AMD RYZEN 7000 Series

BATTLECARD MAY 2023

AMD RYZEN™ 7045 SERIES PROCESSORS VS 13TH GEN INTEL CORE PROCESSORS

PURE GAMING & CREATOR SPEED. UNPLUG & BE FREE.

AMD Ryzen™ 7045 Series processors are designed to deliver the most performance you can get in a mobile processor.

ULTIMATE MOBILE GAMING

Enjoy the astonishing performance you need to play, and to win, from AMD Ryzen™ 7000 Series processors.

NEXT-LEVEL CONTENT CREATION

Edit 4K video, render complex 3D scenes, and multitask demanding applications without slowing down.

UNPLUG & BE FREE

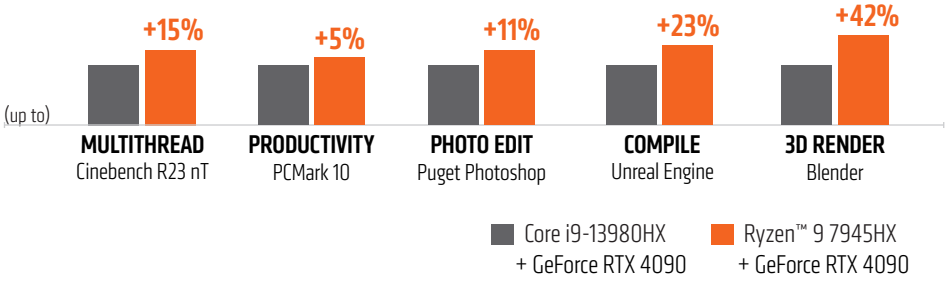
Smart battery management delivers amazing battery life you wouldn't expect from a gaming notebok.

FLAGSHIP PERFORMANCE

Packed with 16 high-performance cores and 32 threads of pure processing power to tear through demanding workloads.

WINNING PERFORMANCE[1]

Tackle demanding workloads with blazing speed.



HIGH PERFORMANCE, LOW POWER

AMD Ryzen™ 7045 Series processors can offer **higher performance** than 13th Gen Intel Core processors while **using less power**[2]

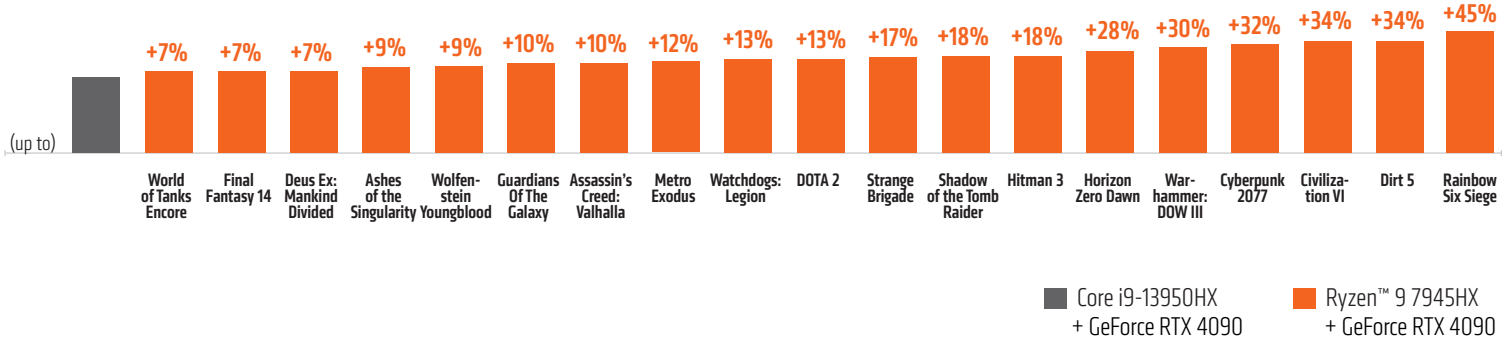
AMD Ryzen™ 9 7945HX vs. Intel Core i9-13980HX:

