

Key Announcements:

- Qualcomm Brings Record-breaking Generative AI for Devices at Snapdragon Summit 2023 – link
- Qualcomm Unleashes Snapdragon X Elite: The AI Super-Charged Processor to Revolutionize the PC – link
- Qualcomm Launches Premium Snapdragon 8 Gen 3 to Bring Generative AI to the Next Generation Flagship Smartphones – link
- Qualcomm S7 and S7 Pro Gen 1 Sound Platforms Unleash Next Level Audio Experiences – link
- Qualcomm Unveils Snapdragon Seamless to Allow Your Devices to Work as One – link

Key Announcement

Establishing Qualcomm as a leader in on-device AI at the edge

- Qualcomm Brings Record-breaking Generative AI for Devices at Snapdragon Summit 2023 – link

- New Snapdragon® platforms showcase unmatched on-device AI performance for a wave of generative AI devices and applications, with enhanced focus on responsiveness, reliability and privacy.
- Snapdragon X Elite is built from the ground up for on-device AI with an industry-leading NPU, along with best-in-class CPU performance and efficiency among Windows PC platforms.
- Snapdragon 8 Gen 3 has the most powerful NPU for mobile devices and uses the power of AI to invisibly enhance camera, gaming, sound and connectivity experiences for premium smartphones.
- Partners including Microsoft, Meta, Google, HP, and multiple others showed their support of on-device AI at Snapdragon Summit.

Snapdragon X Elite



13B+
Parameter support in PCs



On-device Personalization
Qualcomm® Sensing Hub

Qualcomm AI Stack

Qualcomm® AI Stack Models -
Fully optimized models

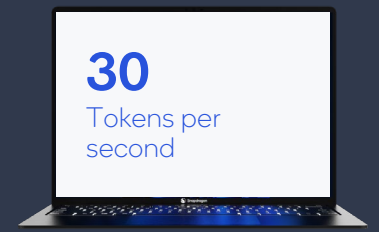
Fastest stable diffusion in the world

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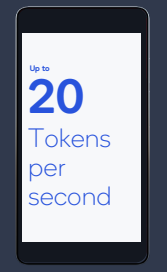
First to support **multi-modality gen AI models**



Text Prompt.



Meta Llama 2 powered AI assistants

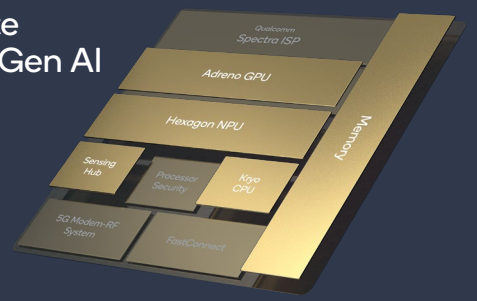


Support for a wide range of models

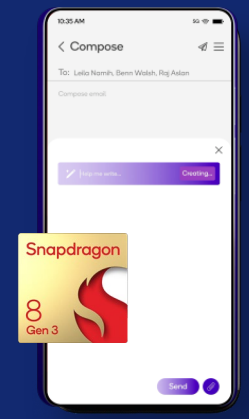
Microsoft Meta Baidu 百度 stability.ai OpenAI

Het. Compute designed for Gen AI

CPU
GPU
NPU



Up to
10B
Parameter support in phones



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Snapdragon® X Elite – The most powerful computing processor for the next generation AI PC

Key Announcement

- Qualcomm Unleashes Snapdragon X Elite: The AI Super-Charged Platform to Revolutionize the PC – link

- The Snapdragon X Elite platform features the new custom integrated Qualcomm Oryon™ CPU which sets the bar in performance – delivering up to 2 times faster CPU performance versus the competition, matching competitor peak performance at 68% less power.
- Built for AI, Snapdragon X Elite is capable of running generative AI models with over 13 billion parameters on-device and continues to expand Qualcomm's AI leadership.
- With 45 TOPS of NPU performance, Snapdragon X Elite has 4.5 times faster AI processing power than competitors.
- PCs powered by Snapdragon X Elite are expected from leading OEMs starting mid-2024.



