SNAPDRAGON® 6s GEN 4 MOBILE PLATFORM

Astonishing performance
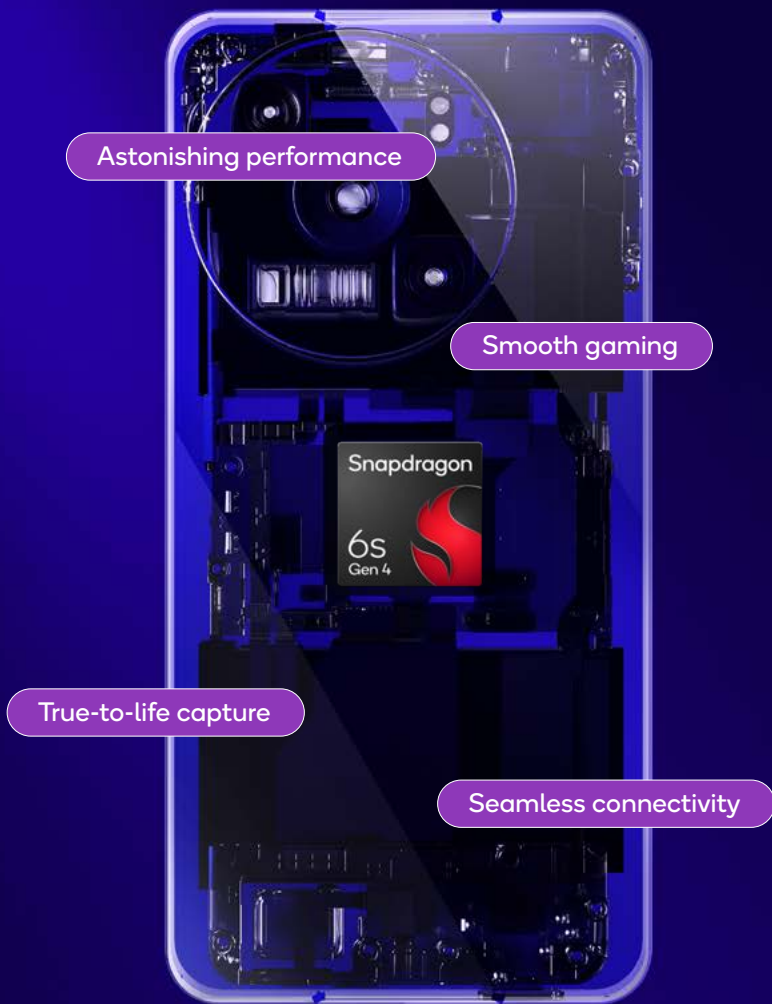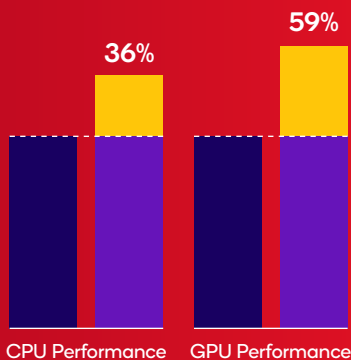
Smooth gaming

True-to-life capture

Seamless connectivity

Snapdragon
6s
Gen 4

The Snapdragon 6s Gen 4 Mobile Platform is where power meets precision. Its advanced 4nm architecture, 36% improved CPU, and 59% faster GPU enables longer battery life and optimized on-device experiences. Plus, immerse yourself in smooth gaming at 144 FPS and capture memories that are true-to-life with 200 MP photos and high-resolution video—all backed by seamless 5G and Wi-Fi 6E connectivity. Familiar experiences, elevated.

Astonishing performance

Enjoy smoother multitasking, faster app loading times, and enhanced overall system performance—making every interaction with your device a pleasure.

36%

59%

CPU Performance   GPU Performance

Comparisons made to previous generation.

Smooth gaming

Immerse yourself in the world of mobile gaming with support for ultra-smooth 144 FPS at FHD+ resolution.

- Variable Rate Shading adjusts shading rates across different screen areas, optimizing graphics performance in both quality and speed.
- Qualcomm® Game Quick Touch reduces touch latency, making controls faster and more responsive.

True-to-life capture

Bring your memories to life with highly detailed photo and high-resolution video capture from the Qualcomm Spectra™ ISP.

- Capture snapshots at 200 MP that are able to zoom in and still retain sharp picture quality.
- Hardware-accelerated Multi-Frame Noise Reduction (MFNR) rapidly process images, combining them to reduce noise and improve clarity in low-light conditions.

Seamless connectivity

Enjoy seamless streaming, lag-free online gaming, and quick downloads from virtually anywhere.

- Qualcomm® 5G Modem-RF System delivers blazing fast Release 16 5G.
- Qualcomm® FastConnect™ Mobile Connectivity System provides high-speed Wi-Fi 6E and reliable Bluetooth® connectivity.

Camera

200 MP

High-Res Video

Hardware-Accelerated Multi-Frame Noise Reduction
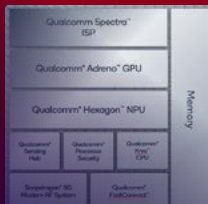
Performance

36% Improved CPU

59% Improved GPU

4nm Process Node

Qualcomm Spectra™ ISP

Qualcomm® Adreno™ GPU

Qualcomm® Hexagon™ NPU

Memory

Snapdragon 6s Gen 4

Gaming

Variable Rate Shading

Qualcomm Game Quick Touch

144 Hz FHD+

Connectivity

Release 16 5G

Wi-Fi 6E

Bluetooth® 5.4 Technology

All comparisons made to previous generation.

5G Modem-RF System

Qualcomm® 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
- Global 5G multi-SIM

Downlink: Up to 2.9 Gbps

Multimode support: 5G NR, LTE, mmWave, sub6 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 5.4, LE Audio, Dual Bluetooth antennas

Camera

Qualcomm Spectra™ Image Signal Processor
- Dual 12-bit ISPs
- Up to 16+16 MP dual camera @ 30 FPS with Zero Shutter Lag
- Up to 32 MP single camera @ 30 FPS with Zero Shutter Lag
- Up to 200 MP Photo Capture

Video capture formats: HEVC, H.264

2K HDR video capture @ 30 FPS

Slow-mo video capture at 720p @ 240 FPS

Hardware-Based Multi-Frame Noise Reduction (MFNR)

Audio

Qualcomm Aqstic™ audio codec

Qualcomm Aqstic smart speaker amplifier

Total Harmonic Distortion + Noise (THD+N)

Playback: -108 dB

Snapdragon Sound™ Technology Suite

Display

On-Device Display Support:
- FHD+ @ 144 Hz

CPU

Qualcomm® Kryo™ CPU
- 64-bit Architecture
- 4 Performance cores, up to 2.4GHz
- 4 Efficiency cores, up to 1.8GHz

Visual Subsystem

Qualcomm® 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

Qualcomm® Trusted Execution Environment (TEE)

Trust Management Engine

Qualcomm® wireless edge services (WES)

Qualcomm® Type-1 Hypervisor

Charging

Qualcomm® Quick Charge™ 4+ Technology

Location

GPS, Glonass, BeiDou, Galileo, QZSS, NavIC

Triple Frequency GNSS (L1/L5/L2)

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-DDR5x 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: SM6435-AA