Intel CES 2022

Client Computing Group

Press and Industry Analyst Presentation

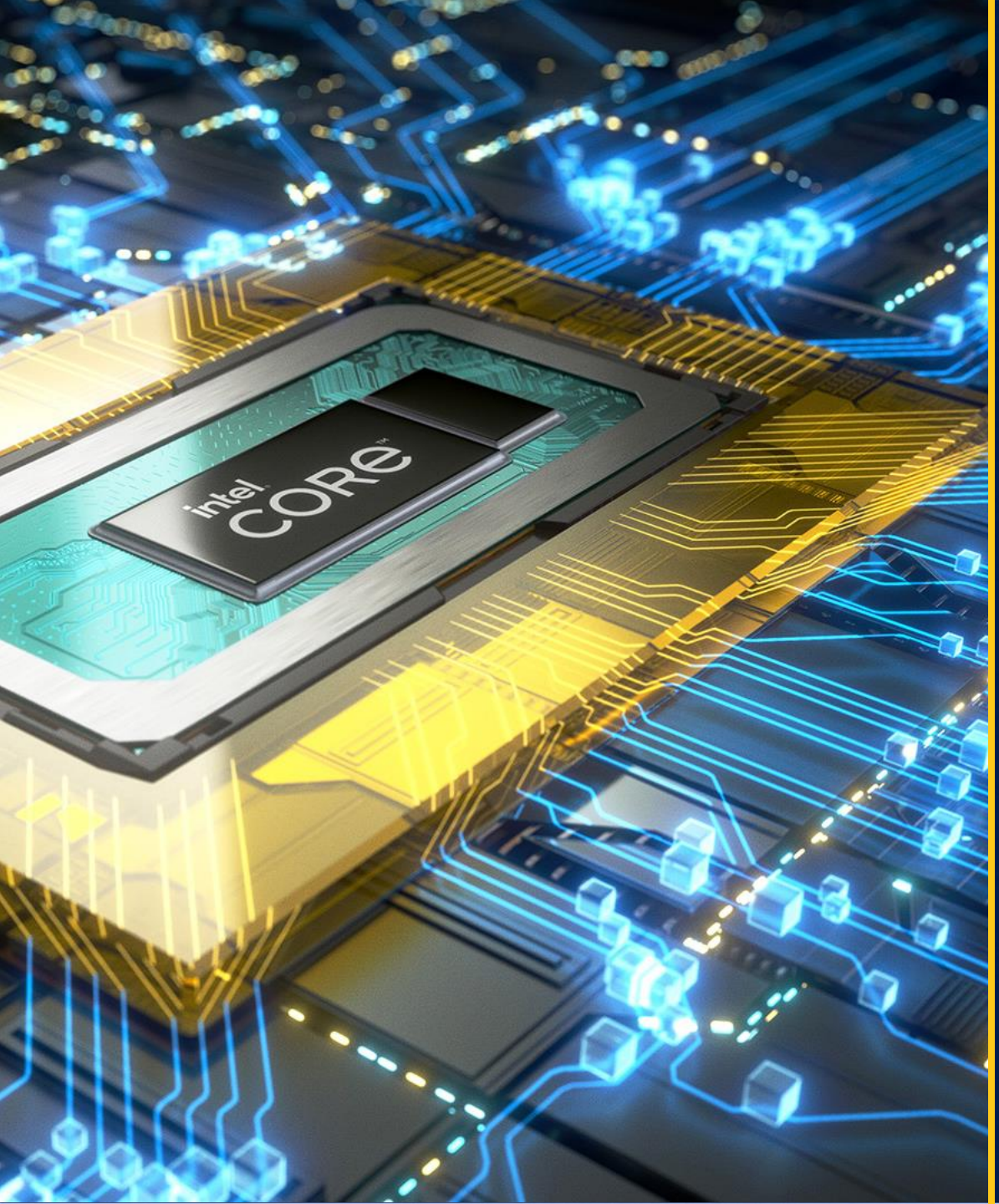
Client Computing Group Speakers

Daniel Rogers
Director
Mobile Product Marketing

Mandy Mock
Vice President
CCG General Manager
Desktop, Workstation, & Channel

Josh Newman
Vice President
CCG General Manager
Mobile Innovation

Kate Porter
Senior Director of Segmentation
& Scale, Business Client Platforms



Intel CES 2022

Client Computing Group

Press and Industry Analyst Presentation

12th Gen Intel Core H-series Processors

Daniel Rogers

Director, Mobile Product Marketing

Architecture Day 2021

12th Gen Intel Core

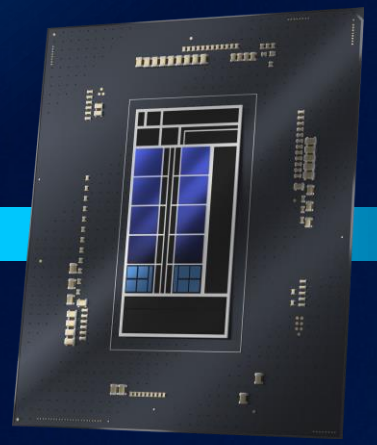
Reinventing Multi Core Architecture

Single, Scalable SoC Architecture
All Client Segments – 9W to 125W – built on Intel 7 process

All-New Core Design
Performance Hybrid with Intel® Thread Director

Industry-Leading Memory & I/O
Support for DDR5, PCIe Gen5,
Thunderbolt™ 4, Intel ® Wi-Fi 6E (Gig+)

Desktop



Mobile

Ultra Mobile

intel

Announcing

12th Gen Intel Core Mobile Processor Family

H-series
Enthusiast

45W

P-series
Performance Thin & Light

28W

U-series
Modern Thin & Light

15W

9W

Scalable Architecture For All Laptop Segments

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Introducing

12th Gen Intel® Core™ H-series Processors

The Fastest Mobile Processor. Ever.

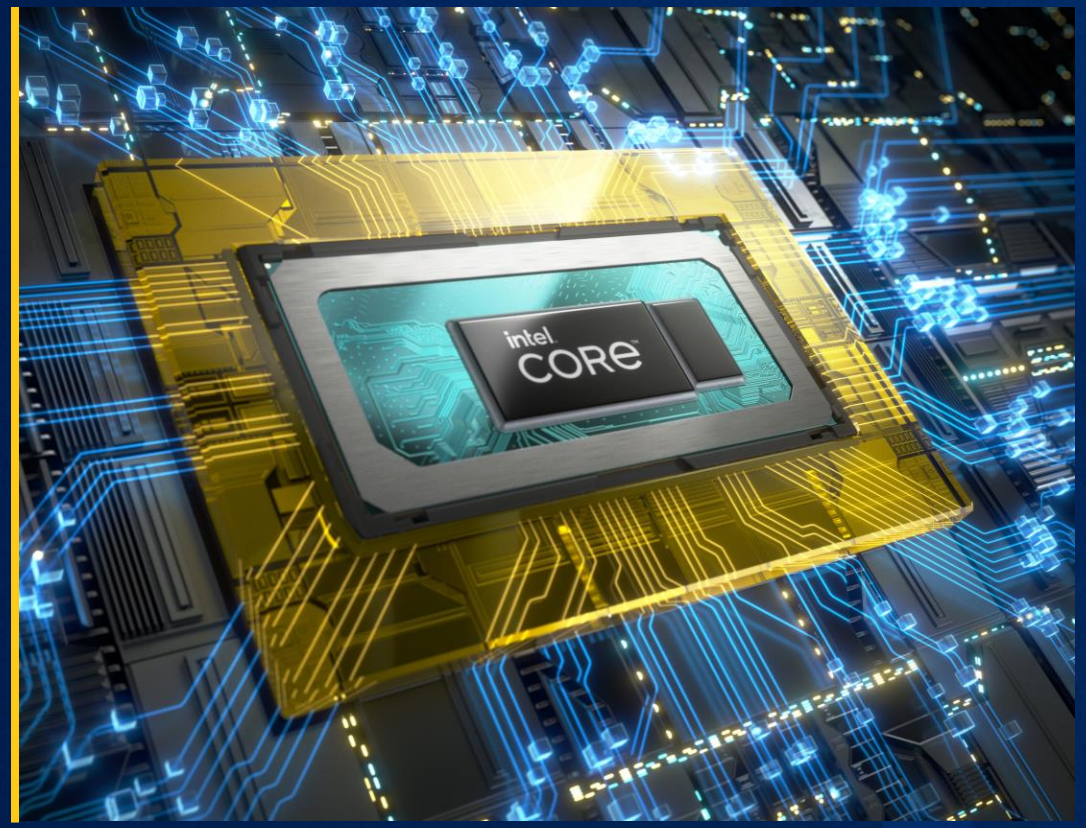
Performance hybrid design – up to 40% faster

World's Best Mobile Gaming Platform

Ultimate gameplay on a laptop – low-latency Wi-Fi 6E

Built for Content Creators

Blazing fast video editing, 3D modeling, and rendering



"The Fastest Mobile Processor. Ever." Source: Intel. Based on superior performance of 12th Gen Intel Core processor. Intel Core i9 12900HK and Core i9 11980HK performance is estimated based on measurements with Intel internal reference platforms. AMD Ryzen 9 5900HX performance is estimated based on measurements on a Lenovo Legion R9000K with RTX 3080. Apple M1 Max performance is estimated based on public statement made by Apple on 10/18/2021 and measurements on Apple M1 Max 16" 64GB RAM Model A2485. Metric used is geometric mean of an n-copy SPECrate run of the C/C++ integer benchmarks in SPEC CPU 2017. Best available compilers selected for all processors. Binaries compiled with ICC for Intel/AMD and with Xcode 13.1 for Apple. Details at www.intel.com/PerformanceIndex.

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"World's Best Mobile Gaming Platform" based on unique features and superior in-game benchmark mode performance of 12th Gen Intel Core i9-12900HK with NVIDIA RTX 3080 GPU vs 11th Gen Intel Core i9-11980HK with same GPU and vs AMD R9-5900HX with same GPU. Configurations for all systems include Windows 11 21H2 (OS Build 22000.282) and 1920x1080 Resolution – High Quality Graphics Preset. See www.intel.com/PerformanceIndex for additional workload and configuration details. Results may vary. Other names and brands may be claimed as the property of others.

