SNAPDRAGON® 7 GEN 3 MOBILE PLATFORM

Exhilarating AI

Bask in next-gen artificial intelligence that works behind-the-scenes to make your everyday tasks effortless. Chat in real-time with global gamers or follow livestreams of international influencers with multi-language translation and transcription. Plus, the contextually aware Qualcomm® Sensing Hub recognizes your routines to intuitively open apps at the precise moment you need them.

- Qualcomm® AI Engine offers 60% better AI performance per watt
- Qualcomm® Hexagon™ NPU improves AI network performance
- Brand new INT4 precision support in the Snapdragon 7-series enhances power efficiency for longer-lasting communication, productivity, and more

Unyielding performance

Thrive in the fast lane with accelerated processing. Enjoy seamless experiences from our Qualcomm® Kryo™ CPU reaching blazing speeds of 2.63 GHz—nearly 15% improvement from previous generation. Plus, surround yourself in sound using spatial audio with head tracking—new to the Snapdragon 7-series. And recharge from 0-50% in five minutes, thanks to Qualcomm® Quick Charge™ 5 Technology.

- Improved CPU and GPU performance contributes to 20% overall power savings
- Snapdragon Sound™ Technology Suite support enables lossless-quality audio output and stereo-quality recording
- LE Audio with Auracast enables revolutionary use cases, like public TV audio access, easy sound sharing, and enhanced hearing aid performance

Fan-favorite gaming

Heighten your competitive edge with immersive gaming, brought to life on an ultra-smooth display. Select Snapdragon Elite Gaming™ features take graphics from standard to staggering. Experience near zero lag with Qualcomm® Game Quick Touch and achieve longer battery life through intelligent upscaling by Snapdragon Game Super Resolution.

- Qualcomm® Adreno™ GPU delivers over 50% faster graphics rendering for high-quality HDR gaming
- Adreno Frame Motion Engine can double frame rates to upscale content while maintaining the same power consumption

Creativity-charged camera

Revel in your memories with advanced photo capture in up to 200 MP—made even more vivid with intelligent enhancements. Eliminate grainy discoloration for higher-res results with a new AI Remosaic feature, while AI Noise Reduction produces clearer, more vibrant images, even in dim environments. Plus, achieve crisp, HDR-quality footage to delight in every detail using AI Video Retouch.

- Qualcomm Spectra™ Triple ISP enables capture from three cameras at once, with super-fast parallel processing and smooth zooming
- Computational 4K HDR Video Capture boasts incredible contrast, sharpness, and realism
- Support for Google Ultra HDR photo format renders incredible detail in both shadows and highlights

Unstoppable connectivity

Speedy and reliable 5G and Wi-Fi coverage provide you with the utmost confidence from almost anywhere. Blazing download speeds up to 5 Gbps deliver unceasing mobile gaming, work-from-anywhere productivity, and more—thanks to the Snapdragon X63 5G Modem-RF System. And Wi-Fi-based entertainment and communication soar with the Qualcomm® FastConnect™ 6700 Mobile Connectivity System, aided by jitter-free Bluetooth® 5.3 technology.

- 5G Dual-SIM Dual-Active (DSDA) enables simultaneous use of two 5G+5G or 5G+4G SIM cards for ultimate user flexibility
- Wi-Fi speeds up to 2.9 Gbps
- New triple frequency location support in the Snapdragon 7-series provides greater location accuracy user experience, even for devices with lower quality GNSS antenna
### SPECIFICATIONS & 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 (INT4, INT8, and INT16)
- Qualcomm® Sensing Hub

#### 5G Modem-RF System
- Snapdragon® X63 5G Modem-RF System
  - 5G mmWave and sub-6 GHz, standalone (SA) and non-standalone (NSA) modes, FDD, TDD
  - Dynamic Spectrum Sharing
  - mmWave: 4 carriers, 2x2 MIMO
  - Sub-6 GHz: 4x4 MIMO
  - Qualcomm® 5G PowerSave 2.0
  - Qualcomm® Smart Transmit™ 2.0 technology
  - Qualcomm® Wideband Envelope Tracking
  - Qualcomm® AI-Enhanced Signal Boost
  - Global 5G multi-SIM, including 5G/4G DSDA

#### Wi-Fi & Bluetooth
- Qualcomm® FastConnect™ 6700 System
  - Wi-Fi Generation: Wi-Fi 6E, Wi-Fi 6
  - Wi-Fi Standards: 802.11ax, 802.11ac, 802.11a/b/g/n
  - Wi-Fi Spectral Bands: 60/40/30/160 MHz
  - Peak speed: 2.9 Gbps
  - Channel Bandwidth: 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)
  - 4-Stream (2x2 + 2x2) Dual Band Simultaneous (DBS)
  - Wi-Fi Security: WPA3-Enterprise, WPA3-Enhanced Open, WPA3 Easy Connect, WPA3-Personal
- Integrated Bluetooth
  - Bluetooth features: Bluetooth 5.3, LE Audio
  - Bluetooth audio: Snapdragon Sound™ technology with support for Qualcomm® aptX™ Voice, aptX Lossless, aptX Adaptive, and LE Audio

#### Camera
- Qualcomm Spectra™ Image Signal Processor
  - Triple 12-bit ISPs
  - Up to 3.0 Gigapixels per second computer vision ISP (CV-ISP)
  - Up to 21 MP triple camera @ 30 FPS with Zero Shutter Lag
  - Up to 32+21 MP dual camera @ 30 FPS with Zero Shutter Lag
  - Up to 64 MP single camera @ 30 FPS with Zero Shutter Lag
  - Up to 200 MP Photo Capture

#### Visual Subsystem
- Adreno® GPU
  - HDR gaming (10-bit color depth, Rec. 2020 color gamut)
  - Physically Based Rendering
  - Volumetric Rendering
  - Adreno Frame Motion Engine
  - API Support: OpenGL® ES 3.2, OpenCL® 2.0 FP, Vulkan 1.3
  - Hardware-accelerated H.265 and VP9 decoder
  - HDR Playback Codec support for HDR10+, HDR10, HLG, and Dolby Vision

#### Security
- Platform Security Foundations, Qualcomm® Trusted Execution Environment & Services (TEE)
- Trust Management Engine (Root of Trust)
- 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
- 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-DDR5 memory, up to 3200 MHz
- Support for LP-DDR4x memory, up to 2133 MHz
- Memory Density: Up to 16 GB

#### General Specifications
- Select Snapdragon Elite Gaming™ features
- 4 nm Process Technology
- USB Version 3.1 Gen 2; USB Type-C Support
- Storage: UFS 3.1
- Part Number: SM7550-AB

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Certain optional features available subject to Carrier and OEM selection for an additional fee. Snapdragon and Qualcomm branded products are products of Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm wireless edge services are offered by Qualcomm Technologies, Inc. and/or its subsidiaries. Qualcomm, Snapdragon Elite Gaming, Snapdragon Sound, Snapdragon, Adreno, FastConnect, Kryo, Snapdragon, Spectra, Qualcomm Aqstic, Hexagon, and Quick Charge are trademarks or registered trademarks of Qualcomm Incorporated. aptX® is a trademark or registered trademark of Qualcomm Technologies International, Ltd. ©2023 Qualcomm Technologies, Inc. and/or its affiliated companies. All rights reserved.