14. generace procesorů Intel® Core™ pro stolní PC

Intel® ARC™ Graphics

Jaroslav Petráš

jaroslavx@retailedgeintel.com

Generace procesorů Intel

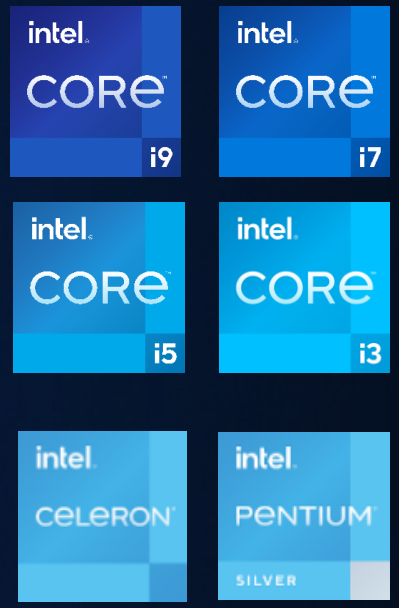
10. gen

CHIPSET: 400

11. gen

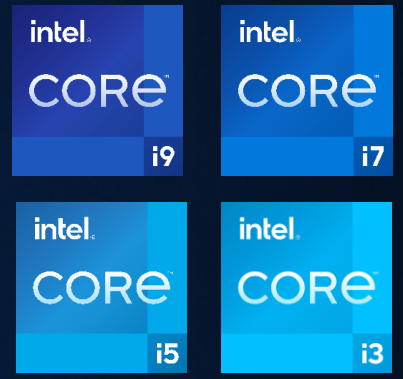
CHIPSET: 500

12. Gen (hybridní)



CHIPSET: 600

13. Gen (hybridní)



CHIPSET: 700

kompatibilní

kompatibilní

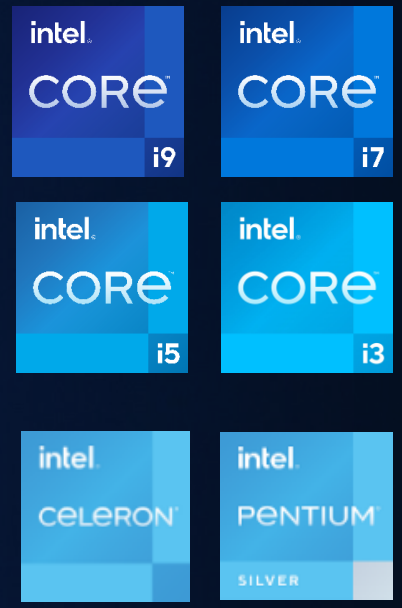
Generace procesorů Intel

NOVINKA

10. gen

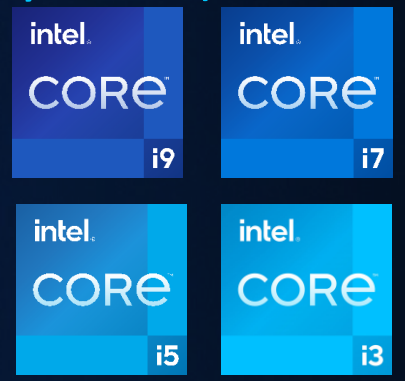
CHIPSET: 400

12. Gen
(hybridní)



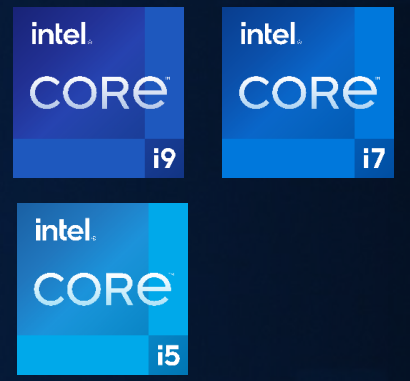
CHIPSET: 600

13. Gen
(hybridní)



CHIPSET: 700

14. Gen
(hybridní)
Pouze „K + KF“



CHIPSET: 700

kompatibilní

kompatibilní

intel®

NOVINKA

Procesory
14. generace
Intel® Core™

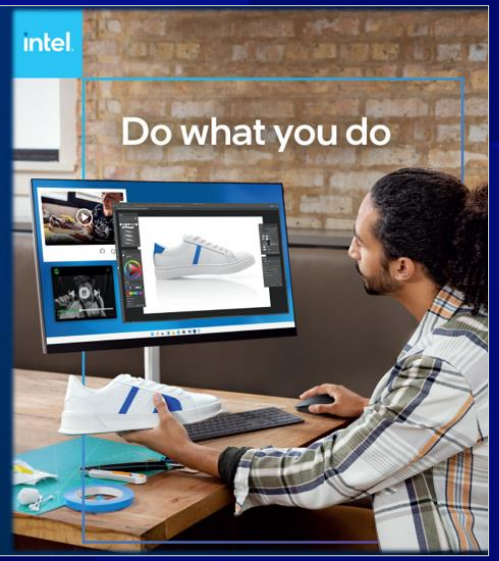
intel 11

Intel® technologie

intel 16

Porovnání

Nejprodávanější procesory



intel
ARC™
GRAPHICS

NOVINKA

Procesory 14. generace Intel® Core™

Přehled platformy pro procesory 14. generace Intel® Core™

Architektura

- VYŠŠÍ P-core and E-core frequency[3]
- VĚTŠÍ Intel® Smart Cache (L3) and L2 cache[4]
- VÍCE Efficient-cores and greater L3 cache for Intel® Core™ i7 processors
- Up to 24 (8P+16E) cores and up to 32 threads
- Performance hybrid architecture[1]
- Intel® Thread Director[5]
- Intel 7 Process Technology

Platforma

- NOVÁ Discrete Intel® Wi-Fi 7 (5 Gig) support[9]
- VĚTŠÍ Max memory capacity up to 192 GB
- CPU PCIe 5.0 (up to 16 lanes)[6]
  - NOVĚ PCIe 5.0 SSD Support
- DDR5 support (up to 5600 MT/s)[7]
- DDR4 support (up to 3200 MT/s)[7]
- PCH PCIe 4.0 (up to 20 lanes)
- Up to 8 DMI 4.0 lanes
- Discrete Thunderbolt™ 4 technology support (USB4 compliant)
- Intel® UHD Graphics featuring Xe architecture[8]

Technologie

- Intel® Dynamic Tuning Technology
- Intel® Turbo Boost Max Technology 3.0[10]
- Intel® Thermal Velocity Boost[10]
- Intel® Adaptive Boost[11]
- Intel® Extreme Tuning Utility[2]
- Intel® Extreme Memory Profile 3.0[2]
- Integrated Intel® Killer™ Wi-Fi 6E
- Intel® Deep Learning Boost
- Intel® Gaussian & Neural Accelerator 3.0 (GNA)
- Intel® Hyper-Threading Technology[10]

For numbered references, see notices and disclaimers section.

Intel® Core™ Processors (14th Gen) Specifications

Processor Number	Processor Cores (P-cores + E-cores)[18]	Processor Threads	Intel® Smart Cache (L3)	Total L2 Cache	Processor Turbo Frequency				Unlocked[2]	Processor Graphics[8]	Total CPU PCIe Lanes	Max Memory Speed (MT/s)[15]	Memory Channels	Max Memory Capacity[15]	Processor Base Power (W)	Maximum Turbo Power
					Intel® Thermal Velocity Boost Frequency (GHz)[10]	Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)[10]	Single P-core Turbo Frequency (GHz)[10]	Single E-core Turbo Frequency (GHz)[10]								
i9-14900K	24 (8 +16)	32	36 MB	32 MB	Up to 6.0	Up to 5.8	Up to 5.6	Up to 4.4	✔	Intel® UHD Graphics 770	20	DDR5 5600 DDR4 3200	2	192 GB	125	253
i9-14900KF	24 (8 +16)	32	36 MB	32 MB	Up to 6.0	Up to 5.8	Up to 5.6	Up to 4.4	✔	n/a	20	DDR5 5600 DDR4 3200	2	192 GB	125	253
i7-14700K	20 (8 +12)	28	33 MB	28 MB	n/a	Up to 5.6	Up to 5.5	Up to 4.3	✔	Intel® UHD Graphics 770	20	DDR5 5600 DDR4 3200	2	192 GB	125	253
i7-14700KF	20 (8+12)	28	33 MB	28 MB	n/a	Up to 5.6	Up to 5.5	Up to 4.3	✔	n/a	20	DDR5 5600 DDR4 3200	2	192 GB	125	253
i5-14600K	14 (6+8)	20	24 MB	20 MB	n/a	n/a	Up to 5.3	Up to 4.0	✔	Intel® UHD Graphics 770	20	DDR5 5600 DDR4 3200	2	192 GB	125	181
i5-14600KF	14 (6+8)	20	24 MB	20 MB	n/a	n/a	Up to 5.3	Up to 4.0	✔	n/a	20	DDR5 5600 DDR4 3200	2	192 GB	125	181

For numbered references, see notices and disclaimers section.

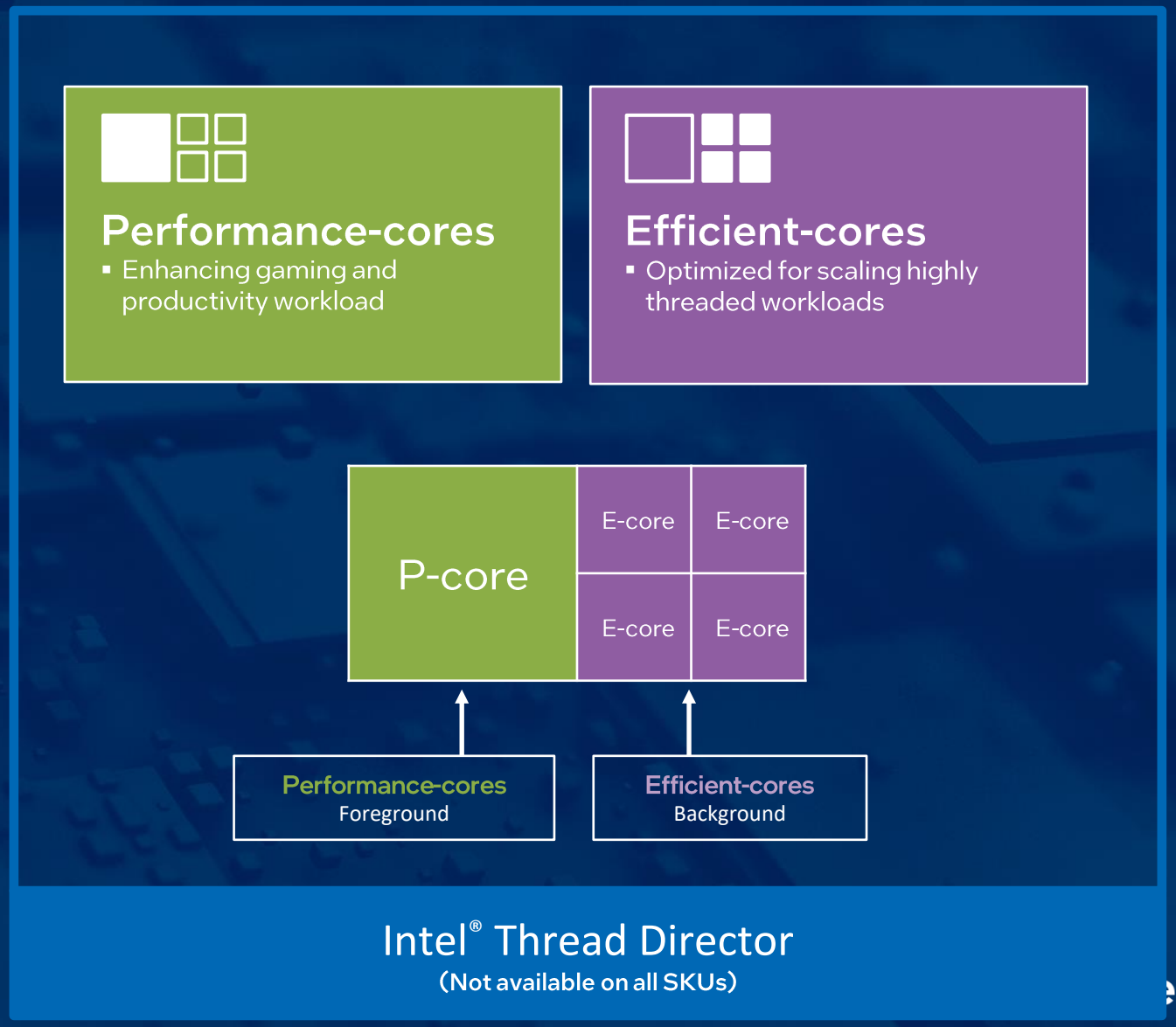
Motherboard Chart

	Intel® 600 Series Chipset[12]	Intel® 700 Series Chipset[12]
High Speed I/O Lanes & Port Flexibility	Up to 38 lanes	Up to 38 lanes
Chipset PCI Express 3.0 Lanes	Up to 16	Up to 8
Chipset PCI Express 4.0 Lanes	Up to 12	Up to 20
Processor PCI Express 4.0 Lanes	4	4
Processor PCI Express 5.0 Lanes[6]	16	16
Processor PCIe Lane Configuration Support	1x16+1x4 or 2x8+1x4	1x16+1x4 or 2x8+1x4
DMI	x8 Gen4	x8 Gen4
USB 3.2 Gen 1x1 (5G) Ports	Up to 10	Up to 10
USB 3.2 Gen 2x1 (10G) Ports	Up to 10	Up to 10
USB 3.2 Gen 2x2 (20G) Ports[13]	Up to 4	Up to 5
Integrated Sensor Hub	5.4	5.4
USB Audio Offload	Yes	Yes
Volume Management Device (Intel® VMD)[14]	Yes	Yes

