Shown with optional LCD / touch panel

Open-Q™ 2100 Development Kit

Based on the Qualcomm® Snapdragon™ 2100 processor

Intrinsyc's Open-Q™ 2100 Development Kit is an open frame platform powered by our ultra-compact, production ready Open-Q™ 2100 SOM. The SOM is based on the Snapdragon™ Wear 2100 (APQ8009W) processor which is 30% smaller and 25% more power efficient than the previous generation Snapdragon™ wearable processor. Our wearables development kit is an ideal starting point for your product development of ultra-compact or wearable devices, embedded and IoT edge devices, or voice recognition products.

Key Features

- Qualcomm® Snapdragon™ 2100 SoC
- Powered by ultra-compact (31.5x15mm) Open-Q 2100 SOM
- Wi-Fi 802.11b/g/n 2.4GHz + BT 4.2
- Nano-ITX Form factor Carrier Board 120mm x 120mm
- Exposed I/O for evaluation and proof of concept work
- Android 7 for Wearables

Open-Q 2100 SOM

Hardware Specifications

Open-Q™ 2100 SOM

*See the Open-Q 2100 SOM datasheet for complete details

Processor	Qualcomm® Snapdragon™ 2100 (APQ8009W) Quad-Core ARM Cortex A7 (32-bit) at 1.094GHz, Qualcomm® Adreno™ 304 GPU, Low power sensor core DSP
Memory/Storage	512MB LPDDR3 RAM, 4GB eMMC Flash
Wireless	Wi-Fi 802.11b/g/n (WCN3620) w/ U.FL ant. connector Bluetooth 4.2 + BLE
Location Services	Qualcomm® Gen 8C GNSS (WGR7640) with U.FL antenna connector

Open-Q 2100 Carrier Board

Display Interfaces	HDMI Type-A output via DSI -> HDMI bridge on carrier board — up to 720p 4 lane MIPI DSI interface for optional external LCD/touch panel
Camera Interface	2-lane MIPI CSI camera interface to support up to 8MP, compatible with optional camera accessory board

Audio Interfaces	Integrated Codec on SOM with the following interfaces on carrier board:
	    3.5mm headset jack
	    Audio expansion header with 1x speaker output, 1x earpiece output, and 3x mic inputs

I/O Interfaces	1x USB client micro-B (for programming and ADB) and USB hub with 4x USB Type-A host ports + Ethernet 1x debug UART via USB micro-B microSD card socket, SPI, I2C, I2S, GPIO
Input Voltage	Input voltage: 12V from included power adapter or single-cell lithium-ion battery (not included)
Form Factor	Nano-ITX form factor carrier board 120mm x 120mm SOM size: 31.5mm x 15mm

Software

OS Support	Android™ 7 for Wearables Note that all hardware features may not be supported by all SW — see latest SW release notes for details.

Optional Display & Camera

Purchasing Information

Open-Q 2100 Dev Kit	Part number: QC-DB-J00003	Store Link
Open-Q 2100 SOM	Part number: QC-DB-J00004	Store Link
Open-Q 2100 LCD	Part number: QC-DB-J00005	Store Link
Open-Q 13MP Camera	Part number: 030-0181-0101_B	Store Link

Intrinsyc Product Design Services

Intrinsyc also offers comprehensive product development including hardware, software, mechanical engineering, as well as specialty services such as camera, audio, DSP, and RF development. Contact Intrinsyc to discuss your product design needs today: sales@intrinsyc.com

Development Kit includes: Carrier board, SOM, 12V power supply, HDMI cable, Quick Start Guide, access to full documentation, SW updates, and basic development kit support.