



REDEFINE POSSIBILITIES

Unleash the power of an AI PC with Snapdragon X Plus Platform. Snapdragon X Plus revolutionizes your digital experience by bringing powerful performance and efficiency, lightning-fast connectivity, and groundbreaking on-device AI to even more of your favorite devices. Experience unparalleled productivity in ultra-portable laptop designs, with battery life that lasts for days.

GAME-CHANGING PERFORMANCE & EFFICIENCY

This powerhouse processor takes your laptop's performance to extraordinary heights. Snapdragon® X Plus' powerful 10-core Qualcomm Oryon™ CPU allows users to optimize workloads for productivity without interruption. Say goodbye to lag with incredibly fast responsiveness. The integrated Qualcomm® Adreno™ GPU delivers graphics-intensive presentations and entertainment. All this performance runs with incredible power efficiency, so you can go longer on a single charge with up to multi-day battery life*.

BUILT FOR AI

Snapdragon X Plus is powering the next generation of AI PCs. It is equipped with the industry-leading Qualcomm® AI Engine (CPU, GPU, NPU) that features a premium integrated Qualcomm® Hexagon™ NPU. The NPU delivers processing that reaches 45 TOPS, making it the world's fastest NPU for laptops. Utilize artificial intelligence (AI) on-device to bring your tasks and imagination to life with massive power savings. Snapdragon X Plus enables intuitive AI productivity tools that assist with your workflows, save valuable time, and make multitasking a breeze. Enhance your look and sound with cutting-edge camera and audio features. The Qualcomm AI Engine supports Windows Studio Effects and many other AI-accelerated applications and experiences that make usage possibilities endless.

SMARTER USER EXPERIENCES

Snapdragon X Plus revolutionizes the way you interact with your laptop. Whether you are streaming, downloading, or syncing, every action is smoother, more responsive, and more connected. Keep up while on the go from virtually anywhere with 5G** and Wi-Fi 7 with HBS Multi-Link for lightning-fast and jitter-free connectivity. Snapdragon Seamless™ experience enables you to easily switch between your favorite devices without relying on a cord connection. The Snapdragon Sound™ Technology Suite offers an immersive and high-fidelity audio experience, allowing users to enjoy lossless music and entertainment with wireless headphones. Snapdragon X Plus helps keep your PC protected from chip to cloud with features from the Qualcomm® Secure Processing Unit that runs the Microsoft Pluton TPM, total memory encryption, and Microsoft Secured-core PC support.

Snapdragon® X Plus: SKU Comparison Table

		Qualcomm Oryon™ CPU				Qualcomm® Adreno™ GPU	Qualcomm® Hexagon™ NPU	Memory	
Platform	Part Number	Cores	Total Cache	Max Multi-Core Frequency	Boost Frequency	TFLOPs	NPU TOPS	Memory Type	Transfer Rate
Snapdragon X Plus	X1P-66-100	10	42 MB	3.4 GHz	4.0 GHz (Single-Core)	3.8	45	LPDDR5x	8448 MT/s
Snapdragon X Plus	X1P-64-100	10	42 MB	3.4 GHz	None	3.8	45	LPDDR5x	8448 MT/s
Snapdragon X Plus	X1P-46-100	8	30 MB	3.4 GHz	4.0 GHz (Single-Core)	2.1	45	LPDDR5x	8448 MT/s
Snapdragon X Plus	X1P-42-100	8	30 MB	3.2 GHz	3.4 GHz (Single-Core)	1.7	45	LPDDR5x	8448 MT/s

* Battery life varies significantly with settings, usage, and other factors.
 ** Device features and functionality may vary based on OEM design.



FEATURES

Powerful CPU with high performance and remarkable power efficiency

Delivers exceptional energy savings and up to multiple days of battery life*

Industry-leading NPU, with up to 45 TOPS AI performance

Powers Copilot+PCs for the fastest, most intelligent Windows PC ever

On-device AI for transformative intelligent experiences, including support for generative AI at 30 tokens per second

Integrated GPU delivers stunning graphics performance

Lightning-fast downloading, streaming, and syncing of files with 5G** and Wi-Fi 7 connectivity, including HBS Multi-Link for minimized latency and jitter-free entertainment

Enterprise-grade security for enhanced protection from chip to cloud

Support for AV1 encode and decode for up to 4K HDR video streaming

Immersive, lossless audio for high-fidelity music and entertainment with your wireless headphones with Snapdragon Sound™ Technology Suite

Support for up to three external UHD monitors running at 60 Hz, delivering snappier and smoother display experiences

LPDDR5x memory with 135 GB/s bandwidth for faster AI experiences and efficient multitasking

