



Extreme mobile computing, extreme productivity from virtually anywhere.

The Snapdragon® 8cx Gen 3 Compute Platform offers extreme performance and efficiency all in a premium, ultra-thin form factor. Support for up to multi-day battery life powers an always on, always connected computing experience and multi-gigabit, lightning fast 5G throughput speeds up to 10 Gbps and industry leading Wi-Fi 6/6E connectivity speeds. Advanced camera and audio technology enables crisp video and crystal-clear audio. Powerful AI accelerated experiences, and enterprise-grade security make for modern, mobile PCs.

Performance and Battery Life

The Snapdragon 8cx Gen 3 Compute Platform is designed to deliver extreme productivity and entertainment. With a 5nm architecture, Snapdragon 8cx Gen 3 delivers fast and efficient processing speeds with up to 85% faster¹ CPU multi-tasking performance and up to 60% faster² GPU performance for incredibly smooth, responsive performance¹. All of this performance is delivered with leading efficiency and supports up to 25+ hours or up to multi-day battery life on a single charge, which is up to 2X as long as your current PC.

Always On, Always Connected

High-performance, robust and low-latency wireless connectivity enables the freedom of productivity and entertainment from virtually anywhere. Stay Always Connected with Snapdragon 8cx Gen 3 seamlessly switching between blazing fast 5G, 4G LTE, and trusted Wi-Fi 6 or 6E. It offers lightning-fast speeds up to 10 Gbps with the Snapdragon X65 5G Modem-RF system, up to 7.5 Gbps with the Snapdragon X55 5G Modem-RF system, or up to 4.4 Gbps with the Snapdragon X62 5G Modem-RF system. Qualcomm® FastConnect™ 6900 system delivers industry leading Wi-Fi 6E performance with up to 3.6 Gbps. Whether you are uploading, downloading, or editing large files in the cloud with colleagues, connectivity is critical to the speed of your productivity and collaboration. And with the growth of cloud gaming services like xCloud, titles that have never before been playable on thin and light notebooks are now possible with our leading connectivity!

Advanced Camera and Audio

Snapdragon 8cx Gen 3 enables immersive video and audio experiences for video conferencing in applications like Teams, Zoom, or others. These experiences are enabled by a quick startup camera supporting up to 4K HDR video and the latest generation 3A (Auto focus, Auto White Balance, and Auto Exposure). Crisp and clear video conferencing is made real with Hi-Fi audio and AI accelerated Echo-cancellation and noise suppression (ECNS) to ensure that you are clearly seen and heard for an incredible user experience.

Artificial Intelligence

Snapdragon 8cx Gen 3 with the Qualcomm® AI Engine delivers 29+ TOPS of powerful acceleration, 3 times greater³, for the latest experiences and applications. Utilizing the performance and efficiency of Snapdragon 8cx Gen 3, the Qualcomm AI Engine enables cloud-class models to run on thin and light laptops while other system resources stay responsive, so you stay productive.

Enterprise-Grade Security

Snapdragon 8cx Gen 3 security solutions keep you secure from the chip to the cloud. Layered secure boot and the new Microsoft Pluton TPM architecture running on the Qualcomm® Secure Processing Unit (SPU) help ensure your device starts securely. Snapdragon 8cx Gen 3 is Microsoft Secured-core PC capable for the most secure devices out of the box, with Windows Hello face and fingerprint login features to enable secure access. Runtime memory encryption helps keep your data secure, and you can connect securely over 5G, and 4G LTE cellular, and trusted Wi-Fi networks.





Snapdragon

8cx compute platform Gen 3

SPECIFICATIONS & FEATURES

Features

- First Windows compute platform at 5nm
- Qualcomm® Smart Transmit™ Technology for mmW/Sub6
- Higher performance, lower power
- 2x b/w, additional band, 4K QAM
- 85% generational CPU performance increase
- 60% generational GPU performance increase
- Up to 4K HDR support in DPU (FP16)
- Variable refresh rate (120 FPS)
- Camera security framework for Windows Hello
- Leading video power efficiency
- Qualcomm® Neural Processing Engine SDK support for AI
- Enhanced Enterprise security features
- Runtime Memory Encryption
- UFS 3.1 support

