

# Snapdragon



## 888+ 5G mobile platform

The Snapdragon® 888+ 5G Mobile Platform fuels flagship experiences with profoundly intelligent entertainment, including AI-enhanced gameplay, streaming, photography, and more—backed by boosted performance, unrivaled speed and premium connectivity.



### Unbridled performance for world-class entertainment

Better, faster, stronger—our newly upgraded Qualcomm® Kryo™ 680 CPU revs up your elite entertainment experiences. Open social feeds, load games, or access your favorite content in a flash with an industry-leading processor designed to meet high-end demands head-on. Plus, stay immersed for hours without stopping to recharge thanks to a hyper-efficient 5 nm process.

- The Qualcomm® Adreno™ 660 GPU renders detailed graphics in a flash
- Kryo 685 CPU with speeds up to 3.0 GHz\* and Arm Cortex-X1-based architecture for increased efficiency



### The smartest way to connect with friends, family and colleagues

With more than 20% AI performance upgrade, the astounding 32 TOPS enables the Snapdragon 888+ to run multiple neural networks simultaneously that work specifically to make your video calls and entertainment experiences more immersive. From AI super resolution and AI-based noise cancellation that suppresses unwanted sounds, to camera enhancement features such as single camera bokeh effects—all help you stay truly connected with the ones that matter.

- 6th gen Qualcomm® Artificial Intelligence (AI) Engine for unbeatable flagship AI experiences
- Qualcomm® Hexagon™ 780 Processor packs a fused architecture for high performance and efficiency
- 2nd Gen Qualcomm® Sensing Hub with a dedicated lower-power always-on AI processor for intelligent assistance and contextual awareness



### Unrivaled speed and premium connectivity

Connect, consume, create—in a flash. Truly global 5G with peak download speeds up to 7.5 Gbps means you'll game, stream, and share in real time, at best-in-class quality. Plus, our Qualcomm® FastConnect™ 6900 Mobile Connectivity System provides blazing Wi-Fi 6 & 6E and rich Bluetooth audio. Get lost in matchless entertainment with flawless performance, even with multiple devices on one network.

- 3rd gen Snapdragon X60 5G Modem-RF System with mmWave plus 5G carrier aggregation across TDD-FDD bands
- Industry's fastest available mobile Wi-Fi with multi-gig speeds up to 3.6 Gbps and increased capacity by harnessing new 6 GHz spectrum
- Premium audio experiences with dual Bluetooth antennas and Snapdragon Sound™ Technology



### Our most brilliant capture yet

The Snapdragon 888+ empowers and enhances your creative expression. With 8K encoding and decoding, seamlessly capture or view ultra-detailed, true-to-life videos. Unparalleled AI boosts quality even further—get bright results in dim lighting and see clearly with reduced noise. Plus, intelligent semantic segmentation identifies and optimizes individual aspects of your videos, for true point-and-shoot glory of the highest degree.

- Qualcomm Spectra™ 580 Triple ISP captures from three lenses simultaneously with parallel processing up to 2.7 gigapixels per second
- HDR video records in over a billion shades of color with crisp contrast, peak brightness, and deep black
- Low Light architecture for bright, clear results day or night



### Intelligence for the win

Outsmart and outperform the competition with this premier platform in your arsenal. The full suite of Snapdragon Elite Gaming™ features boost responsiveness and performance, complemented by advanced AI, all to launch you into the winner's circle. Collaborate globally as language barriers melt away with real-time translation or make last-second moves with responsive voice commands. Scheme and strategize, swerve and steer backed by unbeatable flagship-level intelligence.

- Qualcomm® Game Quick Touch reduces touch latency by up to 20%, while Variable Rate Shading (VRS) allows games to run better without draining power
- Updatable drivers offer real-time game updates, no OS update required
- Up to 144 Hz QHD display support for smooth, vivid gameplay

To learn more visit  
[snapdragon.com](https://snapdragon.com)

All comparisons made are in reference to previous generation, Snapdragon 888 mobile platform. Results will vary depending on OEM implementation and other factors. Battery life varies significantly based on device, settings, usage, and other factors.

Snapdragon, Qualcomm AI Engine, Qualcomm Hexagon, Qualcomm Sensing Hub, Qualcomm FastConnect, Qualcomm Spectra, Snapdragon Elite Gaming, Qualcomm Adreno, Qualcomm Kryo, Qualcomm Game Quick Touch, and Snapdragon Sound are products of Qualcomm Technologies Inc. and/or its subsidiaries.

\*Exact speed measured at 2.995 GHz

## SPECIFICATIONS &amp; FEATURES

**Artificial Intelligence**

- Adreno 660 GPU
- Kryo 680 CPU
- Hexagon 780 Processor
  - Fused AI Accelerator
  - Hexagon Tensor Accelerator
  - Hexagon Vector eXtensions
  - Hexagon Scalar Accelerator
- Qualcomm Sensing Hub (2nd Generation)

**5G Modem-RF System**

- Snapdragon X60 5G Modem-RF System
  - 5G mmWave and sub-6 GHz, standalone (SA) and non-standalone (NSA) modes, FDD, TDD
  - Dynamic Spectrum Sharing
  - mmWave: 800 MHz bandwidth, 8 carriers, 2x2 MIMO
  - Sub-6 GHz: 200 MHz bandwidth, 4x4 MIMO
  - Qualcomm\* 5G PowerSave
  - Qualcomm\* Smart Transmit™ technology
  - Qualcomm\* Wideband Envelope Tracking
  - Qualcomm\* AI-Enhanced Signal Boost
  - Global 5G multi-SIM
- Downlink: Up to 7.5 Gbps
- Uplink: Up to 3 Gbps
- Multimode support: 5G NR, LTE including CBRS, WCDMA, HSPA, TD-SCDMA, CDMA 1x, EV-DO, GSM/EDGE