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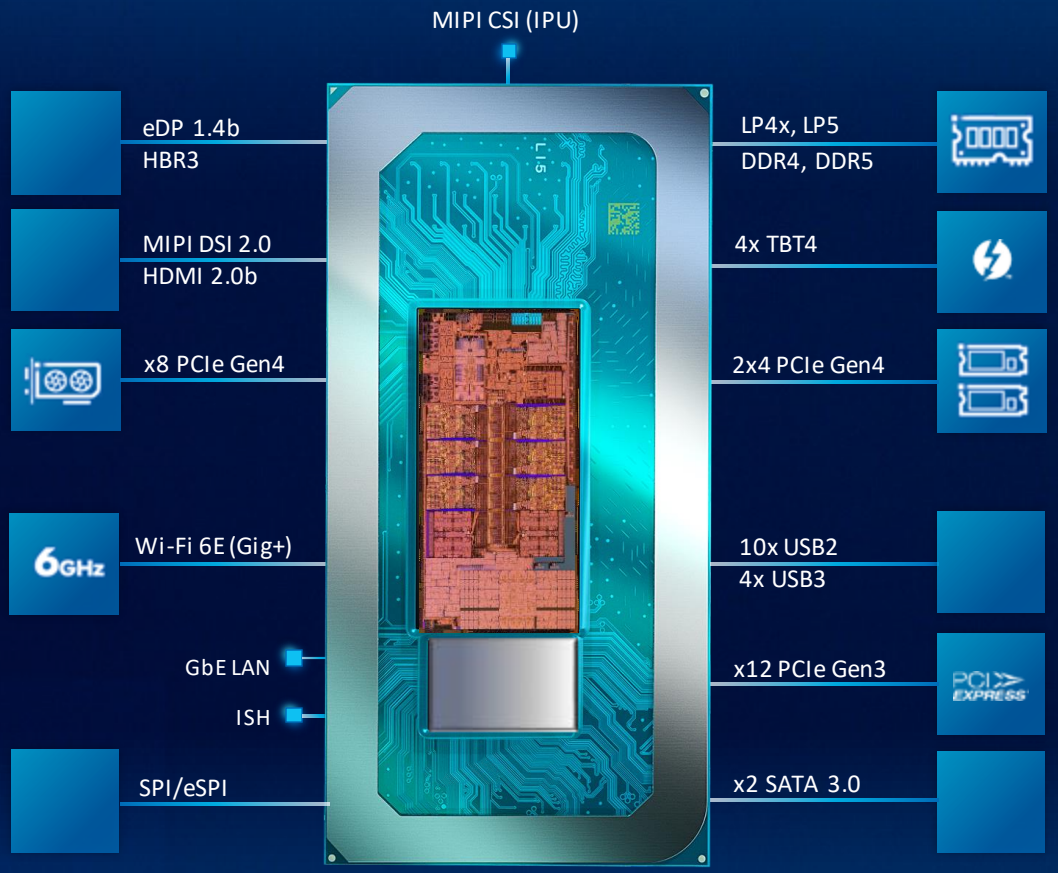
What's New

12th Gen Intel® Core™ H-series Processors



50x25x1.3mm BGA package

All-New Core Architecture

Up to 14-cores: 6 P-cores + 8 E-cores
with Intel Thread Director

Broad Memory Support

DDR5-4800, DDR4-3200
LPDDR5-5200, LPDDR4x-4267

Best-In-Class Connectivity

Intel Wi-Fi 6E (Gig+)
Thunderbolt™ 4

Intel® Wi-Fi 6/6E (Gig+) are best-in-class Wi-Fi technologies. See intel.com/PerformanceIndex (connectivity) for details.

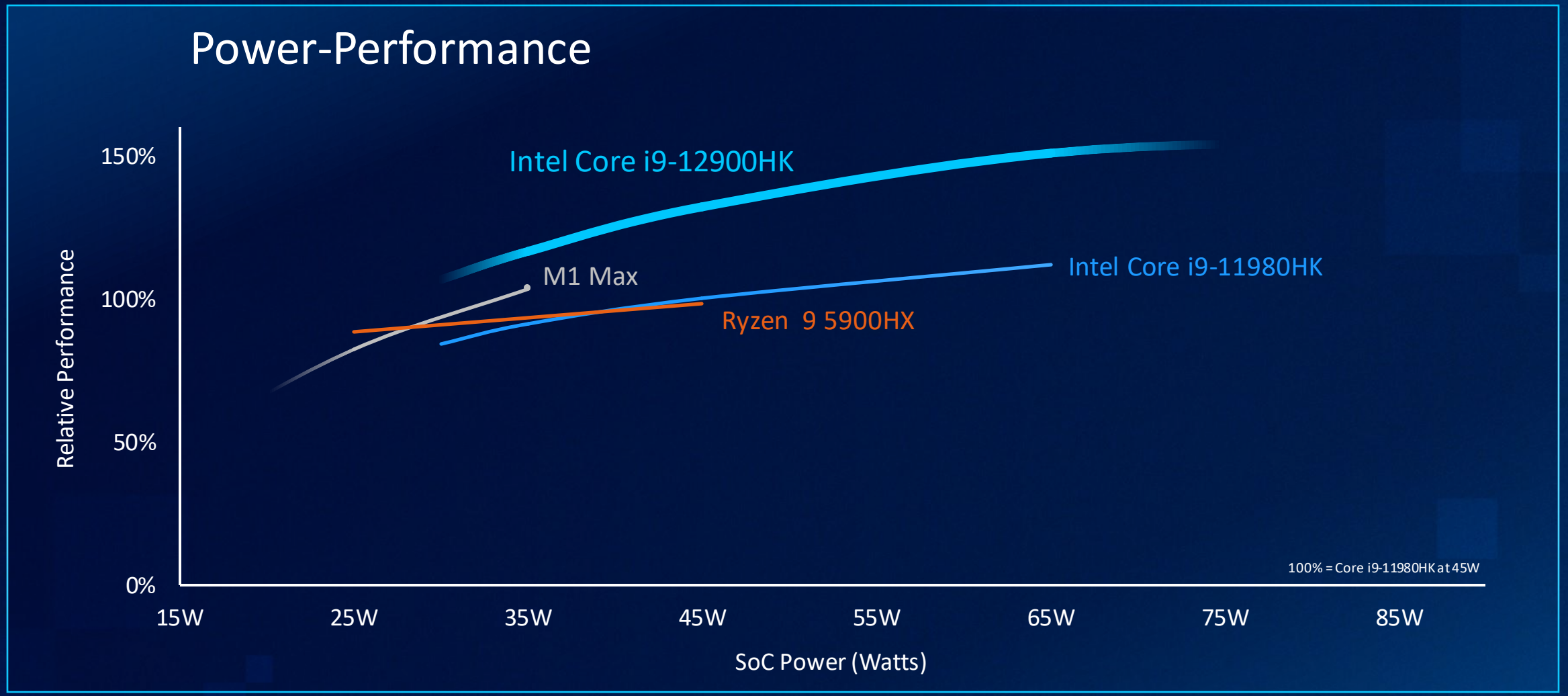
SKU Stack

12th Gen Intel® Core™ H-series Processors

	Processor Number	Processor Cores	Processor Threads	Performance Cores	Efficient Cores	L3 Cache	Max Turbo Frequency	Base Power	Intel vPro®
	i9-12900HK	14-core	20T	6P	8E	24MB	5.0 GHz	45W	Essentials
	i9-12900H	14-core	20T	6P	8E	24MB	5.0 GHz	45W	Enterprise
	i7-12800H	14-core	20T	6P	8E	24MB	4.8 GHz	45W	Enterprise
	i7-12700H	14-core	20T	6P	8E	24MB	4.7 GHz	45W	Essentials
	i7-12650H	10-core	16T	6P	4E	24MB	4.7 GHz	45W	-
	i5-12600H	12-core	16T	4P	8E	18MB	4.5 GHz	45W	Enterprise
	i5-12500H	12-core	16T	4P	8E	18MB	4.5 GHz	45W	Essentials
	i5-12450H	8-core	12T	4P	4E	12MB	4.4 GHz	45W	-

12th Gen Intel® Core™ H-series Processors

The Fastest Mobile Processor. Ever.



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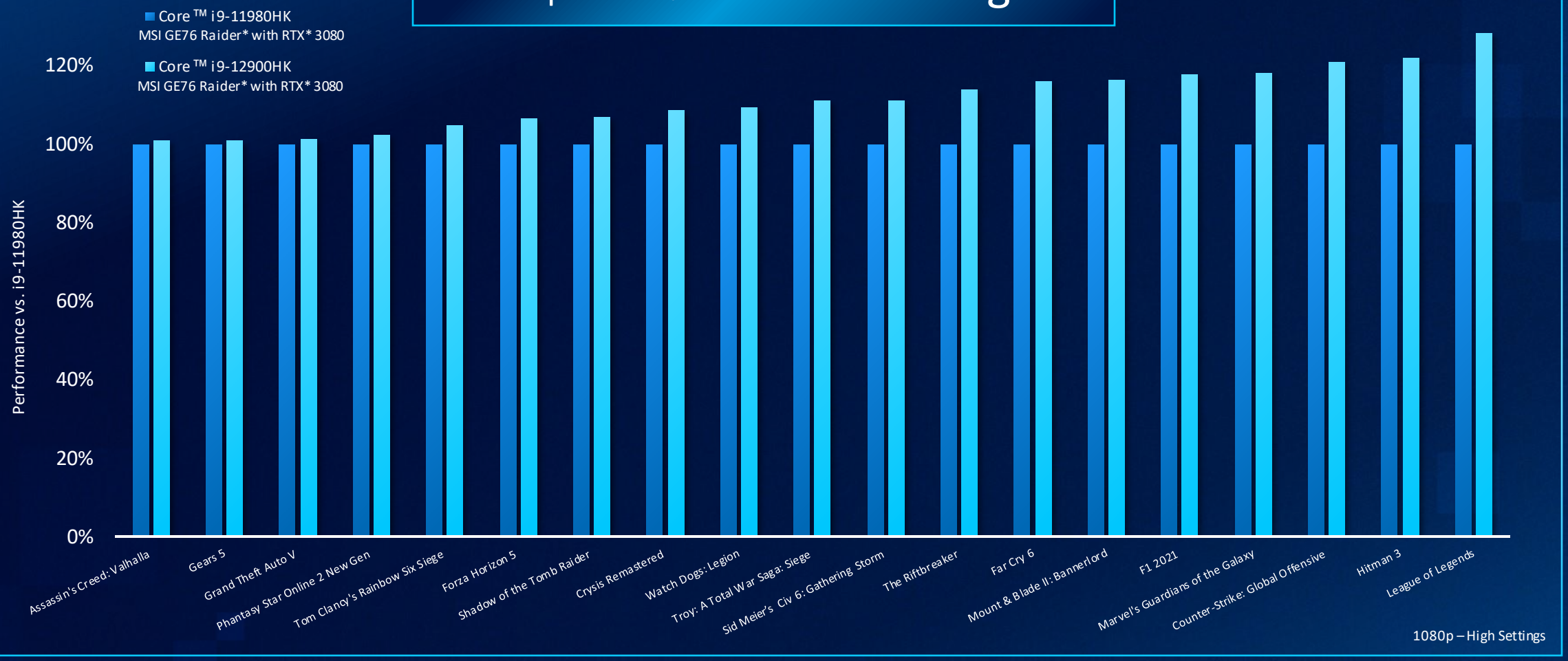
12th Gen Intel® Core™ H-series Processors

World's Best Mobile Gaming Platform

up to 28% Faster Gaming



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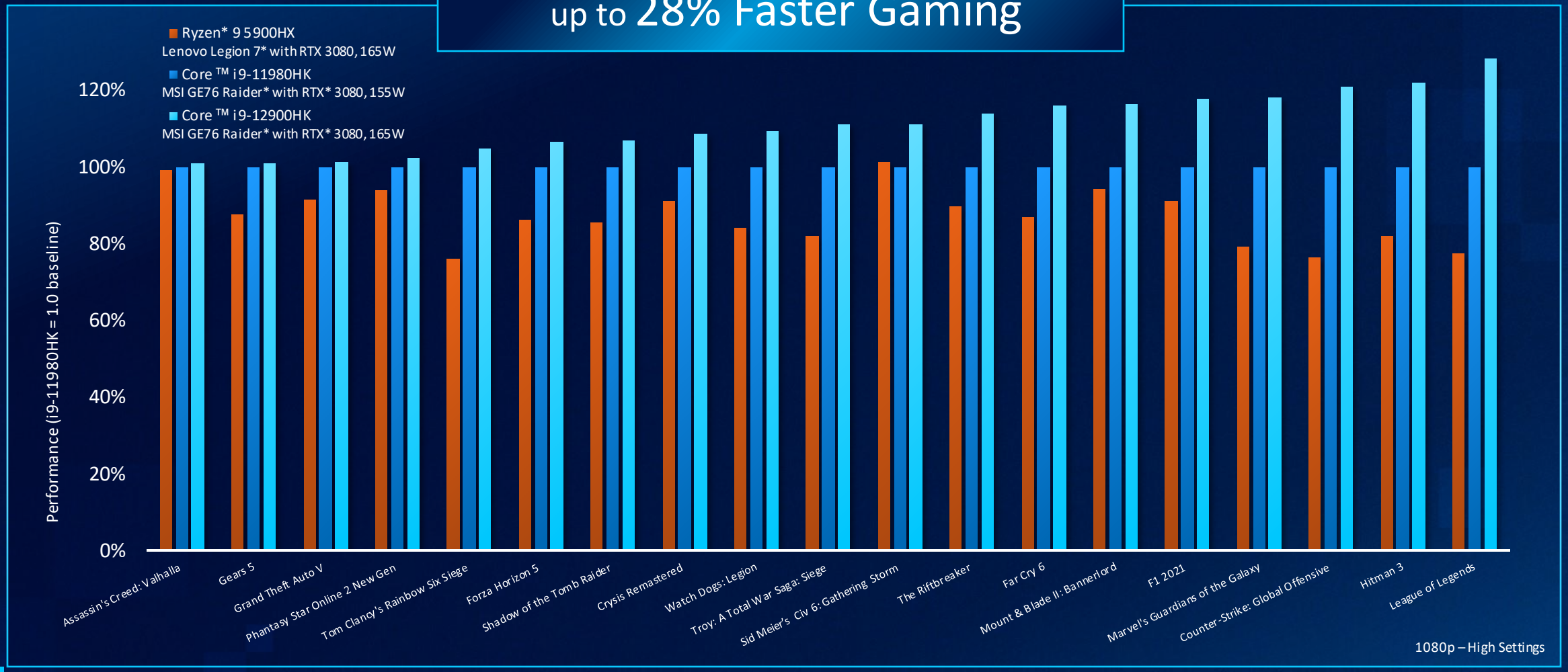

