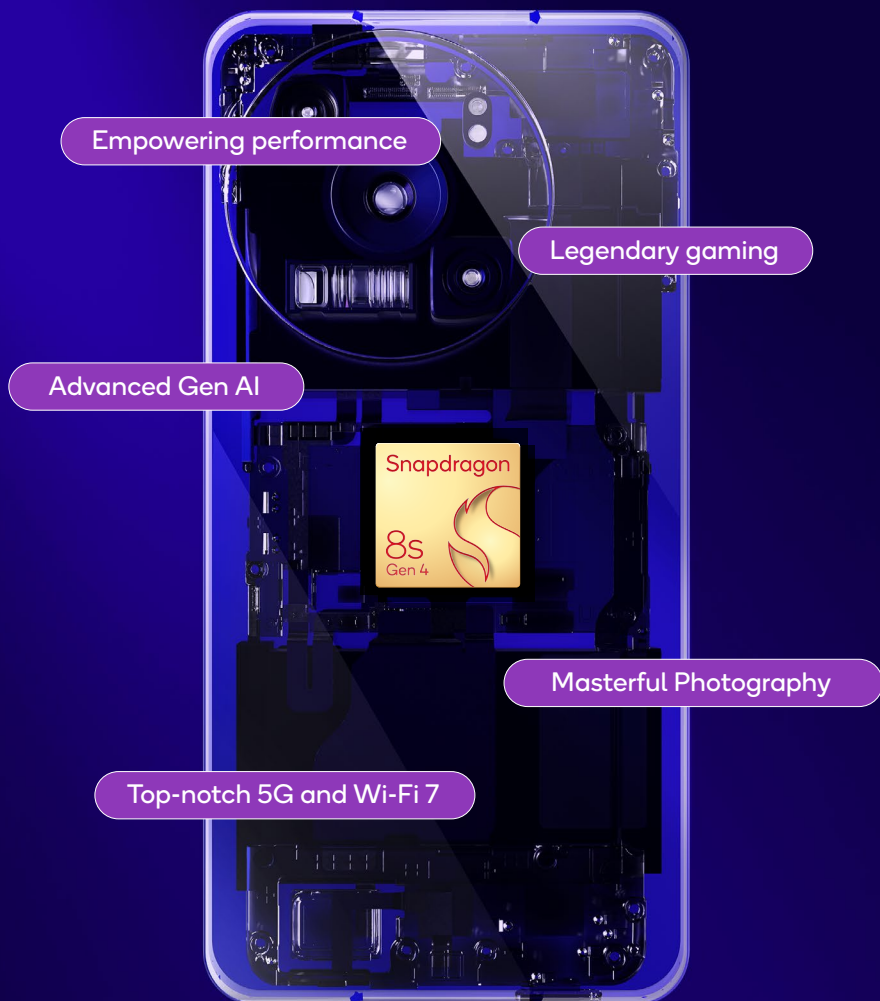


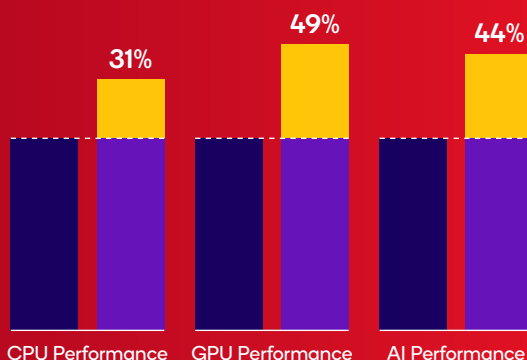
UNLEASH LEGENDARY MOBILE GAMING



Snapdragon® 8s Gen 4 Mobile Platform empowers performance with incredible power efficiency. Unlock extraordinary experiences with a platform that makes premium accessible.

Power up your inner champion

A **prime performance CPU** delivers incredible speeds at up to **3.2 GHz**, while a **brand new GPU** architecture improves performance—all with **optimized** power management.



Legendary gaming



Experience total immersion with a new sliced GPU architecture and the full suite of Snapdragon Elite Gaming™ features for ultra-smooth, high-performance sessions.

- Hardware-Accelerated Ray Tracing with Global Illumination greatly enhances the environment with photo realistic lighting effects, including shadows and reflections
- Qualcomm Adaptive Performance Engine provides ultra-fast and super-smooth performance while providing longer gameplay sessions
- Snapdragon Game Super Resolution 2.0 intelligently upscales low-res game scenes in up to 4K

Masterful photography



Revolutionize your capture with our 18-bit Triple AI ISP. 4K Limitless Segmentation brings out the best in every detail, recognizing and enhancing over 250 objects in real-time.