**Wi-Fi & Bluetooth**

- FastConnect 6900 System
  - Wi-Fi Standards: Wi-Fi 6E, Wi-Fi 6 (802.11ax), Wi-Fi 5 (802.11ac), 802.11a/b/g/n
  - Wi-Fi Spectral Bands: 2.4 GHz, 5 GHz, 6 GHz
  - Peak speed: 3.6 Gbps
  - Channel Utilization: 20/40/80/160 MHz
  - 8-stream sounding (for 8x8 MU-MIMO)
  - MIMO Configuration: 2x2 (2-stream)
  - MU-MIMO (Uplink & Downlink)
  - 4K QAM
  - OFDMA (Uplink & Downlink)
  - Dual-band simultaneous (2x2 + 2x2)
  - Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal
- Integrated Bluetooth
  - Bluetooth Version: Bluetooth 5.2
  - Bluetooth features: Dual Bluetooth antennas, LE Audio Features (one-to-many broadcast), Qualcomm\* aptX™ suite
  - Bluetooth audio: Snapdragon Sound with 24-bit 96kHz music streaming, Ultra-low latency <90 milliseconds, 32-kHz Super Wideband Voice

**Camera**

- Qualcomm Spectra 580 Image Signal Processor
  - Triple 14-bit ISPs
  - Up to 2.7 Gigapixels per Second computer vision ISP (CV-ISP)
  - Up to 200 Megapixel Photo Capture
  - Up to 28 MP triple camera @ 30 FPS with Zero Shutter Lag
  - Up to 64+25 MP dual camera @ 30 FPS with Zero Shutter Lag
  - Up to 84 MP single camera @ 30 FPS with Zero Shutter Lag
- Rec. 2020 color gamut photo and video capture
- Up to 10-bit color depth photo and video capture
- 10-bit HDR HEIF photo capture
- 4K Video Capture + 64 MP Photo
- 8K Video Capture @ 30 FPS
- Slow-mo video capture at 720p @ 960 FPS
- HEIF: HEIC photo capture, HEVC video capture
- Video Capture Formats: HDR10+, HDR10, HLG, Dolby Vision
- 4K Video Capture @ 120 FPS
- 4K HDR Video Capture with Portrait Mode (Bokeh)
- Multi-frame Noise Reduction (MFNR)
- Real-time object classification, segmentation, and replacement
- Locally compensated Multi-Frame Noise Reduction
- Multi-Frame and Staggered HDR sensor support
- Low light photography architecture
- Video super resolution
- AI-based auto-focus and auto-exposure
- Advanced HW-based face detection with deep learning filter

**Audio**

- Hexagon Voice Assistant Accelerator for hardware accelerated voice signal processing
- Qualcomm Aqstic™ audio codec (Up to WCD9385)
- Total Harmonic Distortion + Noise (THD+N), Playback: -108dB
- PCM up to 384 kHz/32-bit
- Customizable "Golden Ears" filter
- New Qualcomm Aqstic smart speaker amplifier (up to WSA8835)

**Display**

- On-Device Display Support:
  - 4K @ 60 Hz
  - QHD+ @ 144 Hz
- Maximum External Display Support: up to 4K @ 60 Hz
  - 10-bit color depth, Rec. 2020 color gamut
  - HDR10 and HDR10+
- Demura and subpixel rendering for OLED Uniformity

**CPU**

- Kryo 680 CPU
  - Up to 3.0 GHz\*, with Arm Cortex-X1 technology
  - 64-bit Architecture

**Visual Subsystem**

- Adreno 660 GPU
  - Vulkan\* 1.1 API support
  - HDR gaming (10-bit color depth, Rec. 2020 color gamut)
  - Physically Based Rendering
  - API Support: OpenGL\* ES 3.2, OpenCL™ 2.0 FP, Vulkan 1.1
  - Hardware-accelerated H.265 and VP9 decoder
  - HDR Playback Codec support for HDR10+, HDR10, HLG and Dolby Vision

**Security**

- Platform Security Foundations, Trusted Execution Environment & Services, Secure Processing Unit (SPU)
- Qualcomm\* wireless edge services (WES) and premium security features
- Qualcomm\* 3D Sonic Sensor and Qualcomm 3D Sonic Max (fingerprint sensor)
- Qualcomm\* Type-1 Hypervisor

**Charging**

- Qualcomm\* Quick Charge™ 5 Technology

**Location**

- GPS, Glonass, BeiDou, Galileo, QZSS, NavIC capable
- Dual Frequency Support (L1/L5)
- Sidewalk/lane-level Positioning
- Sensor-Assisted Positioning

**Memory**

- Support for LP-DDR5 memory up to 3200 MHz
- Memory Density: up to 16 GB

**General Specifications**

- Full Suite of Snapdragon Elite Gaming features
- 5 nm Process Technology
- USB Version 3.1; USB Type-C Support
- Part Number: SM8350-AC

\*Exact speed measured at 2995 GHz

Certain optional features available subject to Carrier and OEM selection for an additional fee.

Qualcomm Quick Charge, Qualcomm 3D Sonic Sensor, Qualcomm Smart Transmit, Qualcomm 5G Powersave, Qualcomm Aqstic, Qualcomm Wideband Envelope Tracking, Qualcomm AI-Enhanced Signal Boost, Qualcomm Type-1 Hypervisor and Qualcomm aptX are products of Qualcomm Technologies Inc. and/or its subsidiaries.

Qualcomm wireless edge services are offered by Qualcomm Technologies, Inc. and/or its subsidiaries.

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