Intel® technologie

Performance Hybrid Architecture[1]

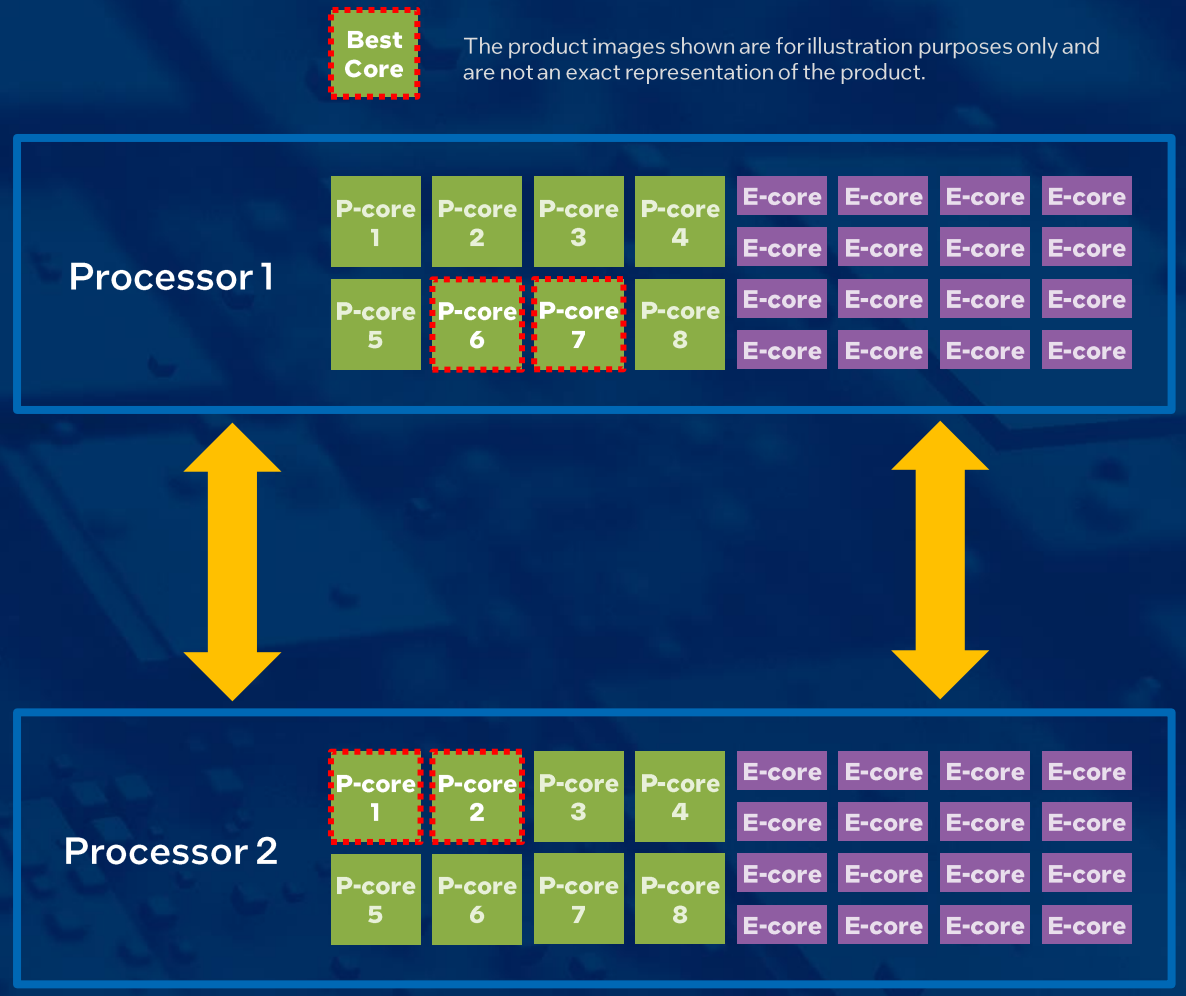
- Performance hybrid architecture combines two core microarchitectures on a single processor die.
- Intel® Thread Director prioritizes and manages distribution of workloads, sending tasks to optimized cores.
- To get the full capabilities of Intel® Thread Director, pair a select Intel® Core™ desktop processor (14th gen) with Windows 11.



For numbered references, see notices and disclaimers section.

Intel® Turbo Boost Max Technology 3.0[10]

- A combination of software and hardware that identifies the best-performing P-cores to deliver great lightly and single-threaded performance.



For numbered references, see notices and disclaimers section.

Intel® Adaptive Boost Technology[11]

- Intel® ABT is designed to increase gaming and multi-core performance with systems that utilize advanced thermal solutions.
- Intel® ABT kicks in when the **CPU is below the ICCMax limit (maximum current) and a temperature limit of 100°C.**
- Frequency gain and the duration vary with different workloads, cooling solutions, and processor capabilities.

For numbered references, see notices and disclaimers section.

Intel® Gaussian & Neural Accelerator 3.0

- Designed to process AI speech and audio applications such as neural noise cancellation while simultaneously freeing up CPU resources
- **For Gamers:** Remove background noise like keyboard clatter and fan noise.

The Evolution of a Wireless Revolution

NOVINKA

Wi-Fi 4

IEEE 802.11n
Bands:
2.4 GHz, 5 GHz
Channel Bandwidths
20, 40 MHz
64 QAM

KEY ADVANCES:
- WPA2 Security
- 4x4 MIMO
- LDPC Error Correction

~300 Mbps

2007

Wi-Fi 5

IEEE 802.11ac
Bands:
5 GHz
Channel Bandwidths
20, 40, 80, 160 MHz
256 QAM

KEY ADVANCES:
- Up to 8x8 MIMO
- DL MU-MIMO
- Beamforming

~1.7 Gbps

2013

Wi-Fi 6 / 6E

IEEE 802.11ax
Bands:
2.4 GHz, 5 GHz
Channel Bandwidths
20, 40, 80, 160 MHz
1024 QAM

KEY ADVANCES:
- Best-in-class WPA3 security
- UL and DL MU-MIMO, OFDMA
- Target wait time (TWT)

~2.4 Gbps

2019

Wi-Fi 7

IEEE 802.11be
Bands:
2.4 GHz, 5 GHz, 6 GHz
Channel Bandwidths
20, 40, 80, 60, 320 MHz
4096 QAM

KEY ADVANCES:
- Multi-link operation (MLO)
- Multi-RU and puncturing
- Managed QoS & Restricted Service Periods

~5.8 Gbps

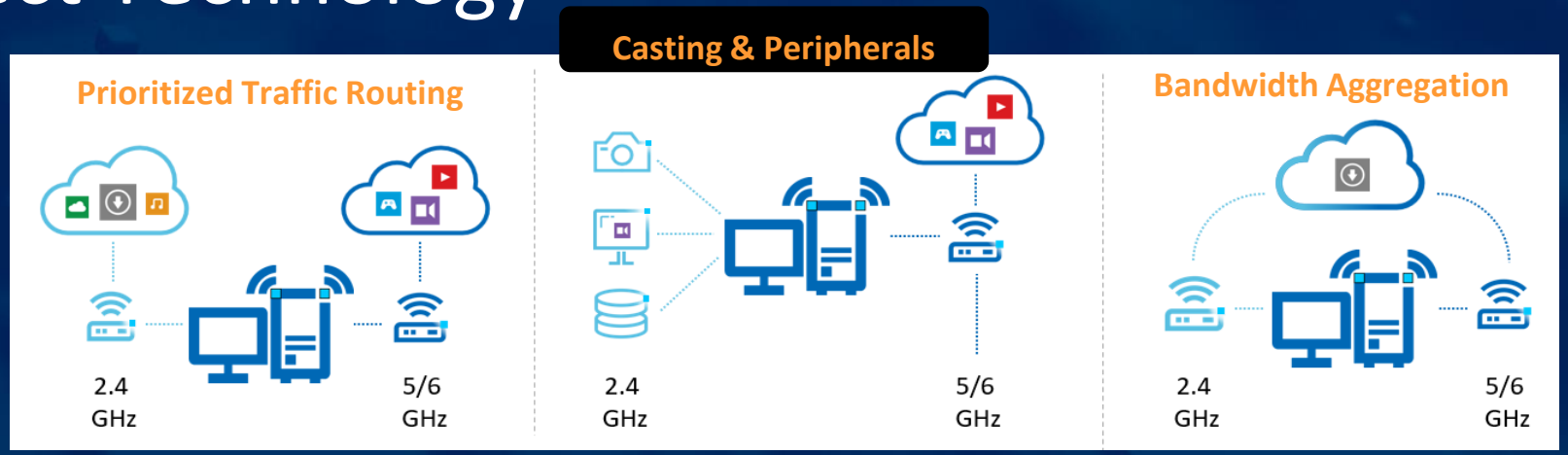
2024

Max. PC data rates

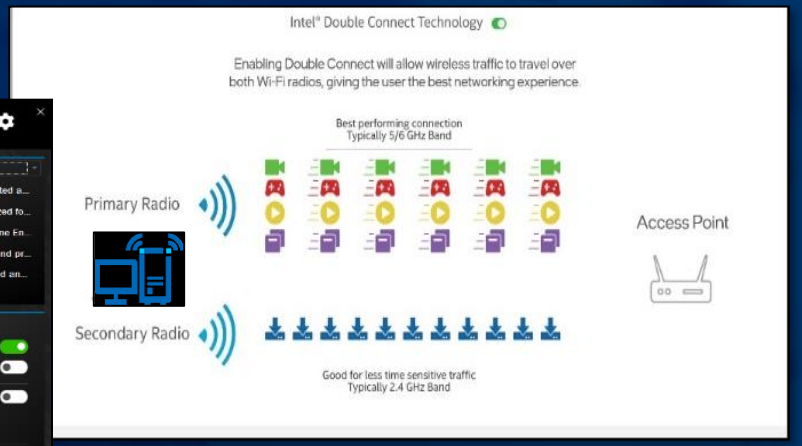
1 Includes PHY and multi-link data rate improvements
* Theoretical maximum data rates based on the latest draft of the IEEE 802.11be standard.
** ">5 Gbps Wi-Fi 7 2x2 client speed" – is based on the current draft of the 802.11be specification which specifies the theoretical maximum data rate for a 2x2 device that supports 320 MHz channels, 4096 QAM, and Multi-Link Operation is 5.76 Gbps. Based on an industry-standard assumption of 90% efficiency for new Wi-Fi products operating in the exclusive 6 GHz band, the resulting estimated maximum over the air 2x2 client speed would be 5.19 Gbps. Wi-Fi 7 feature functionality subject to OS support. For OS schedules consult associated OSV

Intel® Double Connect Technology

- Simultaneous Wi-Fi links for better performance
- Theoretical max throughput ~3Gbps
- Smart AP switching
- Intel® Connectivity Performance Suite
- Intel® Killer™ Networking Software
- Intel® Wi-Fi 6E AX411 / Intel® Killer™ Wi-Fi 6E AX1690



