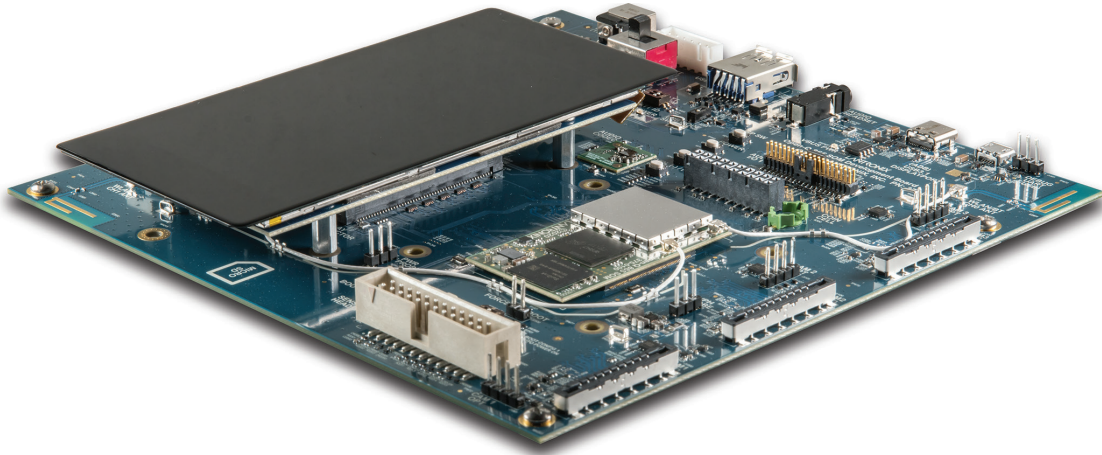


Open-Q™ 865XR SOM Development Kit

Based on the Qualcomm® Dragonwing™ SXR2130P processor

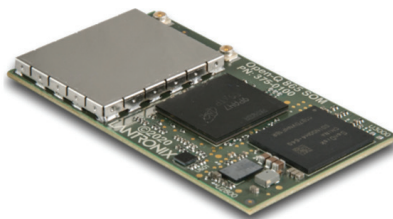


The Open-Q™ 865XR SOM Development Kit is a versatile, easy-to-use, exposed board platform, powered by our ultra-compact, production-ready, Open-Q™ 865XR SOM. The SOM utilizes Qualcomm® Technologies' heterogenous compute expertise to offer a System-on-Chip with multiple specialized processing cores for powerful AI processing, image and graphics processing, and audio processing.

The development kit provides the ideal starting point for evaluating the Open-Q™ 865XR SOM or developing next generation embedded and IoT devices. The platform consists of Lantronix's Open-Q™ 865XR SOM, an open-frame carrier board exposing all the available I/O, and a range of accessories to fast track your product development.

Key Features

- Powered by micro-sized (50x29mm) Open-Q 865XR SOM
- Open-frame Mini-ITX Form-factor carrier board for evaluation and development
- Numerous I/O and connectivity options
- Optional LCD/touchscreen and cameras
- Wi-Fi and Bluetooth antennas on carrier board
- Android™ 10



Open-Q™ 865XR SOM

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:

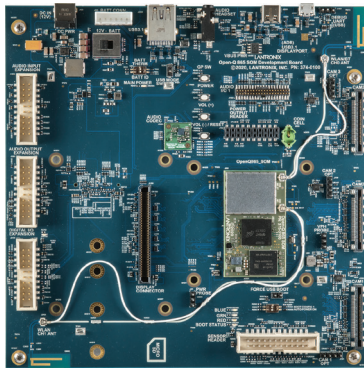
- Camera development and tuning
- Voice control
- Machine learning
- Mechanical & RF design
- Thermal & power optimization

IoT product development made easy.

Lantronix Open-Q™ 865XR SOM Development Kit

Hardware Specifications:

Open-Q™ 865XR SOM		*See the Open-Q 865XR SOM product brief for complete details
• Processors	Qualcomm® Dragonwing™ SXR2130P built on 7nm technology: Kryo™ 585 Octa-core CPU, Hexagon™ DSP, Adreno™ 650 GPU, Spectra™ 480 ISP, Adreno 665 VPU	
• Memory/Storage	6GB LPDDR5 SDRAM at 2750MHz, 64GB UFS Flash Storage	
• Wireless	802.11ax 2x2 MU-MIMO + Bluetooth 5.1, Bluetooth Milan ready	
• Power Management	Qualcomm® power management and battery charging on SOM	
Open-Q™ 865XR SOM Carrier Board		
• Display Interfaces	DisplayPort v1.4 on USB Type-C, at 8.1 Gbps/lane, with USB3 and USB2 data concurrency 2x 4 lane MIPI DSI connector for optional LCD / Touch panel accessory or custom display adapters	
• Camera Interfaces	3x 4-lane MIPI CSI with connectors to mate to optional camera accessories	
• Audio Interfaces	Qualcomm® WCD9385 Hi-Fi audio codec module on carrier board, with 3.5mm headset jack (stereo out + mic in) Additional audio expansion: Analog out header, Analog in header, digital I/O header (SoundWire/DMIC/MI2S/PDM)	
• I/O Interfaces	2 USB ports: 1x USB3.1 Type-C + DisplayPort, 1x USB 3.1 Type-A host 1x PCIe Gen3 2-lane M.2 socket, microSD card socket Debug UART with serial USB I/O expansion headers for sensor board, UART, I2C, SPI, configurable GPIOs	
• Wireless	Dual Wi-Fi/BT PCB antennas on carrier board	
• Power Input	Input: 12V/3A (adapter included) or single-cell Li-Ion battery (not included)	
• Form Factor	SOM: 50mm x 29mm, Carrier Board: Mini-ITX 170mm x 170mm	
Software:		
• OS Support	Android™ 10 — Note that all hardware features may not be supported by SW.	



Optional Display and Camera

Purchasing Information:

Description	P/N
• Open-Q™ 865XR SOM Dev Kit Open-Q 865XR Dev Kit with 865XR SOM (8GB/128GB). Bundle includes camera, display and power supply.	LOQ-865-EVK
• Open-Q™ 865XR SOM (6+64GB)	QC-DB-U10004
• Open-Q™ 865XR SOM (8+128GB)	QC-DB-U10004A
• Open-Q™ LCD	QC-DB-G00005
• Open-Q™ IMX258 Camera	QC-DB-U10006