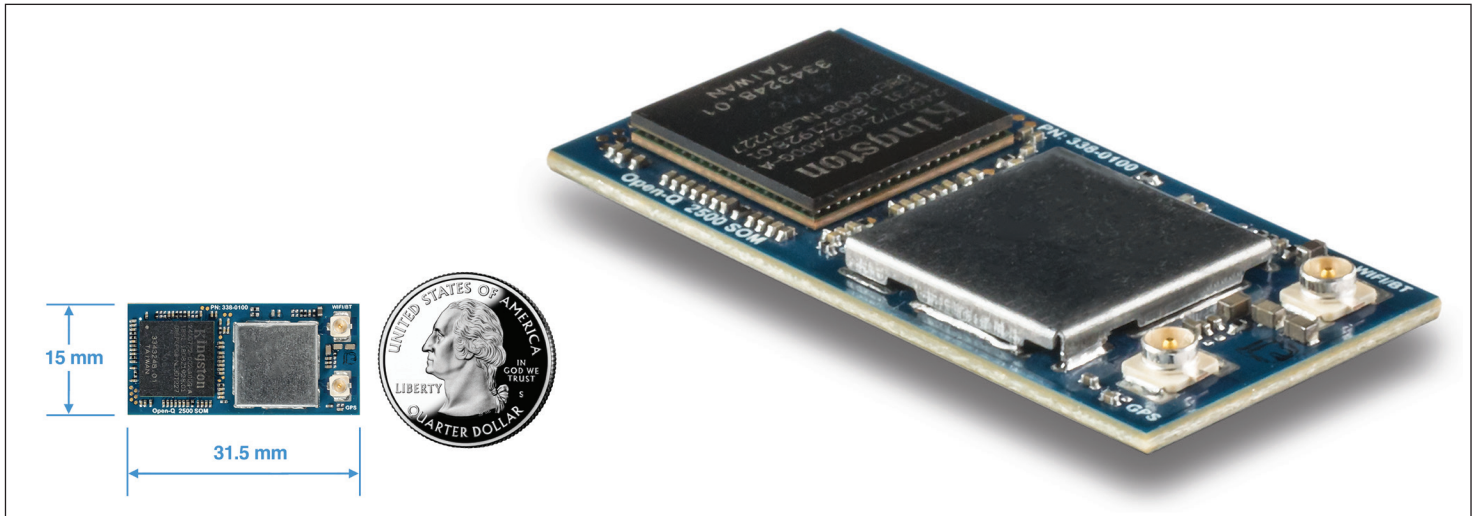


Open-Q™ 2500 SOM (System on Module)

Based on the Qualcomm® Snapdragon Wear™ SDW2500 platform



Lantronix's Open-Q™ 2500 SOM combines critical elements for wearable device innovation and performance: high performance, small size, low power, integrated sensor support, and seamless connectivity. The SOM is designed to meet the needs across a range of Android™ based wearable devices including pet, children, and elderly trackers, high-end fitness trackers, smartwatches, connected headsets, smart eyewear, and more. An integrated, ultra-low power sensor hub supports rich algorithms with superior accuracy, and to help extend battery life for wearables, the Snapdragon Wear™ 2500 platform incorporates a new wearable PMIC, which supports reduced power consumption both on standby and when active.

Key Features

- High Performance Quad-Core ARM Cortex A7
- DSP for low power sensor processing
- Qualcomm® Wi-Fi/BT 802.11b/g/n + BT 4.x
- Qualcomm® Gen 8C GNSS location system
- Camera 2-lane MIPI CSI up to 8MP
- Long battery life with new wearables specific PMIC
- USB Type-C to support Qualcomm® Quick Charge

Applications

- Connected wearables
- Pet, children, elderly trackers
- Fitness trackers
- Connected headsets
- Smart eyewear
- Ultra-compact embedded devices

Engineering Services:

We provide a full solution – our unparalleled engineering expertise and product development skills deliver innovative products that are cost-effective and can jumpstart your Go-to-Market timeline.

Our business model offers turnkey product development services, or we can augment your team in specific areas of development. The choice is yours.

Key development expertise in:

- Camera development and tuning
- Voice control
- Machine learning
- Mechanical & RF design
- Thermal & power optimization

IoT Product Development made easy



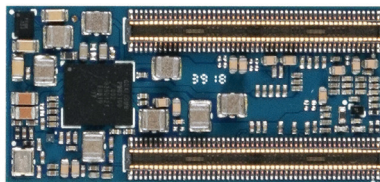
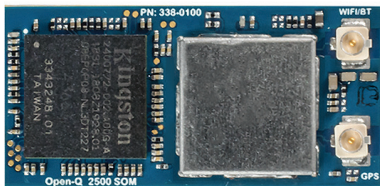
Lantronix Open-Q™ 2500 SOM

Hardware Specifications:

Open-Q™ 2500 SOM	
• Processor	Snapdragon Wear™ 2500 (APQ8009W) optimized for wearables Quad-Core ARM Cortex A7 (32-bit) at 1.094GHz Qualcomm® Adreno™ 304 GPU DSP for low power sensor core
• Memory/Storage	PoP memory: 1GB LPDDR3 RAM, 8GB eMMC Flash
• Wireless	Wi-Fi 802.11b/g/n (WCN3620) w/ U.FL ant. connector Bluetooth 4.x
• Location Services	Gen 8C GNSS (WGR7640) with U.FL connector
• Display Interface	4-lane MIPI DSI, up to 720p at 60fps optimized for wearables
• Camera Interface	2-lane MIPI CSI supports up to 8MP camera
• Audio Interfaces	2x I2S interfaces + DMIC input for digital audio peripherals
• Power/Battery Management	Power management and battery charging on SOM with Quickcharge capability via USB Type-C (PMW3100 power management chip)
• USB Interface	USB2 with Type-C interface for quick-charge capability
• General I/O	GPIO, BLSP, Sensor I/O, SDIO
• Sensor Support	Snapdragon sensor core DSP Interface
• 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	Size: 31.5mm x 15mm with 2x 100 pin board to board connectors

Software:

• OS Support	Android™ 8 for Wearables *Note that all hardware features may not be supported by all SW versions — see latest SW release notes for details
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Purchasing Information:

• Open-Q™ 2500 SOM	PN: QC-DB-J10004
• Open-Q™ 2500 Dev Kit	PN: QC-DB-J10003

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.

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Certifications



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