

### USB

- 1x USB 3.1 Gen 1 (Type C)
- 2x USB 2.0 via USB 2.0 Hub (on Expansion Board)
- 1x Ethernet (10/100 Mbps) via USB 2.0 Hub (on Expansion Board)

### Audio (Built-in or Discrete (default))

- Built-in Audio Codec Support (PMIC)
  - 2x Analog MIC
  - 1x Speaker
- Discrete Qualcomm® Audio Codec Support (on Expansion Board)
  - 2x Speaker Interface Outputs
  - 5x Analog Mics
  - 3x Digital Mics
  - 1x 3.5mm Audio Jack with MIC

### Camera

- 3x 4-lane MIPI-CSI Ports (2x Simultaneous support)
- Support for up to 21MP Image Sensor

### Display

- 2x 4-lane MIPI-DSI
- eInfochips Display Adapter Card Support (1080p)
- 2560 × 1600 @ 60 fps, 1080p @ 30 fps Miracast
- 4K@30fps Display Port (DP) 10-bit (External dual MIPI-DSI to DP required)

### Video

#### Encode

- Supported Formats: H.265 (HEVC), H.264, VP8, MPEG4
- Supported Resolution: 3840x2160 (4K) @ 30 fps (H.264, H.265), 1080p @ 120 fps (H.264, H.265, VP8)

#### Decode

- Supported formats: 10-bit H.265 (HEVC), 8-bit H.264, H.265, VP8, and VP9
- Supported Resolution: 3840x2160 (4K) @ 60 fps (H.264, H.265)

### Sensors

- 1x Accelerometer and Gyroscope
- 1x Magnetometer
- 1x Ambient Light & Proximity Sensor

### Others

- 1x UART, 2x SPI, 2x I2C, 16x GPIO. 1x MI2S provided on header
- 1x JTAG Interface for Debug
- 1x 4K HDMI Input Support via a HDMI to CSI add-on board
- 1x DSI to HDMI 1.4b (1080p30) Adapter Card

### Power specification

- Power supply input: 12V/5A input from 12V DC Power Adapter (included in kit)
- Optional - Battery Support - 3.7V Li-Po Battery

### Mechanical specification

- SBC - 85mm x 54mm
- Expansion Board - 114mm x 160mm

### Temperature Specification

- Operating Temperature Range: -30°C to +85°C

### Operating System

- Android 8.1

### Kit Contents

- 1x Single Board Computer (SBC) based on Snapdragon 660
- 1x IO Expansion Board
- 1x LCD (MIPI-DSI, 1080p)
- 1x Audio Board (Using Qualcomm WCD9335 Audio Codec)
- 1x Base Plate
- 1x Power Adapter
- 1x Ethernet Cable
- 1x USB Cable
- 1x Quick Start Guide

### Add-on Accessories

- Camera Card

### Orderable Part

- SBC:** EIC-Q660-500
- Development Kit:** EIC-Q660-510

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