AMD RYZEN 8000 Series

AMD RYZEN™ 9 8945HS PROCESSOR VS INTEL CORE ULTRA 9 185H PROCESSOR

AMD WINS ACROSS PERFORMANCE, GAMING AND AI

TECHNOLOGY LEADER

AMD **"Zen 4" 4nm architecture is the most advanced**[1], for optimal efficiency and performance

FASTER PERFORMANCE

Experience **faster performance across productivity and content creation** benchmarks[2]

POWERFUL GAMING

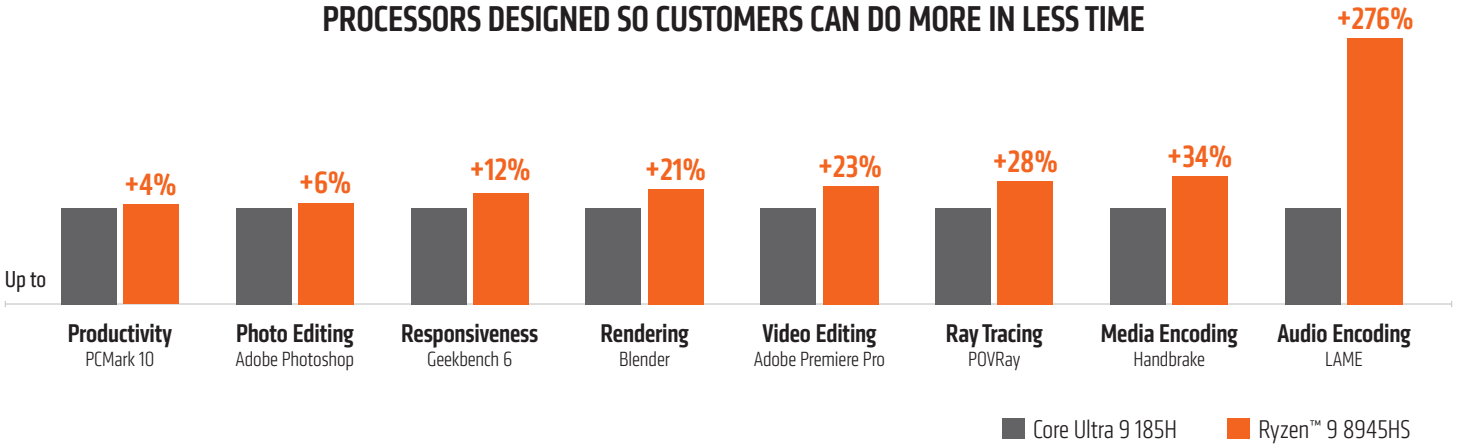
Enjoy **more immersive gaming and entertainment** with powerful AMD Radeon™ 700M graphics built-in[3]

AI LEADERSHIP

AMD continues its AI leadership with **more AI-enabling processing power** than the competition[4]

PURE SPEED TO WORK AND CREATE FASTER[2]

PROCESSORS DESIGNED SO CUSTOMERS CAN DO MORE IN LESS TIME



FASTER IN EVERYDAY MULTITASKING[5]

JUGGLE REAL-WORLD WORKLOADS AT MORE THAN TWICE THE SPEED OF THE COMPETITION

Up to **2.4X FASTER AT**
MICROSOFT TEAMS CALL + EXCEL

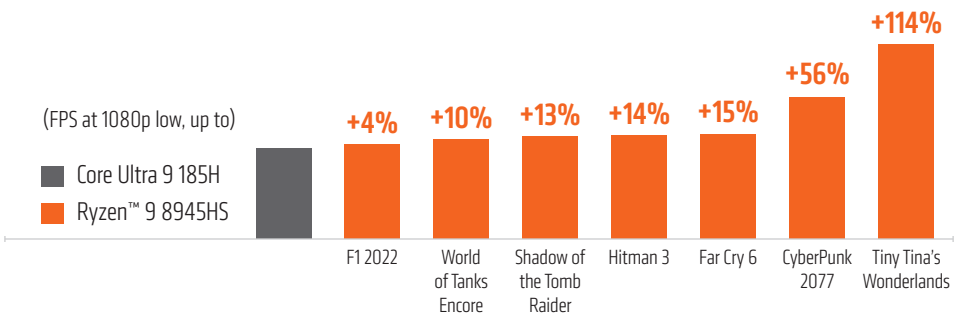
Up to **2.2X FASTER AT**
MICROSOFT TEAMS CALL + POWERPOINT