Usage model 1 | Usage model 2 | Usage model 3



intel®

NOVINKA

Procesory
14. generace
Intel® Core™

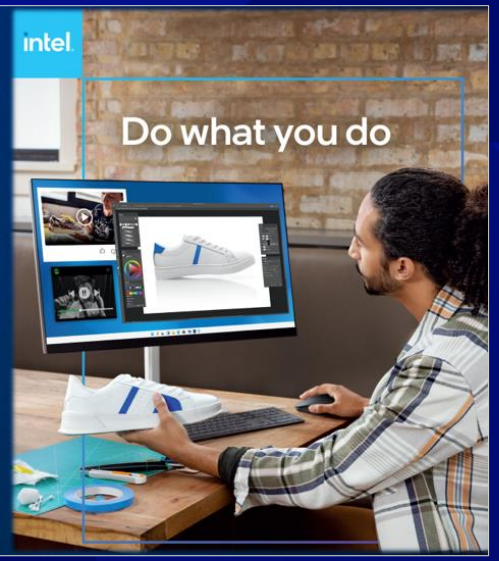
intel 11

Intel® technologie

intel 16

Porovnání

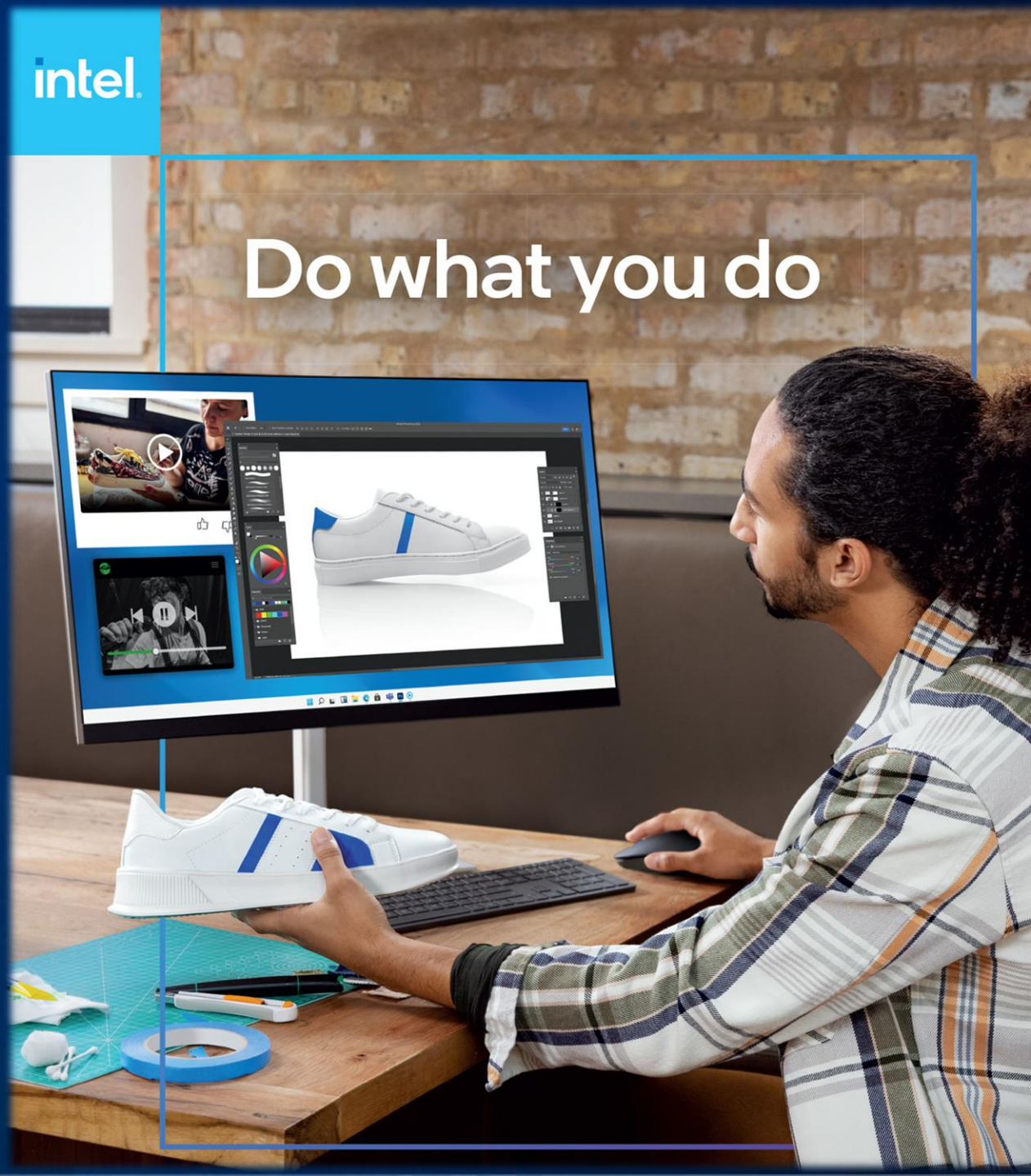
Nejprodávanější procesory



intel
ARC™
GRAPHICS

Porovnání

Nejprodávanější procesory



Which Benchmark Meets the Criteria?

CrossMark

Document Editing

Photo Editing

Spreadsheet

Organize Photo

Responsiveness

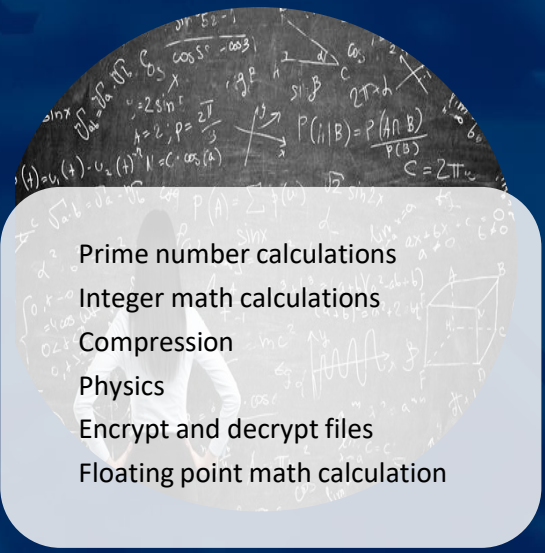
Web Browsing

Video Editing

Productivity **Creativity** **Snappiness**

- REAL Usages for PC
- RELEVANT usages
- Modeled on Popular Applications

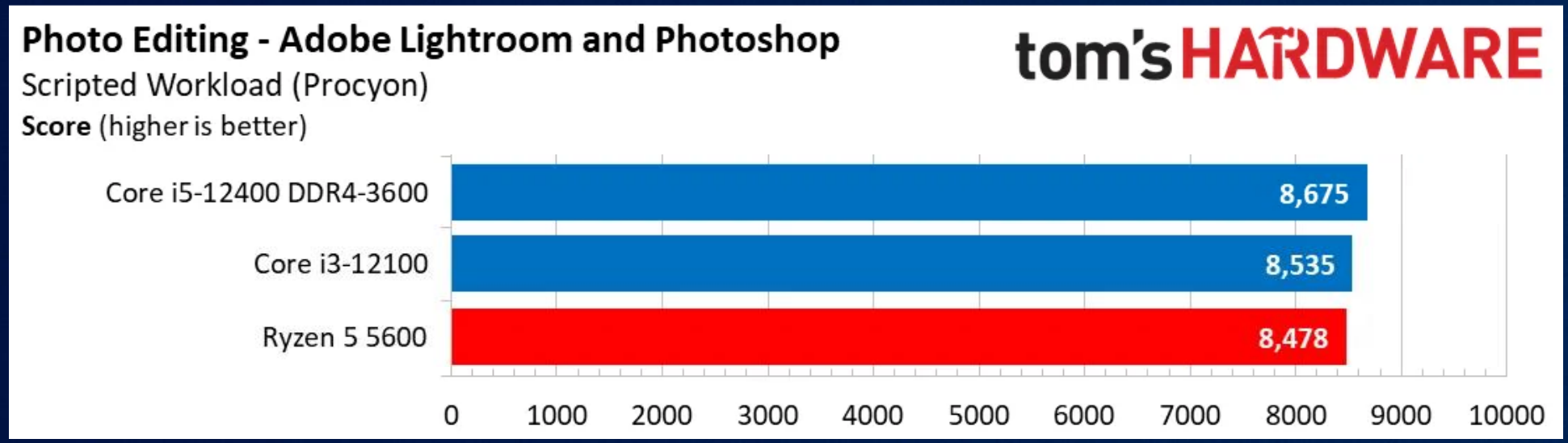
PassMark Software



- Prime number calculations
- Integer math calculations
- Compression
- Physics
- Encrypt and decrypt files
- Floating point math calculation

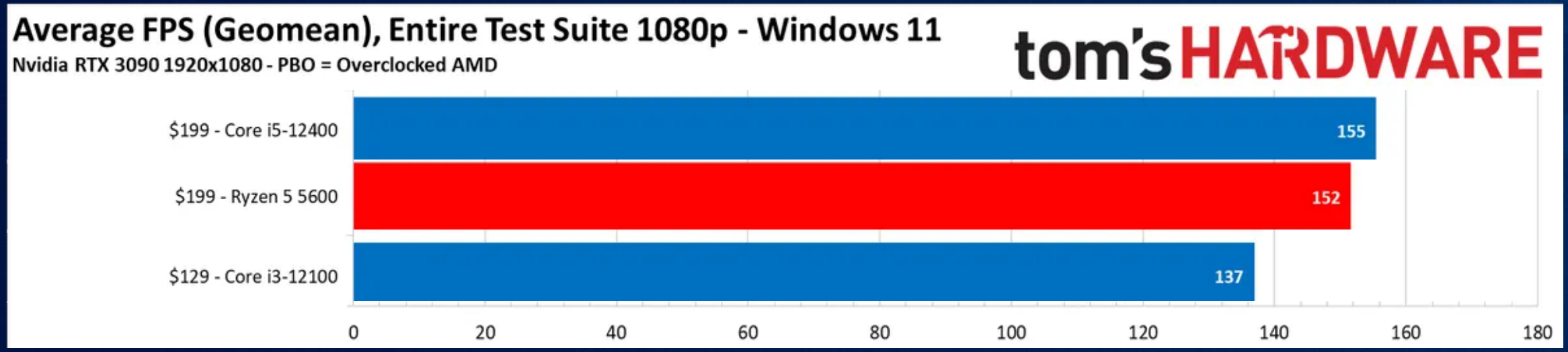
- REAL Usages for PC
- RELEVANT usages
- Modeled on Popular Applications

R5 5600 vs. I3-12100 vs. I5-12400



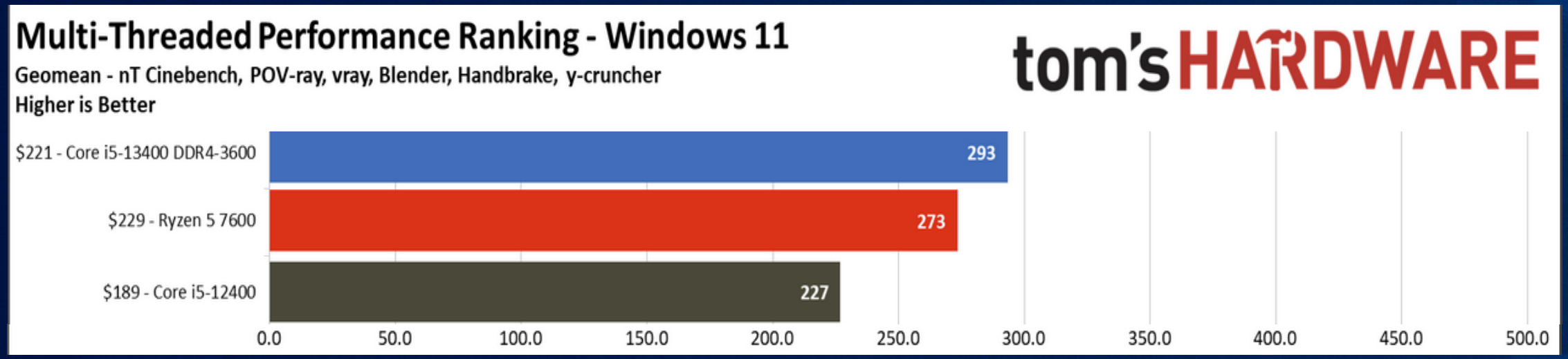
https://www.tomshardware.com/reviews/amd-ryzen-5-5600-and-ryzen-5-5500-review/4

R5 5600 vs. I3-12100 vs. I5-12400



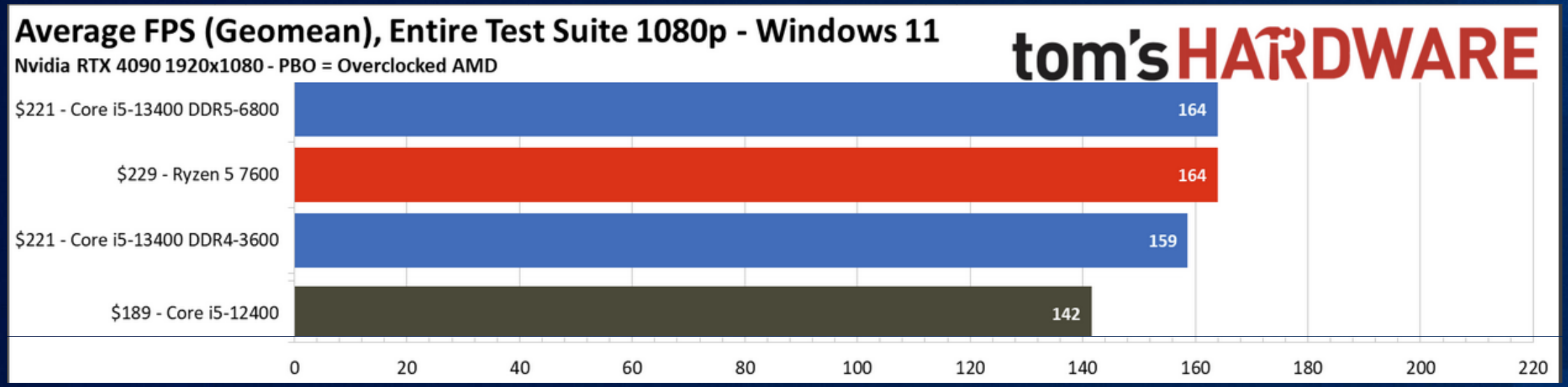
https://www.tomshardware.com/reviews/amd-ryzen-5-5600-and-ryzen-5-5500-review/4

