



HOW TO SELL

10TH GEN INTEL[®] CORE[™] DESKTOP PROCESSORS



EXPLAIN HOW TO ENJOY ELITE PERFORMANCE, STUNNING ENTERTAINMENT, NEXT-GEN CONNECTIVITY AND ADVANCED TUNING SUPPORT

When selling a new 10th Gen Intel[®] Core[™] desktop processor to your customers, explain how an optimal balance of frequency, cores and threads can help them do what they are looking to do with their PC—effortlessly and fast.



Upsell to Intel[®] Core[™] i9-10900K, the world's fastest gaming processor¹

- Up to 5.3 GHz max clock speed with Intel[®] Thermal Velocity Boost²
- 10 processing cores and 20 computing threads for multitasking
- Breakthrough performance
- Designed for enthusiasts and DIYers seeking ultimate gaming and premium creator experiences

Up to 5% better Windows application performance

with a 10th Gen Intel[®] Core[™] i9-10900K vs. 10th Gen Intel[®] Core[™] i7-10700K³



Upsell to an Intel[®] Core[™] i7 processor for optimized gaming and content creation

- Up to 5.1 GHz max clock speed with Intel[®] Turbo Boost Max Technology 3.0⁴
- 8 processing cores / 16 compute threads for multitasking
- Ideal for everything from effortless multitasking to mainstream content creation to high-end gaming

Up to 7% better Windows application performance

with a 10th Gen Intel[®] Core[™] i7-10700K vs. 10th Gen Intel[®] Core[™] i5-10600K³



Upsell to an Intel[®] Core[™] i5 processor for balanced price and performance

- Up to 4.8 GHz max clock speed with Intel[®] Turbo Boost Technology 2.0⁵
- 6 processing cores / 12 compute threads
- Ideal for everything from office productivity to light content creation to mainstream gaming

Up to 13% better Windows application performance

with a 10th Gen Intel[®] Core[™] i5-10600K vs. 10th Gen Intel[®] Core[™] i3-10320³



Choose the Intel[®] Core[™] i3 processor for great everyday computing

- Up to 4.6 GHz max clock speed with Intel[®] Turbo Boost Technology 2.0⁵
- 4 processing cores / 8 compute threads
- Great for general productivity, content consumption and casual gaming

Up to 43% better Windows application performance

with a 10th Gen Intel[®] Core[™] i3-10320 vs. 10th Gen Intel[®] Pentium[™] G6600³

HOW TO TALK TO DIFFERENT TYPES OF USERS

TYPE OF USER	INTERESTED IN	FOCUS ON...
 <p>Enthusiast Gaming & Streaming</p>	<ul style="list-style-type: none"> • An uncompromising experience with the games they enjoy—high frame rates, fast level loading, no slowdown. • When streaming, they want to maintain great frame rates and responsiveness even while they are live-broadcasting to their fans and followers. • Overclocking to get the most out of their processor.⁶ 	<ul style="list-style-type: none"> • High GHz speeds that enable a PC to get more done at once without slowing down. • Recommend more cores and threads—these enable users to run more applications simultaneously (like playing an intense FPS game while streaming using Open Broadcaster Software) • Intelligent performance —Intel® Turbo Boost Max Technology 3.0 helps the best-performing cores to provide increased performance. • Support for super-fast DDR4-2933 memory enables great responsiveness, no matter what they're doing.⁷ • If they are interested in overclocking, steer them toward a processor with the letter K in its processor number—these are unlocked
 <p>Mainstream Gaming</p>	<ul style="list-style-type: none"> • A great experience with today's games (high frame rates and good responsiveness) without breaking the bank. • Fast game loading and the ability to play games they enjoy—either alone or with their friends • Pushing their dollar as far as possible • A PC that will work great with the games that they enjoy 	<ul style="list-style-type: none"> • Explain how Intel® Hyper-Threading Technology makes the most of their processor's available cores • Talk about how features like Intel® Turbo Boost Technology intelligently adjust to meet your computing needs • To get the most out of their processor, recommend an unlocked and overclockable processor and suggest that they use either Intel® Performance Maximizer (new overclockers) or Intel® Extreme Tuning Utility (advanced overclockers)^{6,8} • Intel has worked with over 200 game developers to make sure that their games run great on Intel processors
 <p>Content Creation</p>	<ul style="list-style-type: none"> • View their PC as one of their most powerful productivity and creativity-boosting tools • Nothing should stand in the way or limit their creative ideas • Their time is valuable and they can't afford to be waiting while their PC exports a 3D model, manipulates a texture or exports a 4K video • Files they work with are often quite large and can take time to transfer 	<ul style="list-style-type: none"> • An investment in a new PC featuring a 10th Gen Intel® Core™ processor will enable them to take advantage of intelligent performance-boosting features • Higher GHz speeds enable Intel processors to get more done in less time • Support for new connectivity features like Wi-Fi 6 (wireless gigabit internet) and Thunderbolt™ 3 help transfer large files in less time
 <p>Everyday Computing</p>	<ul style="list-style-type: none"> • These users want their PC to work seamlessly as part of their daily lives • They care less about technologies and are more interested in security and reliability 	<ul style="list-style-type: none"> • Point to Intel's role as a trusted provider of computing technology • Mention that a new PC can set them free to do and enjoy the things that they love • Mention that new 10th Gen Intel® Core™ processors deliver a great experience with Windows 10 • Security is built into the hardware with features that help to defend against evolving malware threats