Best-in-class performance vs. x86

Up to **2X** Faster CPU

Qualcomm Oryon™ CPU
12 High-performance cores
Dual-Core Boost

Up to **2X** Faster GPU

Qualcomm® Adreno™ GPU
4.6 Teraflops
Triple UHD monitor support

4nm process node

Generative AI powerhouse

Snapdragon smart

Capable to run **13B+** Parameters on device

Generates **30** Tokens/sec For 7B LLMs

Built for AI

75 TOPS
Qualcomm® AI Engine

45 TOPS
Qualcomm® Hexagon™ NPU

<1 seconds
Stable Diffusion

4.5X
Faster AI processing power than competitors

Smart user experiences

Snapdragon connect
Snapdragon sound
Snapdragon secure
Snapdragon sight

Lightning fast 5G | Wi-Fi 7
Immersive Lossless Audio
Advanced Camera ISP
Snapdragon Seamless
Chip-to-cloud security

Leading PC performance per watt

Matches peak PC performance at **68%** of the power vs competition

Qualcomm, Snapdragon, Kryo, Qualcomm Oryon, Adreno, Hexagon, Snapdragon Sight, Snapdragon Sound, Snapdragon Smart and Snapdragon Seamless are trademarks or registered trademarks of Qualcomm Incorporated. | CPU Performance is based on Geekbench v6.2 Multi-Thread on Windows OS run in October 2023. Snapdragon X Elite was tested using a Qualcomm laptop reference design on Windows OS. The i7-1360P (12 core) and i7-1355U (10 core) were tested using a Samsung Galaxy Book3 360 13" 2023 (NP730QFG) laptop and Samsung Galaxy Book3 15.6" 2023 (NP750XFG) laptop, respectively on Windows 11. Maximum performance reflected by i7-1360P and i7-1355U represent maximum achievable results in given platforms under unconstrained PL1/PL2 settings and no thermal limitations. Power and performance comparison reflects results based on measurements and hardware instrumentation of given devices. GPU Performance is based on 3DMark WildLife Extreme run in October 2023. Snapdragon X Elite was tested using a Qualcomm laptop reference design on Windows PS and a pre-commercial build of Wildlife Extreme. The i7-13800H (14 core) was tested using a Razer Blade 15 2023 (RZ09-0485) laptop on Windows 11. Maximum performance reflected by i7-13800H represents maximum achievable results in given platform under unconstrained PL1/PL2 settings and no thermal limitations. Power and performance comparison reflects results based on measurements and hardware instrumentation of given devices.

Snapdragon® 8 Gen 3 – A clear leader in on-device intelligence, premium-tier performance, and power efficiency

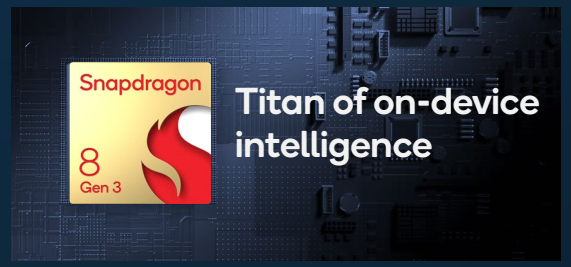
Key Announcement

- Qualcomm Launches Premium Snapdragon 8 Gen 3 to Bring Generative AI to the Next Wave of Flagship Smartphones – link

Our first mobile platform meticulously designed with generative AI in mind.

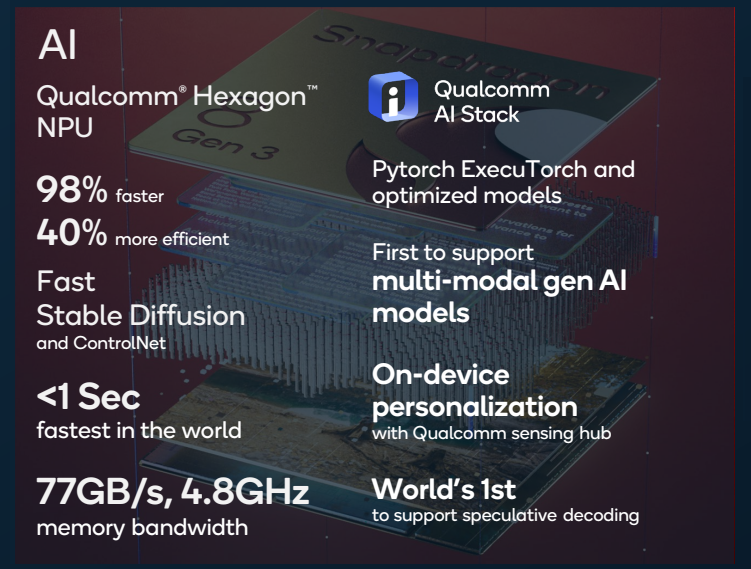
"Snapdragon 8 Gen 3 infuses high-performance AI across the entire system to deliver premium-level performance and extraordinary experiences to consumers. This platform unlocks a new era of generative AI enabling users to generate unique content, help with productivity, and other breakthrough use cases. Each year, we set out to design leading features and technologies that will power our latest Snapdragon 8-series mobile platform and the next generation of flagship Android devices. The Snapdragon 8 Gen 3 delivers."