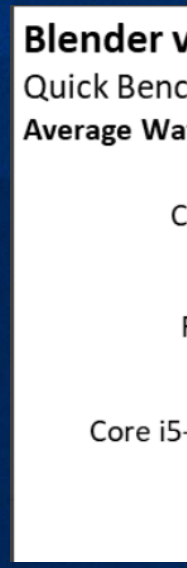
Ryzen 5 7600 vs. Core i5-13400 vs. Core i5-12400



https://www.tomshardware.com/news/intel-core-i5-13400-core-i5-13400f-cpu-review

Ryzen 5 7600 vs. Core i5-13400 vs. Core i5-12400





https://www.tomshardware.com/news/intel-core-i5-13400-core-i5-13400f-cpu-review

Cena platformy

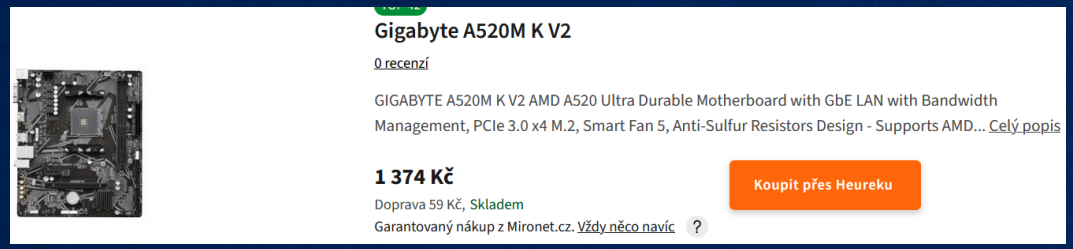
https://zakladni-desky.heureka.cz/asus-prime-b760m-a-wifi-d4-90mb1cx0-m0eay0/#prehled/

intel B760
vs.
AMD B650

https://zakladni-desky.heureka.cz/asus-prime-b650m-a-wifi-ii-90mb1eg0-m0eay0/#prehled/

https://zakladni-desky.heureka.cz/gigabyte-h610m-s2h-v2-ddr4/#prehled/

intel H610
vs.
AMD A520



https://zakladni-desky.heureka.cz/gigabyte-a520m-k-v2/#prehled/

intel®

NOVINKA

Procesory
14. generace
Intel® Core™

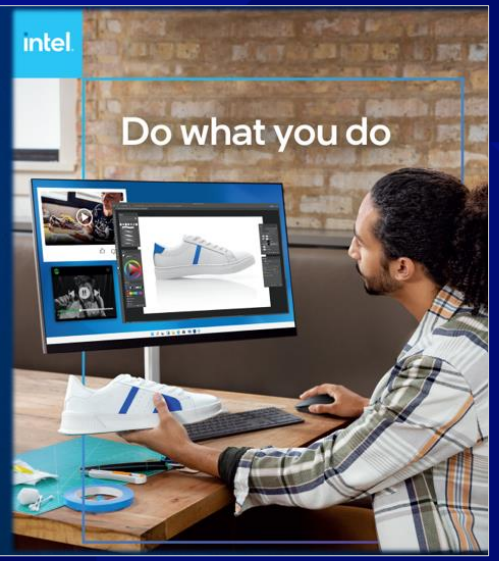
intel 11

Intel® technologie

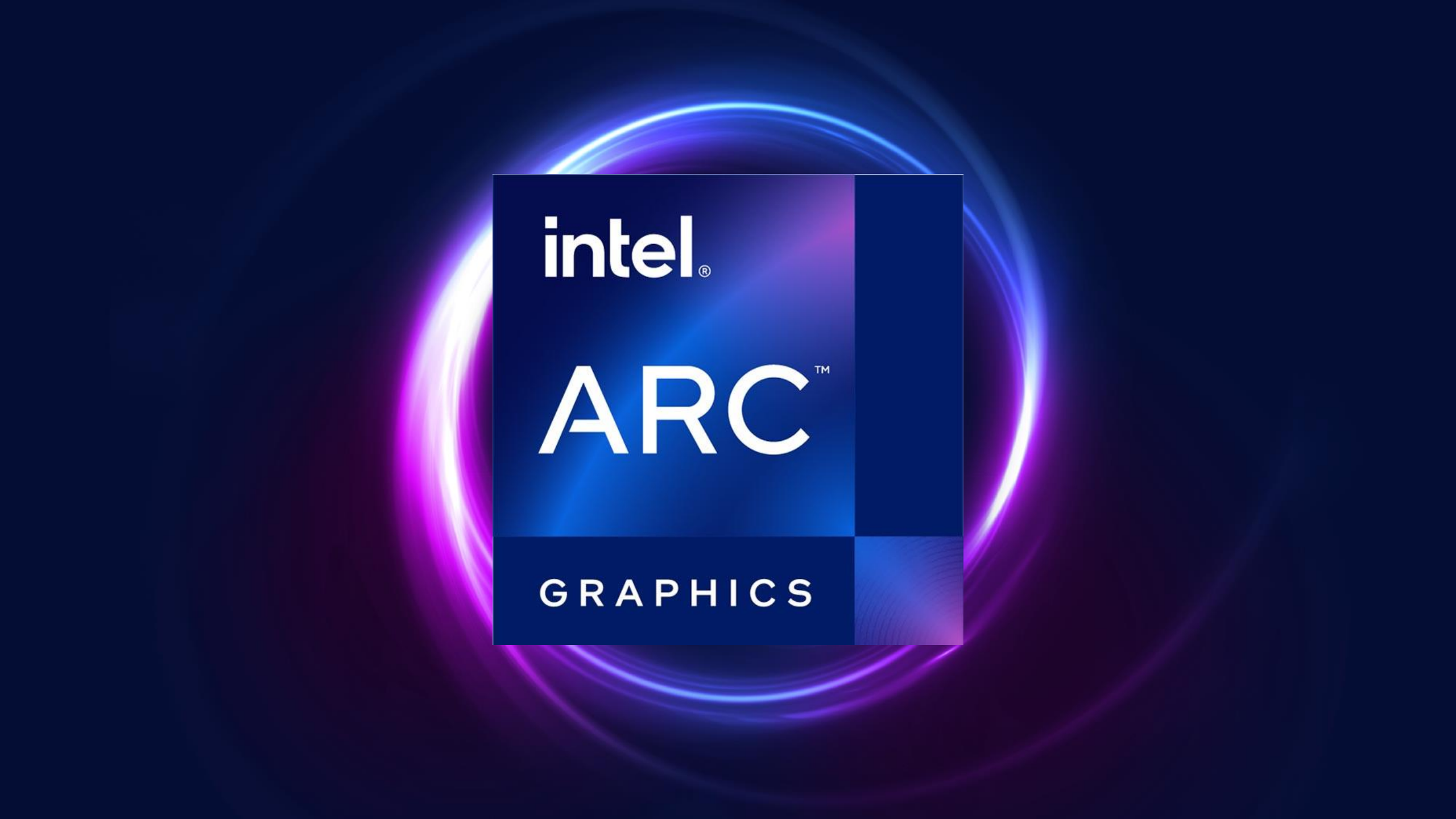
intel 16

Porovnání

Nejprodávanější procesory



intel
ARC™
GRAPHICS


intel.
ARC™
GRAPHICS

intel ARC 7 A770 Limited Edition Desktop Graphics Card

32 Xᵉ-cores	32 Ray Tracing Units	512 XMX Engines	2100MHz Graphics Clock
16 GB GDDR6	256 bit Memory interface	560 GB/s Memory bandwidth	225W Total Board Power

XeSS · DirectX 12 Ultimate · XMX AI Acceleration · Xe Media Engine · PCI Express 4.0

intel ARC 7 A750 Limited Edition Desktop Graphics Card

28 Xᵉ-cores	28 Ray Tracing Units	448 XMX Engines	2050MHz Graphics Clock
8 GB GDDR6	256 bit Memory interface	512 GB/s Memory bandwidth	225W Total Board Power

XeSS · DirectX 12 Ultimate · XMX AI Acceleration · Xe Media Engine · PCI Express 4.0

intel ARC 7 — Acer Predator BiFrost Intel Arc A770 OC

32 Xe-cores	32 Ray Tracing Units	512 XMX Engines	2400MHz Graphics Clock
16 GB GDDR6	256 bit Memory interface	560 GB/s Memory bandwidth	225W Total Board Power

XeSS · DirectX XII ULTIMATE · XMX AI Acceleration · Xe Media Engine · PCI EXPRESS 4.0

intel ARC 7 — A750 Limited Edition Desktop Graphics Card

28 Xe-cores	28 Ray Tracing Units	448 XMX Engines	2050MHz Graphics Clock
8 GB GDDR6	256 bit Memory interface	512 GB/s Memory bandwidth	225W Total Board Power

XeSS · DirectX XII ULTIMATE · XMX AI Acceleration · Xe Media Engine · PCI EXPRESS 4.0

intel ARC 7

Graphics

	Configuration	Ray Tracing	Memory
A750	28 Xe-Cores	28 Units	8GB GDDR6

The ideal choice for the performance gamer: experience immersive, ray-traced games and get more performance with XeSS. Do more than just game with seamless streaming features, advanced content creation capabilities, and get Intel's most advanced Deep Link technologies.

XeSS Intel® Xe Super Sampling

DirectX XII ULTIMATE

Intel® Xe Matrix Extensions XMX AI Acceleration

Xe Media Engine

PCI EXPRESS 4.0

Competitive Product Stack up

Intel	AMD	NVIDIA
Intel® Arc™ A770	RX 7600 Series	RTX 4060
Intel® Arc™ A750	RX 6600 Series	RTX 3060 12GB
	RX 6500XT	RTX 3060 8GB
Intel® Arc™ A380	RX 6400	GTX 1650
Intel® Arc™ A310	Radeon 550	GTX 1630
Iris Xe™ Graphics		GT 1030

Incredible Leads in Performance at 1080p Gaming

Tested at 1080p Ultra , pricing as of Jan 26, 2023

Intel® Arc™ A750
$249

AMD Radeon RX 6600

Intel Arc A750 delivers

+22% More performance averaged across select titles.

Nvidia GeForce RTX 3060 (8GB)

Intel Arc A750 delivers

+25% More performance averaged across select titles.

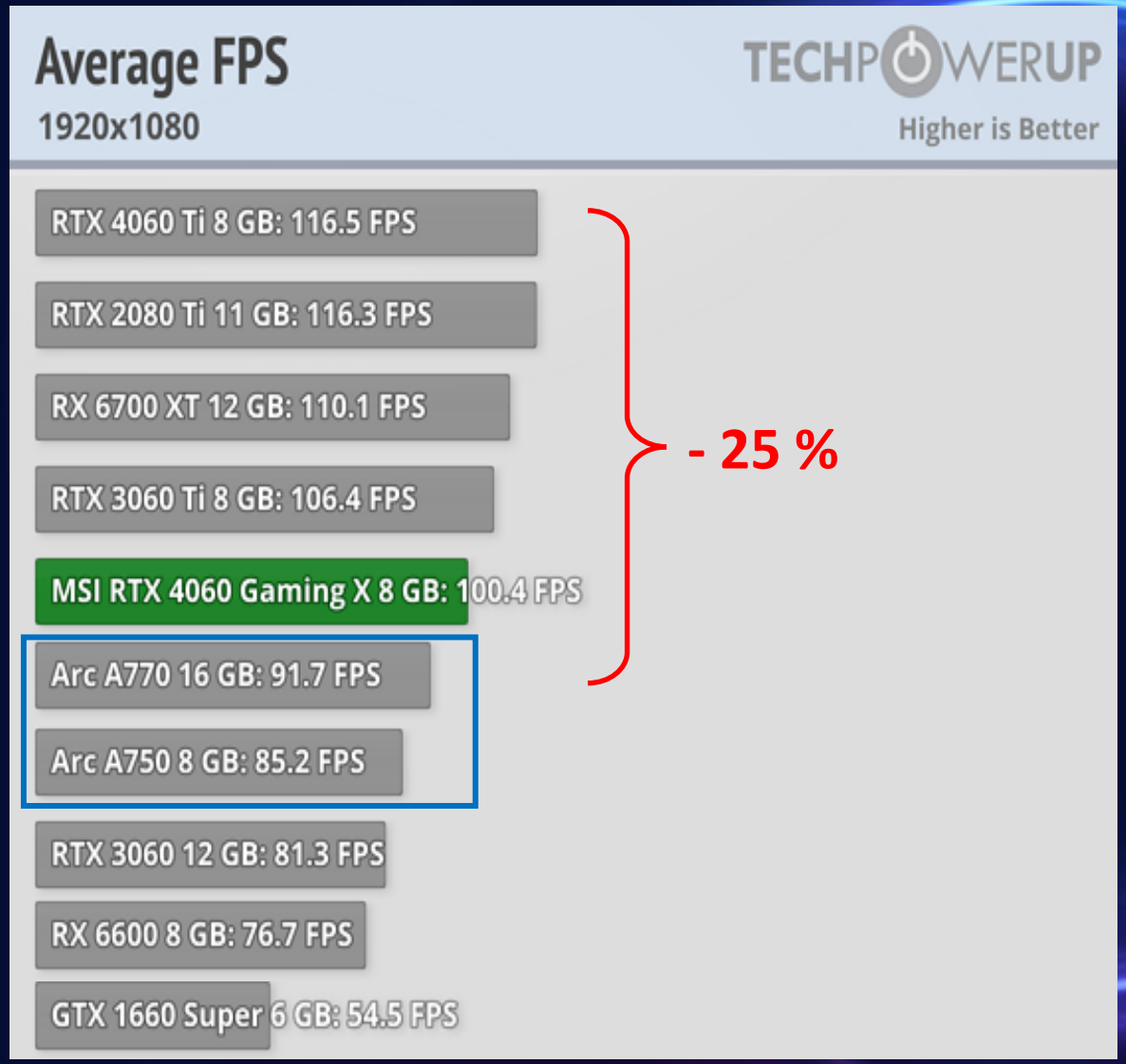
Nvidia GeForce RTX 3060 (12GB)

Intel Arc A750 delivers

+10% More performance averaged across select titles.

