AMD RYZEN™ 9 9955HX3D PROCESSOR

VS

INTEL CORE ULTRA 9 285HX

AMD RYZEN 9000 Series

OVERVIEW

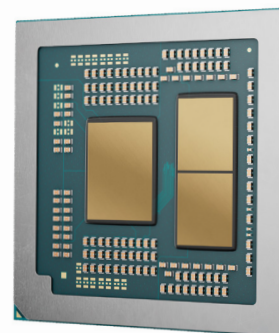### THE ULTIMATE MOBILE GAMING PROCESSOR

- Equipped with 2nd gen AMD 3D V-Cache, the Ryzen 9 9955HX3D is second to none when it comes to gaming performance.[FRG-07]

FASTER PRODUCTIVITY AND CONTENT CREATION

- Do more in less time, with leadership performance in real-world productivity, multitasking, and content creation[FRG-08]

POWERFUL PERFORMANCE AND EFFICIENCY

- using the same advanced "Zen 5" architecture found in our award-winning AMD Ryzen™ 9 9950X3D desktop processor.
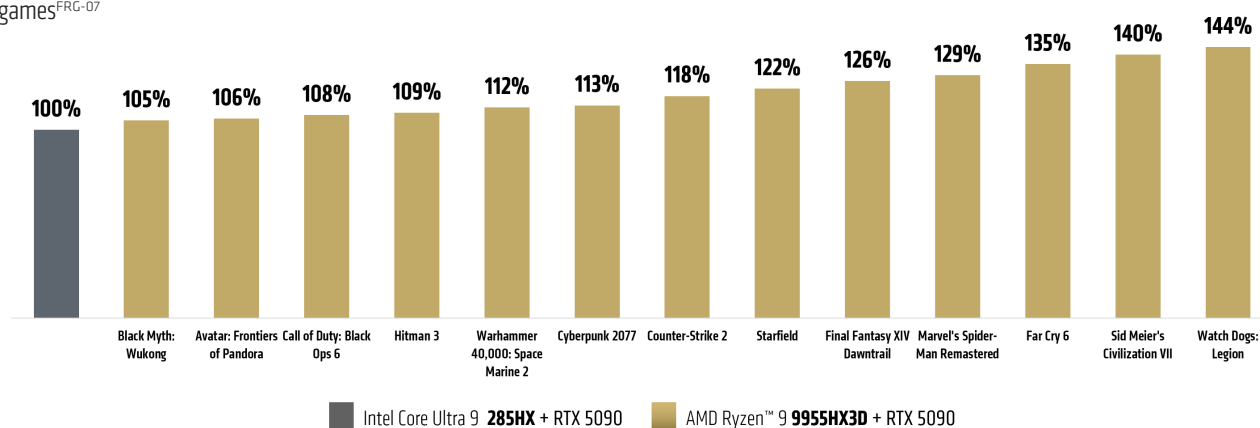

LEADERSHIP GAMING PERFORMANCE[FRG-07]

vs Intel:

on average

22% Faster

across 35 games[FRG-07]

AMD Ryzen™ 9 9955HX3D
vs Core Ultra 9 285HX at 1080p High Settings - Gaming

Game	Performance
Black Myth: Wukong	100%
Avatar: Frontiers of Pandora	105%
Call of Duty: Black Ops 6	106%
Hitman 3	108%
Warhammer 40,000: Space Marine 2	109%
Cyberpunk 2077	112%
Counter-Strike 2	113%
Starfield	118%
Final Fantasy XIV Dawntrail	122%
Marvel's Spider-Man Remastered	126%
Far Cry 6	129%
Sid Meier's Civilization VII	135%
Watch Dogs: Legion	140%
	144%

■ Intel Core Ultra 9 **285HX** + RTX 5090   ■ AMD Ryzen™ 9 **9955HX3D** + RTX 5090

See endnote FRG-07

ENHANCE YOUR CREATIVE WORKFLOWS AND POWER THROUGH YOUR CREATIVITY FRG-08

vs Intel:

on average

5% Faster

creation across 14 tests[FRG-08]

up to **1%** Faster video Editing (Procyon Video Editing)

up to **5%** Faster 3D Modeling (Blender)

up to **9%** Faster Photo Editing (Procyon Photo Editing)

up to **5%** Faster at Office (Procyon Office)

up to **14%** 3D Rendering (Corona Benchmark)

up to **24%** Faster File Compression (7-Zip)

