

SoM-800

System on Module with Qualcomm® QCS8550 SoC



Feature

- **Flagship Performance:** Qualcomm® Kryo™ CPU, Adreno™ 740 GPU, and Spectra™ ISP for advanced compute and imaging
- **High-Resolution Video:** Supports 8K30 video encoding and 8K60/4K240 decoding with AV1 support
- **Flexible Display & Cameray:** Dual DSI (up to 4K@120Hz) and DP1.4; supports 5 concurrent cameras and up to 3x 36MP ISPs
- **Expandable Interfaces:** PCIe Gen4 and Gen3, multiple MIPI CSI lanes, and DP over USB Type-C
- **Robust for Industrial Use:** Wide operating temperature (-25°C to +75°C), LGA form factor, and Android 13 support

Specification

System	CPU	Qualcomm® Dragonwing™ QCS8550
	GPU	Qualcomm® Adreno™ 740
	AI	48 INT8 TOPs
	RAM & Storage	16GB LPDDR5x, 128GB UFS
	OS	Android 13, Yocto Linux
Interfaces	Display	2 x DSI 4-Lane; support up to 4K@120Hz 1 x DP V1.4 over Type-C
	Camera	3 x 36 MP@30FPS ISPs 4 x CSI D-PHY-1.2 4-lane 2 x CSI D-PHY-1.2 2-lane 2 x CSI C-PHY-2.0 3-trio compatible with D-PHY 4-lane 5 x concurrent (3 IFEs + 2 IFE-lites)
	Audio	2 x WSA SoundWire interfaces 1 x I2S 4 x DMIC ports
	Video	4K240/8K60 Decode 4K120/8K30 Encode, AV1 decode
	USB	1 x USB 3.1 Gen 2 (with DP V1.4)
	QUP	QUPs, SSC QUPs, IIC HUBs
	SDIO	2 x SDC
	Debug	1 x Debug UART
	PCIE	1 x PCIe Gen4 2-lane ; 1 x PCIe Gen3 2-lane
	Antenna	2, Wi-Fi & Bluetooth, Wi-Fi MIMO (Optional)
Wireless Connectivity	Wi-Fi	Wi-Fi 7 (Optional)
	Bluetooth	Bluetooth 5.4 (Optional)
Power	DC Input	3.55 V ~ 4.4 V, typ. 3.8 V
Mechanical	Dimensions (W x D x H)	54.0mm x 45.0mm x 3.8mm
	Form Factor	LGA
	Weight	18.6 g
Environmental	Operating Temperature	-20°C to +75°C
	Storage Temperature	-40°C to +85°C