Rounding performed on perf/$ measurements, calculation is based on un-rounded results. Performance varies by use, configuration and other factors. See backup for further details. Results may vary.

Intel ARC A770 16GB - recenze

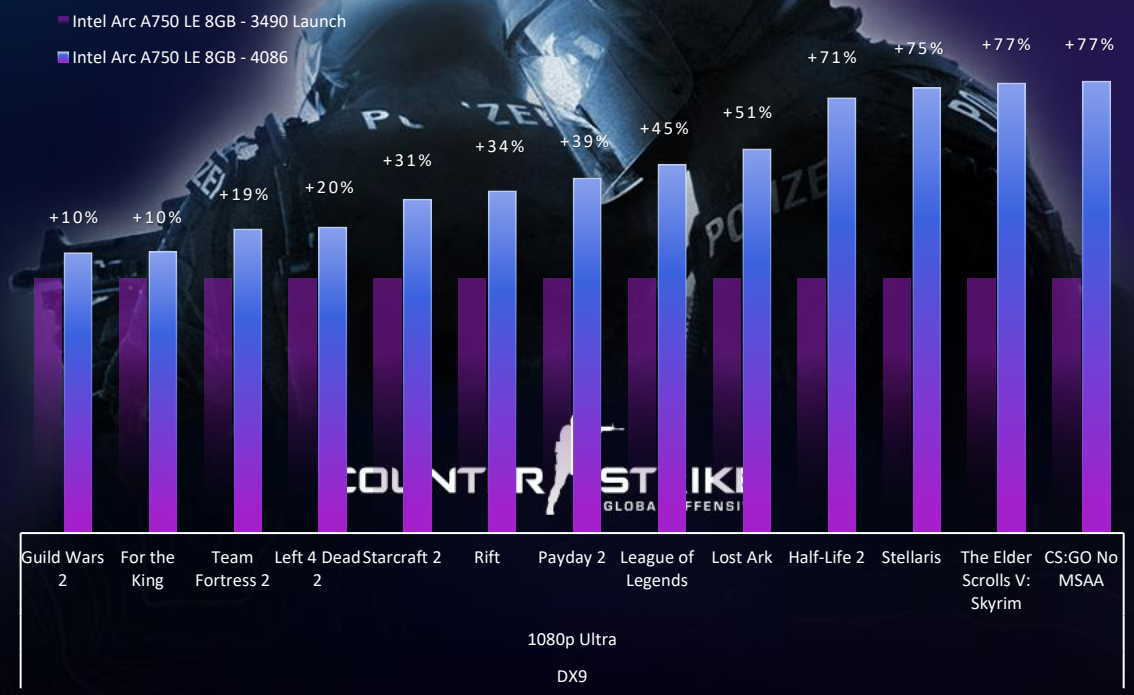


https://www.techpowerup.com/review/msi-geforce-rtx-4060-gaming-x/31.html

Rapid and Significant Performance Gains Since Launch

43%

Better performance on average across DirectX 9 games.



Better performance on DirectX 11 games.

+24% at 1080p

+16% at 1440p

Better performance on DirectX 12 games.

+5% at 1080p & 1440p

+11% vs **RTX 3060 12GB**

Performance varies by use, configuration and other factors. See backup for further details. Results may vary.

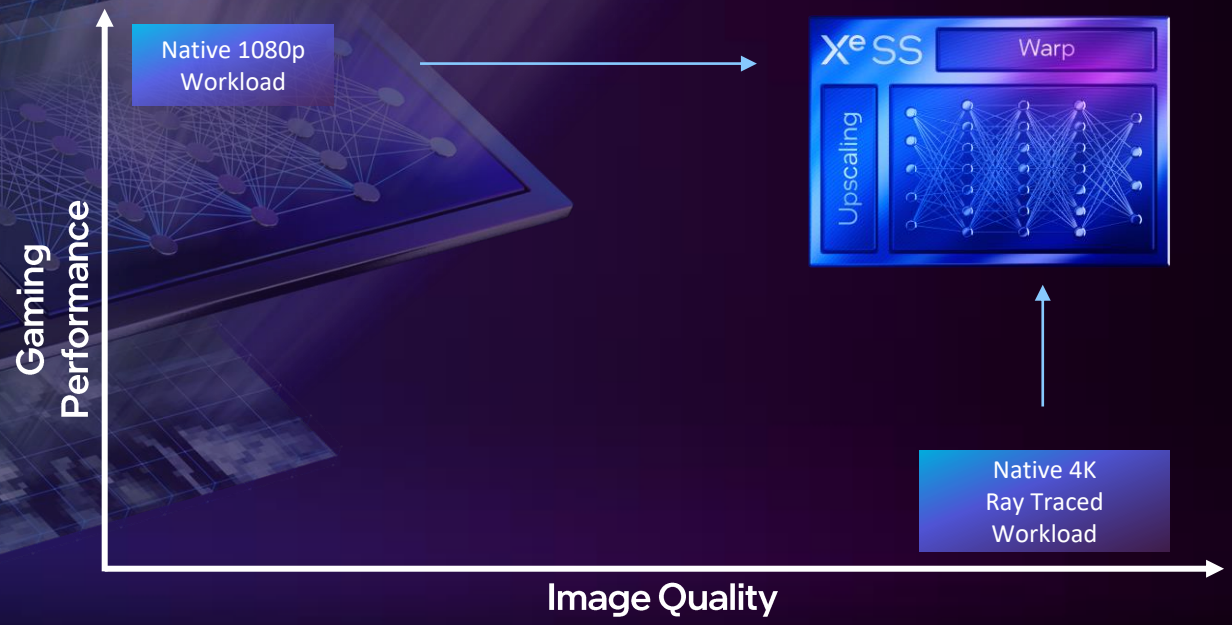
Intel®

Xe Super Sampling

Intel® XeSS harnesses dedicated AI processors on Intel® Arc™ GPUs to apply deep learning algorithms that intelligently boost performance and immersion.

Get 4K Ray-Traced Image Quality with 1080p Frame Rates

Intel XeSS technology delivers the best of both worlds



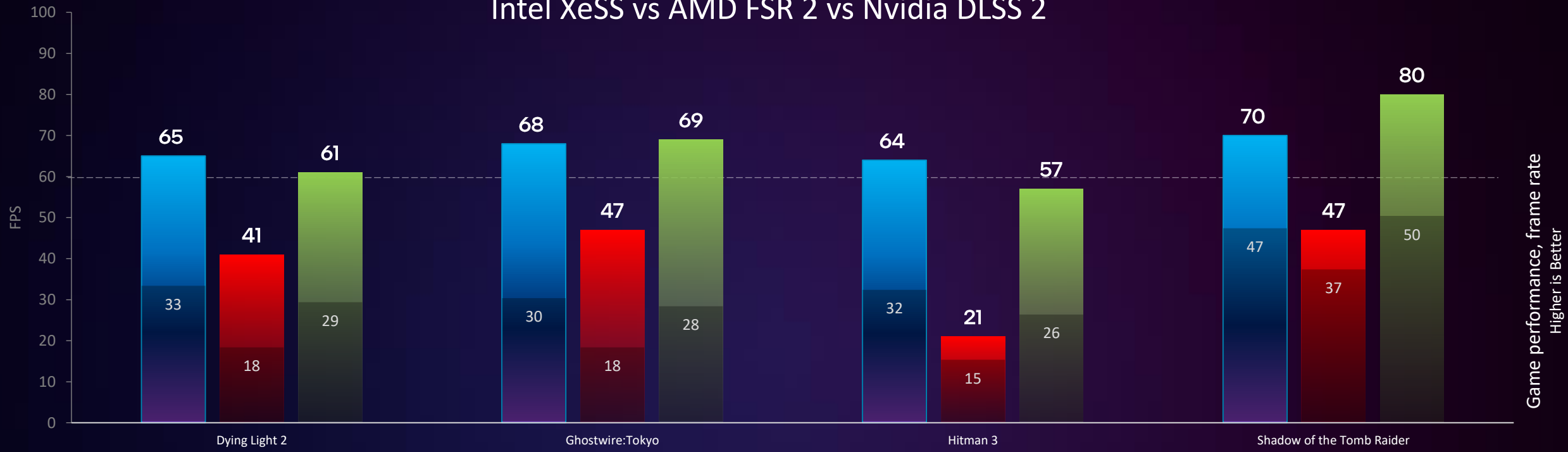

Survive until you can open a rift back to Earth 01:59:47
Build a Communications Hub.
Attack incoming! 00:18
0/16
+25 224/198
11.2K/11.2K
+0 1/1
559/750
+0 1/1
602/750
35
200
∞
207/320
10
10
1
2
3
4
5
6
7
8
LSHIFT
Day: 4
09 : 15
100%
100%
XeSS 4K
Beta Demo revision: 22335 dx12 TC build: 0

Multiple XeSS Options Enabling Better Gaming Experiences

Rounding performed on FPS measurements, performance uplift is calculated based on unrounded results.
Performance varies by use, configuration and other factors. See backup for workloads and configurations.

Ray Tracing Performance in 1440p with XeSS Enabled

Intel XeSS vs AMD FSR 2 vs Nvidia DLSS 2



60+ FPS Ray Traced Gaming with XeSS

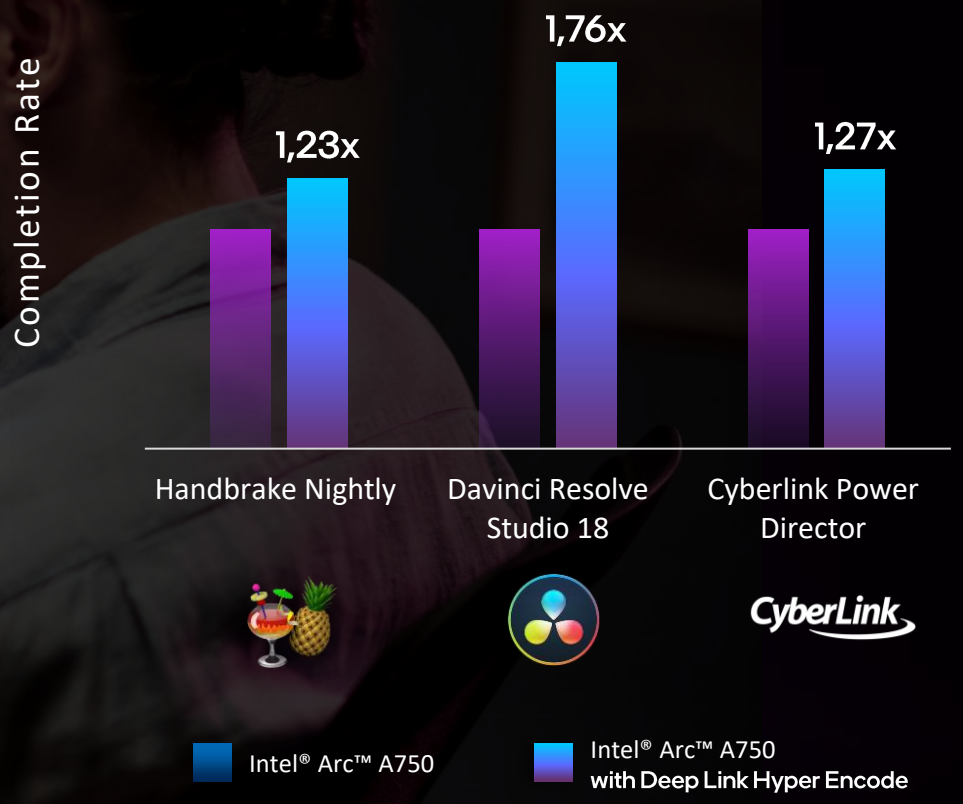
Across select titles

Performance varies by use, configuration and other factors. See backup for workloads and configurations.