Up to **15% faster** multithread performance

With up to **54% better** efficiency

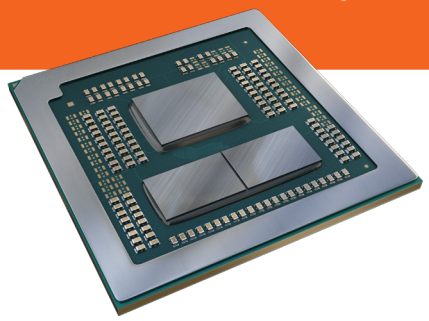
ULTIMATE MOBILE GAMING

AMD Ryzen™ 9 7945HX processor offers on average 10% faster gaming across 31 game titles[3]



AMD

AMD Ryzen™ 7045 Series processors bring the ultimate performance and battery life for gamers and creators:



FLAGSHIP PERFORMANCE

Working and playing on an AMD laptop has never felt so powerful with up to 16 cores and 32 threads of pure performance.

MOST ADVANCED PROCESSOR TECHNOLOGY

Power, performance, and efficiency are at your fingertips with the latest 5nm "Zen 4" processor core technology from AMD.

AMAZING BATTERY LIFE

Smart power management features deliver battery life you wouldn't expect from notebooks this powerful.

GIANT ON-CHIP MEMORY

Get instant responsiveness and powerful multitasking with up to 80MB on-chip cache--4X that of previous gen processors.

NEXT-GEN TECHNOLOGIES

Stay on the leading edge of mobile technology with fast DDR5 memory, WiFi 6e support, and full security feature support for Microsoft Windows 11.

COMPETITIVE POSITIONING

AMD RYZEN	HIGH-PERFORMANCE CORES	PROCESS (lower is better)	CACHE	TDP
AMD Ryzen™ 9 7945HX	16C / 32T	5nm	80MB	55W+
AMD Ryzen™ 9 7845HX	12C / 24T	5nm	76MB	55W+
AMD Ryzen™ 7 7745HX	8C / 16T	5nm	40MB	55W+
AMD Ryzen™ 5 7645HX	6C / 12T	5nm	38MB	55W+

INTEL CORE	PERFORMANCE / EFFICIENCY CORES / THREADS	PROCESS (lower is better)	CACHE	TDP
i9-13980HX i9-13950HX i9-13900HX	8p / 16e / 32T	10nm	36MB	55W+
i7-13850HX i7-13700HX i7-13650HX	8p / 12e / 28T 8p / 8e / 24T 6p / 8e / 20T	10nm	30MB 30MB 24MB	55W+
i5-13600HX i5-13500HX i5-13450HX	6p /8e / 20T 6p / 8e / 20T 6p / 4e / 16T	10nm	24MB 24MB 20MB	55W+

FOOTNOTES:

1. DRG-11 Based on testing by AMD as of 3/7/2023. Testing results demonstrated in Cinebench R23 nT, Puget Photoshop, Compile (Unreal Engine), PCMark Express, 3DMark Physics, Blender (CPU). Configuration for Ryzen™ 9 7945HX system: ASUS Strix Scar 17 configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4090 Graphics, Windows® 11 64-bit. Configuration for Intel Core i9-13980HX system: ASUS Strix Scar G16 configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4080 Graphics,, Windows® 11 64-bit.System manufacturers may vary configurations, yielding different results. Performance may vary.
2. DRG-12: Based on testing by AMD as of 3/7/2023. Testing results demonstrated in Cinebench R23 nT while recording processor package power using HWinfo. Efficiency measured as performance-per-watt (performance/Watts used in test).Configuration for Ryzen™ 9 7945HX system: ASUS Strix Scar 17 configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4090 Graphics, Windows® 11 64-bit. Configuration for Intel Core i9-13980HX system:ASUS Strix Scar G16 configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4090 Graphics, Windows® 11 64-bit.System manufacturers may vary configurations, yielding different results. Performance may vary.
3. DRG-10 Based on testing by AMD as of 3/7/2023. Testing results demonstrated in 31 games at 1080p, high settings. Configuration for Ryzen™ 9 7945HX system: ASUS Strix Scar 17 configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4090 Graphics, Windows® 11 64-bit. Configuration for Intel Core i9-13950HX system: Gigabyte Aorus 17X, configured with 32GB (2x16GB) DDR5, 1TB SSD, GeForce RTX 4090 Graphics, Windows 11 64-bit. System manufactucturers may vary configurations, yielding different results. Performance may vary.
4. 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.

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