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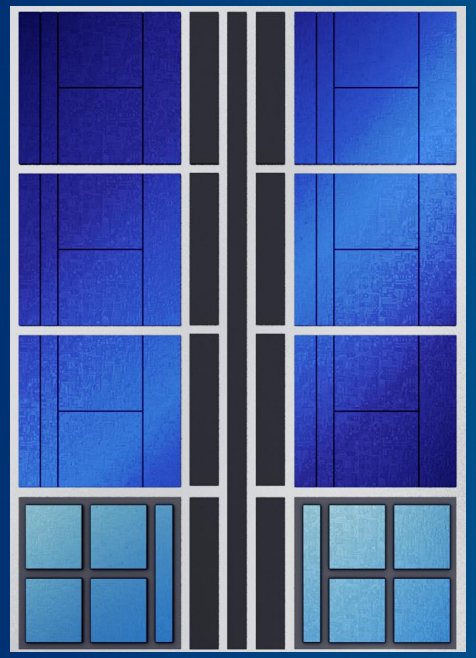
Game Optimization Example - Hitman 3



High QoS
Render Thread
Game Thread

up to 8%
higher FPS

Asynchronous
Physics, Animation, AI

Low QoS
Background, Audio

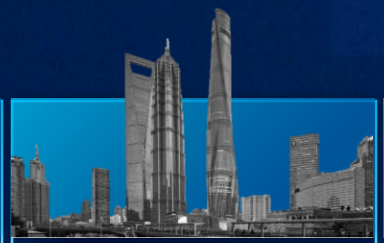
For workload and configuration details, see www.intel.com/performanceindex. Results may vary.

Designed for Creators

Graphic Design

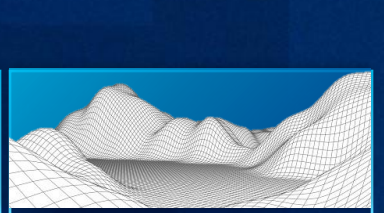
Broadcast & Streaming

Media & Entertainment



Architecture, Engineering & Construction

Product Design & Manufacturing



Scientific Visualization & Simulation

Adobe

AUTODESK

AVID

Blackmagicdesign

blender

Bentley

chaos

DASSAULT SYSTEMES

DOLBY DIGITAL

MAGIX

FFmpeg

HandBrake

FOUNDRY

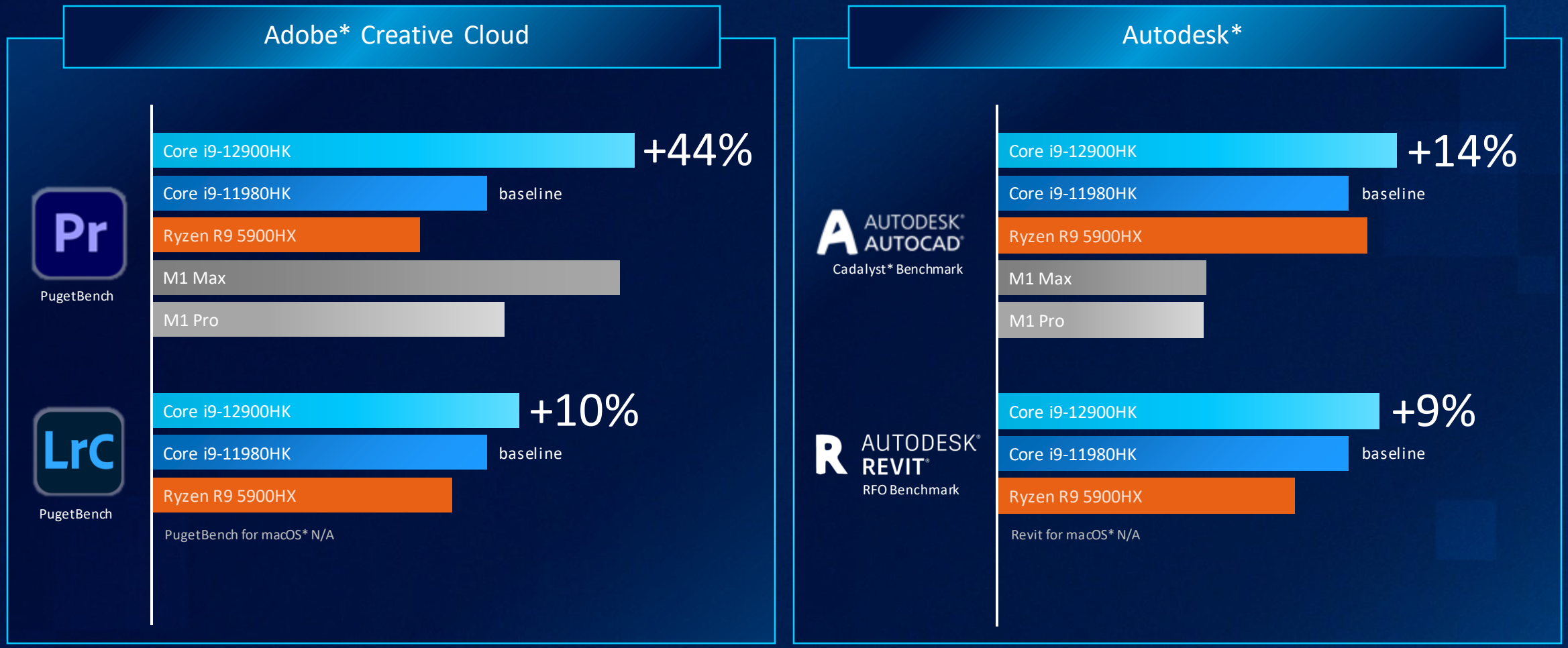
MAXON
A NEMETSCHEK COMPANY

wondershare

intel

12th Gen Intel® Core™ H-series Processors

Built for Content Creators



- Ryzen* 9 5900HX — Lenovo Legion* R9000K with RTX* 3080 2X 16GB DDR4
- Core i9-11980HK — MSI GE76 Raider* with RTX* 3080 2X 16GB DDR4
- Core i9-12900HK — MSI GE76 Raider* with RTX* 3080 2X16GB DDR5
- M1 Max — MBP 16" 64 GB RAM Model A2485
- M1 Pro — MBP 14" 16 GB RAM Model A2442

For workload and configuration details, see www.intel.com/performanceindex. Results may vary. *Other names and brands may be claimed as the property of others.

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12th Gen Intel® Core™ H-series Processors

Built for Content Creators

Blender*
BMW Car Demo – render time

Lower is better

- Core i9-12900HK — 30% less time
- Ryzen R9 5900HX
- M1 Max
- M1 Pro
- Core i9-11980HK — baseline

CrossMark* Creativity Scenario
Photo Editing, Photo Organization, Video Editing

- Core i9-12900HK — +22%
- M1 Max
- M1 Pro
- Core i9-11980HK — baseline
- Ryzen R9 5900HX

- Ryzen* 9 5900HX — Lenovo Legion* R9000K with RTX* 3080
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12th Gen Intel® Core™ H-series Processors

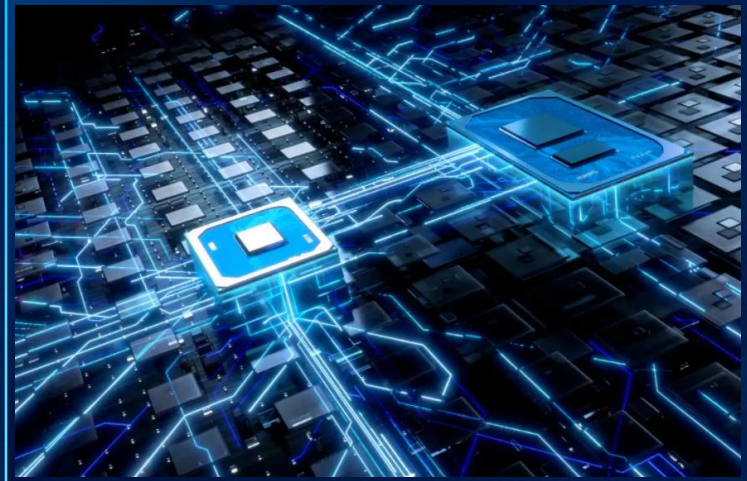
Leading Platform Technologies

Intel® Killer™ Wi-Fi 6E

- Exclusive 6 GHz Channels
- Low Latency Gameplay
- Intel® Double Connect

Thunderbolt™ 4

- Universal Cable
- 40Gbps
- Mandatory Certification



Intel Deep Link

- Power Sharing
- Hyper Encode
- Additive AI

intel

12th Gen Intel® Core™ H-series Processors

Intel's Fastest H-series Ramp

acer DELL GIGABYTE™ hp Lenovo msi RAZER REPUBLIC OF GAMERS

Ultraportable

≥14" Display
≥16mm
~35W SoC

Performance
On The Go.

Thin Enthusiast

≥15" Display
≥18mm
~45W SoC

Amazing Performance
in sleek form factor.

Halo Enthusiast

≥15" Display
≥20mm
~65W SoC

Uncompromised
Performance.

>100 Designs

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Summary

12th Gen Intel® Core™ H-series Processors

The Fastest Mobile Processor. Ever.