RECOMMEND THE RIGHT MOTHERBOARD

Your customer will need to pair their 10th Gen Intel® Core™ desktop processor with a supporting Intel® based 400 Series Motherboard.

	INTEL® BASED 400 SERIES Z490	INTEL® BASED 400 SERIES Q470	INTEL® BASED 400 SERIES B460	INTEL® BASED 400 SERIES H470	INTEL® BASED 400 SERIES H410
Optimized for	Gaming, overclocking & multitasking	Remotely managing, diagnosing & updating computers	Office productivity, 4K video streaming, photo editing	4K video streaming, photo editing & backup	Everyday computing such as online browsing
Recommended Processors	10th Gen Intel® Core™ Processors that are Unlocked & Overclockable	10th Gen Intel® Core™ Processors with Intel® vPro™ Technology	10th Gen Intel® Core™ Processors	10th Gen Intel® Core™ Processors	Intel® Pentium® Gold, Intel® Celeron®
Intel® Optane™ Memory can accelerate the things that matter most to you; turning your unique computing habits into productivity advantages ⁹	✓	✓	✓	✓	
Overclocking allows the computer processor to operate out of specification to boost performance ⁶	✓				
Intel® vPro™ Technology provides hardware enhanced security features and remote manageability ¹⁰		✓ ^{11,12}			
Intel® RST PCIe Raid improves I/O performance and data storage reliability best used for video or image processing	✓	✓ ¹¹	✓	✓	

CHOOSE YOUR FIT

FOR EVERYDAY
PRODUCTIVITY



FOR SEAMLESS GAMEPLAY
& ENTERTAINMENT



FOR COMPETITIVE GAMING
& CONTENT CREATION



FOR ULTIMATE GAMING
& CONTENT CREATION



UP TO

Cores/Threads:

4/8

6/12

8/16

10/20

Max Frequency (GHz)⁴:

4.6

4.8

5.1

5.3

Available Unlocked & Overclockable⁶

ASK ABOUT OVERCLOCKING

Consider asking your customers if they have ever heard about Overclocking. Overclocking, or running a processor faster than its factory settings can enable additional performance and is a great way to get more performance out of your PC. The best part? New 10th Gen Intel® Core™ processors are highly overclockable. Simply look for the letter “K” in the processor name.⁶



POWERFUL NEW FEATURES FOR INTELLIGENT OVERCLOCKING

- NEW! Enhanced voltage frequency control improves voltage control granularity.
- NEW! PCIe overclocking fine tunes discrete graphics performance for extreme overclockers.
- NEW! Per-core hyper-threading control for overclocking allows experienced overclockers to decide which hyper-threads to turn on or off on a per-core basis.

