



ELITE PERFORMANCE FOR GAMERS AND ENTHUSIASTS

THE INTEL® Z490 CHIPSET AND 10TH GENERATION
INTEL® CORE™ DESKTOP PROCESSORS

Fine tune your Intel Z490 chipset & unlocked 10th Generation Intel Core Processor with enhanced core & memory overclocking for a premium experience. Experience the optimized data flow you need for fantastic in-game performance while streaming, recording, creating, editing, with features such as Intel® Turbo Boost Max Technology 3.0¹ and Intel® Hyper-Threading Technology¹.



STRAIGHT-FORWARD AND FINE-TUNED OVERCLOCKING²

Intel Z490 Chipset with an unlocked 10th Gen Intel Core Processor and Intel® Performance Maximizer software will automatically overclock your system with just the click of a mouse. A free, innovative, automated overclocking tool exclusively from Intel that makes it easy to dynamically and reliably custom-tune a select unlocked 10th gen Intel Core processor based upon its individual performance DNA.¹.



SEAMLESS CONNECTIVITY AND RESPONSIVENESS:

- The Intel Z490 chipset integrates an Intel® Wi-Fi 6 AX201 with Gig+ CNVi solution which offers best-in-class wireless standards for fast, flexible and safe connectivity. Intel Wi-Fi 6 (Gig+) enables gigabit speeds that are nearly 3X faster than standard Wi-Fi (802.11ac).⁴ Experience improved speed and responsiveness that enables a more reliable connection when browsing, streaming or gaming, even in environments with many connected devices. Rapidly access your digital life with the Intel Z490 chipset and 10th Generation Intel Core Processors, which enables Intel® Optane™ memory to speed up access to your favorite applications and files.³
- Supports new discrete 2.5G Intel® Ethernet Connector I225 that delivers greater network speeds demanded in the latest game titles.

**UNBELIEVABLY
RESPONSIVE
COMPUTING
EXPERIENCE**

FAST AND RELIABLE STORAGE CAPABILITIES:

- Intel Z490 chipset and Intel Core processors deliver amazing performance, while Intel® Optane™ SSDs support storage-demanding workloads. Combining both innovations into a single platform optimizes performance, delivers fast application loading and fast boot. Paired together, this combination unlocks an unbelievably responsive computing experience. Create fast storage volumes and back-up your media and critical information via RAID support with Intel processor and chipset-connected PCI Express* SSDs¹. Expand your storage with up to 6 SATA 6 Gb/s ports. Enable fast data transfers to your favorite devices with PCI Express* 3.0.

EXPERIENCE
MORE
IMMERSIVE
VISUALS



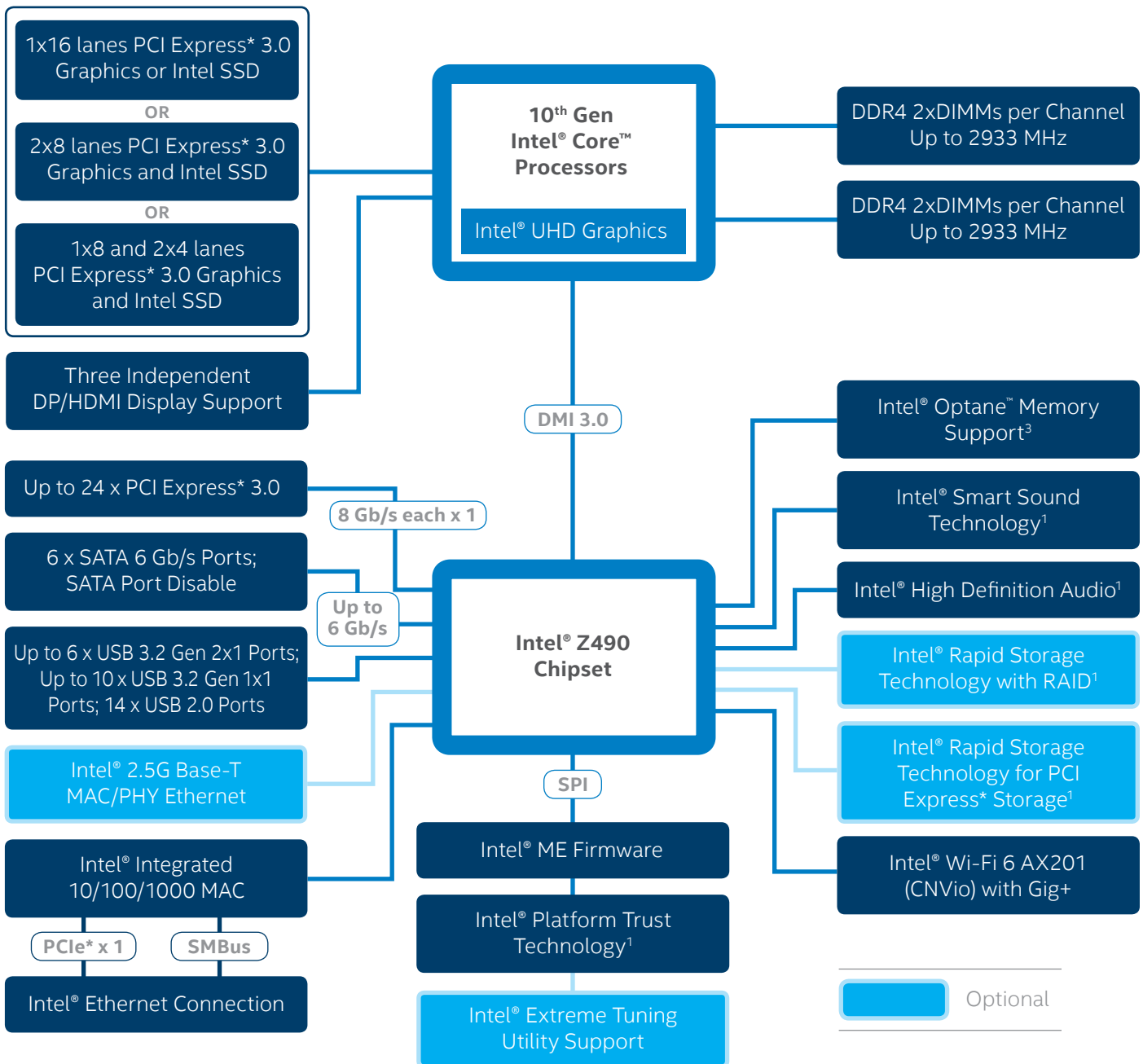
STUNNING VISUALS WITH INTEL® UHD GRAPHICS:

