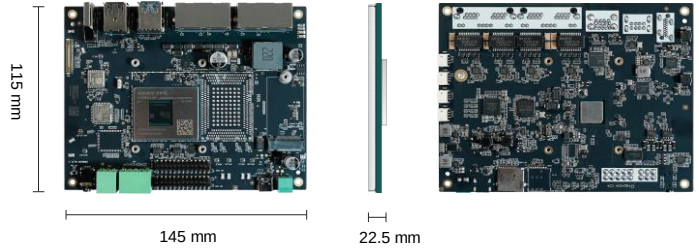


Quectel QSM882GP-WF

Single-Board Computer



Quectel QSM882GP-WF is a smart Single-Board Computer (SBC) based on the Qualcomm QCS8550 platform. Powered by Qualcomm's flagship QCS8550 IoT processor, the board supports both Ubuntu and Android operating systems. It features a high-performance octa-core Kryo™ CPU, along with an Adreno™ 740 GPU, Adreno 1295 DPU, Adreno 8550 VPU, Hexagon™ DSP, and Spectra™ ISP. Delivering powerful computing performance and rich multimedia capabilities, the QSM882GP-WF is purpose-built to meet the high compute, edge computing, and advanced multimedia demands of both industrial and consumer applications.

The QSM882GP-WF supports Wi-Fi, Bluetooth, and standalone BDS positioning, alongside a low-power sleep mode. Additionally, the board integrates a comprehensive array of peripheral interfaces—including Ethernet, AHD camera inputs, HDMI and eDP displays, PCIe, UART, USB, I2C, and SPI. This extensive connectivity significantly expands its versatility in M2M applications, making it ideal for a wide range of end products and industries, such as video conferencing, live streaming, gaming, edge computing, robotics, AR/ VR, smart retail, and smart safety.



Key Features

- ✓ 1 × Kryo Prime @ 3.2 GHz + 4 × Kryo Gold @ 2.8 GHz + 3 × Kryo Silver @ 2.0 GHz
- ✓ Adreno™ 740 GPU
- ✓ Hexagon™ DSP + Hexagon Vector eXtensions (HVX) + Hexagon Matrix eXtensions (HMX)
- ✓ Spectra™ ISP
- ✓ Adreno 8550 VPU
- ✓ Adreno 1295 DPU
- ✓ Neural Processing Unit (NPU)
- ✓ Security Processing Unit (SPU)
- ✓ Video encoding: 4K @ 120 fps; 8K @ 30 fps
- ✓ Video decoding: 4K @ 240 fps; 8K @ 60 fps
- ✓ 48 TOPS NPU computing power
- ✓ Wi-Fi/ Bluetooth, GNSS



Qualcomm Kryo™
64-bit Octa-core
Processor



Qualcomm
Adreno™ 740
GPU



PCIe Interface



Ubuntu OS



Android OS



Rich Multimedia
Capabilities



Wi-Fi/ Bluetooth



BDS

Quectel QSM882GP-WF

Single-Board Computer QSM882GP-WF	
Region/Operator	Global
CPU	1 × Kryo Prime @ 3.2 GHz + 4 × Kryo Gold @ 2.8 GHz + 3 × Kryo Silver @ 2.0 GHz
OS	Ubuntu 22.04/ Android 13
Memory	• 12 GB + 256 GB (LPDDR5X + UFS) • 24 GB + 256 GB (LPDDR5X + UFS) • 16 GB + 512 GB (LPDDR5X + UFS) • 24 GB + 512 GB (LPDDR5X + UFS)
Dimensions (mm)	115 × 145 × 22.5
Package	MOB
Temperature Range	
Operating Temperature	-30 °C to +75 °C
Electrical Features	
Operating Voltage	10.8–13.2 V
Start-up Current	1.4 A
Interfaces	
LCM	HDMI × 1 + EDP × 1
Camera	AHD × 4 + POE × 4
Audio	External speaker (3 W) / 4-pole headphone jack
Video	Auto-resolution detection: 720p, 1080p, 2K or 4K
USB	Type-A ports × 4, with up to 2 A current • USB 3.0 × 2 • USB 2.0 × 2
PCIe	SSD 2242 × 1
UART	× 4, RS232 × 1 + RS485 × 2 + Debug × 1
SD Card	× 1, SD 3.0
(U)SIM	× 1
I2C	× 1, dedicated for sensors
RTC	× 1
PWRKEY	× 1
GPIO	× 16
Type-C	1 × USB 2.0
Ethernet	4 × 1000 M
Antenna	× 2, GNSS × 1 + Wi-Fi × 1
Fan	× 1