INTEL HAS EXCLUSIVE TOOLS FOR EVERY TYPE OF OVERCLOCKER

ENTRY-LEVEL

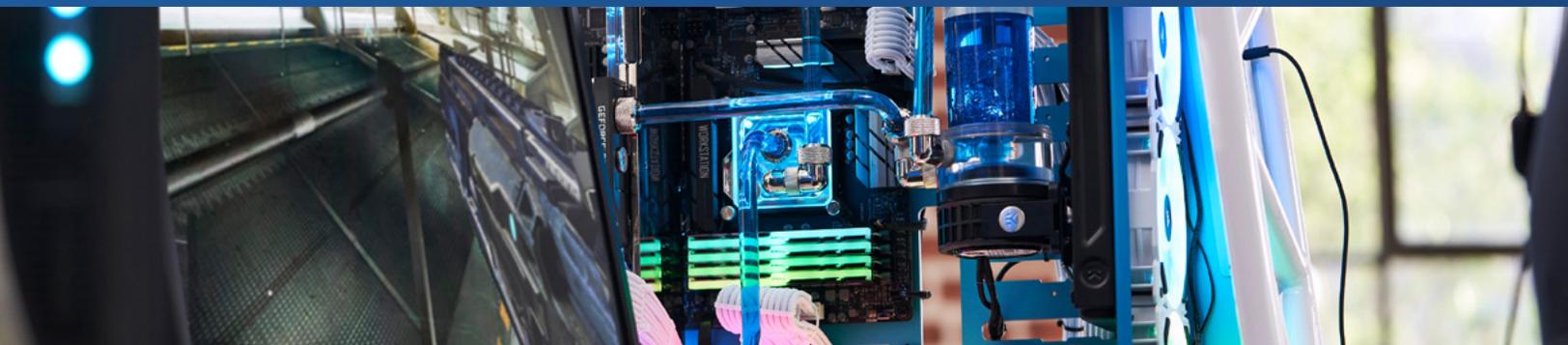
INTEL®
P E R F O R M A N C E
MAXIMIZER

Easily begin to overclock your processor with Intel® Performance Maximizer, a hyper-intelligent overclocking tool that helps you gain a fast, competitive edge.^{6,8}

EXPERIENCED

INTEL® EXTREME
TUNING UTILITY

Push the limits with Intel® Extreme Tuning Utility's advanced performance-tuning software that enables experienced enthusiasts to overclock, monitor, and stress-test a system.^{6,13}



ARE THEY LOOKING TO START STREAMING?

More than ever, lots of different people are getting into streaming—sharing things like gameplay, design, cooking and much more. If your customer is looking to get streaming, Intel® Easy Streaming Wizard can help them configure Open Broadcasting Software—one of today's most popular streaming tools—on their 10th Gen Intel® Core™ desktop processor-based PC.¹⁴

INTEL® EASY STREAMING WIZARD

Intel® Easy Streaming Wizard simplifies the process of configuring your processor's capabilities, bandwidth and peripherals—helping to get you streaming in minutes, instead of hours.¹⁴



CLOSE THE SALE WITH POWERFUL INTEL INNOVATIONS

- **NEW up to 5.3GHz with Intel® Thermal Velocity Boost.**² Take advantage of up to 5.3GHz processor speeds, right out of the box, and enjoy fast, responsive performance.
- **NEW! Intel® Turbo Boost Max Technology 3.0.**⁴ Your customer can get an automatic performance boost when running many common applications.
- **NEW! Memory Support with DDR4-2933.**⁷ Get an added boost with support for faster memory speeds—enabling smooth, responsive performance, powerful multitasking and exceptional productivity when creating.⁷
- **Intel® Hyper-Threading Technology.** Available across the entire 10th Gen Intel® Core™ processor family. Whether you choose the top-tier Intel® Core™ i9 processor or the entry-level Intel® Core™ i3 processor, you'll be able to multitask and do more simultaneously.
- **NEW! Intel® Ethernet Connection I225.** Now available on 10th Gen platform, 2.5G Intel® Ethernet Connector I225 delivers greater than 2X the network speeds of 1GB Ethernet on existing cabling.^{15,16}
- **NEW! Intel® Wi-Fi 6 AX201.** Now integrated into 10th Gen Intel® Core™ desktop processors, Intel® Wi-Fi 6 (Gig+) delivers responsive game play, nearly 3X faster downloads, and more reliable connections. Delivers best-in-class wireless experiences with the freedom and flexibility to game or create anywhere throughout the home or office.^{15,16}
- **Intel® Optane™ Technology Support.** When your customer launches applications, they will be able to open and work with large files incredibly fast, or stay productive while multitasking. This is great to emphasize for those users who are interested in a PC that will be able to better keep pace with their work flow and lifestyle.⁹