- Intel UHD 630 Graphics on 10th Generation Intel Core processors provide eye-popping 4K UHD resolutions. Experience more immersive visuals with High Dynamic Range (HDR) and Rec. 2020 (Wide Color Gamut) support. Playback your favorite videos with color precision via native true 10-bit graphics output. Watch the latest 4K UHD premium content on your PC from leading online providers.¹ With up to three independent, DisplayPort* and/or HDMI* displays supported with the Intel Z490 chipset, you can enable smooth game play with high frames per second while increasing productivity.

INTEL® Z490 CHIPSET FEATURES AT A GLANCE

FEATURES	BENEFITS
Support for 10th Generation Intel® Core™ desktop processors	Supports 10th Generation Intel® Core™ processors, Intel® Pentium® processors, and Intel® Celeron® processors.
Intel® Rapid Storage Technology ¹	With additional SSDs and hard drives added, helps provide quick access to digital photo, video, and data files, and data protection against a hard disk drive failure with RAID 0, 1, 5, and 10.
Intel® Rapid Storage Technology for PCI Express® Storage ¹	Enables Intel® Rapid Storage Technology features such as RAID 0, 1, and 5 with Intel PCI Express®-based NVMe SSDs connected via Intel processors and the Intel Z490 chipset
Intel® Optane™ Memory Support ³	Provides performance improvements as well as fast app response times for system acceleration and responsiveness when paired with an Intel Optane memory module.
Intel® Wi-Fi 6 Support	Integrated Intel® Wi-Fi 6 AX201(Gig+) CNVi solution or Intel® Wi-Fi 6 AX200(Gig+) solution allowing you to connect up to Gigabit Wi-Fi speeds ⁴ .
Intel® Smart Sound Technology ¹	Integrated digital signal processor (DSP) for audio offload and audio/voice features.
Intel® High Definition Audio ¹	Integrated audio support enables premium digital surround sound and delivers advanced features such as multiple audio streams and jack re-tasking.
USB 3.2 Gen 2x1	Integrated USB 3.2 Gen 2x1 support provides data transfer performance with a design data rate of up to 10 Gb/s.
USB 3.2 Gen 1x1	Integrated USB 3.2 Gen 1x1 support provides data transfer performance with a design data rate of up to 5 Gb/s.
USB 2.0	USB 2.0 support with a design data rate of up to 480 Mb/s.
USB Port Disable	Enables individual USB ports to be enabled or disabled as needed. This feature helps provide added protection of data by preventing malicious removal or insertion of data through USB ports.
Serial ATA (SATA) 6 Gb/s	High-speed storage interface supporting up to 6 Gb/s transfer rates for optimal data access.
SATA Port Disable	Enables individual SATA ports to be enabled or disabled as needed. This feature helps provide added protection of data by preventing malicious removal or insertion of data through SATA ports.
Intel® Platform Trust Technology ¹	Integrated chipset hardware and firmware solution that delivers a trusted element of the platform execution to provide enhanced security by verifying the boot portion of the boot sequence which helps protect against viruses and malicious SW attacks.
PCI Express 3.0 Interface	Offers up to 8 GT/s for fast access to peripheral devices and networking with up to 24 PCI Express 3.0 lanes, configurable as x1, x2, and x4 depending on desktop motherboard designs.
10th Generation Intel® Core™ processor PCI Express 3.0 Interface	Intel® Z490 chipset-based platforms enable the processor PCI Express 3.0 lanes to be configurable as 1x16, 2x8, or 1x8 and 2x4 depending on desktop motherboard designs.
Intel® Integrated 10/100/1000 MAC	Support for the Intel® Ethernet Connection I219-V.

INTEL® Z490 CHIPSET BLOCK DIAGRAM



- Intel technologies may require enabled hardware, software or service activation.
- 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.
- Intel® Optane memory requires specific hardware and software configuration. Visit www.intel.com/OptaneMemory for configuration requirements.
- Gigabit Wi-Fi speeds based on IEEE theoretical maximum bandwidth enabled by 2x2 802.11ac 160MHz (1.733Mbps) and requires the use of similarly configured router. 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.

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Printed in USA 0220/JC/NB/AQ

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