- Real-time skin and sky tone correction intelligently captures natural color tones even in challenging environments
- Night Vision 2.0 captures detailed videos in low light with silky-smooth precision in 4K at 30 FPS
- An Always-Sensing Camera lets you control your phone without touching the screen, supporting features like hand gestures—even in low-power mode

Advanced Gen AI



Unlock new possibilities with a faster NPU, supporting on-device multimodal and multilingual generative AI, brought to this tier for the first time.

- Faster Qualcomm® AI Engine* enhances on-device Gen AI experiences
- Create unique content in multiple languages and interact with intelligent assistants that understand speech, text, and visuals
- Support for a variety of leading LLMs and LVMs
- 2x larger shared memory for improved memory bandwidth

*Compared to previous generation.

Top-notch 5G and Wi-Fi 7



Game, create, or communicate at lighting speed with our pioneering, AI-accelerated 5G modem and high-performance Wi-Fi 7 solutions.

- Snapdragon 5G Modem-RF System provides remarkable connectivity performance, spectrum flexibility, and battery efficiency with speeds up to 4.2 Gbps
- Qualcomm® FastConnect™ Mobile Connectivity System offers leading Wi-Fi 7 with speeds up to 5.8 Gbps
- Qualcomm® eXpanded Personal Area Network (XPAN) technology keeps earbuds and headphones connected via Wi-Fi for untethered, whole-building mobile gaming audio
- Support for Bluetooth Core Specification 6.0 technology enables proximity capabilities like Bluetooth Channel Sounding

Camera

Triple AI ISP
Limitless Segmentation
Night Vision

Connectivity

5G Modem-RF System
FastConnect Mobile Connectivity System
Bluetooth® 6.0 technology

Performance

31% improved CPU
49% improved GPU
44% improved AI

Gaming

Sliced Adreno GPU
Snapdragon Game Super Resolution 2.0
Adreno Frame Motion Engine 2.0

Audio

Qualcomm® eXpanded Personal Area Network (XPAN) technology

AI

2X larger shared memory
Multi-modal Gen AI support
Sensing Hub

Compared to previous generation



SPECS & FEATURES

Artificial Intelligence

Qualcomm AI Engine

- Qualcomm® Adreno™ GPU
- Qualcomm® Kryo CPU™
- Qualcomm® Hexagon™ NPU
- Fused AI accelerator architecture
- Hexagon scalar, vector, and tensor accelerators
- Hexagon Direct Link
- Support for precisions (INT4, INT8)

Qualcomm® Sensing Hub

- Dual micro NPUs for audio and sensors
- Always-Sensing Camera
- Support for INT4 precision

5G Modem-RF System

Snapdragon® 5G Modem-RF System

- Sub-6 GHz, standalone (SA) and non-standalone (NSA) modes, FDD, TDD
- Sub-6 GHz: 4x4 MIMO, 230 MHz, 256 QAM
- Qualcomm® 5G AI Suite
- Qualcomm® AI-Enhanced Signal Boost
- Qualcomm® 5G PowerSave Gen 3
- Qualcomm® Smart Transmit™ 5.0 technology
- Qualcomm® Wideband Envelope Tracking
- Qualcomm® 5G Ultra-Low Latency Suite
- Global 5G multi-SIM, including 5G+ 5G/4G SA Dual-SIM Dual-Active (DSDA)

Downlink: Up to 4.2 Gbps

3GPP Release 17 support

Multimode support: 5G NR, NR-DC, EN-DC, LTE, CBRS, WCDMA, HSPA, CDMA 1x, EV-DO, GSM/EDGE

Wi-Fi & Bluetooth®

Qualcomm® FastConnect™ Mobile Connectivity System

- Wi-Fi Generation: Wi-Fi 7
- Peak Speed: 5.8 Gbps
- 802.11be, 802.11ax, 802.11ac, 802.11a/b/g/n
- Wi-Fi Spectral Bands: 6 GHz, 5 GHz, 2.4 GHz
- Channel Bandwidth: 320/240/160/80/40/20 MHz
- 8-stream sounding (for 8x8 MU-MIMO)
- MIMO Configuration: 2x2 (2-stream)
- MU-MIMO (Uplink & Downlink)
- 4K QAM
- OFDMA (Uplink & Downlink)
- High-Band Simultaneous (HBS) Multi-Link
- Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal

Integrated Bluetooth

- Bluetooth Audio: Snapdragon Sound™ Technology Suite, Qualcomm® aptX™ Voice, aptX Lossless, aptX Adaptive, and LE Audio
- Bluetooth Features: Bluetooth Core Specification 6.0, LE Audio, Dual Bluetooth antenna, Bluetooth Channel Sounding