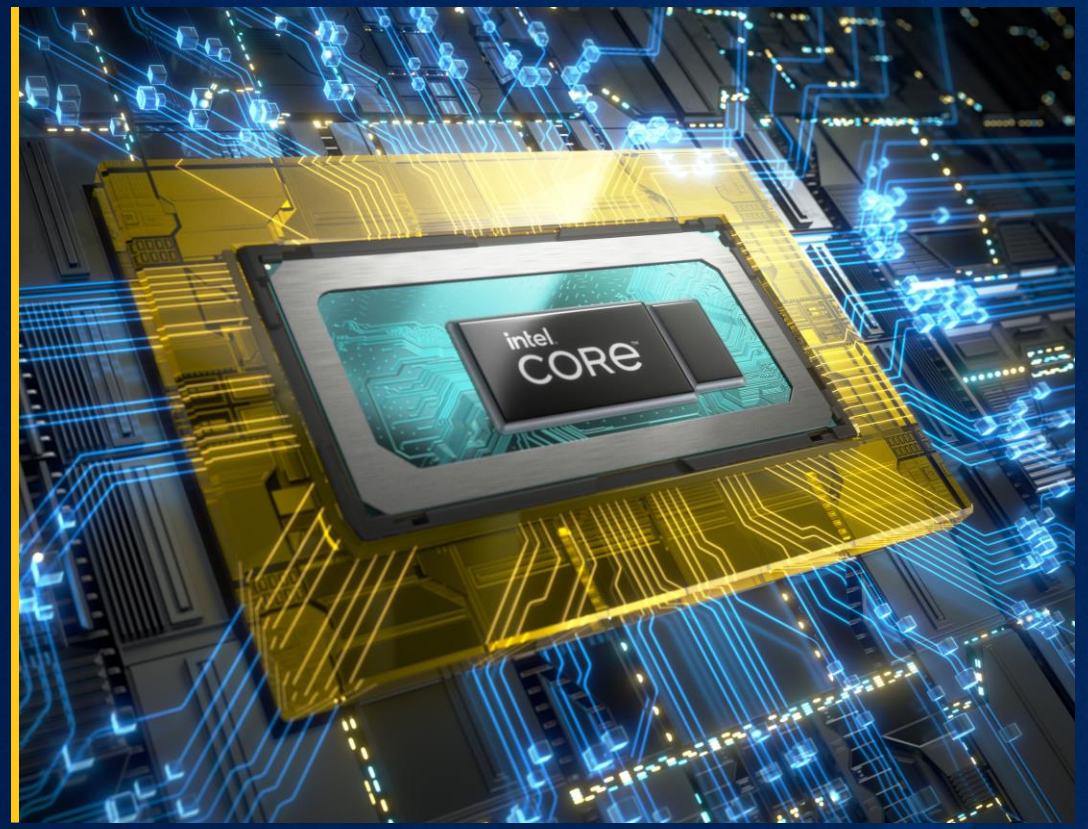
Performance hybrid design – up to 40% faster

World's Best Mobile Gaming Platform

Ultimate gameplay on a laptop – low-latency Wi-Fi 6E

Built for Content Creators

Blazing fast video editing, 3D modeling, and rendering



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Intel CES 2022

Client Computing Group

Press and Industry Analyst Presentation

12th Gen Intel® Core™ Desktop Processors Mainstream Consumer

Mandy Mock

Vice President, Client Computing Group

General Manager, Desktop, Workstation, and Channel

12th Gen Intel® Core™ Desktop Processors

World's Best
Gaming Processor

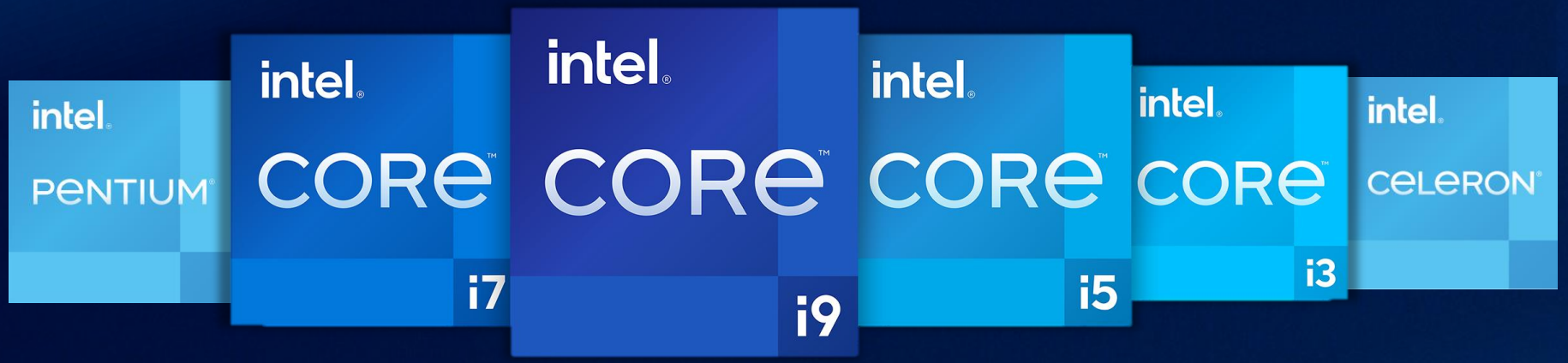
Best
Overclocking Experience

Giant Leap for
Content Creation

As measured by unique features and superior in-game benchmark mode performance (score or frames per second) on majority of the 31 game titles tested (as of Oct 1,4 2021), including in comparison to AMD Ryzen 5950X. Based on enhanced overclocking ability enabled by Intel's comprehensive tools and unique architectural tuning capabilities. Overclocking may void warranty or affect system health. Learn more at intel.com/overclocking.
For workload and configuration details, see www.intel.com/performanceindex. Results may vary. Other names and brands may be claimed as the property of others

Introducing the Full 12th Gen Intel® Core™ Desktop Processor Family

Ultimate scalable power and performance for gaming, creation and productivity



22 new SKUs (65w & 35w)

New Intel® Laminar Coolers

Available In-Box With 12 th Gen Intel® Core™ Desktop Processors (65W)

Intel® Laminar RH1 Cooler

- Controllable aRGB Lighting
- 2.6 BA Near-silent Performance
- Larger / Copper Heat Column
- Intel Validated Compatibility
  Three-year Limited Warranty

Intel® Laminar RM1 Cooler*

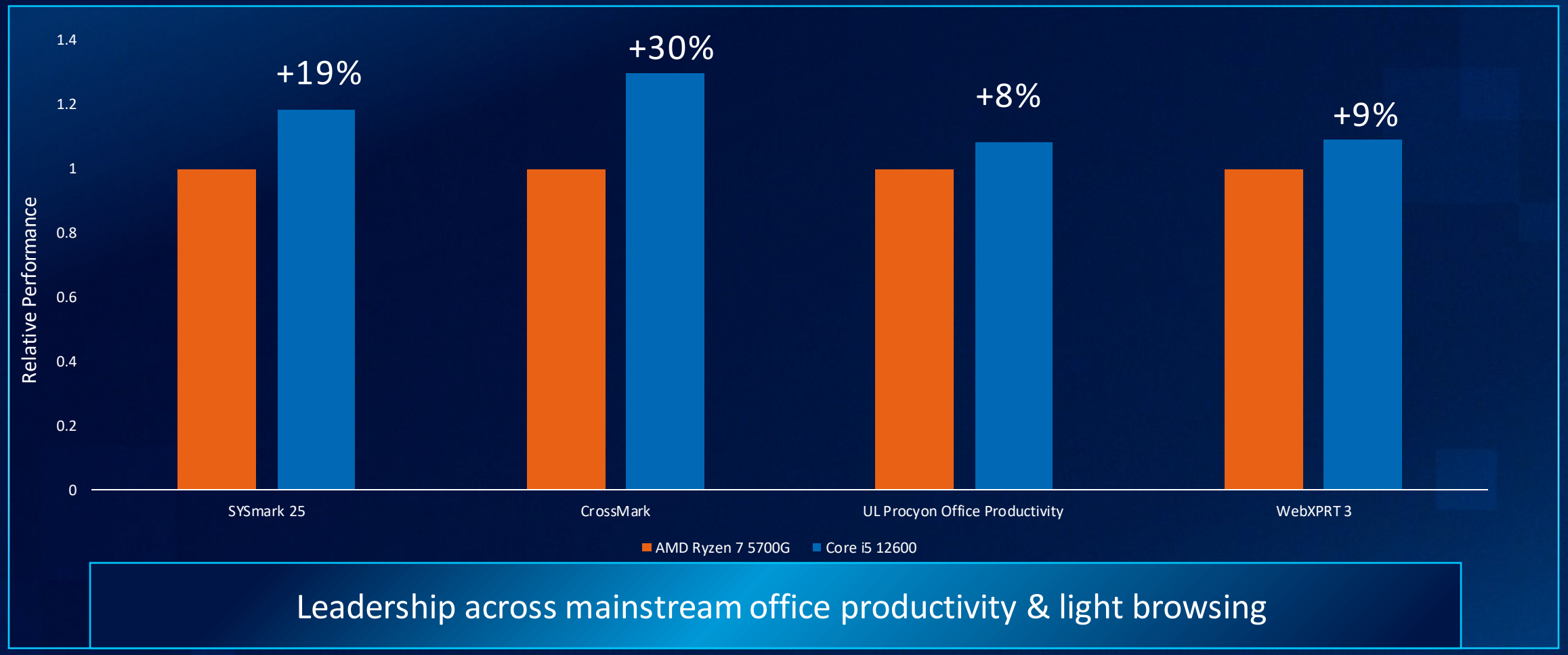
- Standard size
- 3.9 BA Quiet Performance
- Intel Validated Compatibility
- Three-year Limited Warranty

Intel® Laminar RS1 Cooler*

- Standard size
- Intel Validated Compatibility
- Three-year Limited Warranty

*Also available in bulk pack

Leadership performance & Amazing Value Productivity



Leadership across mainstream office productivity & light browsing

For workload and configuration details, see www.intel.com/performanceindex. Results may vary.
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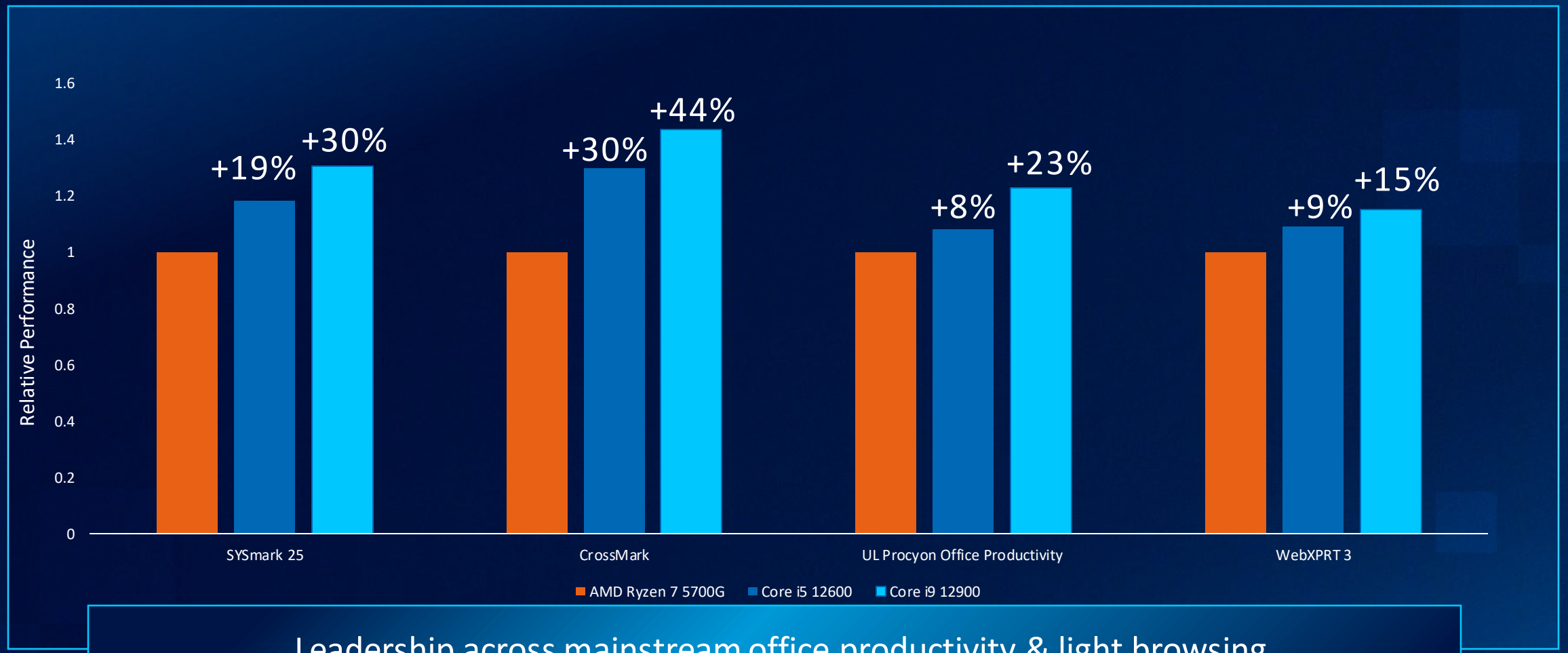
Leadership performance & Amazing Value Productivity