AMD

SPECIFICATIONS

Model	Cores /Threads	Boost Freq[GD-150] (up to)	Base Freq	TDP	Total Cache	Architecture
AMD Ryzen™ 9 9955HX3D	16/32	5.4 GHz	2.5 GHz	55-75W	144MB	4nm "Zen 5"
AMD Ryzen™ 9 9955HX	16/32	5.4 GHz	2.5 GHz	55-75W	80MB	4nm "Zen 5"
AMD Ryzen™ 9 9850HX	12/24	5.2 GHz	3.0 GHz	45-75W	76MB	4nm "Zen 5"

FOOTNOTES

1. FRG-06: Testing by AMD as of April 2025 on an MSI Raider A18 equipped with the AMD Ryzen™ 9 9955HX3D and NVIDIA GeForce RTX 5090 with Best Performance enabled versus an ASUS ROG Strix equipped with the AMD Ryzen 9 7945HX3D and NVIDIA GeForce RTX 4090 with Best Performance enabled. Performance uplift based on the average of results from the following benchmarks: Ashes of the Singularity: Escalation, Assassin's Creed: Mirage, Assassin's Creed: Valhalla, Avatar: Frontiers of Pandora, Black Myth: Wukong, Borderlands 3, Counter-Strike 2, Cyberpunk 2077, Deus Ex: Mankind Divided, DOTA 2, F1 24, Far Cry 6, Final Fantasy XIV Dawntrail, Forza Horizon 5, Hitman 3, Hogwarts Legacy, Horizon Zero Dawn, League of Legends, Marvel's Spider-Man Remastered, Metro Exodus, Metro Exodus: Enhanced Edition, Middle-Earth: Shadow of War, Shadow of the Tomb Raider, Starfield, The Callisto Protocol, The Riftbreaker, Tiny Tina's Wonderlands, Tom Clancy's Rainbow Six Siege, Total War: WARHAMMER III, Warhammer 40,000: Dawn of War III, Warhammer 40,000: Space Marine 2, Watch Dogs: Legion, Wolfenstein: Youngblood, World of Tanks enCore. System manufacturers may vary configurations, yielding different results.
2. FRG-07: Testing by AMD as of April 2025 on the following systems (best performance mode enabled): (1) MSI Raider A18 notebook equipped with the AMD Ryzen™ 9 9955HX3D, 64GB RAM, RTX 5090 GPU, and VBS ON versus (2) MSI Raider 18 notebook equipped with the Intel Core Ultra 9 285HX, 64GB RAM, RTX 5090 GPU, and VBS ON. Performance uplift based on the average of results from the following benchmarks: Assassin's Creed Mirage, Assassin's Creed Valhalla, Avatar: Frontiers of Pandora, Baldur's Gate 3, Black Myth: Wukong, Borderlands 3, Call of Duty: Black Ops 6, Counter-Strike 2, Cyberpunk 2077, Dota 2, Dragon Age: The Veilguard, Far Cry 6, Final Fantasy 14: Dawntrail, Forza Horizon 5, Grand Theft Auto V, Hitman 3, Hogwarts Legacy, Horizon Zero Dawn, League of Legends, Marvel Rivals, Marvel's Guardians of the Galaxy, Marvel's Spider-Man Remastered, Metro Exodus, Metro Exodus Enhanced Edition, Monster Hunter Wilds, Shadow of the Tomb Raider, Sid Meier's Civilization VII, Star Wars Outlaws, Starfield, The Callisto Protocol, Tiny Tina's Wonderlands, Tom Clancy's Rainbow Six Siege, Total War: Warhammer III, Warhammer 40,000: Space Marine 2, Watch Dogs: Legion. System manufacturers may vary configurations, yielding different results.
3. FRG-08: Testing by AMD as of April 2025 on the following systems (best performance mode enabled): (1) MSI Raider A18 notebook equipped with the AMD Ryzen™ 9 9955HX3D, 64GB RAM, RTX 5090 GPU, and VBS ON versus (2) MSI Raider 18 notebook equipped with the Intel Core Ultra 9 285HX, 64GB RAM, RTX 5090 GPU, and VBS ON. Performance uplift based on the average of results from the following benchmarks: 7zip, Handbrake, Phoronix Test Suite – FLAC Audio Encoding, Puget Bench – Photoshop, Blender 4.3, CineBench 23.2 Multi-thread, Cinebench 2024 Multi-thread, Corona Benchmark, POV-Ray Multi-thread, VRay, PCMark 10 Extended, Procyon Office Productivity, Procyon Photo Editing, Procyon Video Editing. System manufacturers may vary configurations, yielding different results.
4. GD-150: Boost Clock Frequency is the maximum frequency achievable on the CPU running a bursty workload. Boost clock achievability, frequency, and sustainability will vary based on several factors, including but not limited to: thermal conditions and variation in applications and workloads.

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