CPU

Qualcomm Kryo CPU

- 64-bit Architecture
- Prime core, up to 3.2 GHz
- Performance cores, up to 3.0 GHz

Audio

Qualcomm Aqstic™ audio codec

Qualcomm Aqstic smart speaker amplifier

Total Harmonic Distortion + Noise (THD+N)

Playback: -108 dB

Qualcomm® Audio and Voice Communication Suite

Spatial audio with head tracking

Display

On-device Display Support:

- WQHD+ @ 144 Hz

Maximum External Display Support:

- 4K @ 60 Hz

Variable Refresh Rate support for 240 Hz to 1 Hz

- 10-bit color depth, Rec. 2020 color gamut
- HDR10, HDR10+, HDR vivid, and Dolby Vision

Visual Subsystem

Video decode up to 4K at 60 FPS (native decode support VP9 and AV1 formats)

Qualcomm Adreno GPU

- Real-time Hardware-Accelerated Ray Tracing with Global Illumination
- Snapdragon Adaptive Game Configuration
- Qualcomm Adaptive Performance Engine
- Snapdragon Game Super Resolution 2.0
- Adreno Frame Motion Engine 2.0
- Snapdragon Game Post Processing Accelerator
- HDR gaming (10-bit color depth, Rec. 2020 color gamut)
- Snapdragon Shadow Denoiser
- API support: OpenGL® ES 3.2, OpenCL™ 2.0 FP, Vulkan® 1.3
- Hardware-accelerated H.265, VP9, AV1 decoder
- HDR Playback Codec support for HDR10+, HDR10, HLG, and Dolby Vision

Camera

Qualcomm Spectra™ Image Signal Processor

- AI ISP, Triple 18-bit ISPs

Limitless real-time Semantic Segmentation photo and video processing

Engine for Visual Analytics 4.0, including hardware acceleration for iToF depth sensors up to 4K60 FPS

Support for the latest HDR, DCG+VS, DCG, Staggered, QDOL, Less Blanking, and Multiframe HDR image sensors

Support for triple video capture from HDR image sensors, with seamless switching between any HDR mode

- Up to 36 MP triple camera @ 30 FPS with Zero Shutter Lag
- Up to 108 MP single camera @ 30 FPS with Zero Shutter Lag
- Up to 320-megapixel photo capture

AI-based face detection, AI for 3A (auto-focus, autoexposure, and auto-white balance)

Rec. 2020 color gamut photo and video capture

Up to 10-bit color depth photo and video capture

10-bit HEIF: HEIC photo capture, HEVC video capture

Google Ultra HDR photo capture

Video capture HDR formats: HDR10+, HDR10, HLG, Dolby Vision

8K HDR video playback @ 60 FPS

4K HDR video capture @ 60 FPS

Slow-mo video capture at 1080p @ 480 FPS

Hardware Bokeh Engine 2 for video capture

Pro Sight video capture

Ultra-low light video capture with AI Noise Reduction in 4K30 FPS

Computational HDR video capture: Up to 4 exposures (with QDOL image sensors)

Video super resolution

Massive Multi-Frame Noise Reduction with AI

Locally Motion Compensated Temporal Filtering

- Enhanced AI video segmentation @ 4K60 FPS
- Realtime AI skin and sky tone adjustments in 4K60 FPS

Truepic photo capture with C2PA-compliant certificate authority

Security

Trust Management Engine (Root of Trust), along with platform-level security foundations

Support for Android's DICE-based remote key provisioning

Qualcomm® Trusted Execution Environment (TEE) for use cases requiring higher processing assurance

Qualcomm® Type-1 Hypervisor for isolation from the high-level OS

Qualcomm® wireless edge services (WES) for secure attestation and provisioning

Qualcomm® 3D Sonic Sensor and Qualcomm 3D Sonic Max (fingerprint sensor)

Location

Concurrent GPS, Glonass, BeiDou, Galileo, QZSS, NavIC

Triple frequency GNSS (L1/L2C/L5)

Sensor-Assisted Positioning 6.0

- With global map aiding
- Urban pedestrian navigation with sidewalk accuracy
- Global freeway lane-level vehicle navigation

Charging

Qualcomm® Quick Charge™ 5 Technology

Memory

Support for LP-DDR5x memory, up to 4800 MHz

Memory Density: Up to 24 GB

General Specifications

Snapdragon Elite Gaming™ features

4nm Process Technology

USB Version 3.1 Gen 2; USB Type-C Support

Storage: UFS 4.0

Part Number: SM8735