Intel® Deep Link Hyper Encode

Faster Transcoding Performance

By combining media encode engines across Intel® integrated graphics and Intel® Arc™ graphics



Performance varies by use, configuration and other factors. See backup for workloads and configurations.

intel ARC

A380

Full AV1 Hardware Acceleration

Many Apps Available Today With Intel Arc AV1 Support

OBS Studio | YouTube | XSplit

STREAM

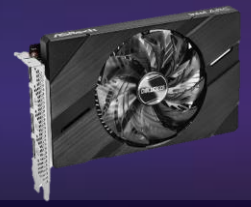
FFMPEG | HandBrake | Adobe Premiere Pro | DaVinci Resolve Studio

CREATE

Support for up to 4 displays

Modern Features

XeSS | DirectX XII ULTIMATE | XMX AI Acceleration | Xe Media Engine



ASRock A380 Challenger ITX

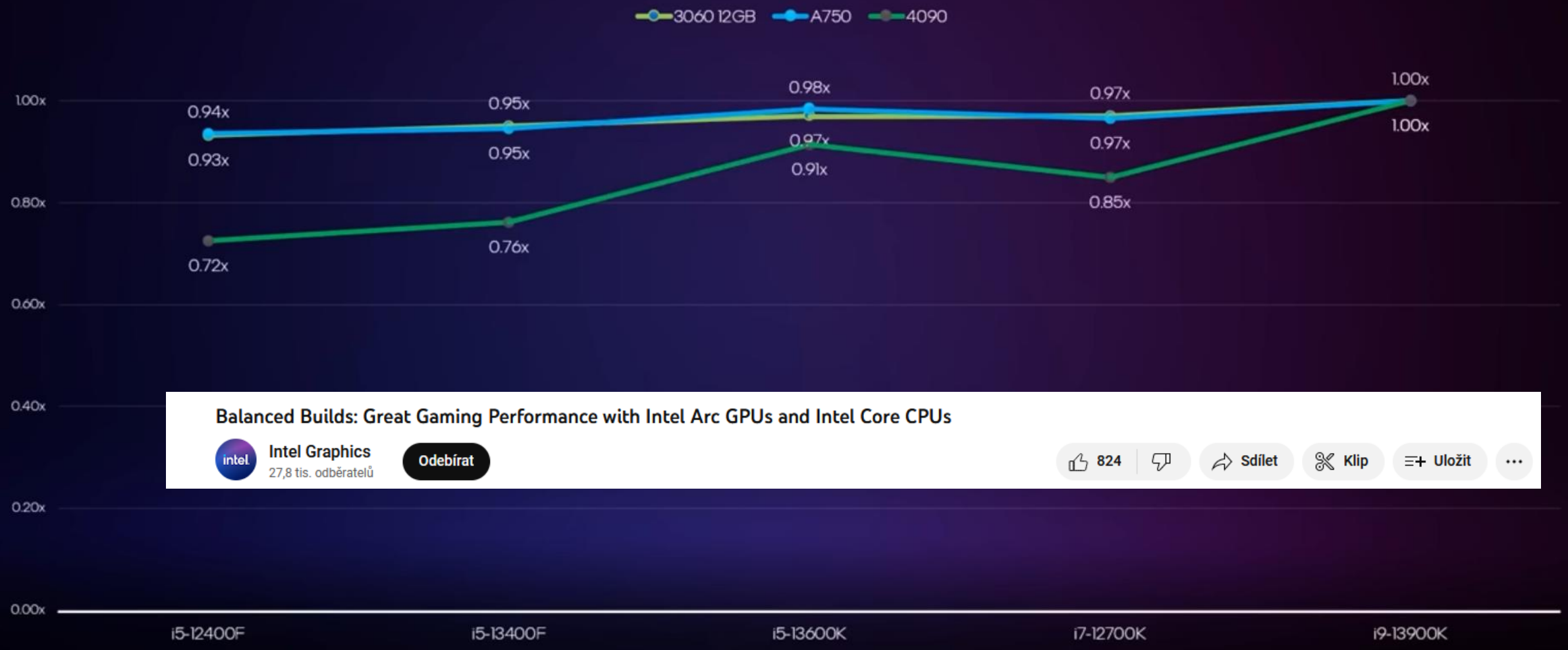
Sparkle A380 Elf

Image is provided for illustrative purposes only

*Other names and brands may be claimed as the property of others. Intel® Deep Link technologies requires an Intel® Core™ CPU with integrated graphics.

Different GPU classes leveled up by Core i9

All APIs, 1080p, average of normalized avg. FPS



Balanced Builds: Great Gaming Performance with Intel Arc GPUs and Intel Core CPUs

Intel Graphics
27,8 tis. odběratelů
Odebírat

824 Sdílet Klip Uložit

Performance varies by use, configuration and other factors. See backup for further details. Results may vary.

Intel® Core™ Processors

Závěr

Děkuji!!

Otázky?

jaroslavx@retailedgeintel.com

Workloads and Configurations
A750 1440p Gaming Performance

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel Arc A750 delivers over 60 FPS 1440p ultra gaming performance across a broad set of games.	**A750 configuration:** GPU: Intel® Arc™ A750 8GB Limited Edition Drivers: 31.0.101.3490 and 31.0.101.4086 CPU: Intel® Core™ i9-13900K processor Motherboard: Asus ROG MAXIMUS Z790 Hero, BIOS 0703 Memory: Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM 5600MHz C36 Storage: Corsair MP600 Pro XT 4TB NVMe O/S: Windows 11 Pro 22621.963, Balanced Power Policy	Broad set of DX9, DX11, DX12 games tested at 1440p ultra. All games run 3 times and median of runs was taken. • Call of Duty: Vanguard -60.23FPS • Marvel's Guardians of the Galaxy -61.68FPS • Borderlands 3 -61.88FPS • Metro Exodus -64.97FPS • Tiny Tina's Wonderlands -65.26FPS • Gears 5 -65.6FPS • Ghostwire Tokyo -65.93FPS • Control -66.3FPS • Tom Clancy's The Division 2 -68.91FPS • NARAKA: BLADEPOINT -69.05FPS • Middle-Earth: Shadow of War -72.38FPS • Horizon Zero Dawn -72.5FPS • Far Cry 6 -73.94FPS • Justice (Ni Shui Han) -74.58FPS • Forza Horizon 5 -75.7FPS • Red Dead Redemption 2 -79.58FPS • Marvel's Spider-Man Remastered -82.54FPS • Moonlight Blade -83.56FPS • BeamNG.drive -83.77FPS • F1 2022 -83.8FPS • GTA V -87.8FPS • Sniper Elite 5 -104.53FPS • Death Stranding: Director's Cut -105.58FPS • Battlefield V -110.19FPS • Resident Evil Village -111.35FPS • Back 4 Blood -118.97FPS • Lost Ark -122.69FPS • The Elder Scrolls V: Skyrim -148.24FPS • PUBG -97.1FPS • Apex Legends -95.48FPS • Overwatch 2 -168.45FPS • Starcraft 2 -183.11FPS • DOTA 2 -215.53FPS • Rocket League -247.24FPS • League of Legends -328.86FPS • CS:GO -345.82FPS • Valorant -431.79FP	January 25th, 2023

Workloads and Configurations – A750 DX9 and DX11 Uplifts

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel Arc A750 delivers 43% more performance averaged across DirectX9 games at 1080p when using the latest 3490 driver versus the launch driver. Using 99th percentile FPS, Intel Arc A750 delivered 60% smoother gameplay when using the latest 3490 driver versus the launch driver.	**A750 configuration:** GPU: Intel® Arc™ A750 8GB Limited Edition Drivers: 31.0.101.3490 and 31.0.101.4086 CPU: Intel® Core™ i9-13900K processor Motherboard: Asus ROG MAXIMUS Z790 Hero, BIOS 0703 Memory: Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM 5600MHz C36 Storage: Corsair MP600 Pro XT 4TB NVMe O/S: Windows 11 Pro 22621.963, Balanced Power Policy	13 Games tested at 1080p on old driver versus new driver: • Guild Wars 2 • For the King • Team Fortress 2 • Left 4 Dead 2 • Starcraft 2 • Rift • Payday 2 • League of Legends • Lost Ark • Half Life 2 • Stellaris • The Elder Scrolls V: Skyrim • CS:GO (No MSAA) Average of all games resulted in a 43% uplift.	January 25th, 2023
Intel Arc A750 delivers 24% more performance averaged across DX11 games at 1080p, and 16% more performance averaged across DX11 games at 1440p, when using the latest 3490 driver versus the launch driver.	**A750 configuration:** GPU: Intel® Arc™ A750 8GB Limited Edition Drivers: 31.0.101.3490 and 31.0.101.4086 CPU: Intel® Core™ i9-13900K processor Motherboard: Asus ROG MAXIMUS Z790 Hero, BIOS 0703 Memory: Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM 5600MHz C36 Storage: Corsair MP600 Pro XT 4TB NVMe O/S: Windows 11 Pro 22621.963, Balanced Power Policy	14 games tested at 1080p and 1440p on old driver versus new driver: • Borderlands 2 • Far Cry New Dawn • Fortnite • Back 4 Blood • Valorant • DOTA 2 • PUBG • Assassin's Creed Odyssey • Tom Clancy's The Division 2 • Rocket League • Total War: Warhammer III • Warframe • Rider's Republic • BeamNG.drive Average of all games resulted in a 24% uplift at 1080p and 16% uplift at 1440p.	January 25th, 2023

Workloads and Configurations
A750 DX12 Uplifts and vs RTX 3060 12GB

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel Arc A750 delivers 5% more performance averaged across DX12 games at 1440p when using the latest 3490 driver versus the launch driver. Across the same games at the same settings, Intel Arc A750 delivers 11% more performance versus RTX 3060 12GB.	**A750 configuration:** GPU: Intel® Arc™ A750 8GB Limited Edition Drivers: 31.0.101.3490 and 31.0.101.4086 CPU: Intel® Core™ i9-13900K processor Motherboard: Asus ROG MAXIMUS Z790 Hero, BIOS 0703 Memory: Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM 5600MHz C36 Storage: Corsair MP600 Pro XT 4TB NVMe O/S: Windows 11 Pro 22621.963, Balanced Power Policy **RTX 3060 12GB configuration:** GPU: EVGA GeForce RTX 3060 XC Gaming 12GB (12G-P5-3657-KR) Drivers: 528.02 Driver CPU: Intel® Core™ i9-13900K processor Motherboard: Asus ROG MAXIMUS Z790 Hero, BIOS 0703 Memory: Corsair DOMINATOR PLATINUM RGB 32GB (2x16GB) DDR5 DRAM 5600MHz C36 Storage: Corsair MP600 Pro XT 4TB NVMe O/S: Windows 11 Pro 22621.963, Balanced Power Policy	Games tested at 1440p on old driver versus new driver: • Assassin's Creed Valhalla • Borderlands 3 • Call of Duty: Vanguard • Dirt 5 • Dying Light 2 Stay Human • Gears 5 • Hitman 3 • Justice (Ni Shui Han) • Tiny Tina's Wonderlands Average of all games resulted in a 5% uplift driver over driver, and an 11% uplift over RTX 3060 12GB.	January 25th, 2023

