

MediaTek Dimensity 9500

CPU and UX

- MediaTek Exclusive 3rd gen All Big Core design
- Octa-core with Arm C1-Ultra, C1-Premium and C1-Pro processors
- 32% faster CPU single-core performance
- 55% lower CPU single-core peak power use
- 37% lower CPU multi-core peak power use
- Extremely fast and consistent touch and scrolling response
- 50ms app launch reaction speed with only 10ms deviation
- Support SME 2 (Scalable Matrix Extension) for 57% improved object detection performance

GPU and Gaming

- New Arm Mali-G1 Ultra GPU with 2X raytracing units
- Dimensity Dynamic Cache Architecture
- 33% greater peak performance
- 42% better power efficiency at peak performance
- Up to 119% faster raytracing performance
- Capable of 120FPS immersive raytraced gameplay
- Vulkan raytracing pipeline support generates more realistic effects, efficiently
- Support for Unreal Engine 5.5+ with cutting-edge MegaLights/Nanite features

NPU and AI

- New MediaTek NPU 990 with 2nd gen Gen-AI Engine
- Newly-added Super Efficient NPU: Industry's first CIM-based NPU for always-on AI applications.
- 56% lower peak power use
- 2X faster token generation speed
- 4K resolution high quality image generation

Multimedia

- Best-in-class ISP with dedicated tracking, portrait and zoom-in engine
- Best-in-class 4K60 Cinematic Mode video recording
- Full speed (30fps) object focus tracking in snapshots
- Android's first 4K120 Dolby Vision video capture with EIS
- AI-ISP enhanced 200MP photo capture
- MiraVision SmartScreen ensures vivid colors and contrast from extremes of direct sunlight to 1nit ultra-low light

5G and Connectivity

- New 5CC-CA up to 7.4Gbps sub-6GHz
- MediaTek 5G UltraSave: 10% more power efficiency using AI traffic prediction
- MediaTek Smart Multi-Link Call: eliminate dropped calls with cellular/Wi-Fi duplication
- MediaTek Connect UltraSave: 20% more power efficient Wi-Fi with AI traffic prediction
- 20% faster large Wi-Fi file transfer speed vs competitor flagship alternatives
- 35% further reach for Bluetooth audio providing better voice quality during calls/conferencing
- AI-GNSS: 20% more accurate location and near-instant fix. Ideal for ride-hailing apps, or when exiting zero-signal spaces



*Comparisons are stated in reference to the previous generation Dimensity flagship chip, unless otherwise stated

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