Leadership across mainstream office productivity & light browsing

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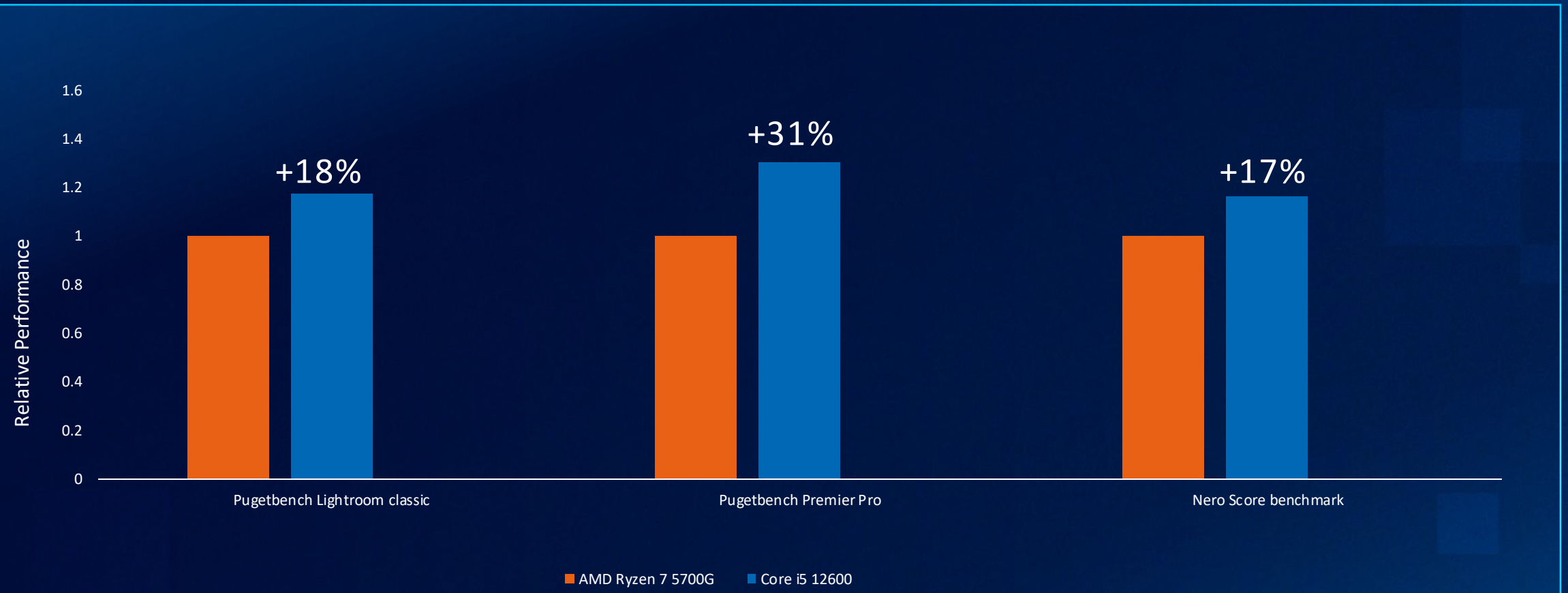
Leadership performance & Amazing Value

Content Creation



Leadership across popular & representative Photo & Video editing applications

For workload and configuration details, see www.intel.com/performanceindex. Results may vary.
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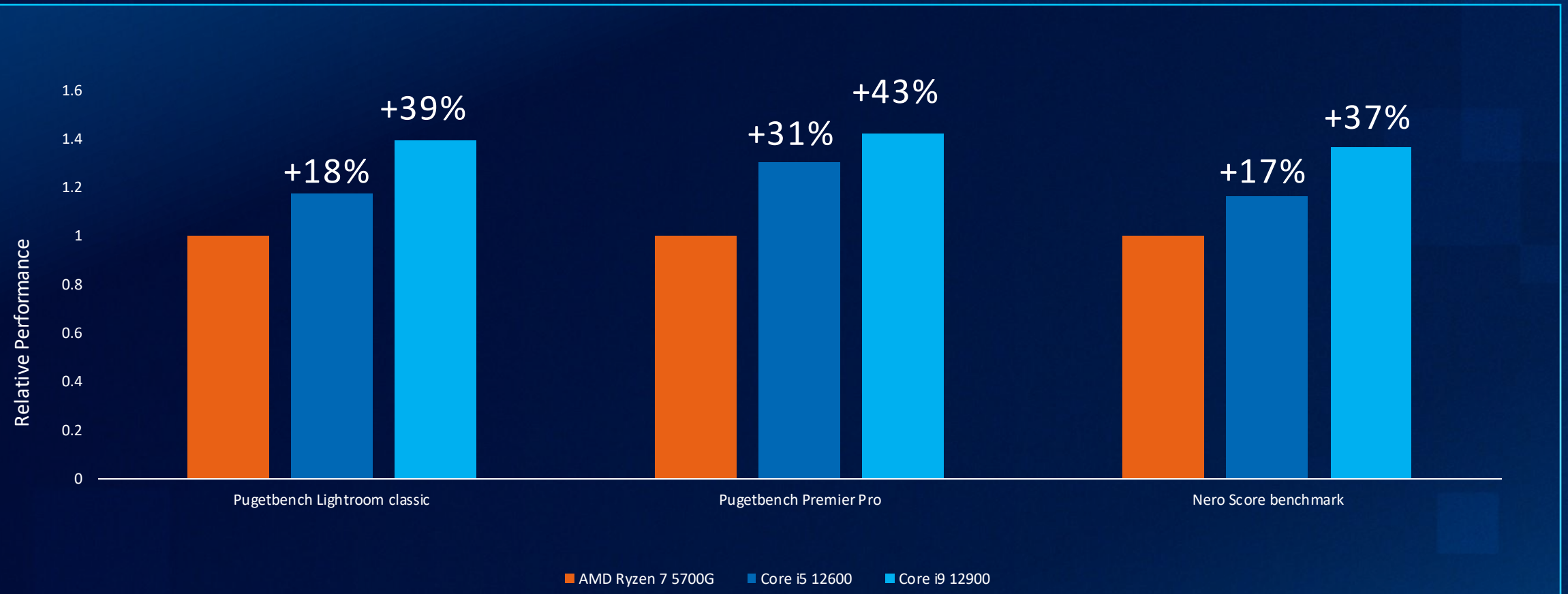
Leadership performance & Amazing Value

Content Creation



Leadership across popular & representative Photo & Video editing applications

For workload and configuration details, see www.intel.com/performanceindex. Results may vary.
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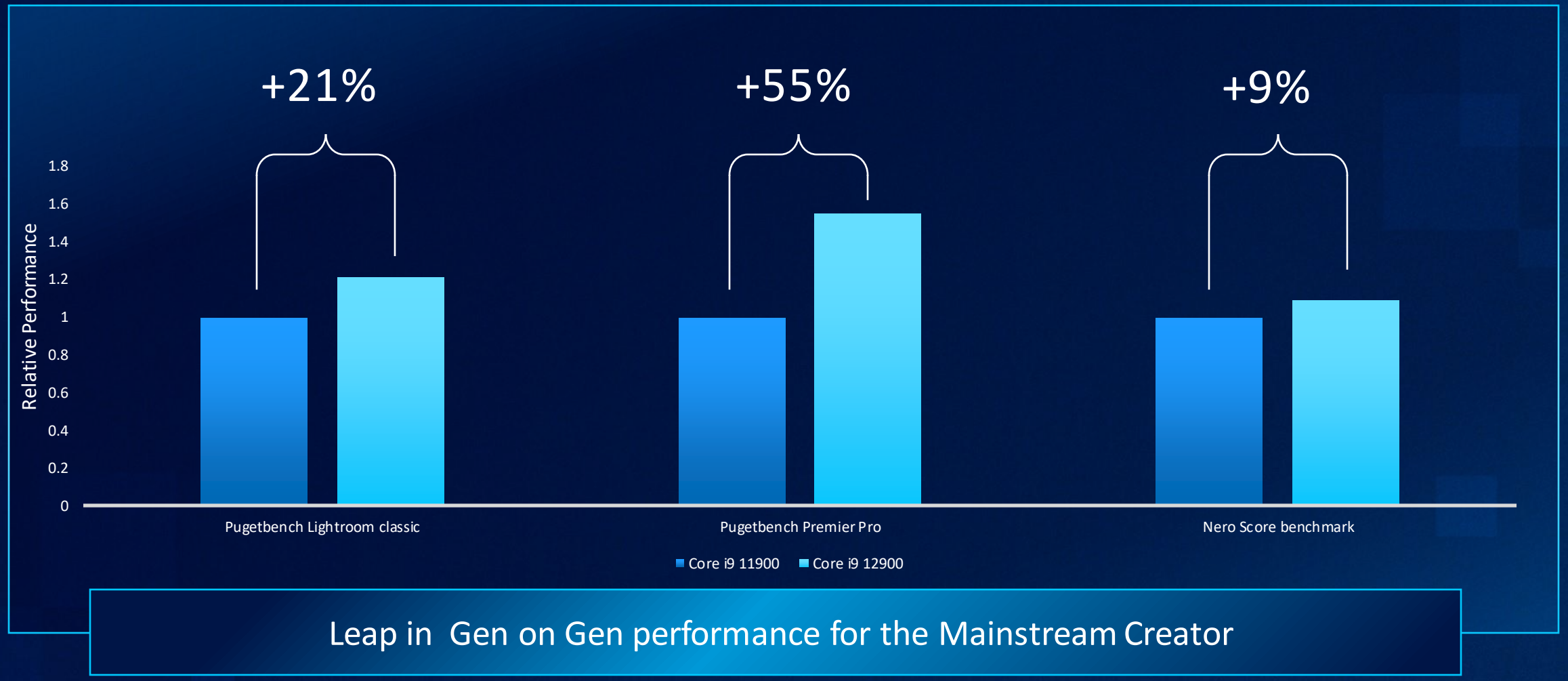
Huge Leap in Performance for Content Creation

Workloads

Intel Core i9-12900 vs Intel Core i9-11900

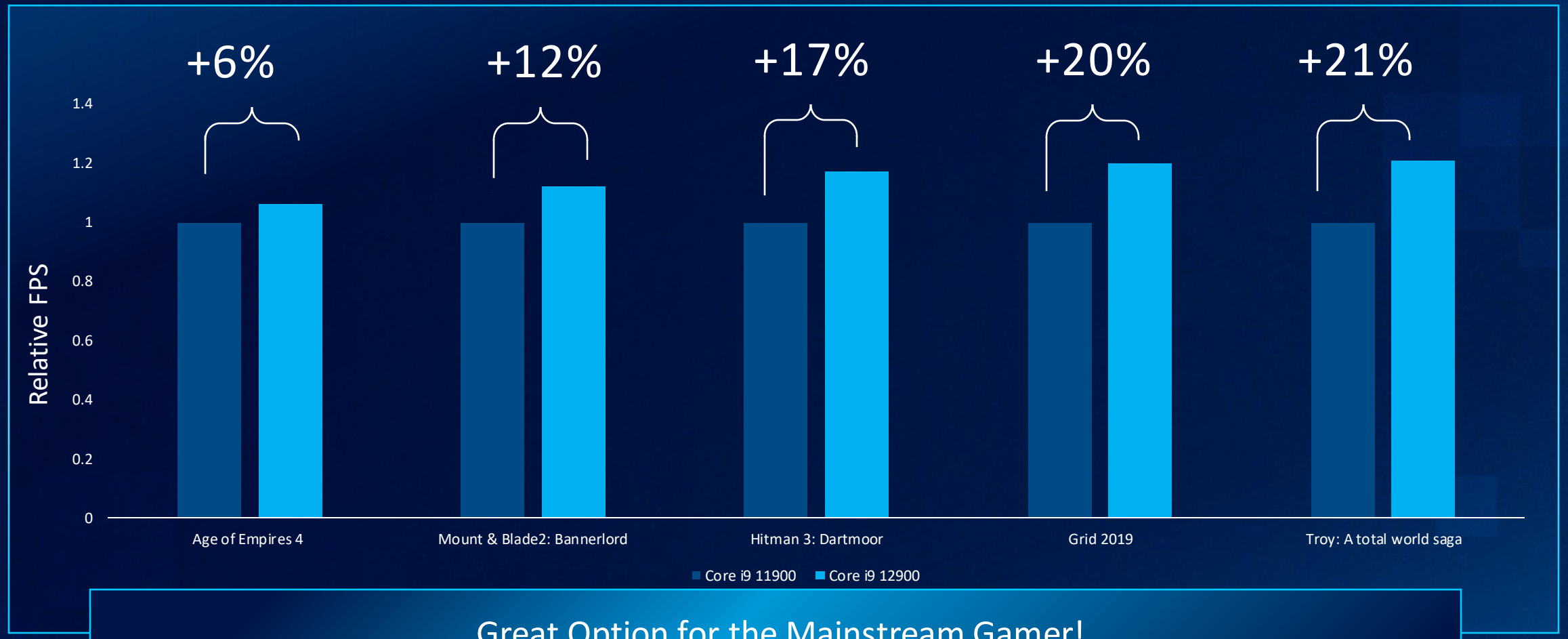


Leap in Gen on Gen performance for the Mainstream Creator

For workload and configuration details, see www.intel.com/performanceindex. Results may vary.

