

Open-Q™ 2100 System on Module

Based on the Qualcomm® Snapdragon™ Wear 2100 platform

Intrinsyc's Open-Q™ 2100 SOM (System on Module) is an ultra-compact production and wearable ready Snapdragon™ Wear 2100 SOM. Our SOM is 31.5mm x 15mm — 3/4 of the size of a quarter. The Snapdragon™ Wear 2100 (APQ8009W) is 30% smaller and 25% more power efficient than the previous generation Snapdragon™ wearable processor. Use our class leading wearable SOM to fast track your ultra-compact or wearable product development.

Key Features

- Qualcomm® Snapdragon™ 2100 SoC (APQ8009W)
- 512MB LPDDR3 and 4GB eMMC combo PoP memory
- Wi-Fi 802.11b/g/n 2.4GHz + Bluetooth 4.2
- Qualcomm® Izat™ Gen 8C GNSS location services
- Power efficient and Wearable ready
- Ultra-compact 31.5mm x 15mm
- Android™ 7 for Wearables

Applications

- Connected Wearables
- Ultra-compact embedded devices
- Tethered Smartwatches
- Fitness Trackers
- Contactless devices



Hardware Specifications

Processor	Qualcomm® Snapdragon™ Wear 2100 (APQ8009W) Quad-Core 64-bit ARM Cortex A7 1.094GHz Qualcomm® Adreno™ 304 GPU DSP for low power sensor core
Memory/Storage	512MB LPDDR3 RAM, 4GB eMMC Flash
Wireless	Wi-Fi 802.11b/g/n 2.4GHz (WCN3620) w/ U.FL ant. connector Bluetooth 4.2 + BLE
Location Services	Qualcomm® Gen 8C Location Suite supporting GPS, Beidou, and GLONASS or GPS, Beidou, and Galileo WGR7640 GNSS receiver with U.FL antenna connector supporting active antennas
LCD/Touchscreen Interface	1x 4 lane MIPI DSI display port, up to 720p 60fps Optimized for wearables
Camera Interface	1x 2-lane MIPI CSI camera port support to 8MP
Video Performance	Video encode up to 720p at 30fps H.264 (AVC) Video Playback 1080p at 30 fps H.264 (AVC) and H.265 (HEVC)
Audio Interfaces	Integrated audio codec (PM8916-1) 1x mono speaker output 1x earpiece output 1x headset — stereo output + 1 mic input 3x microphone inputs
Power/Battery Management	Power management and battery charging solution on SOM Qualcomm® PMI8916-1
I/O Interfaces	USB 2.0, I2S, I2C, GPIO, SDIO, Sensor core I/O
Operating Environment	Input voltage: 3.6V to 4.2V Operating Temperature: -25°C to +85°C Tc (based on component case temperature specifications)
Form Factor	31.5mm x 15mm with 2x 100 pin board to board connectors

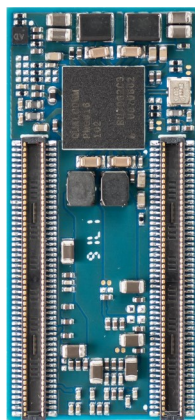
Software

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.
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Purchasing Information

Open-Q 2100 SOM Part number: QC-DB-J00004 [Store Link](#)

Alternate SOM configurations available by special order (minimum order quantities apply) - e.g. different memory size, etc. Contact sales to discuss your specific needs today: sales@intrinsyc.com



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