Up to **2.3X FASTER AT**
MICROSOFT TEAMS CALL + WORD

AMD

FASTER GAMING PERFORMANCE[3]

EXPERIENCE THE POWER OF A GAME CONSOLE IN A THIN & LIGHT LAPTOP



AMD RADEON™ 700M GRAPHICS

Enjoy smooth 1080p gaming, rich content creation, and immersive entertainment with the powerful AMD Radeon™ graphics

AMD RYZEN™ AI FOR AI PC LEADERSHIP

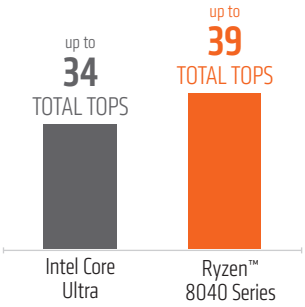
BE READY FOR NEW AI EXPERIENCES WITH LOCAL AI PROCESSING

AMD RYZEN AI

Enjoy **100+** AI-enabled experiences available today on PCs with AMD Ryzen™ AI

AI LEADERSHIP

More AI performance than the competition to keep up with the demands of growing AI applications[4]



SPECIFICATIONS

Model	Architecture	Cores/Threads	Cache	Boost Freq[6] (up to)	TDP	TOTAL TOPS
AMD Ryzen™ 9 8945HS with Radeon™ 780M graphics	4nm "Zen 4"	8C / 16T	24 MB	5.2 GHz	35-54W	39 TOPS
Intel Core Ultra 9 185H with Intel Arc graphics	7nm Intel 4	16C (6P + 8e + 2LPe) / 22T	24 MB	5.1 GHz	45W	34 TOPS

FOOTNOTES:

1. GD-203 Based on a smaller node size of the AMD processor for an x86 platform, as of September 2023. GD-203.
2. Testing as of March 2024 by AMD Performance Labs. Configuration for AMD Ryzen 9 8945HS processor: AMD Reference board, AMD Radeon 780M graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Configurations for Intel Core Ultra 9 185H: MSI Prestige 16, Intel Arc graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Both with VBS enabled. Laptops tested using the following benchmarks: 7Zip, Handbrake, LAME, Puget Adobe Photoshop, Puget Adobe Premiere Pro, Puget DaVinci Resolve, 3DMark Night Raid, Blender, POVRay, Cinebench R24, Geekbench 6, PCMark 10. PC manufacturers may vary configurations yielding different results. Results may vary. HWK-53
3. Testing as of March 2024 by AMD Performance Labs. Configuration for AMD Ryzen 9 8945HS processor: AMD Reference board, AMD Radeon 780M graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Configurations for Intel Core Ultra 9 185H: MSI Prestige 16, Intel Arc graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Both with VBS enabled. Laptops tested using the following game at 1080p lowest settings: CyberPunk 2077, F1 2022, Far Cry 6, Hitman 3, Shadow of the Tomb Raider, Tiny Tina's Wonderlands, World of Tanks Encore. PC manufacturers may vary configurations yielding different results. Results may vary. HWK-54
4. As of February, 2024, based on reported TOPS specifications for AMD Ryzen™ 8040 Series processors vs competitive Intel Core Ultra processors. HWK-35.
5. Testing as of March 2024 by AMD Performance Labs. Configuration for AMD Ryzen 9 8945HS processor: ASUS Vivobook S16, AMD Radeon 780M graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Configurations for Intel Core Ultra 9 185H: MSI Prestige 16, Intel Arc graphics, 16GB RAM, 1TB SSD, Windows 11 Pro. Both with VBS enabled. Laptops tested using the following benchmarks: 7Zip, Handbrake, LAME, DaVinci Resolve, Blender, POVRay, Geekbench 6, PCMark 10, and multitasking with Procyon Office Suite while on a Microsoft Teams (3x3) call with background blur enabled. PC manufacturers may vary configurations yielding different results. Results may vary. HWK-51
6. GD-150 Max boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates.

AMD