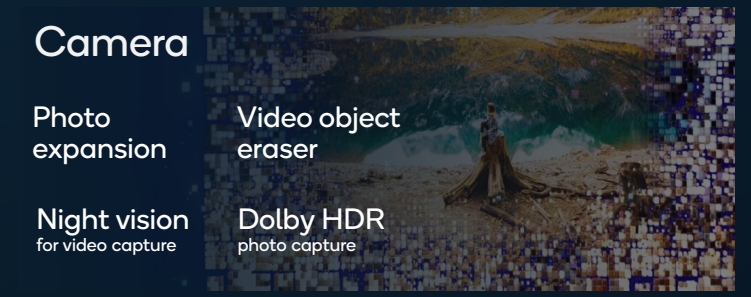
Chris Patrick
SVP & GM, Mobile Handsets
Qualcomm Technologies, Inc.

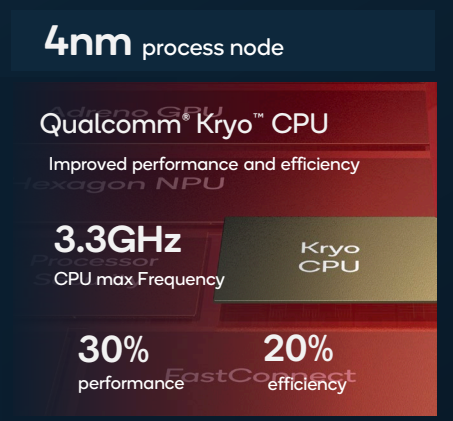


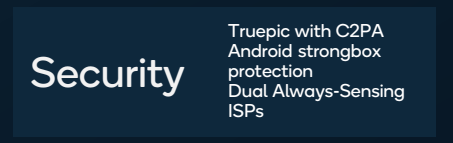


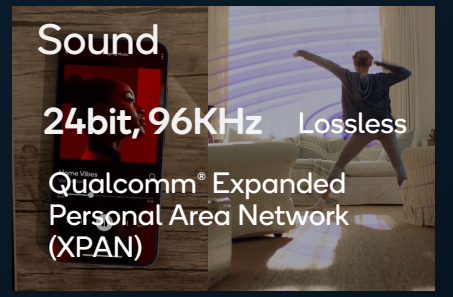












Battery life and storage varies significantly based on device, settings, usage, and other factors. Performance comparisons are made against the Snapdragon 8 Gen 2 Mobile Platform.

Setting a new benchmark for high-performance sound at ultra-low power

Key Announcement

- Qualcomm® S7 and S7 Pro Gen 1 Sound Platforms Unleash Next Level Audio Experiences – link

- The Qualcomm S7 and S7 Pro Gen 1 Platforms utilize an unparalleled level of on-device AI to deliver our most advanced, personalized, and responsive audio experiences.
- The platforms deliver six times the compute power, almost 100 times the AI power of previous generation platforms and a new tier of ultra-premium performance at low power.
- The Qualcomm S7 Pro Sound platform is the first to support Qualcomm® Expanded Personal Area Network Technology (XPAN) and micro-power Wi-Fi connectivity to extend audio range across the home, building or campus, with support for up to 192kHz lossless music quality.

Snapdragon sound

Almost 100X more AI

AI

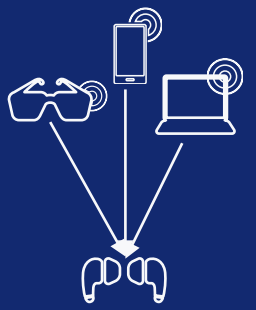
Qualcomm® Expanded Personal Area Network