Intel Core i9-12900 vs Intel Core i9-11900

Huge Leap in Gaming Performance



Great Option for the Mainstream Gamer!

As measured by unique features and superior in-game benchmark mode performance of 12th Gen Intel Core i9-12900 with Z690 and DDR5 4400MHz DRAM vs 11th Gen Intel Core i9-11900 with Z590 and DDR4 3200MHz DRAM. Configuration for both systems include Windows 11 , 1920x1080 Resolution– High Quality Graphics Preset with EVGA RTX 3080 GPU. For workload and configuration details, see www.intel.com/performanceindex. Results may vary. Other names and brands may be claimed as the property of others

Introducing NEW Intel® 600 Series Chipset SKUs

Platform Capabilities

NEW Additional Consumer SKUs: H670, B660, H610

NEW Chipset PCIe 4.0 lanes

NEW x8 & X4 DMI Gen 4.0 options for increased bandwidth CPU-to-PCH interconnect

NEW Integrated Intel® Wi-Fi 6E (Gig+)

NEW Intel® Volume Management Device (Intel® VMD) for user friendly PCIe device management

	Feature / Capability	Z690	H670	B660	H610
Processor Support	P & E-Core & BCLK Overclocking	✓	×	×	×
	Memory Overclocking	✓	✓	✓	×
	System Memory Channels Supported	2	2	2	2
Chipset I/O Configuration	DMI 4.0 Lanes	8	8	4	4
	Chipset PCIe* 4.0 Lanes[1]	Up to 12	Up to 12	Up to 6	N/A
	Chipset PCIe* 3.0 Lanes[1]	Up to 16	Up to 12	Up to 8	8
	SATA 3.0 (6 Gb/s) Ports[1]	Up to 8	Up to 8	4	4
	Maximum USB Ports: • Total USB 2 Ports[1] • USB 3.2 Gen 2x2 (20G) [3] • USB 3.2 Gen 2x1 (10G) • USB 3.2 Gen 1x1 (5G)	14 4 10 10	14 2 4 8	12 2 4 6	10 N/A 2 4
Storage	Intel® Rapid Storage Technology 19.x	✓	✓	✓	✓
	• Intel® VMD	✓	✓	✓	✓
	• PCIe* Storage Support	✓	✓	✓	✓
	• PCIe RAID 0,1,5 Support	✓	✓	×	×
Wi Fi	Integrated Intel® Wi-Fi 6E (Gig+)	✓	✓	✓	✓

[P] USB 3.2 Gen 2x2 compared to USB 3.2 Gen 2x1 10Gbps.
[◊†] Intel Hybrid Storage devices such as Pyramid Glacier (H20) can't attach to CPU PCIe due to PCIe 2x2 requirement.
See www.intel.com/PerformanceIndex for additional workload and configuration details.

Introducing the next evolution in desktop computing

New Project Athena-based desktop designs powered by 12th Generation Intel® Core™ processors on the Intel vPro® platform will transform the desktop experience with both modern innovations and breakthrough performance.

Modern Work Environment

Modernize the form factor to adapt to new work environments and requirements

Technology Advancements

Performance
Responsiveness
Security
Immersion

UX Evolution

Bring new experiences to the desktop PC on par with modern usages

See https://www.intel.com/content/www/us/en/products/docs/devices-systems/laptops/laptop-innovation-program.html?wapkw=Athena%20Project for additional details

4 Pillars of Project Athena-based Desktop Designs

Modern innovations transform desktops

Breakthrough performance powered by 12th Generation Intel® Core™ processors on the Intel vPro® Enterprise and Intel vPro® Essential platforms

PRIVACY

Walk away lock functionality to help protect your information privacy from passersby

ENGAGEMENT

More immersive collaboration experiences with artificial intelligence-based noise reduction and simplified cable connections.

PREPARED

Business desktops designed to sense your presence and authenticate you automatically, freeing you from password frustration

SUSTAINABILITY

Smaller, more efficient form factors designed to help OEMs meet EPEAT environmental and social responsibility standards

intel

Broad Ecosystem Support & Readiness

Incredible partnerships for product readiness at launch

- 140+ customers
- 30+ countries
- 200+ motherboards

Not a comprehensive list of customers and partners
Other names and brands may be claimed as the property of others

12th Gen Intel® Core™ Desktop Processors

Processor Number	Processor Cores (P+E)[3]	Processor Threads[4]	Intel® Smart Cache (L3)	Total L2 Cache	Processor Turbo Frequency			Processor Base Frequency		Processor Graphics	Total CPU PCIe Lanes	Max Memory Speed (MT/s)[2]	Memory Channels	Maximum Memory Capacity[2]	Processor Base Power (W)	Maximum Turbo Power (W)	RCP Pricing (USD 1K)
					Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)[4]	P-core Max Turbo Frequency (GHz)[5]	E-core Max Turbo Frequency (GHz)[5]	P-core Base Frequency (GHz)[5]	E-core Base Frequency (GHz)[5]								
Socket LGA 1700 – Mainstream																	
i9-12900	16 (8P + 8E)	24	30MB	14MB	Up to 5.1	Up to 5.0	Up to 3.8	2.4	1.8	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	65	202	$489
i9-12900F	16 (8P + 8E)	24	30MB	14MB	Up to 5.1	Up to 5.0	Up to 3.8	2.4	1.8	n/a	20	DDR5 4800 DDR4 3200	2	128GB	65	202	$464
i7-12700	12 (8P + 4E)	20	25MB	12MB	Up to 4.9	Up to 4.8	Up to 3.6	2.1	1.6	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	65	180	$339
i7-12700F	12 (8P + 4E)	20	25MB	12MB	Up to 4.9	Up to 4.8	Up to 3.6	2.1	1.6	n/a	20	DDR5 4800 DDR4 3200	2	128GB	65	180	$314
i5-12600	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.8	n/a	3.3	n/a	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	65	117	$223
i5-12500	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.6	n/a	3.0	n/a	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	65	117	$202
i5-12400	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.4	n/a	2.5	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	65	117	$192
i5-12400F	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.4	n/a	2.5	n/a	n/a	20	DDR5 4800 DDR4 3200	2	128GB	65	117	$167
i3-12300	4 (4P + 0E)	8	12MB	5MB	n/a	Up to 4.4	n/a	3.5	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	60	89	$143
i3-12100	4 (4P + 0E)	8	12MB	5MB	n/a	Up to 4.3	n/a	3.3	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	60	89	$122
i3-12100F	4 (4P + 0E)	8	12MB	5MB	n/a	Up to 4.3	n/a	3.3	n/a	n/a	20	DDR5 4800 DDR4 3200	2	128GB	58	89	$97
Pentium Gold G7400	2 (2P + 0E)	4	6MB	2.5MB	n/a	n/a	n/a	3.7	n/a	Intel® UHD Graphics 710	20	DDR5 4800 DDR4 3200	2	128GB	46	n/a	$64
Celeron G6900	2 (2P + 0E)	2	4MB	2.5MB	n/a	n/a	n/a	3.4	n/a	Intel® UHD Graphics 710	20	DDR5 4800 DDR4 3200	2	128GB	46	n/a	$42

Intel® processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.
All processors support Intel® Virtualization Technology (Intel® VT-x).

1. Unlocked features are present with select chipsets and processor combinations. Altering clock frequency or voltage may void any product warranties and reduce stability, security, performance, and life of the processor and other components. Check with system and component manufacturers for details.
2. Memory speeds are associated with 1DPC configurations. Maximum memory capacity of 128GB is achievable with 2DPC configuration.
3. Processor cores listed first are the total number of cores in the processor. The number of Performance-cores and the number of Efficient-cores are listed in parentheses (P+E).
4. Intel® Hyper-Threading Technology and Intel® Turbo Boost Max Technology 3.0 are only available on Performance-cores.
5. Efficient-core frequencies are lower to optimize power usage. The frequency of cores and core types varies by workload, power consumption and other factors. Visit https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html for more information.

12th Gen Intel® Core™ Desktop Processors

Processor Number	Processor Cores (P+E)[3]	Processor Threads[4]	Intel® Smart Cache (L3)	Total L2 Cache	Processor Turbo Frequency			Processor Base Frequency		Processor Graphics	Total CPU PCIe Lanes	Max Memory Speed (MT/s)[2]	Memory Channels	Maximum Memory Capacity[2]	Processor Base Power (W)	Maximum Turbo Power (W)	RCP Pricing (USD 1K)
					Intel® Turbo Boost Max Technology 3.0 Frequency (GHz)[4]	P-core Max Turbo Frequency (GHz)[5]	E-core Max Turbo Frequency (GHz)[5]	P-core Base Frequency (GHz)[5]	E-core Base Frequency (GHz)[5]								
Socket LGA 1700 – Low Power																	
i9-12900T	16 (8P + 8E)	24	30MB	14MB	Up to 4.9	Up to 4.8	Up to 3.6	1.4	1.0	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	35	106	$489
i7-12700T	12 (8P + 4E)	20	25MB	12MB	Up to 4.7	Up to 4.6	Up to 3.4	1.4	1.0	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	35	99	$339
i5-12600T	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.6	n/a	2.1	n/a	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	35	74	$223
i5-12500T	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.4	n/a	2.0	n/a	Intel® UHD Graphics 770	20	DDR5 4800 DDR4 3200	2	128GB	35	74	$202
i5-12400T	6 (6P + 0E)	12	18MB	7.5MB	n/a	Up to 4.2	n/a	1.8	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	35	74	$192
i3-12300T	4 (4P + 0E)	8	12MB	5MB	n/a	Up to 4.2	n/a	2.3	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	35	69	$143
i3-12100T	4 (4P + 0E)	8	12MB	5MB	n/a	Up to 4.1	n/a	2.2	n/a	Intel® UHD Graphics 730	20	DDR5 4800 DDR4 3200	2	128GB	35	69	$122
Pentium Gold G7400T	2 (2P + 0E)	4	6MB	2.5MB	n/a	n/a	n/a	3.1	n/a	Intel® UHD Graphics 710	20	DDR5 4800 DDR4 3200	2	128GB	35	n/a	$64
Celeron G6900T	2 (2P + 0E)	2	4MB	2.5MB	n/a	n/a	n/a	2.8	n/a	Intel® UHD Graphics 710	20	DDR5 4800 DDR4 3200	2	128GB	35	n/a	$42

Intel® processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.
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5. Efficient-core frequencies are lower to optimize power usage. The frequency of cores and core types varies by workload, power consumption and other factors. Visit https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html for more information.

