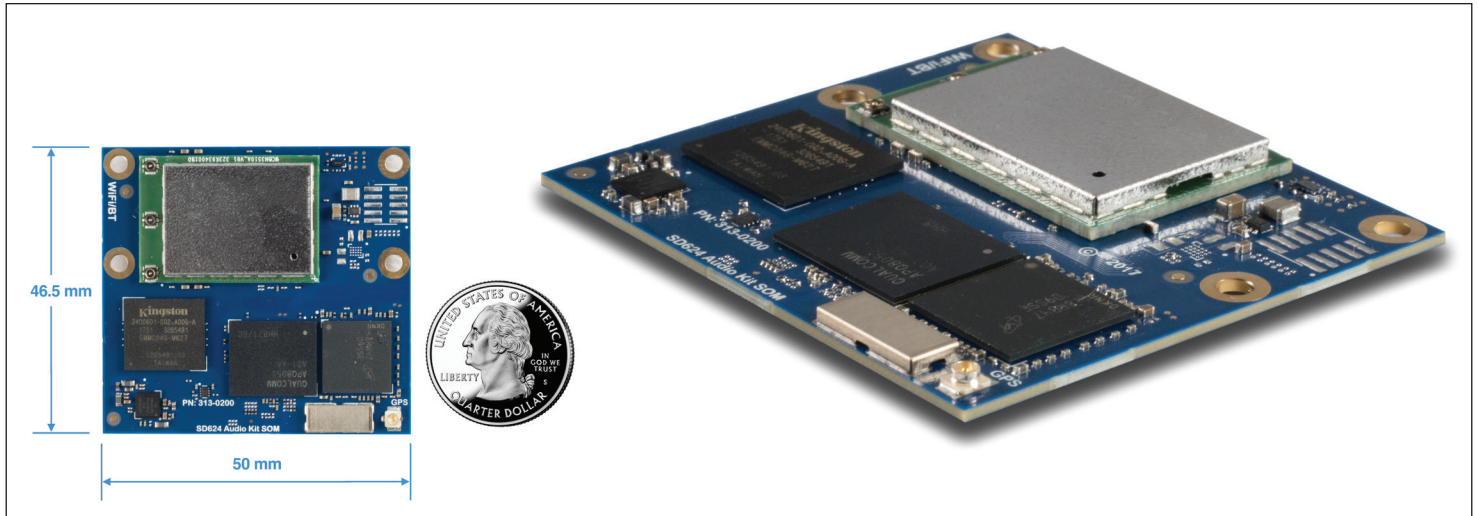


Open-Q™ 624A SOM (System on Module)

Based on the Qualcomm® APQ8053-Lite SoC



Lantronix's Open-Q™ 624A SOM is a feature-rich, production ready module based on the APQ8053-Lite SoC from Qualcomm® Technologies, Inc. The SOM's small form factor, high-end Wi-Fi/BT and extensive peripheral I/O make it ideal for devices that require cloud connectivity and edge compute capabilities. Its multimedia, HD video camera, and touch display capabilities, along with extensive audio features, make it a perfect solution for creating next-gen home hub products requiring tasks such as video conferencing, remote video monitoring, movie and video streaming.

Key Features

- Octa-Core 64-bit ARM Cortex A53 1.8GHz
- Pre-certified high performance Wi-Fi/BT module
- Qualcomm Hi-Fi audio codec for multi-mic solutions
- Hi-Def video playback and LCD support
- Android™ 8 Oreo™

Applications

- Audio/video home hubs
- Smart home control center
- Video conferencing products
- Streaming video/audio devices
- Smart connected cameras

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.



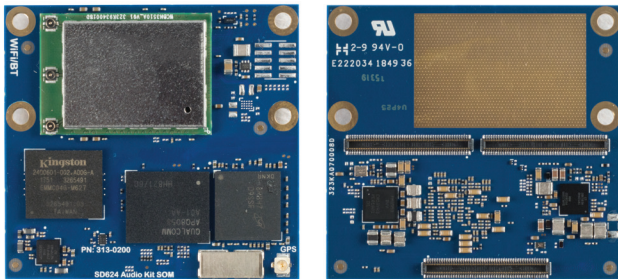
Lantronix Open-Q™ 624A SOM

Hardware Specifications:

Open-Q™ 624A SOM	
• Processor	Qualcomm® APQ8053-Lite built on 14nm technology Octa-Core 64-bit ARM Cortex A53 1.8GHz 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, 32GB eMMC Flash (16GB & 4GB flash memory sizes available by special order)
• Wireless	Pre-certified Wi-Fi/BT module - 802.11a/b/g/n/ac, 2x2 MU-MIMO, 2.4/5Ghz, Bluetooth 4.2 + BLE (QCA9379-3) 3x MHF4 antenna connectors - 2 for Wi-Fi, 1 separate for BT
• Location Services	GPS, GLONASS, Compass (WGR7640) w/ U.FL antenna connector
• LCD/Touchscreen Interface	1x 4-lane MIPI DSI display interface Supports LCD up to 1080P Full HD 60fps
• Camera Interface	Up to 21MP with 2x 4-lane MIPI CSI camera interfaces and dual ISPs
• Video	Video Capture up to 1080p at 90fps, Video Playback up to 1080p at 90fps, H.264 (AVC) and H.265 (HEVC)
• Audio Interfaces	I2S interface for external audio devices 2x digital mic inputs directly to processor
• Audio Codec	Qualcomm® Hi-Fi audio codec on SOM (WCD9335) with 1x headset interface 4x analog microphone inputs 1x stereo line outputs 4x digital mic inputs
• Power/Battery Management	Qualcomm power management and battery charging solution (PM8953/PM18952)
• I/O	1x USB3.0 Type-C, multiple BLSP ports (GPIO, UART, SPI, I2C buses), debug UART
• Operating Environment	Power input: 3.6V to 4.2V Operating Temperature: 0°C to +50°C
• Form Factor	Carrier board connection: 3x 100 pin board-to-board connectors Size: 50mm x 46.5mm with four mounting holes for secure mounting and effective thermal solutions

Software:

• OS Support	Android™ 8 Oreo™ *Note that all hardware features may not be supported by all SW – see latest SW release notes for details
---------------------	---



Purchasing Information:

• Open-Q 624A SOM	PN: QC-DB-M10032
--------------------------	------------------

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.

Certifications



© 2023 Lantronix, Inc. All rights reserved. Lantronix is a registered trademark of Lantronix, Inc. in the U.S. and other countries. Open-Q is a trademark of Lantronix, Inc. Qualcomm APQ8053, Qualcomm Adreno, and Qualcomm Hexagon are products of Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm, Adreno, and Hexagon are trademarks of Qualcomm Incorporated, registered in the United States and other countries. All other trademarks are the property of their respective owners. Specifications subject to change without notice. Not all features listed may be supported in software. MPB-00092. Rev B

Learn more at lantronix.com/open-q-624-som