1 As measured by in-game benchmark mode performance (score or frames per second) where available, or frames per second where benchmark mode is unavailable. PC Gaming Processors Compared: 10th Gen Intel® Core™ i9-10900K, Intel® Core™ i9-9900KS, AMD Ryzen™ 9 3950X. Prices of compared products may differ. Configurations: Graphics: Nvidia GeForce RTX 2080 Ti, Memory: 4x8GB DDR4 (2666, 2933 or 3200 per highest speed of the corresponding processor), Storage: Intel® Optane™ SSD 905P, OS Windows 10 Pro 1909 v720 19H2(RS6). Results: 10th Gen Intel® Core™ i9-10900K scored better on the majority of the 25+ game titles tested.

2 Certain features may not be present in all SKUs. Includes the effect of Intel® Thermal Velocity Boost (Intel® TVB), a feature that opportunistically and automatically increases clock frequency above single-core and multi-core Intel® Turbo Boost Technology frequencies based on how much the processor is operating below its maximum temperature and whether turbo power budget is available. The frequency gain and duration are dependent on the workload, capabilities of the processor and the processor cooling solution. Intel® Thermal Velocity Boost feature is opportunistic at a temperature of 70°C or lower and when turbo power budget is available. The frequency gain and duration is dependent on the workload (best for bursty workloads), capabilities of the individual processor, and the processor cooling solution. Frequencies may reduce over time and longer workloads may start at the max frequency but drop as processor temperature increases.

4 Maximum turbo frequency using Intel Turbo Boost Technology 3.0

5 Maximum turbo frequency using Intel Turbo Boost Technology 2.0

6 Unlocked features are present with select chipsets and processor combinations. Altering clock frequency or voltage may damage or reduce the useful life of the processor and other system components, and may reduce system stability and performance. Product warranties may not apply if the processor is operated beyond its specifications. Check with the manufacturers of system and components for additional details.

7 DDR4 maximum speed support is 1 and 2 DPC for UDIMMs but only 1 DPC for SODIMMs. DDR4 2DPC UDIMM 2933 or 2666 is capable when same UDIMM part number are populated with in each channel.

8 Some features may only be available with the latest version of Intel® Performance Maximizer. For more information and a full list of compatible processors, please visit intel.com/performanceoptimizer

9 Intel® Optane™ memory requires specific hardware and software configuration. Visit www.intel.com/OptaneMemory for configuration requirements

10 Intel SIPP, Intel vPro™, & Intel AMT support requires select Comet Lake S-processors and select Intel® 400 series chipsets

11 Certain features may not be present in all SKUs.

12 Intel® SIPP, Intel® vPro™, & Intel® AMT support requires select 10th gen Intel® Core™ processors and select Intel® 400 series chipsets

13 Some features may only be available with the latest version of Intel® Extreme Tuning Utility. For more information and a full list of compatible processors, please visit downloadcenter.intel.com/download/24075

14 Some features may only be available with the latest version of Intel® Easy Streaming Wizard. For more information and a full list of compatible processors, please visit intel.com/easystreaming

15 Intel® Wi-Fi 6 AX201 requires specific hardware configurations. Discrete Intel® Wi-Fi 6 AX200 available for chipsets not supporting connectivity integration.

3 802.11ax 2x2 160MHz enables 2402Mbps maximum theoretical data rates, ~3X (2.8X) faster than standard 802.11ac 2x2 80MHz (867Mbps) as documented in IEEE 802.11 wireless standard specifications, and require the use of similarly configured 802.11ax wireless network routers.

