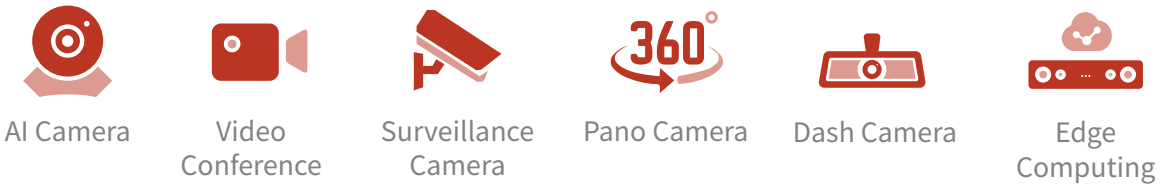


TURBOX C610/C410 SOM

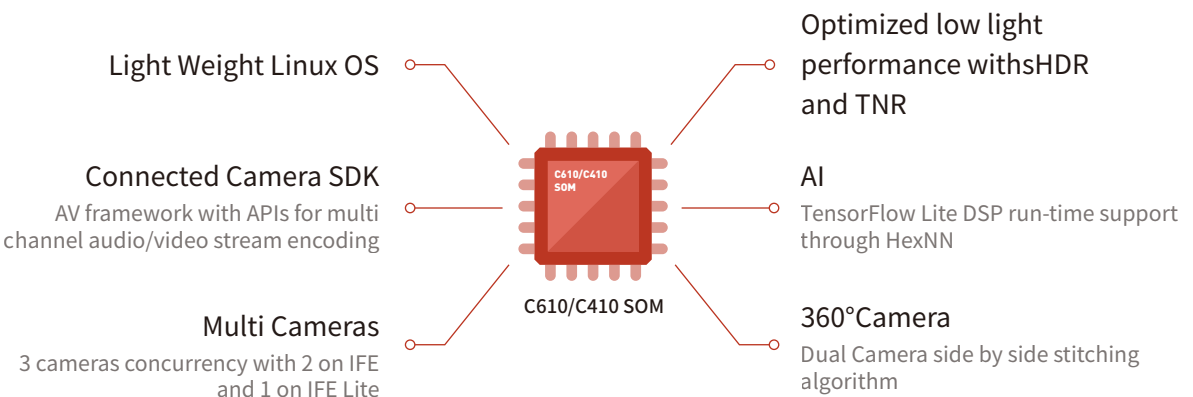
An intelligent vision platform with powerful image processing and machine learning for Smart Camera products

The C610/C410 SOM is based on the Qualcomm QCS610/410 SoC with a powerful combination of superior camera and video processing capability, outstanding Audio processing solutions and onboard Artificial Intelligence(AI) Engine. It is a cost-effective platform to serve a variety of IoT devices including action , VR/360, home security, enterprise security and wearable cameras.

Applications



Features



Specifications

Category	Description
Platform	C610: 2x K4G (Enyo) 2.2 GHz + 6x K4S (A55) 1.8 GHz, 1MB L3 cache C410: 2x K4G (Enyo) 2.2 GHz + 2x K4S (A55) 1.8 GHz, 1MB L3 cache
GPU	Qualcomm® Adreno™ GPU 608 with 64-bit addressing; 845 MHz
DSP	Hexagon™ DSP with dual Qualcomm® Hexagon™ Vector eXtensions (HVX), 1.1 GHz
Memory	C610: Discrete: LPDDR4x 2GB + eMMC 16GB C410: Discrete: LPDDR4x 1GB + eMMC 4GB
Connectivity	WCN3980: WLAN 1 × 1 802.11a/b/g/n/ac and Bluetooth 5.0
Encode	C610: 4K@30 8-bit: HEVC C410: 1080p@90 8-bit: HEVC
Decode	C610: 4K@30 10-bit: HEVC C410: 1080p@90 10-bit: HEVC
Display Interfaces	1 x MIPI-DSI 4-lane, 1080p@60, up to 10 hardware layers; DisplayPort
Camera Interfaces	Dual ISP support; three 4-lane CSIs (4/4/4 or 4/4/2/1); D-PHY 2.1Gbps/lane; C-PHY 5.7Gbps/lane
Other Interfaces	2 x Slimbus; 1 x USB 3.1; 1 x USB 2.0; 1 x SDIO; 4 x I2S; 14QUPs; 1 x RGMII; 120 x GPIO
Operating Environment	Operation Temperature: -20°C ~ 70°C Operation Humidity: 5%-95%, non-condensing
Dimension	38mm x 38mm
OS Support	Linux, Android

Dev Kit

Camera (Accessories)

- IMX577 * 2 (210°supper fish-eye Lens, for PanoCamera)
- IMX415 * 1 (HFOV 120°, for Video Conference Camera)
- IMX347 * 1 (HFOV 90°, for Surveillance Camera)

Display

- HDMI In
- HDMI Out
- MIPI Display

Peripheral

- Ethernet * 2
- USB 3.1 and USB 2.0
- SD Card
- Expansion Connector: Uart, SPI, I2C, I2S, PWM

Audio

- Microphone * 6
- Speaker connector, Line in, Line out

Power

- POE
- 3 pin Battery connector(3rd for temperature sensor)