Specifications

- CPU
 - CPU Cores: Qualcomm® Kryo™ CPU
 - CPU Architecture: 64-bit
- GPU
 - GPU Name: Qualcomm® Adreno™ GPU
 - API Support: DX12
- DSP
 - DSP Technology: Qualcomm® Hexagon™ Processor, Qualcomm® Sensing Hub

Memory

Memory Type: 8 x16 channel LPDDR4x-4266

Storage

SSD: NVMe over PCIe
UFS: UFS 3.1

Process

Process Technology: 5LPE

Display

Max On-Device Display: 4K Ultra HD
Max External Display: Two 4K Displays over DP-MST

Video

Video Playback: Up 4K HDR @ 120fps
Codec Support: H.265 (HEVC), H.264 (AVC), VP9
Video Software: Rec. 2020 color gamut video capture, Up to 10-bits per color video capture

Camera

Image Signal Processor: Qualcomm Spectra™ ISP
Camera: Single camera up to 24 MP, with support for up to 4 concurrent cameras.
Video Capture (30 FPS): 4K HDR video capture, 4K Ultra HD video capture
Slow Motion Video Capture: 720p @ 480 FPS

General Audio

Audio Technology: Qualcomm TrueWireless™ Technology, Qualcomm® Broadcast Audio technology, Qualcomm Aqstic™ audio technology, Qualcomm® aptX™ audio technology
Qualcomm® aptX™ audio playback support: Qualcomm® aptX™, Qualcomm® aptX™ HD

Audio Playback

Channel output: Surround Sound
Speaker protection: Speaker protection

Location

Satellite Systems Support: Beidou, Galileo, GLONASS, GPS, QZSS, SBAS
Location Support: Qualcomm® Location
Global Emergency Services Support: Assisted GPS, OTDOA (LTE-based positioning)

5G Cellular Modem-RF

Modem Name: Snapdragon® X65 5G Modem-RF System
• Peak Download Speed: 10 Gbps
• Cellular Modem-RF Specs: 1000 MHz bandwidth (mmWave), 300 MHz bandwidth (sub-6 GHz)

Modem Name: Snapdragon® X55 5G Modem-RF system
• Peak Download Speed: 7.5 Gbps, 2.5 Gbps
• Peak Upload Speed: 3 Gbps, 316 Mbps
• Cellular Modem-RF Specs: 800 MHz bandwidth (mmWave), 200 MHz bandwidth (sub-6 GHz)

Modem Name: Snapdragon® X62 5G Modem-RF System
• Peak Download Speed: 4.4 Gbps
• Cellular Modem-RF Specs: 400 MHz bandwidth (mmWave), 120 MHz bandwidth (sub-6 GHz)

RF

RFFE: Qualcomm® RF Front-end (RFFE) solution, High-power transmit (HPUE), Qualcomm® Adaptive Antenna Tuning

Wi-Fi

Wi-Fi Standards: 802.11ax (Wi-Fi 6E), 802.11ad, 802.11ac Wave 2, 802.11a/b/g, 802.11n
Wi-Fi Spectral Bands: 24 GHz, 5 GHz, 6 GHz
MIMO Configuration: 2x2 (2-stream)

Bluetooth

Bluetooth® Version: Bluetooth 5.1

Battery life varies significantly based on device, settings, usage, and other factors. Always On, Always Connected PCs require network connectivity and compatible networks.

[snapdragon.com](https://www.qualcomm.com/snapdragon)

1 vs. Snapdragon 8cx Gen 2 as measured by GeekBench 5

2 vs. Snapdragon 8cx Gen 2 as measured by 3DMark Night Raid

3 vs. Snapdragon 8cx Gen 2

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

Snapdragon, Qualcomm AI Engine, Qualcomm FastConnect, Qualcomm Secure Processing Unit, Qualcomm Neural Processing Unit, Qualcomm Kryo, Qualcomm Adreno, Qualcomm Hexagon, Qualcomm Sensing Hub, Qualcomm Spectra, Qualcomm TrueWireless, Qualcomm Broadcast Audio, Qualcomm Aqstic, Qualcomm aptX, Qualcomm Location, Qualcomm RFFE and Qualcomm Adaptive Antenna Tuning are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

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