Workloads and Configurations
1080p A750 vs RX 6600, RTX 3060 8GB, RTX 3060 12GB

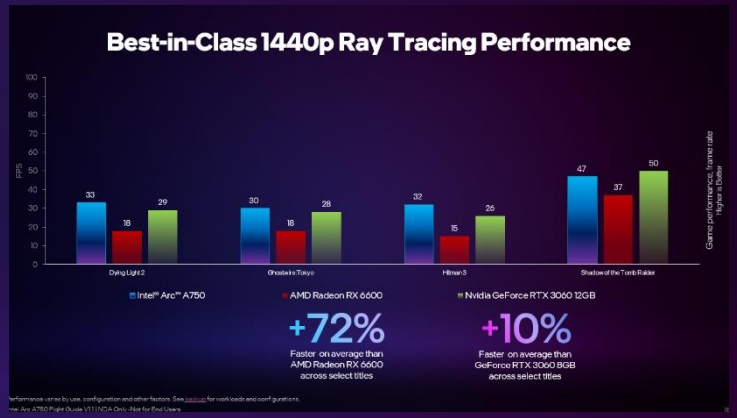
CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel® Arc™ A750 graphics cards delivers 22% faster performance than AMD Radeon RX 6600, 25% faster performance than Nvidia GeForce RTX 3060 8GB, and 10% faster performance than Nvidia GeForce RTX 3060 12GB in select games at 1080p Ultra Settings	A750 configuration: CPU: i9-13900K GPU: Intel Arc A750 Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro 6600 configuration: CPU: i9-13900K GPU: XFX SPEEDSTER SWFT210 Radeon RX 6600 8GB, RX-66XL8LFDQ Memory: 2x16GB DDR5-5600 Drivers: 31.0.12029.10015 O/S: Windows 11 Pro 3060 8GB configuration: CPU: i9-13900K GPU: GeForce RTX 3060 8GB Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963 3060 12GB configuration: CPU: i9-13900K GPU: EVGA GeForce RTX 3060 XC, 12G P5-3657-KR Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963	• Borderlands 3 - Intel® Arc™ A750: 86.33 FPS | AMD Radeon RX 6600: 78.07 FPS | Nvidia GeForce RTX 3060 8GB: 67 FPS | Nvidia GeForce RTX 3060 12GB: 75.08 FPS • Control - Intel® Arc™ A750: 102.03 FPS | AMD Radeon RX 6600: 68.55 FPS | Nvidia GeForce RTX 3060 8GB: 79.84 FPS | Nvidia GeForce RTX 3060 12GB: 89.71 FPS • Gears 5 - Intel® Arc™ A750: 88.91 FPS | AMD Radeon RX 6600: 81.9 FPS | Nvidia GeForce RTX 3060 8GB: 85.49 FPS | Nvidia GeForce RTX 3060 12GB: 93.94 FPS • Ghostwire Tokyo - Intel® Arc™ A750: 103.93 FPS | AMD Radeon RX 6600: 86.29 FPS | Nvidia GeForce RTX 3060 8GB: 92.81 FPS | Nvidia GeForce RTX 3060 12GB: 101.39 FPS • Hitman 3 - Intel® Arc™ A750: 174.18 FPS | AMD Radeon RX 6600: 156.13 FPS | Nvidia GeForce RTX 3060 8GB: 152.18 FPS | Nvidia GeForce RTX 3060 12GB: 165.76 FPS • Metro Exodus - Intel® Arc™ A750: 78.73 FPS | AMD Radeon RX 6600: 61.46 FPS | Nvidia GeForce RTX 3060 8GB: 57.38 FPS | Nvidia GeForce RTX 3060 12GB: 66.5 FPS • Middle-Earth: Shadow of War - Intel® Arc™ A750: 104.02 FPS | AMD Radeon RX 6600: 99.03 FPS | Nvidia GeForce RTX 3060 8GB: 96.92 FPS | Nvidia GeForce RTX 3060 12GB: 109.7 FPS • Strange Brigade - Intel® Arc™ A750: 200.88 FPS | AMD Radeon RX 6600: 155.37 FPS | Nvidia GeForce RTX 3060 8GB: 123.51 FPS | Nvidia GeForce RTX 3060 12GB: 159.13 FPS • Sniper Elite 5 - Intel® Arc™ A750: 148.26 FPS | AMD Radeon RX 6600: 108.32 FPS | Nvidia GeForce RTX 3060 8GB: 110.19 FPS | Nvidia GeForce RTX 3060 12GB: 125.68 FPS Average selling price of $249 USD calculated for RX 6600, $356 USD calculated for RTX 3060, and $391 USD calculated for RTX 3060 12GB , on January 26, 2023, from Newegg.com, all applicable product that was in-stock, for sale by Newegg, A750 average performance uplift and performance/$ vs: • RX 6600: 22% more performance and 1.22x perf/$ • RTX 3060 8GB : 25% more performance and 1.79x perf/$ • RTX 3060 12GB: 10% more performance and 1.72x perf/$	January 31, 2023

Workloads and Configurations
1440p A750 vs RX 6600, RTX 3060 8GB, RTX 3060 12GB

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel® Arc™ A750 graphics cards delivers 33% faster performance than AMD Radeon RX 6600, 29% faster performance than Nvidia GeForce RTX 3060 8GB, and 13% faster performance than Nvidia GeForce RTX 3060 12GB in select games at 1440p Ultra Settings	A750 configuration: CPU: i9-13900K GPU: Intel Arc A750 Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro 6600 configuration: CPU: i9-13900K GPU: XFX SPEEDSTER SWFT210 Radeon RX 6600 8GB, RX-66XL8LFDQ Memory: 2x16GB DDR5-5600 Drivers: 31.0.12029.10015 O/S: Windows 11 Pro 3060 8GB configuration: CPU: i9-13900K GPU: GeForce RTX 3060 8GB Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963 3060 12GB configuration: CPU: i9-13900K GPU: EVGA GeForce RTX 3060 XC, 12G P5-3657-KR Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963	• Borderlands 3 - Intel® Arc™ A750: 61.43 FPS | AMD Radeon RX 6600: 51.14 FPS | Nvidia GeForce RTX 3060 8GB: 47.67 FPS | Nvidia GeForce RTX 3060 12GB: 53.27 FPS • Control - Intel® Arc™ A750: 66.12 FPS | AMD Radeon RX 6600: 41.09 FPS | Nvidia GeForce RTX 3060 8GB: 48.92 FPS | Nvidia GeForce RTX 3060 12GB: 55.71 FPS • Gears 5 - Intel® Arc™ A750: 62.73 FPS | AMD Radeon RX 6600: 53.21 FPS | Nvidia GeForce RTX 3060 8GB: 58.75 FPS | Nvidia GeForce RTX 3060 12GB: 64.49 FPS • Ghostwire Tokyo - Intel® Arc™ A750: 67.6 FPS | AMD Radeon RX 6600: 50.38 FPS | Nvidia GeForce RTX 3060 8GB: 57.97 FPS | Nvidia GeForce RTX 3060 12GB: 62.57 FPS • Hitman 3 - Intel® Arc™ A750: 118.79 FPS | AMD Radeon RX 6600: 97.46 FPS | Nvidia GeForce RTX 3060 8GB: 97.31 FPS | Nvidia GeForce RTX 3060 12GB: 105.17 FPS • Metro Exodus - Intel® Arc™ A750: 64.31 FPS | AMD Radeon RX 6600: 46.23 FPS | Nvidia GeForce RTX 3060 8GB: 44.75 FPS | Nvidia GeForce RTX 3060 12GB: 52.09 FPS • Middle-Earth: Shadow of War - Intel® Arc™ A750: 74 FPS | AMD Radeon RX 6600: 63.84 FPS | Nvidia GeForce RTX 3060 8GB: 67.95 FPS | Nvidia GeForce RTX 3060 12GB: 76.71 FPS • Strange Brigade - Intel® Arc™ A750: 146.82 FPS | AMD Radeon RX 6600: 99.53 FPS | Nvidia GeForce RTX 3060 8GB: 89.64 FPS | Nvidia GeForce RTX 3060 12GB: 116.64 FPS • Sniper Elite 5 - Intel® Arc™ A750: 104.76 FPS | AMD Radeon RX 6600: 74.6 FPS | Nvidia GeForce RTX 3060 8GB: 77.38 FPS | Nvidia GeForce RTX 3060 12GB: 87.029 FPS Average selling price of $249 USD calculated for RX 6600, $356 USD calculated for RTX 3060, and $391 USD calculated for RTX 3060 12GB , on January 26, 2023, from Newegg.com, all applicable product that was in-stock, for sale by Newegg, A750 average performance uplift and performance/$ vs: • RX 6600: 33% more performance and 1.33x performance/$ • RTX 3060 8GB : 29% more performance and 1.84x performance/$ • RTX 3060 12GB : 13% more performance and 1.77x performance/$	January 31, 2023

Workloads and Configurations – A750 Ray Tracing

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
Intel® Arc™ A750 graphics cards delivers 30+ FPS gaming with Real Time Ray Tracing in 1440p resolution.	A750 configuration: CPU: i9-13900K GPU: Intel Arc A750 Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro 6600 configuration: CPU: i9-13900K GPU: XFX SPEEDSTER SWFT210 Radeon RX 6600 8GB, RX-66XL8LFDQ Memory: 2x16GB DDR5-5600 Drivers: 31.0.12029.10015 O/S: Windows 11 Pro 3060 12GB configuration: CPU: i9-13900K GPU: EVGA GeForce RTX 3060 XC, 12G P5-3657-KR Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963	RTRT gaming at 1440p native resolution: • Dying Light 2 - Intel® Arc™ A750: 33 FPS | AMD Radeon RX 6600: 18 FPS | Nvidia GeForce RTX 3060 12GB: 29 FPS • Ghostwire: Tokyo - Intel® Arc™ A750: 30 FPS | AMD Radeon RX 6600: 18 FPS | Nvidia GeForce RTX 3060 128GB: 28 FPS • Hitman 3 - Intel® Arc™ A750: 32 FPS | AMD Radeon RX 6600: 15 FPS | Nvidia GeForce RTX 3060 12GB: 26 FPS • Shadow of the Tomb Raider - Intel® Arc™ A750: 47 FPS | AMD Radeon RX 6600: 37 FPS | Nvidia GeForce RTX 3060 12GB: 50 FPS A750 average performance vs: • RX 6600: 172% • RTX 3060 12GB: 110%	January 2nd, 2023



Workloads and Configurations – A750 Ray Tracing and XeSS

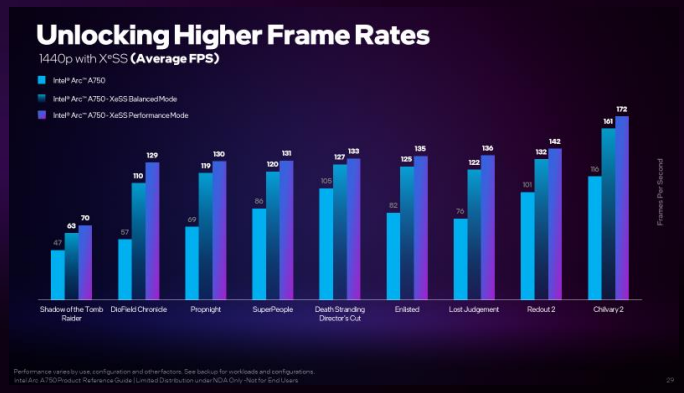
CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	DATE
With XeSS enabled, Intel® Arc™ A750 graphics cards delivers 60+ FPS gaming with Real Time Ray Tracing in 1440p resolution, beating FSR 2 and competitive with DLSS 2	A750 configuration: CPU: i9-13900K GPU: Intel Arc A750 Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro 6600 configuration: CPU: i9-13900K GPU: XFX SPEEDSTER SWFT210 Radeon RX 6600 8GB, RX-66XL8LFDQ Memory: 2x16GB DDR5-5600 Drivers: 31.0.12029.10015 O/S: Windows 11 Pro 3060 12GB configuration: CPU: i9-13900K GPU: EVGA GeForce RTX 3060 XC, 12G P5-3657-KR Memory: 2x16GB DDR5-5600 Drivers: 31.0.101.3959 O/S: Windows 11 Pro, 22H2, 22621.963	RTRT gaming at 1440p native resolution: • Dying Light 2 - Intel® Arc™ A750: 33 FPS | AMD Radeon RX 6600: 18 FPS | Nvidia GeForce RTX 3060 12GB: 29 FPS • Ghostwire: Tokyo - Intel® Arc™ A750: 30 FPS | AMD Radeon RX 6600: 18 FPS | Nvidia GeForce RTX 3060 128GB: 28 FPS • Hitman 3 - Intel® Arc™ A750: 32 FPS | AMD Radeon RX 6600: 15 FPS | Nvidia GeForce RTX 3060 12GB: 26 FPS • Shadow of the Tomb Raider - Intel® Arc™ A750: 47 FPS | AMD Radeon RX 6600: 37 FPS | Nvidia GeForce RTX 3060 12GB: 50 FPS A750 average performance vs: • RX 6600: 172% • RTX 3060 12GB: 110% With XeSS performance mode enabled for Intel Arc, FSR 2 performance mode enabled for AMD Radeon, DLSS 2 performance mode enabled for Nvidia GeForce • Dying Light 2 - Intel® Arc™ A750: 65 FPS | AMD Radeon RX 6600: 41 FPS | Nvidia GeForce RTX 3060 8GB: 54 FPS • Ghostwire: Tokyo - Intel® Arc™ A750: 68 FPS | AMD Radeon RX 6600: 47 FPS | Nvidia GeForce RTX 3060 8GB: 62 FPS • Hitman 3 - Intel® Arc™ A750: 64 FPS | AMD Radeon RX 6600: 21 FPS | Nvidia GeForce RTX 3060 8GB: 53 FPS • Shadow of the Tomb Raider - Intel® Arc™ A750: 70 FPS | AMD Radeon RX 6600: 47 FPS | Nvidia GeForce RTX 3060 8GB: 79 FPS A750 average performance vs: • RX 6600: 189% • RTX 3060 12GB: 101%	January 2nd, 2023

