



## Snapdragon® 6 Gen 3 Mobile Platform

Introducing the Snapdragon® 6 Gen 3 Mobile Platform, powering your everyday experiences—effortlessly. Boosted performance from Snapdragon 6 Gen 1 delivers improved efficiencies across all your daily interactions. Leverage user-friendly intelligence that adapts to your needs, experience smooth and seamless revved-up gaming scenes, and relive memories through crystal-clear capture, all backed by boundless connectivity from virtually anywhere.

### Boosted performance

Take advantage of improved efficiencies across all your daily interactions, from multitasking to app usage.

- Qualcomm® Kryo™ CPU delivers up to 10% better CPU performance for faster and more efficient device usage.
- Experience smooth and seamless gaming scenes with Qualcomm® Adreno™ GPU, rendering over 30% better performance.
- Everyday tasks are made easier with 20% better AI performance from the Qualcomm® AI Engine.

### User-friendly intelligence

Elevate your everyday experiences with improved AI performance and intuitive features powered by the Qualcomm AI Engine.

- AI-based noise cancellation removes unwanted noise so people can always hear you.
- AI-based activity tracking understands routines and opens apps to provide an intuitive experience from the Qualcomm® Sensing Hub.

### Revved-up gaming

Game on with boosted performance and vivid visuals, thanks to the Adreno GPU and select Snapdragon Elite Gaming™ features.

- Variable Rate Shading optimizes power and performance by rendering content of focus at full resolution and the rest at a lower resolution.
- Qualcomm® Game Color Plus has the power to turn any standard game into a vibrant visual masterpiece by boosting color, saturation, sharpness, and detail.
- Qualcomm® Game Quick Touch is optimized to the millisecond to reduce touch latency.

### Crystal-clear capture

Unleash stunning photos and videos using the Qualcomm Spectra™ Triple ISP, with ultra-fast parallel processing and smooth zooming.

- 200 MP photo capture enables truly impressive, highly-detailed shots so you can zoom in and retain quality.
- Record videos with computational HDR for enhanced contrast, sharpness, and realism.
- AI De-Noising (AIDE) removes noise in low-light images to deliver sharper and clearer photos.

### Boundless connectivity

Stay connected with blazing-fast 5G and Wi-Fi 6E speeds.

- Snapdragon 5G Modem-RF System provides blazing-fast 5G speeds and expanded network coverage, enabling lag-free cloud gaming and seamless streaming on-the-go.
- Qualcomm® FastConnect™ Mobile Connectivity System delivers peak Wi-Fi speeds up to 2.9 Gbps for fast and responsive Wi-Fi at home.

All comparisons made to previous generation.

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# Specs & Features

## Artificial Intelligence

Qualcomm® Adreno™ GPU

Qualcomm® Kryo™ CPU

Qualcomm® Hexagon™ NPU

- Fused AI Accelerator
- Hexagon Tensor Accelerator
- Hexagon Vector eXTensions
- Hexagon Scalar Accelerator
- Support for mix precision (INT8+INT16)

Qualcomm® Sensing Hub

## 5G Modem-RF System

Snapdragon® 5G Modem-RF System

- 5G mmWave and sub-6 GHz
- SA, NSA, TDD, FDD, TDD-FDD aggregation
- Dynamic Spectrum Sharing
- mmWave: 200 MHz bandwidth, 2 carriers
- Sub-6 GHz: 140 MHz bandwidth
- Qualcomm® 5G PowerSave 2.0
- Qualcomm® Smart Transmit™ 2.0 technology
- Qualcomm® Wideband Envelope Tracking
- Qualcomm® AI-Enhanced Signal Boost
- Global 5G multi-SIM

Downlink: Up to 2.9 Gbps

Multimode support: 5G NR, LTE, mmWavesub6 dual connectivity (NR-DC), EN-DC, CBRS, WCDMA, HSPA, CDMA 1x, EV-DO, GSM/EDGE

## Wi-Fi & Bluetooth®

Qualcomm® FastConnect™ Mobile Connectivity System

- Wi-Fi Generation: Wi-Fi 6E
- Standards: 802.11ax, 802.11ac, 802.11a/b/g/n
- Peak speed: 2.9 Gbps
- Channel Bandwidth: 20/40/80/160 MHz
- MIMO Configuration: 8x8 Sounding MU-MIMO (Uplink and Downlink)
- 4K QAM
- OFDMA (Uplink & Downlink)
- Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal, FIPS 140-2-support, 256-bit Encryption

Integrated Bluetooth

- Bluetooth® 5.2, LE Audio, Dual Bluetooth antennas, Snapdragon Sound™ Technology Suite with support for Qualcomm® aptX™ Voice, aptX Lossless, aptX Adaptive

## Camera

Qualcomm Spectra™ Image Signal Processor

Triple 12-bit ISPs

Up to 16 MP triple camera @ 30 FPS with Zero Shutter Lag

Up to 32+16 MP dual camera @ 30 FPS with Zero Shutter Lag

Up to 48 MP single camera @ 30 FPS with Zero Shutter Lag

Up to 200 MP Photo Capture

4K HDR Video Capture + 48 MP Photo Capture

Video Capture Formats: HEVC, H.264

4K HDR Video Capture @ 30 FPS

Slow-Mo Video Capture at 720p @ 240 FPS

Hardware-Based Multi-Frame Noise Reduction (MFNR)

Hardware-Based Locally Motion Compensated Temporal Filtering

Support for staggered HDR image sensors

AI-based face detection, auto-focus, and autoexposure

## Audio

Qualcomm Aqstic™ audio codec

New Qualcomm Aqstic smart speaker amplifier

Total Harmonic Distortion + Noise (THD+N) Playback: -108dB

Snapdragon Sound Technology Suite

## Display

On-Device Display Support:

- FHD+ @ 120 Hz

## CPU

Kryo CPU

- 64-bit Architecture
- 4 Performance cores, up to 2.4GHz
- 4 Efficiency cores, up to 1.8GHz

## Visual Subsystem

Adreno GPU

- Vulkan® 1.1 API support
- HDR gaming (10-bit color depth, Rec. 2020 color gamut)
- 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 HLG

## Security

Platform Security Foundations and Qualcomm® Trusted Execution Environment (TEE) for use cases requiring higher processing assurance

Trust Management Engine

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

Qualcomm® Type-1 Hypervisor

## Charging

Qualcomm® Quick Charge™ 4+ technology

## Location

GPS, Glonass, BeiDou, Galileo, QZSS, NavIC

Dual Frequency GNSS (L1/L5)

Sensor-Assisted Positioning

- Urban pedestrian navigation with sidewalk accuracy
- Global freeway lane-level vehicle navigation

## Memory

Support for LP-DDR4x memory, up to 2100 MHz

Support for LP-DDR5 memory, up to 3200 MHz

Memory Density: Up to 12 GB

## General Specifications

4nm Process Technology

Storage: UFS 3.1

USB Version 3.1; USB Type-C Support

Part Number: SM6475-AB

