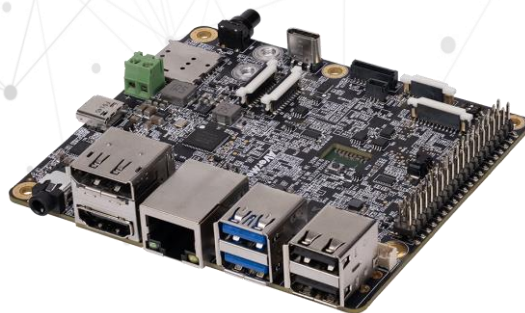


QL501 Single Board Computer

Qualcomm® Dragonwing™ QCS5430 Processor

For Smart City, Smart Retail

Compatible with Raspberry Pi 5 for IO expansion



Overview

AVerMedia's QL501 support powerful Qualcomm® Dragonwing™ QCS5430 processor. This efficient chip opens new worlds of embedded IoT applications with full analytic capabilities.

QL501 is designed to deliver premium-tier features and networking. It offers robust computing capabilities while maintaining energy efficiency, making it ideal for both industrial and commercial use cases.

AVerMedia supports businesses of all sizes and offers customizable BSP services with Qualcomm TEE , flexible MoQ, Qualcomm® Linux and AVerMedia SDK.

Enterprise-Leading Features

- Applies to Qualcomm® QCS5430 processor
- 2 x 4 Lane MIPI CSI-2 Camera Input
- 1 x 4 Lane MIPI DSI-2
- 1 x HDMI output 3840 x 2160 at 60Hz
- 1 x DP output 1920 x 1080 at 60Hz
- 2 x USB 3.0 Type-A & 2 x USB 2.0 Type-A
- 1 x GbE RJ-45
- 40-pin Expansion Header
- Operating temperature: -10°C ~ 60°C (TBC)
- Dimension: 98.4mm x 88.5mm x 26.5mm

The AVerMedia Advantage



Video Processing Technology



Flexibility & Reliability



Dedicated After-Sales Support

AVerMedia understands that each business has a unique set of requirements that requires professional expertise and support. With AVerMedia, you are guaranteed to work with a proven global leader in video processing technology (200+ video capturing & streaming patents) with decades of experience processing multiple video signals for countless award-winning products.

A global leader that supports businesses of all sizes with comprehensive customization services (i.e., HW/PCB/BSP/etc.), flexible MoQ while ensuring a high-quality design and stable product. And for projects requiring additional security, we can provide customizable encryption hardware to support your privacy needs.

By partnering with us, our support-driven team offers prompt after-sales support and live support so that your company stays focused on what matters most, customer acquisition.

Specifications

Model	QL501 Single Board Computer
Platform /Computing Power	Qualcomm® Dragonwing™ QCS5430 / ~3.5 INT8 TOPS (Dense)
Memory and Storage	LPDDR4X 4GB + UFS2.x 64GB
Networking	1 x GbE RJ-45 Micro SIM slot
Display Output	1 x HDMI output 3840 x 2160 at 60Hz 1 x DP output 1920 x 1080 at 60Hz 1 x 4 Lane MIPI-DSI (disable on Windows 11 IoT)
Audio	1 x MIC.in / Line Out (disable on Windows 11 IoT)
USB	2 x USB 2.0 Type A (shared) 2 x USB 3.0 Type-A (shared with M.2 Key B) 1 x USB Type-C (BSP Flash)
Camera Support	2 x 4-lane MIPI-CSI, 22pin FPC 0.5mm pitch (disable on Windows 11 IoT) USB Camera
Expansion Header	40-pin Header (disable on Windows 11 IoT): 2 x 3.3V DC power, 2 x 5V DC power, 1 x UART, 2 x SPI, 1 x PWM, 10 x GPIO, 2 x I2C
Other I/O	1 x PCIe 2.0 RTC wafer, Fan wafer, UART wafer, PoE HAT wafer
Storage	microSD card slot
Input Power	3.5mm Screw Terminal: 9V~20V Optional 12V/5A Adapter
Power Cord	US/JP/EU/UK/TW/AU/CN (optional)
Temperature	Operating temperature -10℃ ~60℃ (TBC)
Buttons	Power/Reset
PCBA/Electronics Mechanical Info	L: 98.4mm x W: 88.5mm x H: 26.5mm Weight: 84.2g
Operating System	Windows 11 IoT / Ubuntu 20.04 (by request)
SDK/API	AVerMedia SDK/API
Certifications	CE, FCC, KC, VCCI
Package	1x QL501 DC IN jack cable screws



*All specifications are subject to change without prior notice.

Security

Function	Description
Qualcomm TEE	Ensures secure memory, content protection, trusted application execution, and power-efficient security management.

Expansion Board List

Part Number	Expansion Board	Description
51D135OB01AG	AVerMedia OOB Board	Support remote device management services
064APOWEROB3X	Japan 3-pin Power Cable	Provides power connection for devices in Japan with a 3-pin plug.

Ordering Information

Model	Processor	Memory	USB	Display	Network	Power Input	Size	Operating Temperature
QL501	Dragonwing QCS5430	4GB	2 x USB 2.0 2 x USB 3.0	1xHDMI 2.0 2xMIPI-CSI 1xDP Full HD	1xGbE RJ45	9V-20V	98.4x88.5 x26.5 mm	-10~60°C (TBC)



R-R-AVM-QL601

사용자 안내문

이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.
This device has been evaluated for conformity for use in a work environment. When used in a home environment, there is a risk of interference.

Type: Carrier Board
Model Name: QL601



*All specifications are subject to change without prior notice.