Workloads and Configurations – XeSS Across GhostWire Tokyo

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 delivers increased gameplay performance (FPS) with the different modes of XeSS compared to without XeSS, in the game Ghostwire Tokyo. Going from native to performance mode results in up to 2.29x or 129% more performance.	Graphics: Intel® Arc™ A750 Graphics Graphics Driver: Release 3959 Processor: Intel® Core™ i9-13900k Motherboard: Asus Rog Maximus Z790 Hero BIOS: 703 Memory: 32GB (2x16GB) DDR5 4800MHz Storage: Corsair MP600 Pro XT 4TB NVMe OS: Win 11 Pro v22H2, Build: 22621.963	GhostWire Tokyo tested at 1440p ultra. • Native: 29.57 FPS • Ultra Quality: 47.87 FPS • Quality: 48.84 FPS • Balanced Mode: 54.41 FPS • Performance Mode: 67.80 FPS The uplift going from native to performance mode is 2.29x or +129%.	Jan 5, 2023

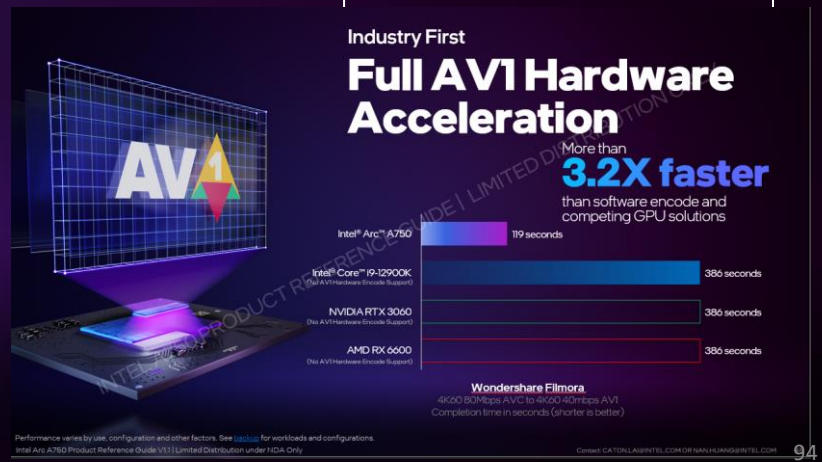
Workloads and Configurations - XeSS

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 with XeSS delivers increased gameplay performance as measured by FPS compared to gameplay without XeSS	Graphics: Intel® Arc™ A750 Graphics, Graphics Driver: Engineering Driver 3262, Processor: Intel® Core™ i9-12900K, Asus ROG MAXIMUS Z690 Hero, BIOS: 1601, Memory: 32GB (2x16GB) DDR5 @ 4800MHz, Storage: Corsair MP600 Pro XT 4TB NVMe, OS: Windows 11 Version 22000.795	All games tested at highest possible settings by choosing highest preset, then manually increased individual settings to maximum. Raytracing options set to maximum when supported by the games. Turned off motion blur and screen effects for Shadow of Tomb Raider. XeSS Performance Mode and Balanced Mode tested on all titles: • Shadow of the Tomb Raider- Native: 46.7FPS | Balanced Mode: 62.69FPS| Performance Mode: 69.88FPS • DioField Chronicle- Native: 56.71FPS | Balanced Mode: 109.55FPS| Performance Mode: 128.93FPS • Propnight- Native: 68.65FPS | Balanced Mode: 119.13FPS| Performance Mode: 130.05FPS • SuperPeople- Native: 85.65FPS | Balanced Mode: 120.46FPS| Performance Mode: 130.67FPS • Death Stranding Director's Cut- Native: 104.65FPS | Balanced Mode: 127.21FPS| Performance Mode: 132.68FPS • Enlisted- Native: 81.86FPS | Balanced Mode: 125.15FPS| Performance Mode: 134.93FPS • Lost Judgement- Native: 76.32FPS | Balanced Mode: 122.19FPS| Performance Mode: 135.68FPS • Redout 2- Native: 101.23FPS | Balanced Mode: 132.02FPS| Performance Mode: 141.92FPS • Chilvary 2- Native: 115.86FPS | Balanced Mode: 160.94FPS| Performance Mode: 172.22FPS	November 21, 2022



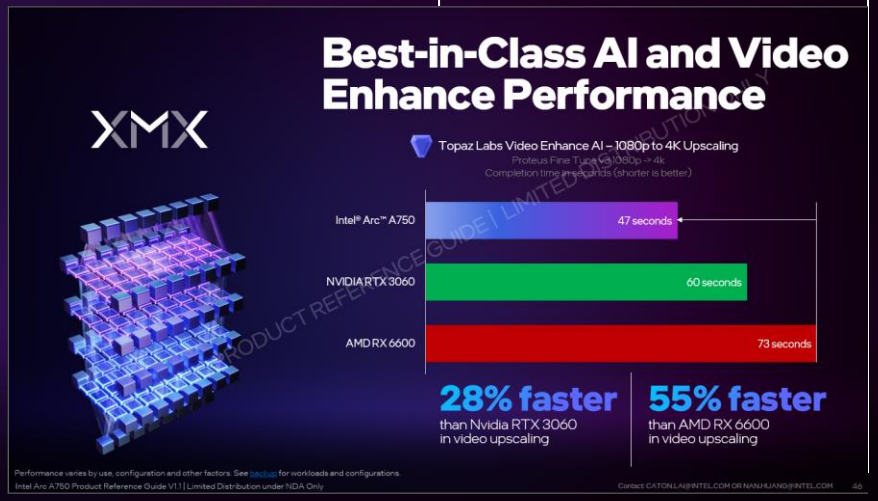
Workloads and Configurations – AV1 Hardware Acceleration

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 is equipped with hardware AV1 encode which enables it to achieve 3.2x faster performance than competing GPUs, which do not have hardware encode capability and must rely on software encoding on the CPU instead.	Intel® Arc™ A750 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: Intel Arc 750 8GB Gddr6 PCIe 4.0 **Graphics Driver**: 31.0.101.4032 **Storage:** Corsair MP600 Pro XT 4TB NVMe AMD Radeon RX 6600 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: ASRock Radeon RX 6600 8GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.12044.3 **Storage:** Corsair MP600 Pro XT 4TB NVMe Nvidia GeForce GTX 3060 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: EVGA - NVIDIA GeForce RTX 3060 XC GAMING 12GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.15.2824 **Storage:** Corsair MP600 Pro XT 4TB NVMe	AV1 software encoding vs. hardware accelerated AV1 encoding measures the time it takes to complete a video transcode in seconds, using wondershare Filmora to convert a 4K/60fps AVC video to a 4K/60fps AV1 video at 80 Mbps. • Arc A750: 119 seconds • Intel® Core™ i9-13900K: 386 seconds NVIDIA RTX 3060 Series (unable to process AV1, so relies on Intel® Core™ i9-13900K and completes in 386 seconds) • RX 6600 (unable to process AV1, so relies on Intel® Core™ i9-13900K and completes in 386 seconds)	Feb, 2023



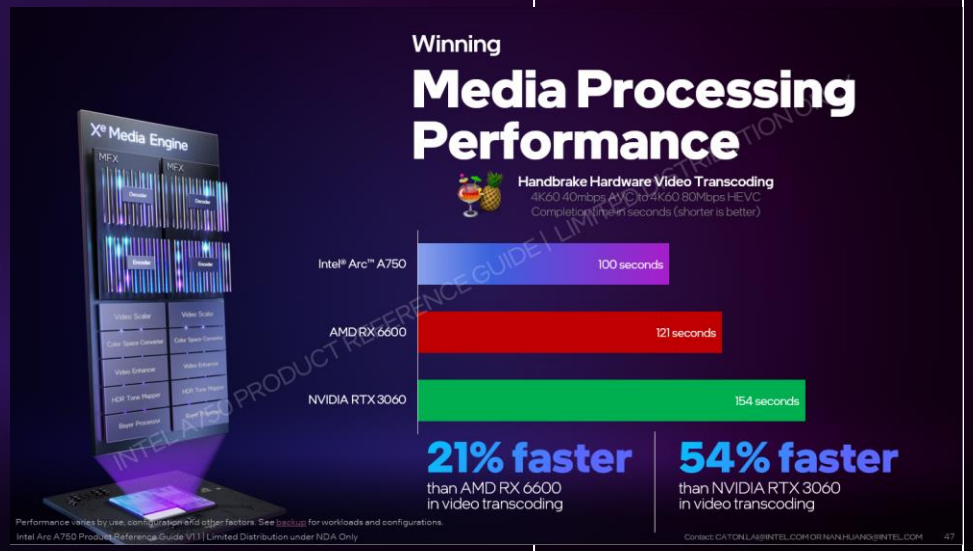
Workloads and Configurations – XMX AI Creation

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 utilizes built in XMX engines to complete AI creation tasks faster. In Topaz Video Enhance AI, the Intel® Arc™ A750 is able to upscale a video 28% faster than an RTX 3060, and 55% faster than an RX 6600	Intel® Arc™ A750 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: Intel Arc 750 8GB Gddr6 PCIe 4.0 **Graphics Driver**: 31.0.101.4032 **Storage:** Corsair MP600 Pro XT 4TB NVMe AMD Radeon RX 6600 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: ASRock Radeon RX 6600 8GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.12044.3 **Storage:** Corsair MP600 Pro XT 4TB NVMe Nvidia GeForce GTX 3060 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: EVGA - NVIDIA GeForce RTX 3060 XC GAMING 12GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.15.2824 **Storage:** Corsair MP600 Pro XT 4TB NVMe	XMX performance tested on Topaz Labs Video Enhance Ai with Proteus Fine Tune v3 converting a video from 1080p to 4K. Total time to completion are as follows: Arc A750: 47 seconds RTX 3060: 60 seconds RX 6600: 73 seconds	Feb, 2023



Workloads and Configurations – Media Processing

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 is able to transcode video up to 54% faster than an RTX 3060, and 21% faster than an RX 6600, using Handbrake to convert from 4K60 (AVC) to 4K60 (HEVC)	Intel® Arc™ A750 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: Intel Arc 750 8GB Gddr6 PCIe 4.0 **Graphics Driver**: 31.0.101.4032 **Storage:** Corsair MP600 Pro XT 4TB NVMe AMD Radeon RX 6600 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: ASRock Radeon RX 6600 8GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.12044.3 **Storage:** Corsair MP600 Pro XT 4TB NVMe Nvidia GeForce GTX 3060 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: EVGA - NVIDIA GeForce RTX 3060 XC GAMING 12GB GDDR6 PCI Express 4.0 **Graphics Driver**: 31.0.15.2824 **Storage:** Corsair MP600 Pro XT 4TB NVMe	Tested using Handbrake to convert video from 4K60 (AVC) to 4K60 (HEVC) , using Default 40Mbps Balanced preset. Completion time (measured in seconds) are as follows: Arc A750: 100s RTX 3060: 154s RX 6600: 121s	Feb, 2023



Workloads and Configurations – Hyper Encode

CLAIM	SYSTEM CONFIGURATION	MEASUREMENT	MEASUREMENT PERIOD
Intel® Arc™ A750 is able to transcode video faster by utilizing Intel Deep Link Hyper Enocde, which harnesses Intel® Core™ processors to aid in encoding video. With Hyper Encode, Using Intel® Deep Link Hyper Encode with Intel® Arc™ A750 and Intel® Core™ i9-13900K working together, delivers faster content creation performance compared to Intel® Arc™ A750 graphics alone: Handbrake 1.23x, Davinci Resolve 1.76x, Cyberlink Power Director 1.27x, for media encode	Intel® Arc™ A750 configuration: **Processor**: Intel® Core™ i9-13900K **Motherboard**: Asus ROG MAXIMUS Z790 Hero (**BIOS**: 0813 x64) **Ram**: 32GB (2x16GB) DDR5 4800MHz **OS**: Windows 11 Pro Version 22H2 22621.1194 **Discrete Graphics**: Intel Arc 750 8GB Gddr6 PCIe 4.0 **Graphics Driver**: 31.0.101.4032 **Storage:** Corsair MP600 Pro XT 4TB NVMe	Intel® Deep Link Hyper Encode workload measures the time it takes to transcode a 4K/30fps AVC @ 57.9Mbps clip to 4K/30fps HEVC @ 30Mbps High Quality format with 3 applications: Handbrake, DaVinci Resolve, and Cyberlink PowerDirector The comparison for the claim is using both Intel® Iris Xe graphics found in the Intel® Core™ i9-13900K, and Intel® Arc™ A750 to encode in an Intel® Deep Link Hyper Encode configuration versus the Intel® Arc™ A750 alone. Handbrake Nightly -- A750 alone: 100s | Hyper Encode: 81s Davinci Resolve Studio 18-- A750 alone: 127s | Hyper Encode: 72s Cyberlink Power Director -- A750 alone: 98s | Hyper Encode: 77s (Handbrake Nightly v. 1.6.1 (2023012300))	Feb 2023