3 Source: Intel. System tests as of 5/1/2020.

Full Configurations:

Processor: 10th Gen Intel® Core™ i9-10900K processor (CML-S) PL1=125W TDP, 10C20T, Motherboard: Pre-production Asus ROG Maximus XII Formula Memory: 32 GB DDR4-2933 DDR4 SDRAM, Storage: Intel® SSD 905P 960GB, Display Resolution: 1920x1080, OS: Microsoft Windows 10 Pro 1909 V720 19H2(RS6), Graphics card: NVIDIA RTX 2080Ti, Graphics driver: 442.59 Bios version 403

Processor: 10th Gen Intel® Core™ i7-10700K processor (CML-S) PL1=125W TDP, 8C16T, Motherboard: Pre-production Asus ROG Maximus XII Formula Memory: 32 GB DDR4-2933 DDR4 SDRAM, Storage: Intel® SSD 905P 960GB, Display Resolution: 1920x1080, OS: Microsoft Windows 10 Pro 1909 V720 19H2(RS6), Graphics card: NVIDIA RTX 2080Ti, Graphics driver: 442.59 Bios version 403

Processor: 10th Gen Intel® Core™ i5-10600K processor (CML-S) PL1=125W TDP, 6C12T, Motherboard: Pre-production Asus ROG Maximus XII Formula Memory: 32 GB DDR4-2933 DDR4 SDRAM, Storage: Intel® SSD 905P 960GB, Display Resolution: 1920x1080, OS: Microsoft Windows 10 Pro 1909 V720 19H2(RS6), Graphics card: NVIDIA RTX 2080Ti, Graphics driver: 442.59 Bios version 403

Processor: 10th Gen Intel® Core™ i3-10320 processor (CML-S) PL1=65W TDP, 4C8T, Motherboard: Pre-production Asus ROG Maximus XII Extreme Memory: 32 GB DDR4-2933 DDR4 SDRAM, Storage: Intel® SSD 905P 960GB, Display Resolution: 1920x1080, OS: Microsoft Windows 10 Pro 1909 V720 19H2(RS6), Graphics card: NVIDIA RTX 2080Ti, Graphics driver: 442.59 Bios version 403

Processor: 10th Gen Intel® Pentium™ G6600 processor (CML-S) PL1= 58W TDP, 2C4T, Motherboard: Pre-production Asus ROG Maximus XII Extreme Memory: 32 GB DDR4-2666 DDR4 SDRAM, Storage: Intel® SSD 905P 960GB, Display Resolution: 1920x1080, OS: Microsoft Windows 10 Pro 1909 V720 19H2(RS6), Graphics card: NVIDIA RTX 2080Ti, Graphics driver: 442.59 Bios version 403

SYSmark* 2018 is a benchmark from the BAPCo* consortium that measures the performance of Windows* platforms. SYSmark 2018 tests three usage scenarios: Productivity, Creativity and Responsiveness. SYSmark contains real applications from Independent Software Vendors such as Microsoft* and Adobe*.

Performance tests may have been optimized for performance only on Intel microprocessors.

Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit www.intel.com/benchmarks.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure.

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.

Includes the effect of Intel® Thermal Velocity Boost (Intel® TVB), a feature that opportunistically and automatically increases clock frequency above single-core and multi-core Intel® Turbo Boost Technology frequencies based on how much the processor is operating below its maximum temperature and whether turbo power budget is available. The frequency gain and duration are dependent on the workload, capabilities of the processor and the processor cooling solution.

Intel Wi-Fi 6: Intel® Wi-Fi 6 (Gig+) products support optional 160 MHz channels, enabling the fastest possible theoretical maximum speeds (2402 Mbps) for typical 2x2 802.11 AX PC Wi-Fi products. Premium Intel® Wi-Fi 6 (Gig+) products enable 2-4X faster maximum theoretical speeds compared standard 2x2 (1201 Mbps) or 1x1 (600 Mbps) 802.11 AX PC Wi-Fi products, which only support the mandatory requirement of 80 MHz channels.

Intel technologies may require enabled hardware, software or service activation. No product or component can be absolutely secure.

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