

AIMF51



Qualcomm[®] QCS8550 1.8" SBC

FC CE ROHS CA





Qualcomm[®] QCS8550 Processor

Bottom View



Top View

KEY FEATURES











Qualcomm

Qualcomm® QCS8550 high-level platform

LPDDR5

LPDDR5 on board memory up to 8GB

Al Box

Target on edge AI box, AIoT application

Ruggedized

Thin client concept and ruggedized design

Al Architecture

Optimized AI architecture (48 INT8, 12 FP16 TOPs)

DFI | Desire For Innovation



SPECIFICATION

SYSTEM	Processor	Qualcomm® QCS8550 Kryo™ CPU, 8 cores, up to 3.2 GHz	
	Memory	8GB LPDDR5	
GRAPHICS	Controller	Qualcomm [®] Adreno™ 740 GPU	
	Feature	OpenGL ES 3.2	
	Display	1 x Micro HDMI	
STORAGE	UFS	128GB UFS 3.1	
EXPENSION	Interface	1 x M.2 B key 3052 (USB 3.1, PCle x1), reference module source: TBD	
		1 x Nano SIM slot	
AUDIO	Audio Codec	Audio codec WCD9385	
REAR I/O	USB	2 x USB 3.1 Gen1 Type A	
	Display	1 x Micro HDMI	
	Debug	1 x USB Type C (Download only)	
INTERNAL I/O	Audio	1 x Line out/Mic in	
	RF Connector	2 x RF connector (Integrated Wi-Fi 7)	
	Other I/O	1 x Power LED, 1 x System LED, 1 x Front Panel	
	Camera	1 x MIPI-CSI2 for 4-lanes camera, reference camera source: BMD13B (Sensor: IMX688)	
POWER	Туре	12VDC	
	Connector	2 pin Power Jack	
	Consumption	TBD	
OS SUPPORT	Linux	Android T/13, Kernel 5.15	
ENVIRONMENT	Temperature	Operating: -5°C~65°C	Storage: -40°C~85°C
	Humidity	Operating: 5%~90% RH	Storage: 5%~90% RH
MECHANISM	Dimensions	1.8" Pico-ITX Form Factor	84mm (3.31") x 68mm (2.67")
	Height	PCB: 1.6 mm	
		Top Side: 13.8 mm	
		Bottom Side: 4.0 mm	
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS, UKCA	

PACKING LIST

• 1 AIMF51 board

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