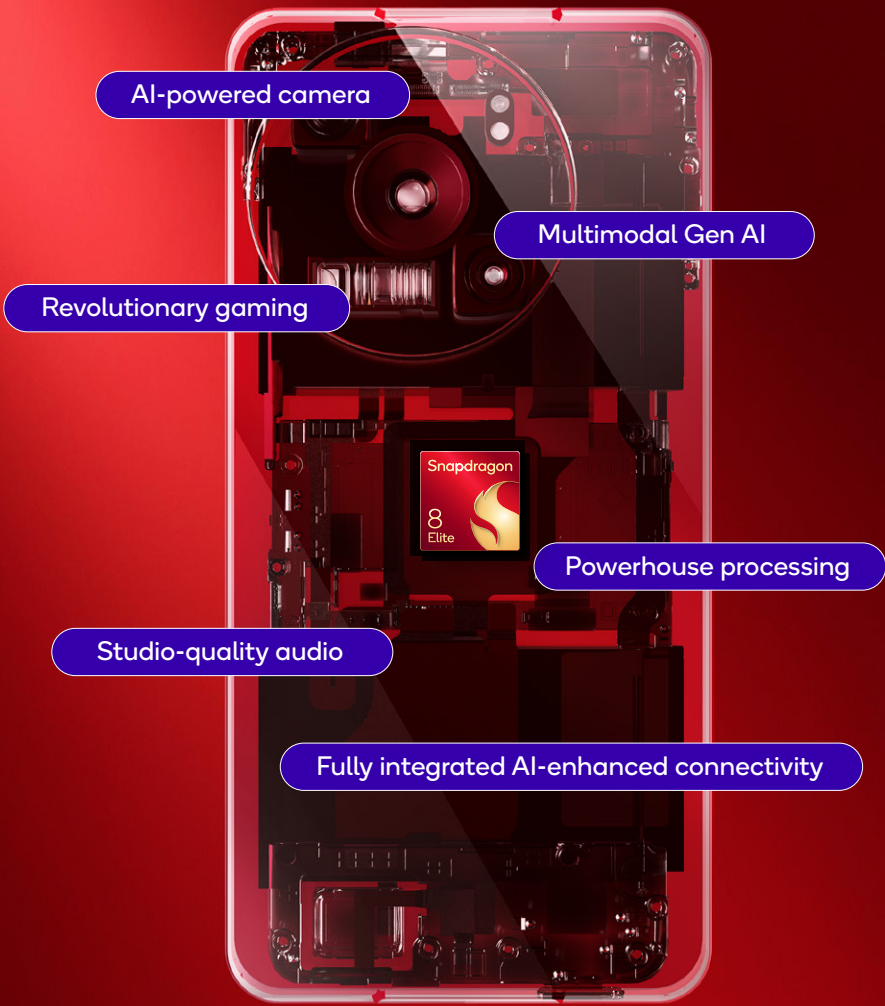


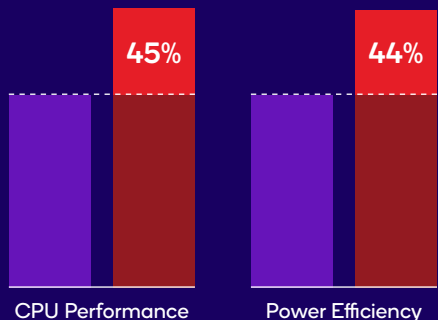
# PERFORMANCE, TRANSFORMED



The Snapdragon® 8 Elite Mobile Platform is the pinnacle of Snapdragon innovation, delivering revolutionary power, speed, efficiency, and support for multimodal generative AI.

## Industry-leading 2<sup>nd</sup> generation Qualcomm Oryon™ CPU

Multitask to the max with the fastest mobile CPU in the world, reaching up to 4.32 GHz peak speeds—a 45% boost in CPU performance at 44% improved power efficiency.