Intel CES 2022

Client Computing Group

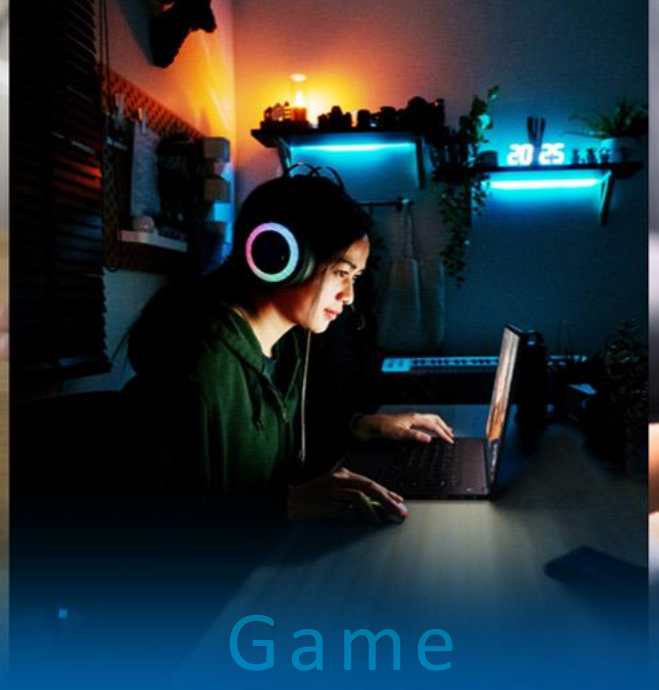
Press and Industry Analyst Presentation

Intel Evo Evolution

Josh Newman

Vice President, Client Computing Group

General Manager, Mobile Innovation



Our Vision

To deliver purposeful computing experiences that unlock people's potential – allowing each person to focus, create and connect in ways that matter most to them.

Enhancing Experiences Through Platforms

Co-Engineering

Ecosystem Leadership

Verifying Experiences

Intel Delivers Beyond the SoC

LG Momentum

>100 Designs

acer ASUS DELL dynabook FUJITSU hp Lenovo

Microsoft Surface msi RAZER SAMSUNG mi

intel

Evo: What's New with 3rd Edition

Key Experiences

Responsiveness from Anywhere

AND

Real World Battery Life

AND

Instant Wake

AND

Fast Charge

AND

NEW Intelligent Collaboration

New Key Spec Technologies

12th Gen SoC

Intel® Wi-Fi 6E (Gig+)*

Intel Connectivity Performance Suite***

Dynamic Background Noise Suppression

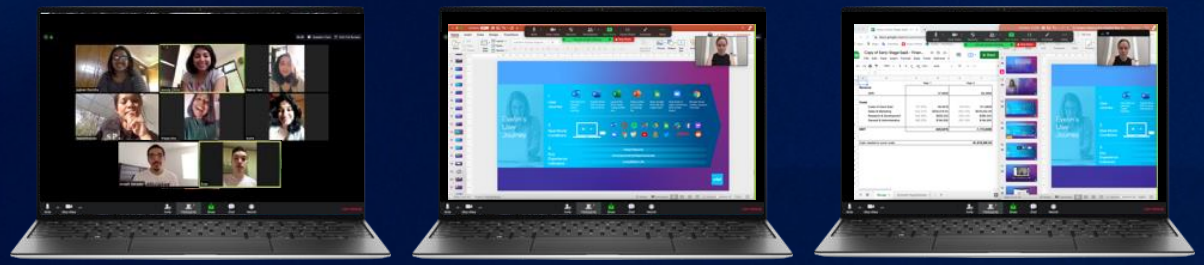
≥FHD camera **

Intel Visual Sensing Technology
(Innovation Option)

* WIFI6e: Subject to 6 GHz band availability, operating system support, and router compatibility, Not available in all markets.
**Not all designs will have >FHD camera, best designs have Intel IPU6/MIPI
***Windows Only

Intelligent Collaboration Experience

1. User Journey



2. Real World Conditions

Background apps

3. Key Experience Indicators

- Uncompromising Responsiveness
- Long Battery Life

4. Foundational Technologies

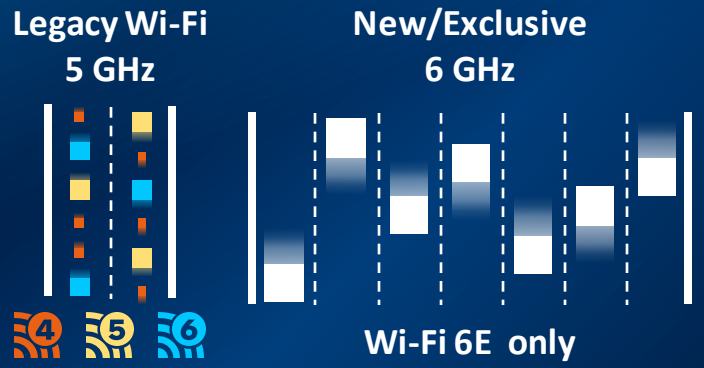
AI Based dynamic background noise cancellation
Intel WI-FI 6E
Intel Connectivity Performance Suite *
AI accelerated system level camera imaging effects

*Windows Only

Great Video Conferencing Experience

Enabling Intelligent Collaboration Experience

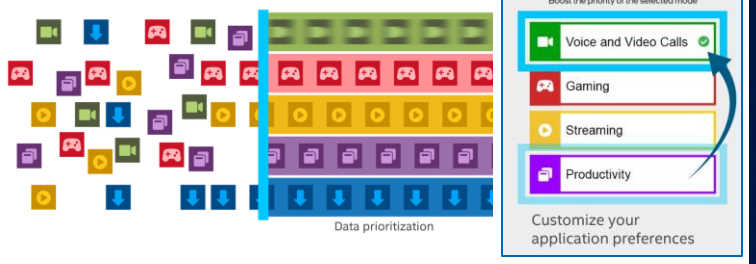
Intel® Wi-Fi 6E (Gig+)
Your New VIP Wi-Fi network



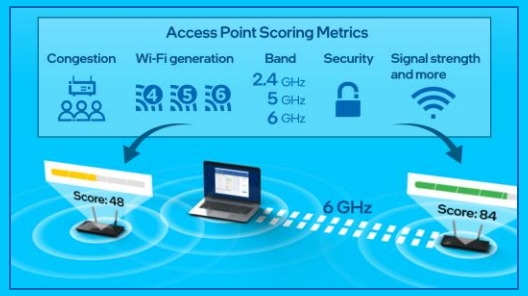
Biggest Wi-Fi advancement
In 20 years

Intel® Connectivity Performance Suite
Automatic Traffic Prioritization
& Connection Optimization

Critical Traffic Prioritization



Dynamic Wi-Fi Connection Optimization



Noise Reduction
Intel® GNA – Gaussian & Neural Accelerator

New Higher Performance Option

H-series Joins Intel® Evo™

Meets all Intel Evo Requirements

AND

12th Gen Intel Core H (35-45W TDP)

Intel® Arc™ Discrete Graphics with Intel Deep Link Technology

Key Attributes

- Larger Screen Size (15-16”)
- Creator-oriented display

New Brand Badges

intel evo i7

intel vPRO An Evo Design i7

Engineered For Int nd Intel® Evo™ vPro® Laptop

The Intel Engineered For Progra
continues to build end to end ex
Backed by Intel co-engineering and

Based on Intel® Evo™ Laptop Fe
Accessory Program with Thunde

panding to Bluetooth® Access

nding the perience Accessories

Expanding the Innovation

Announcement of Foldable Display Spec

Meets all Intel Evo Key Experience Requirements

AND

New Form Factor to adapt to new use cases and experiences

Large Foldable Screen Laptop

Coming to Market 2022

Intel CES 2022

Client Computing Group

Press and Industry Analyst Presentation

Intel vPro®

Kate Porter

Senior Director of Segmentation and Scale

Business Client

Introducing Intel vPro®, powered by 12th Gen Intel® Core™ processors

Built for All Businesses

Security is more challenging in a remote environment

Security Starts with Intel

Comprehensive security built into hardware

Employees need support everywhere

Complete Management

Full life-cycle management optimized for modern cloud environments

Employee effectiveness and experience matters more than ever

Professional Grade Performance

Tuned for the real world demands of today's professionals

intel vPRO

Unrivaled

business PC platform

intel

The right Intel vPro® offering for all business needs

Intel vPro®, an Intel® Evo™ Design

All the enterprise features PLUS responsiveness and experiences.

Intel vPro® Enterprise for Chrome

Offering Built for Business PCs on select Chrome devices.

NEW Intel vPro® Enterprise

Continues to raise the bar for enterprise grade computing in PCs and Workstations.

NEW Intel vPro® Essentials

Small business computing foundation with built-in business features.

It’s Simple: Intel vPro® is Built for All Businesses

Intel vPro® Enterprise

The full-featured platform: enterprise grade computing, premium security features, modern manageability & stability

Where IT drives employee experience & global scale matters

Now available on both Windows and Chrome!

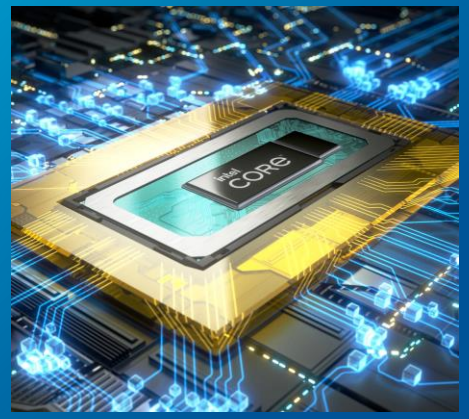
Intel vPro® Essentials

Small business computing foundation with premium connectivity support, built-in security features, partner-ready manageability

Where IT is lean or non-existent

New option for Small Business

Intel CES 2022 CCG News Summary



Launching

all new
12th Gen Intel Core
H-series processors

Introducing

the full 12th Gen Intel
Core S-series desktop
family now available

Sharing new

Intel Evo specifications
and expanded KEIs

Previewing new

Intel vPro platform
brand levels

Notice & Disclaimers

Performance varies by use, configuration and other factors. Learn more at www.Intel.com/PerformanceIndex.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See configuration disclosure for details.

Statements in this document that refer to future plans or expectations are forward-looking statements. These statements are based on current expectations and involve many risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. For more information on the factors that could cause actual results to differ materially, see our most recent earnings release and SEC filings at www.intc.com.

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Your costs and results may vary.

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Results that are based on systems and components as well as results that have been estimated or simulated using an Intel Reference Platform (an internal example new system), internal Intel analysis or architecture simulation or modeling are provided to you for informational purposes only. Results may vary based on future changes to any systems, components, specifications or configurations.

All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest information.

Performance hybrid architecture combines two new core microarchitectures, Performance-cores (P-cores) and Efficient-cores (E-cores), on a single processor die. Select 12th Gen Intel® Core™ processors (certain 12th Gen Intel Core i5 processors and lower) do not have performance hybrid architecture, only P-cores.

Built into the hardware, Intel® Thread Director is provided only in performance hybrid architecture configurations of 12th Gen Intel® Core™ processors; OS enablement is required. Available features and functionality vary by OS.

