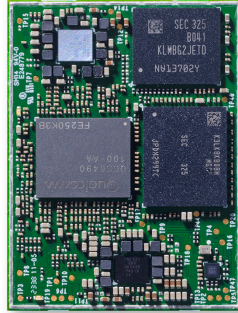


Open-Q™ 5430CS FP2.5 SiP (System in Package)

Based on Qualcomm® QCS5430 System-on-Chip with Android 13 OS



Minimal Development for Scalable AI Solutions

The Open-Q 5430CS provide flexible and effective AI/ML performance, low power consumption, and cost efficiency for edge device applications such as video telematics, video collaboration, industrial handhelds, and AI cameras. The Open-Q 5430CS is based on Qualcomm's QCS5430 chipset. The customers can select between pre-set feature packs according to your product needs today or wait and easily upgrade over the air (OTA) in the future via software to unlock even greater performance.

With the release of the pin-compatible Open-Q 5430CS and Open-Q 6490CS, Lantronix offers our customers product choices that allow them to scale their product line with less investment and save time.

Lantronix offers TAA and NDAA compliant products with at least 10 years for the Open-Q 5430CS, Open-Q 6490CS, Open-Q 5165RB, Open-Q 8250CS, and Open-Q 8550CS with strict Bill-of-Material and quality control. Combined with over 20 years of hardware design and software development experience, and 1200+ successful projects, Lantronix will be your long-term partner, ensuring the ongoing success of your product journey.

Key Features

- Qualcomm® 5430 FP2.5
- Up to 4GB LPDDR5 RAM + 32GB eMMC
- Support UFS and NVMe storage
- Android™ 13
- On-device AI Engine up to 6 TOPS
- Dedicated Computer Vision Engine
- Multiple MIPI camera and display ports
- Multiple high speed connectivity options

Applications

- IP Cameras
- Multi-camera and smart camera systems
- Video telematics
- Video conferencing
- Retail self-check-out
- Digital signage
- 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.



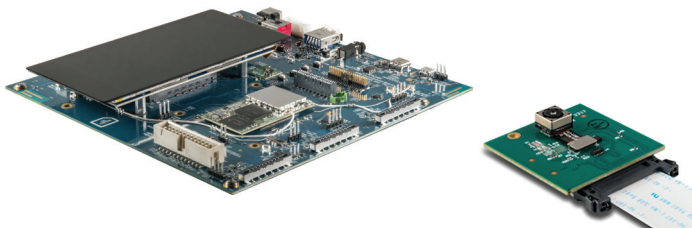
Hardware Specifications:

• Processors	Qualcomm® 5430 SoC built on 6nm technology: FP2.5: Kryo™ 670 Octa-core CPU: 1 Prime @2.4GHz + 3 Gold @ 2.4 GHz + 4 Silver @ 1.8 GHz Hexagon™ 770 with Hexagon Vector eXtensions (HVX)	
	Adreno™ 643L GPU @ Fmax Spectra Spectra™ 570L ISP Adreno™ 633 video processing unit	Adreno™ 1075 display processing unit 6th Gen Qualcomm AI engine Secure processing unit
• Memory/Storage	4GB LPDDR5 @ 3200MHz, and 32GB eMMC; Supports external UFS and NVMe storages	
• Wireless	Supports external Wi-Fi via PCIe 1-lane, up to Wi-Fi 6E, 2x2 MU-MIMO + Bluetooth 5.2	
• Display Interfaces	1x 4-lane MIPI DSI D-PHY 1.2, up to FHD+ touchscreen support Support for USB3.1 Type-C with DisplayPort v1.4 and USB 2.0	
• Camera Interfaces	4x 4-lane MIPI CSI D-PHY 1.2 or C-PHY 1.2 with CCI I2C control	Spectra 570L ISP supporting 36 MP + 22 MP at 30 fps or three 22 MP at 30fps ZSL. 2x IFE, 2x IFE-lite, 4 concurrent MIPI CSI configurable in 4 + 4 + 4 + 4 configuration.
• Video Performance	Decode	Video decode up to 4K60. Native decode for H.265/H.265/VP9
	Encode	Video encode up to 4K30. Native encode for H.265/H.265; Support for HDR10 and HDR10+ playback
	Dec & Enc	Concurrent 1080K60 Decode and 1080K60 Encode or 4K30 Decode and 4K30 Encode
• Audio	Support interfaces to WCD938x/WCD937x high fidelity audio codec and WSA883x speaker amp on carrier board. Hexagon™ audio DSP V66M	
• High Speed Connectivity	1x PCIe Gen3 2-lane; 1x PCIe Gen3 1-lane for connectivity 1x USB 3.1 with support for Type-C + DisplayPort v1.4 with USB SS data concurrency 1x USB 2.0	
• I/O Interfaces	4-bit SD 3.0, UART, I2C, I3C, SPI, configurable GPIOs, sensor I/O to dedicated Hexagon™ sensor DSP	
• Power/Battery	Power management on SiP	
• Operating Environment	Input voltage: 3.8V nominal Operating Temperature: Commercial and industrial temperatures available	
• Form Factor	47 x 35 x 2.72 mm LGA	

Software:

• OS Support	Android™ 13
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*QCS5430 Chipset Performance, see SOM/SiP Release Notes for details on tested configurations and platforms.



Companion Development Kit, display and camera accessories available separately

Purchasing Information:

QC-SIP-5430CS-A	Open-Q 5430 FP1, 4GB LPDDR5, 16GB eMMC
QC-SIP-5430CS-B	Open-Q 5430 FP2.5, 4GB LPDDR5, 32GB eMMC
QC-DK-5430-LA	Open-Q 54300 development kit bundle; Main board, 1x IMX577 camera, 1x OV9282 camera, power supply, and USB debug cable. Android OS

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

Certifications

