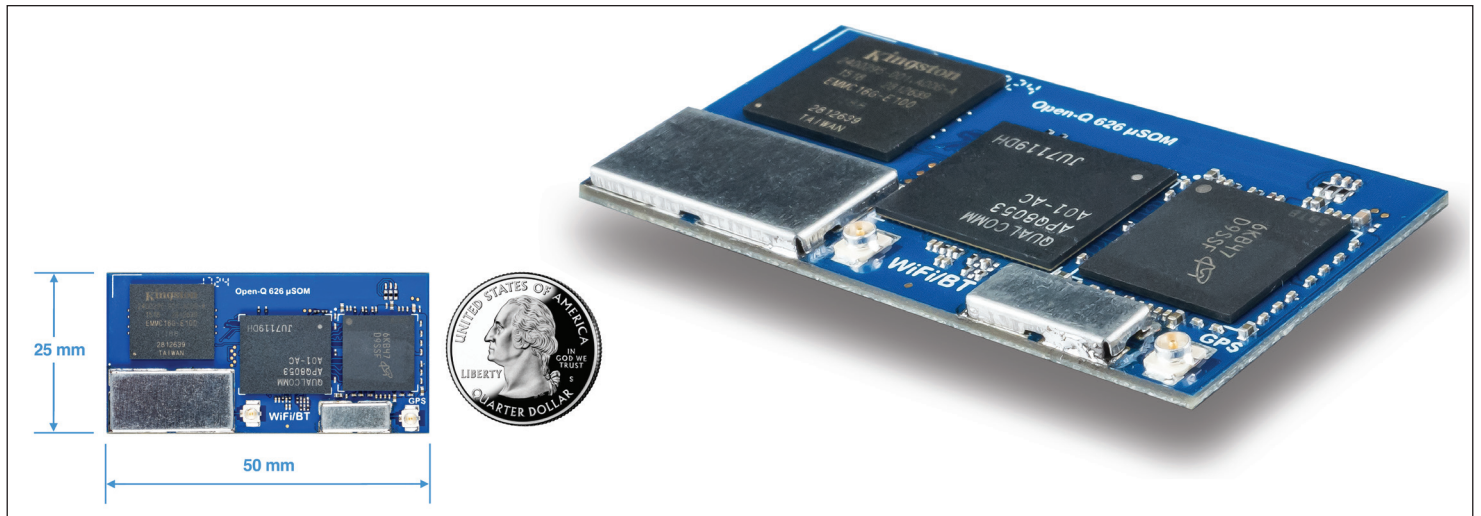


Open-Q™ 626 μ SOM (micro System on Module)

Based on the Qualcomm® APQ8053-Pro SoC



Lantronix's Open-Q™ 626 μ SOM is an ultra-compact (50mm x25mm) production-ready, pre-certified, SOM that is ideal for powering next-generation connected cameras, and other IoT devices. The feature-rich SOM with its advanced processor technology supports premium 4K video with HEVC capture and playback for optimal balance of quality and bandwidth. It offers professional camera features, including — improved dynamic range, enhanced autofocus performance and computational photography. The SOM offers battery-efficient enhancements to audio, video, and computer vision use cases, PC-class graphics with support for advanced APIs and Hardware Tessellation and enables new always-on use cases at reduced power levels and cost.

Key Features

- Qualcomm® APQ8053-Pro SoC
- Pre-certified (FCC/IC) Wi-Fi/BT
- Camera ready
- 2GB LPDDR3 and 16GB eMMC
- Ultra-compact 50mm x 25mm
- Android™ 9, Android™ 10, Yocto Linux®

Applications

- Wearable cam / Action cam / 360 degree cam
- Smart home / IP cam / Security cam
- Industrial machine vision camera
- Stereo-vision camera
- Retail analytics camera
- Robotics / drones

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

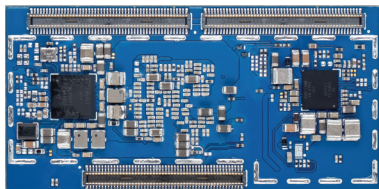
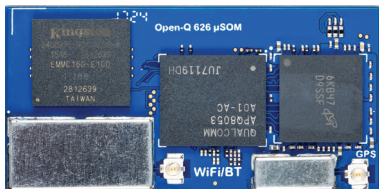
Lantronix Open-Q™ 626 μSOM

Hardware Specifications:

Open-Q™ 626 μSOM	
• Processor	Qualcomm® APQ8053-Pro built on 14nm technology Octa-Core 64-bit ARM Cortex A53 2.2GHz Qualcomm® Adreno™ 506 GPU OpenGL ES 3.1, OpenCL 2.0 Full, DirectX 12, GPU Tessellation, Geometry Shading Qualcomm® Hexagon™ 546 DSP
• Memory/Storage	2GB LPDDR3 RAM, 16GB eMMC Flash
• Wireless	Pre-certified (FCC/IC) Wi-Fi 802.11a/b/g/n/ac 2.4/5Ghz (WCN3680B) with 5Ghz external PA & U.FL antenna connector Bluetooth 4.2 + BLE
• Location Services	GPS, GLONASS, Compass (WGR7640) with U.FL antenna connector
• LCD/Touchscreen Interface	2x 4-lane MIPI DSI LCD up to 1080P Full HD 60fps
• Camera Interface	Up to 24MP with 3x 4-lane MIPI CSI and dual ISPs (additional software may be required)
• Video	Video Capture up to 4K Ultra HD at 30fps Video Playback 4K Ultra HD H.264 (AVC) and H.265 (HEVC)
• Audio	Integrated audio codec (PM8953) 1x Stereo headphone 1x mono speaker, 1x mono earpiece output 3x mic inputs, 1x stereo digital mic input Additional Audio I/O: 2x I2S buses Qualcomm™ Flurance™ HD with Noise Cancellation (optional)
• Power/Battery Management	Power management and battery charging (PM18952)
• I/O	1x USB3.0 Type-C, multiple BLSP ports (GPIO, UART, SPI, I2C buses), Haptics output, 4-bit SDIO, LED driver outputs
• 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	50mm x 25mm with 3x 100 pin board to board connectors

Software:

• OS Support	Android™ 10, Android™ 9, Android™ 8, Android™ 7, OpenEmbedded Yocto Linux® *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™ 626 μSOM	PN: QC-DB-M00004
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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.

Contact Information:

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Certifications



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