

# Open-Q™ 626 µSOM Development Kit

Based on the Qualcomm<sup>®</sup> Snapdragon<sup>™</sup> 626 processor

Intrinsyc's Open-Q<sup>TM</sup> 626  $\mu$ SOM Development Kit is a cost-effective, feature rich, camera tuned, exposed board platform powered by our Open-Q<sup>TM</sup> 626  $\mu$ SOM (micro System on Module) that is based on the Qualcomm Snapdragon<sup>TM</sup> 626 processor (APQ8053Pro).

The Development Kit is ideal for evaluation of the Open-Q 626  $\mu$ SOM as well as jump-starting development of connected camera devices or other high performance embedded and IoT products. The Dev Kit supports our optional LCD or 1080p HDMI out, 4K Ultra HD H.264/H.265 encode and decode, up to 24MP cameras, mic inputs and stereo outputs.

## **Key Features**

- Qualcomm<sup>®</sup> Snapdragon<sup>™</sup> 626 processor (APQ8053Pro)
- Powered by micro-sized (50x25mm) Open-Q 626 μSOM
- Mini-ITX Form-factor Carrier Board (170x170mm)
- HDMI output, USB Type-C, 3 camera connectors
- Exposed I/O for evaluation and proof of concept work
- Android<sup>™</sup> 10, Android<sup>™</sup> 9, Yocto Linux<sup>®</sup>









#### **Hardware Specifications**

Open-Q 626 μS	*See the Open-Q 626 µSOM datasheet for complete details		
Processor	Qualcomm® Snapdragon™ 626 (APQ8053Pro) build on 14nm technology Octa-Core 64-bit ARM® Cortex™ A53 2.2GHz, Qualcomm® Adreno™ 506 GPU, Qualcomm® Hexagon™ DSP		
Memory/Storage	2GB LPDDR3 RAM, 16GB eMMC Flash		
Wireless	Pre-certified (FCC/IC) Wi-Fi 802.11b/g/n/ac 2.4/5Ghz (WCN3680B), Bluetooth 4.2 + BLE		
Location Services	GPS, GLONASS and Compass Receiver (WGR7640) with U.FL antenna connector		
Open-Q 626 Caı	rier Board		
Display	HDMI Output or optional LCD / Touch Panel Up to 1080p Full HD LCD 60fps Up to 1080p HDMI Type A Output		
Camera	Up to 24MP with 3x 4-lane MIPI CSI and dual ISPs		
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) with 1x Stereo headset jack including mic Additional Audio I/O Headers: 1x mono speaker, 1x mono earpiece output 3x analog mic inputs, 1x stereo digital mic input 2x I2S buses for additional external audio devices		
1/0	1x USB3.0 Type C, multiple BLSP ports (GPIO, UART, SPI, I2C buses), Haptics output, LED driver outputs, microSD card socket, Wi-Fi/BT PCB antenna, GNSS PCB antenna, external GNSS antenna connector		
Power Input	Input 12V/3A or single-cell Li-Ion battery (not included)		
Size	SOM size: 50mm x 25mm Carrier Board size: Mini-ITX 170mm x 170mm		
Software	·		



Android<sup>™</sup> 10, Android<sup>™</sup> 9, Android<sup>™</sup> 8, Android<sup>™</sup> 7, OpenEmbedded Yocto Linux<sup>®</sup> **OS Support** 

\*Note that all hardware features may not be supported by all SW versions — see latest SW release notes for details







Optional Display and Camera

### **Purchasing Information**

Open-Q 626 Dev Kit	Part number: QC-DB-M00003	Store Link		
Open-Q 626 μSOM	Part number: QC-DB-M00004	Store Link		
Open-Q 626 LCD	Part number: QC-DB-G00005	Store Link		
Open-Q 13MP Camera	Part number: 030-0181-0101_B	Store Link		

#### **Intrinsyc Product Design Services**

Intrinsyc also offers comprehensive product development including hardware, software, mechanical engineering, as well as specialty services such as camera, audio, DSP, and RF development.

Contact Intrinsyc to discuss your product design needs today:

sales@intrinsyc.com

Development Kit includes: Carrier board, SOM, 12V power supply, HDMI cable, Quick Start Guide, access to full documentation, SW updates, and basic development kit support.

Specifications are subject to change without notice. Not all features listed may be supported in software. All brand or product names are trademarks or registered trademarks of their respective owners. Qualcomm Snapdragon, Qualcomm Kryo, Qualcomm Spectra, Qualcomm Adreno, Fluence and Qualcomm Hexagon are products of Qualcomm Technologies, Inc. Qualcomm IZat is a product of Qualcomm Atheros, Inc. Qualcomm, Snapdragon, Adreno, Fluence and Hexagon are trademarks of Qualcomm Incorporated, registered in the United States and other countries. Kryo, Spectra and IZat are trademarks of Qualcomm Incorporated. Used with permission. Cortex is a trademark of ARM Holding plc. Used with permission.