For Enthusiast Laptops

12th Gen Intel® Core™ H-series Processors

	Processor Number	Processor Cores	Processor Threads	Performance Cores	Efficient Cores	L3 Cache	Max Turbo Frequency P-cores	Max Turbo Frequency E-cores	Base Frequency P-cores	Base Frequency E-cores	Processor Graphics	Max Graphics Frequency	Processor Base Power	Max Turbo Power	Intel vPro®
intel CORE i9	i9-12900HK	14C	20T	6P	8E	24MB	5.0 GHz	3.8 GHz	2.5 GHz	1.8 GHz	96EU	1.45 GHz	45W	115W	Essentials
	i9-12900H	14C	20T	6P	8E	24MB	5.0 GHz	3.8 GHz	2.5 GHz	1.8 GHz	96EU	1.45 GHz	45W	115W	Enterprise
intel CORE i7	i7-12800H	14C	20T	6P	8E	24MB	4.8 GHz	3.7 GHz	2.4 GHz	1.8 GHz	96EU	1.4 GHz	45W	115W	Enterprise
	i7-12700H	14C	20T	6P	8E	24MB	4.7 GHz	3.5 GHz	2.3 GHz	1.7 GHz	96EU	1.4 GHz	45W	115W	Essentials
	i7-12650H	10C	16T	6P	4E	24MB	4.7 GHz	3.5 GHz	2.3 GHz	1.7 GHz	64EU	1.4 GHz	45W	115W	-
intel CORE i5	i5-12600H	12C	16T	4P	8E	18MB	4.5 GHz	3.3 GHz	2.7 GHz	2.0 GHz	80EU	1.4 GHz	45W	95W	Enterprise
	i5-12500H	12C	16T	4P	8E	18MB	4.5 GHz	3.3 GHz	2.5 GHz	1.8 GHz	80EU	1.3 GHz	45W	95W	Essentials
	i5-12450H	8C	12T	4P	4E	12MB	4.4 GHz	3.3 GHz	2.0 GHz	1.5 GHz	48EU	1.2 GHz	45W	95W	-

Intel® processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.
The frequency of cores and core types varies by workload, power consumption and other factors.
Visit https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html for more information.
I9-12900HK supports CPU Over Clocking. Memory Ratio Override is not supported.
Intel Thermal Velocity Boost not supported on 12th Gen mobile processors; Max Turbo Frequency for P-cores may include Intel Turbo Boost Max 3.0.
All SKUs support up to DDR5 (4800 MT/S)/DDR4 (3200 MT/S)/LPDDR5 (5200 MT/S)/LPDDR4 (4267 MT/S) memory
See ark.intel.com for more specification details

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For Performance Thin & Light Laptops

12th Gen Intel® Core™ P-series Processors

	Processor Number	Processor Cores	Processor Threads	Performance Cores	Efficient Cores	L3 Cache	Max Turbo Frequency P-cores	Max Turbo Frequency E-cores	Base Frequency P-cores	Base Frequency E-cores	Processor Graphics	Max Graphics Frequency	Processor Base Power	Max Turbo Power	Intel vPro®
intel CORE i7	i7-1280P	14C	20T	6P	8E	24MB	4.8 GHz	3.6 GHz	1.8 GHz	1.3 GHz	96EU	1.45 GHz	28W	64W	Enterprise
	i7-1270P	12C	16T	4P	8E	18MB	4.8 GHz	3.5 GHz	2.2 GHz	1.6 GHz	96EU	1.40 GHz	28W	64W	Enterprise
	i7-1260P	12C	16T	4P	8E	18MB	4.7 GHz	3.4 GHz	2.1 GHz	1.5 GHz	96EU	1.40 GHz	28W	64W	Essentials
intel CORE i5	i5-1250P	12C	16T	4P	8E	12MB	4.4 GHz	3.3 GHz	1.7 GHz	1.2 GHz	80EU	1.40 GHz	28W	64W	Enterprise
	i5-1240P	12C	16T	4P	8E	12MB	4.4 GHz	3.3 GHz	1.7 GHz	1.2 GHz	80EU	1.30 GHz	28W	64W	Essentials
intel CORE i3	i3-1220P	10C	12T	2P	8E	12MB	4.4 GHz	3.3 GHz	1.5 GHz	1.1 GHz	64EU	1.10 GHz	28W	64W	-

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Visit https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html for more information.
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Max Turbo Frequency for P-cores may include Intel Turbo Boost Max 3.0.
All SKUs support up to DDR5 (4800 MT/S)/DDR4 (3200 MT/S)/LPDDR5 (5200 MT/S)/LPDDR4 (4267 MT/S) memory
See ark.intel.com for more specification details

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For Modern Thin & Light Laptops

12th Gen Intel® Core™ U-series Processors

	Processor Number	Processor Cores	Processor Threads	Performance Cores	Efficient Cores	L3 Cache	Max Turbo Frequency P-cores	Max Turbo Frequency E-cores	Base Frequency P-cores	Base Frequency E-cores	Processor Graphics	Max Graphics Frequency	Processor Base Power	Max Turbo Power	Intel vPro®
intel CORE i7	i7-1265U	10C	12T	2P	8E	12MB	4.8 GHz	3.6 GHz	1.8 GHz	1.3 GHz	96EU	1.25 GHz	15W	55W	Enterprise
	i7-1255U	10C	12T	2P	8E	12MB	4.7 GHz	3.5 GHz	1.7 GHz	1.2 GHz	96EU	1.25 GHz	15W	55W	Essentials
intel CORE i5	i5-1245U	10C	12T	2P	8E	12MB	4.4 GHz	3.3 GHz	1.6 GHz	1.2 GHz	80EU	1.20 GHz	15W	55W	Enterprise
	i5-1235U	10C	12T	2P	8E	12MB	4.4 GHz	3.3 GHz	1.3 GHz	0.90 GHz	80EU	1.20 GHz	15W	55W	Essentials
intel CORE i3	i3-1215U	6C	8T	2P	4E	10MB	4.4 GHz	3.3 GHz	1.2 GHz	0.90 GHz	64EU	1.10 GHz	15W	55W	-
Pentium	8505	5C	6T	1P	4E	8MB	4.4 GHz	3.3 GHz	1.2 GHz	0.90 GHz	48EU	1.10 GHz	15W	55W	-
Celeron	7305	5C	6T	1P	4E	8MB	-	-	1.1 GHz	0.90 GHz	48EU	1.10 GHz	15W	55W	-

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See ark.intel.com for more specification details

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For Modern Thin & Light Laptops

12th Gen Intel® Core™ U-series Processors

	Processor Number	Processor Cores	Processor Threads	Performance Cores	Efficient Cores	L3 Cache	Max Turbo Frequency P-cores	Max Turbo Frequency E-cores	Base Frequency P-cores	Base Frequency E-cores	Processor Graphics	Max Graphics Frequency	Processor Base Power	Max Turbo Power	Intel vPro®
intel CORE i7	i7-1260U	10C	12T	2P	8E	12MB	4.7 GHz	3.5 GHz	1.1 GHz	0.8 GHz	96EU	0.95 GHz	9W	29W	Enterprise
	i7-1250U	10C	12T	2P	8E	12MB	4.7 GHz	3.5 GHz	1.1 GHz	0.8 GHz	96EU	0.95 GHz	9W	29W	Essentials
intel CORE i5	i5-1240U	10C	12T	2P	8E	12MB	4.4 GHz	3.3 GHz	1.1 GHz	0.8 GHz	80EU	0.90 GHz	9W	29W	Enterprise
	i5-1230U	10C	12T	2P	8E	12MB	4.4 GHz	3.3 GHz	1.0 GHz	0.7 GHz	80EU	0.85 GHz	9W	29W	Essentials
intel CORE i3	i3-1210U	6C	8T	2P	4E	10MB	4.4 GHz	3.3 GHz	1.0 GHz	0.7 GHz	64EU	0.85 GHz	9W	29W	-
Pentium	8500	5C	6T	1P	4E	8MB	4.4 GHz	3.3 GHz	1.0 GHz	0.7 GHz	48EU	0.80 GHz	9W	29W	-
Celeron	7300	5C	6T	1P	4E	8MB	-	-	1.0 GHz	0.7 GHz	48EU	0.80 GHz	9W	29W	-

Intel® processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families.
The frequency of cores and core types varies by workload, power consumption and other factors.
Visit https://www.intel.com/content/www/us/en/architecture-and-technology/turbo-boost/turbo-boost-technology.html for more information.
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All SKUs support up to LPDDR5 (5200 MT/S)/LPDDR4 (4267 MT/S) memory
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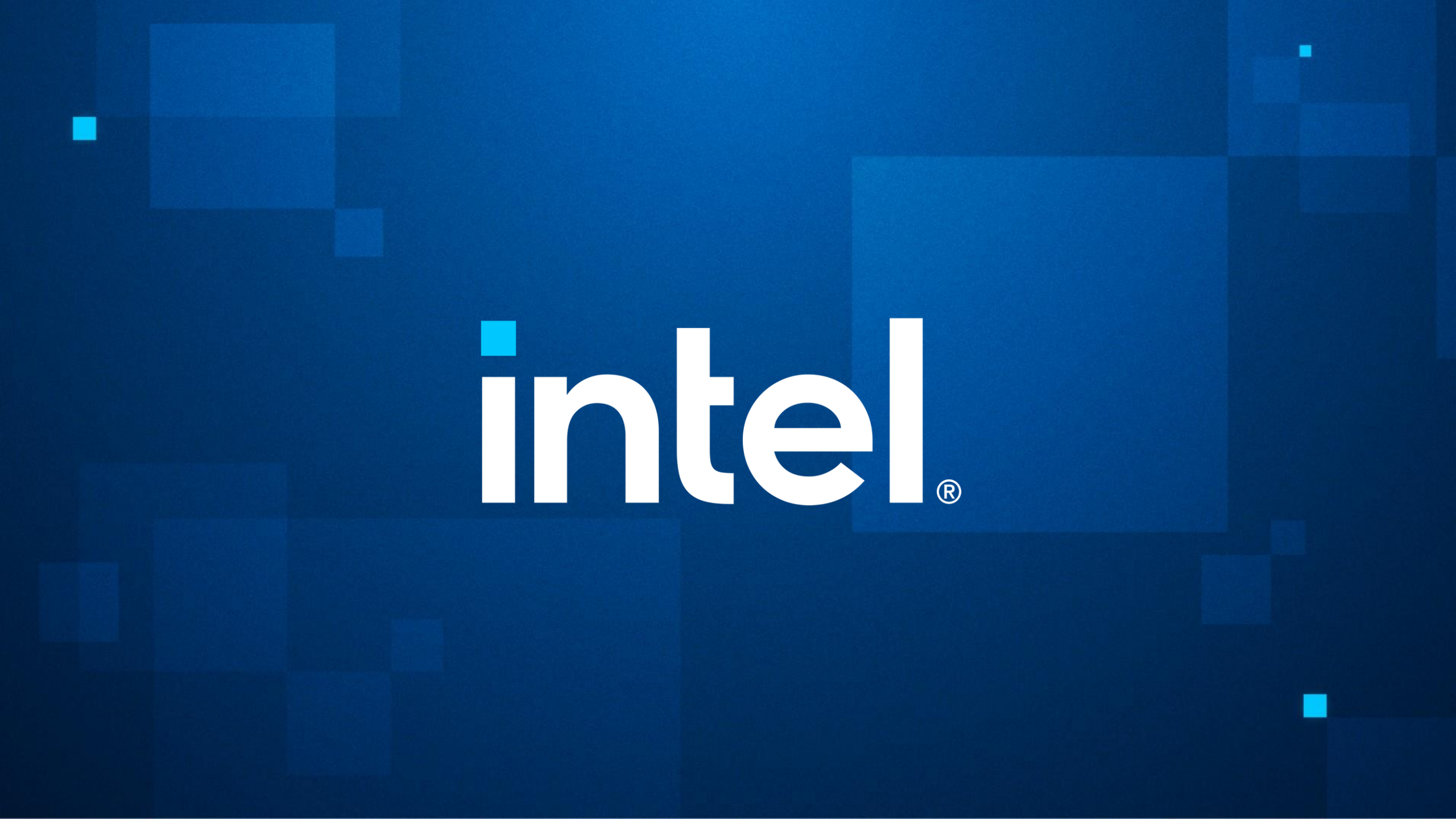
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