Responsive 4th Gen ANC

Qualcomm® 4th GEN ANC

Powerful and connected compute

Micro-power Wi-Fi connectivity for extended range & quality



Qualcomm S7 pro sound platform Gen 1

Qualcomm S7 sound platform Gen 1

192kHz lossless music streaming

Enhanced sound for gaming with spatial audio

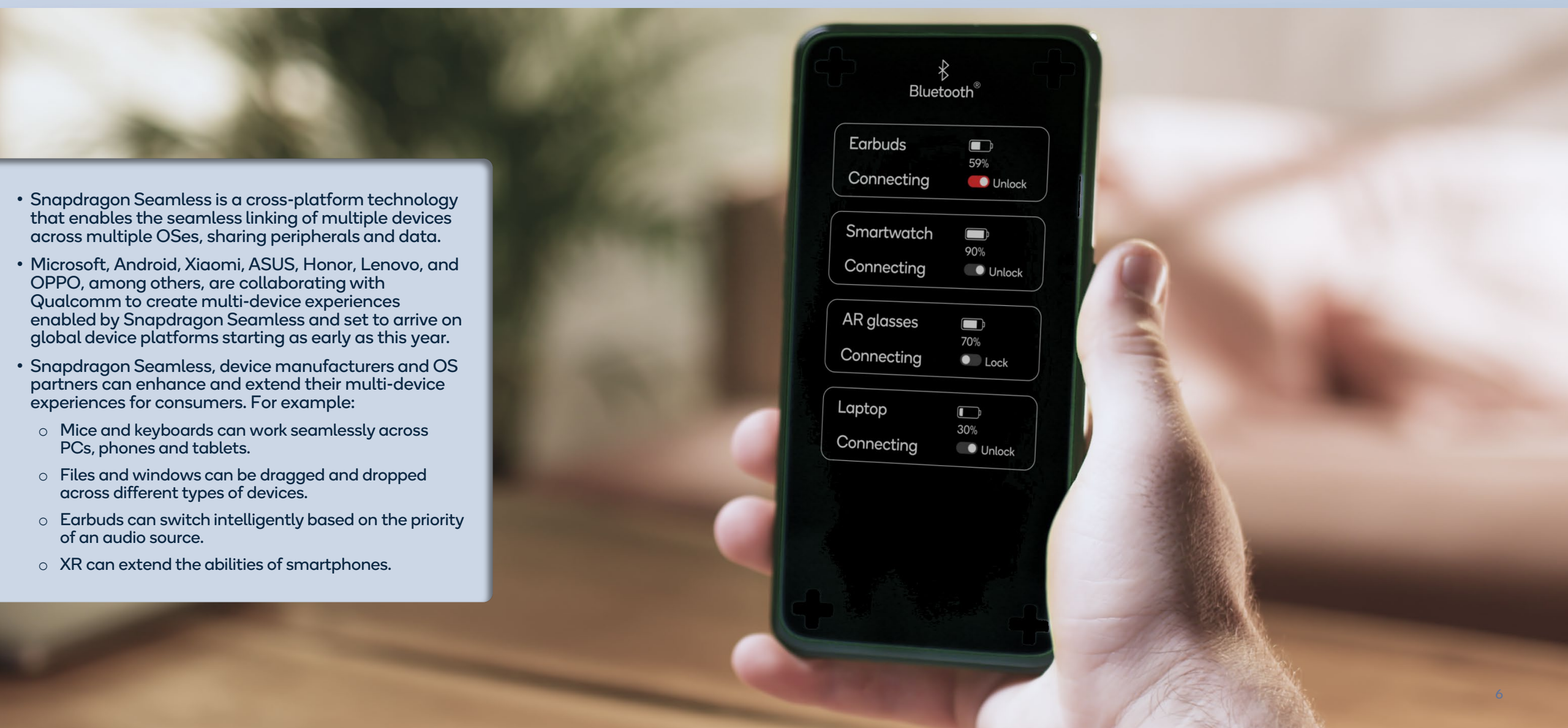


Performance comparisons are made against previous generation platforms.

Breaking down the barriers between OEMs, devices and operating systems

Key Announcement

- Qualcomm Unveils Snapdragon Seamless™ to Allow Your Devices to Work as One – link



- Snapdragon Seamless is a cross-platform technology that enables the seamless linking of multiple devices across multiple OSes, sharing peripherals and data.
- Microsoft, Android, Xiaomi, ASUS, Honor, Lenovo, and OPPO, among others, are collaborating with Qualcomm to create multi-device experiences enabled by Snapdragon Seamless and set to arrive on global device platforms starting as early as this year.
- Snapdragon Seamless, device manufacturers and OS partners can enhance and extend their multi-device experiences for consumers. For example:
  - Mice and keyboards can work seamlessly across PCs, phones and tablets.
  - Files and windows can be dragged and dropped across different types of devices.
  - Earbuds can switch intelligently based on the priority of an audio source.
  - XR can extend the abilities of smartphones.