Advanced MIPI camera support for high-quality imaging and intelligent features, such as auto-framing, background blur, and facial authentication at lower power consumption

SPECIFICATIONS

CPU

Qualcomm® Oryon™ CPU

- 64-bit architecture
- 10 cores, up to 4.0 GHz
- Total Cache: 42 MB

Max Multi-Core Frequency

- X1P-66-100 3.4 GHz
- X1P-64-100 3.4 GHz

Boost Frequency

- X1P-66-100 Single-Core 4.0 GHz
- X1P-64-100 None

GPU

Qualcomm® Adreno™ GPU

- X1P-66-100: Up to 3.8 TFLOPs
- X1P-64-100: Up to 3.8 TFLOPs

NPU

Qualcomm® Hexagon™ NPU

TOPS: 45 TOPS

Micro NPU: Dual Micro NPU on the Qualcomm® Sensing Hub

Memory

Memory Type: LPDDR5x

Transfer Rate: 8448 MT/s

Capacity: Up to 64 GB

Bandwidth: 135 GB/s

Bit Width: 16-bit

Number of Channels: 8

Storage

SD: SD v3.0

SSD/NVMe Interface: NVMe SSD over PCIe Gen 4

UFS: UFS 4.0

Process

Process Node: 4nm

Display

Display Processing Unit (DPU) Name: Qualcomm Adreno DPU

Max. On-Device Display Resolution: eDP v1.4b, up to UHD120 HDR10

Max. External Display Resolution: DP v1.4 - 3 displays, up to UHD60 HDR10, 2 displays 5K60

VPU

Video Processing Unit (VPU) Name: Qualcomm Adreno VPU

Encode:

- 4K UHD 30 FPS 8-bit recording – HEVC (H.265), AV1
- 4K UHD 60 FPS 8-bit encoding – H.264

Decode:

- 4K 60 FPS 10-bit playback – HEVC (H.265), VP9, AV1
- 4K 60 FPS 8-bit playback – H.264
- 4K 120 FPS 8-bit decode – HEVC (H.265)

Concurrency: 4K 60 FPS 8-bit & 10-bit decode + 4K UHD 30 FPS 8-bit encode + 4K UHD 30 FPS 8-bit Miracast

Camera

Image Signal Processor Name:

Qualcomm Spectra™ ISP

- Dual 18-bit ISPs
- Always-Sensing ISP

Dual Camera: 2x 36 MP

Single Camera: Up to 64 MP

Video Capture: 4K HDR

General Audio

Audio Technology: Qualcomm Aqstic™ Audio technology, Qualcomm® aptX™ Audio

Cellular Modem-RF

Snapdragon X65 5G Modem-RF System

Peak Download Speed: 10 Gbps

Peak Upload Speed: 3.5 Gbps

Cellular Modem-RF Specs: 1,000 MHz bandwidth (mmWave), 300 MHz bandwidth (sub-6 GHz)

Performance Enhancement Technologies: Qualcomm® Smart Transmit™ technology, Qualcomm® Wideband Envelope Tracking, Qualcomm® AI-Enhanced Signal Boost adaptive antenna tuning, Qualcomm® 5G PowerSave

Cellular Technology: 5G NR, mmWave, sub-6 GHz, Dynamic Spectrum Sharing (DSS), LTE support for CBRS, HSPA, WCDMA, CDMA 1x, EV-DO, GSM/EDGE

M.2. Interface: 5G M.2. card over PCIe Gen 3

Wi-Fi/Bluetooth®

Wi-Fi/Bluetooth System: Qualcomm® FastConnect™ 7800 Mobile Connectivity System

Generations: Wi-Fi 7, Wi-Fi 6E, Wi-Fi 6

Standards: 802.11be, 802.11ax, 802.11ac, 802.11n, 802.11g, 802.11b, 802.11a

Spectral Bands: 6 GHz, 5 GHz, 2.4 GHz

Spatial Streams: Up to 4

Peak QAM: Up to 4K QAM

Features: Passpoint, 8x8 Sounding, TDLS, Wi-Fi QoS Management, Wi-Fi Optimized Connectivity, Wi-Fi Location, OFDMA (UL/DL), Miracast, Target Wake Time, Voice-Enterprise, MU-MIMO (UL/DL), Multi-Link Operation (MLO), High Band Simultaneous (HBS)

Bluetooth

- Specification Version: Bluetooth 5.4
- Bluetooth Connection Technology: Bluetooth LE

M.2. Interface: WiFi M.2. card over PCIe Gen 3

USB

USB Specification Version: USB4

Interface Type: 3x USB-C

- 3x USB4, 2x USB3.2 Gen2, 1x eUSB2

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