## SPECS & FEATURES

### Artificial Intelligence

#### Qualcomm® AI Engine

- Qualcomm® Adreno™ GPU
- Qualcomm Oryon™ CPU
- Qualcomm® Hexagon™ NPU
- Fused AI accelerator architecture
- Hexagon scalar, vector, and tensor accelerators
- Hexagon Direct Link
- Micro Tile Inferencing
- Large shared memory concurrency support
- Upgraded power delivery system
- Support for mix precision (INT8+INT16)
- Support for all precisions (INT4, INT8, INT16, FP16)

#### Qualcomm® Sensing Hub

- Dual Micro NPUs for audio and sensors
- Dual Always-Sensing ISPs to support two concurrent Always-Sensing Cameras
- Support for INT4 precision

### 5G Modem-RF System

#### Snapdragon® X80 5G Modem-RF System

- 5G Advanced-ready, 5G mmWave and sub-6 GHz, 5G standalone (SA) and non-standalone (NSA) modes, standalone mmWave and mmWave-sub-6 dual connectivity, FDD, TDD

Downlink: Up to 10 Gbps

Uplink: Up to 3.5 Gbps

mmWave: 8 carriers, 2x2 MIMO

- Sub-6 GHz: 4x6 MIMO
- Converged mmWave-sub-6 transceiver
- Qualcomm® 5G AI Suite Gen 3 includes:
  - AI-enhanced performance improvements in power handling, coverage, latency, & QoS
  - AI-assisted mmWave beam management—mmWave (SA) range extension for CPE
  - AI-based GNSS Location Gen 3
- Qualcomm® 5G AI Processor Gen 2 with dedicated tensor hardware accelerator
- Qualcomm® 5G PowerSave Gen 5
- Fully integrated NB-NTN support
- Qualcomm® Smart Transmit™ Gen 5 technology with Snapdragon® Satellite support
- Qualcomm® Wideband Envelope Tracking
- 5G New Calling support
- Qualcomm® Power RF Efficiency Suite
- Qualcomm® 5G Ultra-Low Latency Suite
- Qualcomm® RF Uplink Optimization
- Global 5G multi-SIM, including Qualcomm DSDA Gen 2

3GPP Release 17 and Release 18 support

6xCA Downlink

6-antenna support (6 Rx for 4x6 MIMO)

Multimode support: 5G NR, NR-DC, EN-DC, LTE, CBRS, WCDMA, LAA, GSM/EDGE, Dynamic Spectrum Sharing (DSS)

### Wi-Fi, Bluetooth®, & UWB

#### Qualcomm® FastConnect™ 7900 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
- 4K QAM
- High Band Simultaneous (HBS) Multi-Link
- Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal

#### Integrated Bluetooth

- Bluetooth Features: Bluetooth 6.0, LE Audio, dual Bluetooth antennas

#### Integrated Ultra Wideband (UWB)

- IEEE 802.15.4z, FiRa, CCC

### Audio

#### Snapdragon Sound™ Technology Suite:

- Qualcomm® aptX™ Adaptive and aptX Lossless audio
- Qualcomm® Expanded Personal Area Network (XPAN) technology
- Qualcomm Aqstic™ audio codec
- Qualcomm Aqstic smart speaker amplifier: Total Harmonic Distortion + Noise (THD+N) Playback: -108 dB
- Qualcomm Aqstic Speaker Max
- Qualcomm® Audio and Voice Communication Suite
- Spatial audio with head-tracking

### Display

#### On-Device Display Support:

- 4K @ 60 Hz
- QHD+ @ 240 Hz

#### Maximum External Display Support:

- Up to 8K @ 30 Hz
- Up to 1080 @ 240 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

### CPU

#### Qualcomm Oryon™ CPU

- 64-bit Architecture
- 2 Prime core, up to 4.32 GHz
- 5 Performance cores, up to 3.53 GHz

### 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 4K 60 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 48 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 video capture @ 120 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 4K60 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

### Visual Subsystem

#### Adreno GPU

- Real-time Hardware-Accelerated Ray Tracing with Global Illumination
- Support for Unreal Engine 5.3 running Nanite on smartphones
- Support for Unreal Engine Chaos Physics Engine
- Snapdragon Adaptive Game Configuration
- Snapdragon Game Super Resolution
- Adreno Frame Motion Engine 2.1
- 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™ 3.0 FP, Vulkan™ 1.3
- Hardware-accelerated H.265, VP9, AV1 decoder
- HDR Playback Codec support for HDR10+, HDR10, HLG, and Dolby Vision

### 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 & Services (TEE) for use cases requiring higher processing assurance

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

Secure Processing Unit (SPU) with support for the Android latest Strongbox SW components

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)

AI-based GNSS Location Gen 3

Sensor-Assisted Positioning 6.0

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 5300 MHz

Memory Density: Up to 24 GB

### General Specifications

Full suite of Snapdragon Elite Gaming™ features

3nm Process Technology

USB Version 3.1 Gen 2; USB Type-C Support

Storage: UFS 4.0

Part Number: SM8750-3-AB