

UNLOCKED FOR THE POWER USER

THE INTEL® Z270 CHIPSET AND 7TH
GEN INTEL® CORE™ PROCESSORS

**Ultimate flexibility
and performance
with 7th Gen Intel®
Core™ processor
and the Intel®
Z270 chipset.**

REDEFINED PERFORMANCE FOR THE POWER USER

The Intel Z270 chipset and 7th Gen Intel Core processors will give you the ultimate edge against your opponents. Whether it is responsiveness, expandability or performance, the Intel Z270 chipset and 7th Gen Intel Core processors will arm you with Intel® Turbo Boost Technology 2.0¹ and Intel® Hyper-Threading Technology¹ to get you the win. Fuel your battle with the Intel Z270 chipset and gain the power and performance to reach new records.

UNLOCKED POWER

Unleash your PC's performance with the Intel Z270 chipset and unlocked 7th Gen Intel Core processors. Unlock your core, graphics, and memory frequencies to amazing levels while having the flexibility to keep other areas within specifications. With the tuning capabilities of the Intel Z270 chipset paired with new unlocked 7th Gen Intel Core processors, your imagination has no limits.



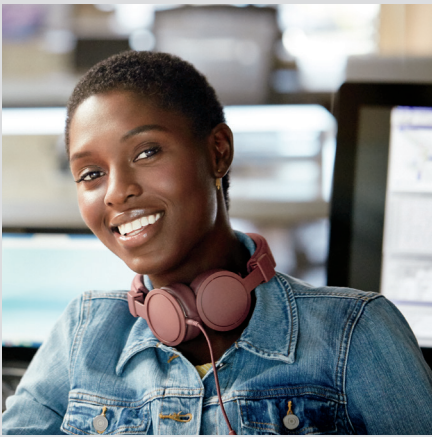
**ENHANCED
VOICE SUPPORT
AND STUDIO
QUALITY SOUND**

YOUR MEDIA... ALWAYS READY TO WOW

The Intel Z270 chipset and 7th Gen Intel Core processors allow you quick access to your digital life with Intel® Ready Mode Technology.¹ Voice command support makes your life easier along with providing the assurance that your favorite apps are always up-to-date. Melt into the amazing sound on the Z270 chipset with Intel® Smart Sound Technology.¹ Enhanced voice support and studio-quality sound will please even the most demanding audiophiles.

IMPROVED VISUALS ON INTEL® PROCESSOR GRAPHICS

Supporting the transformation and growth of media into 4K, 7th Gen Intel Core processors and the Intel Z270 chipset enable premium 4K content.¹ For the first time ever, allow your eyes to see new colors with Wide Color Gamut.¹ Experience eye-popping visuals in HDR that will define the future viewing standard.¹ 3D movies come to life with Intel® InTru™ 3D technology.¹ The Intel Z270 chipset supports up to three independent displays² to get more done.



STORAGE CAPABILITIES EXPANDED

When the Intel Z270 chipset is paired with a 7th Gen Intel Core processor your options for storage will be unbounded. Integrated USB 3.0 makes moving files to your tablet and smartphone blazing fast. RAID support on PCI Express* and Serial ATA storage devices enables speedy app launch and allows your data backups to finish in a flash! Enable blazing fast data transfers with support for PCIe 3.0 storage devices. The Intel Z270 chipset and 7th gen Intel Core processors introduce Intel® Optane™ memory³ with intelligent software which provides performance improvements as well as fast app response times for system acceleration and responsiveness.

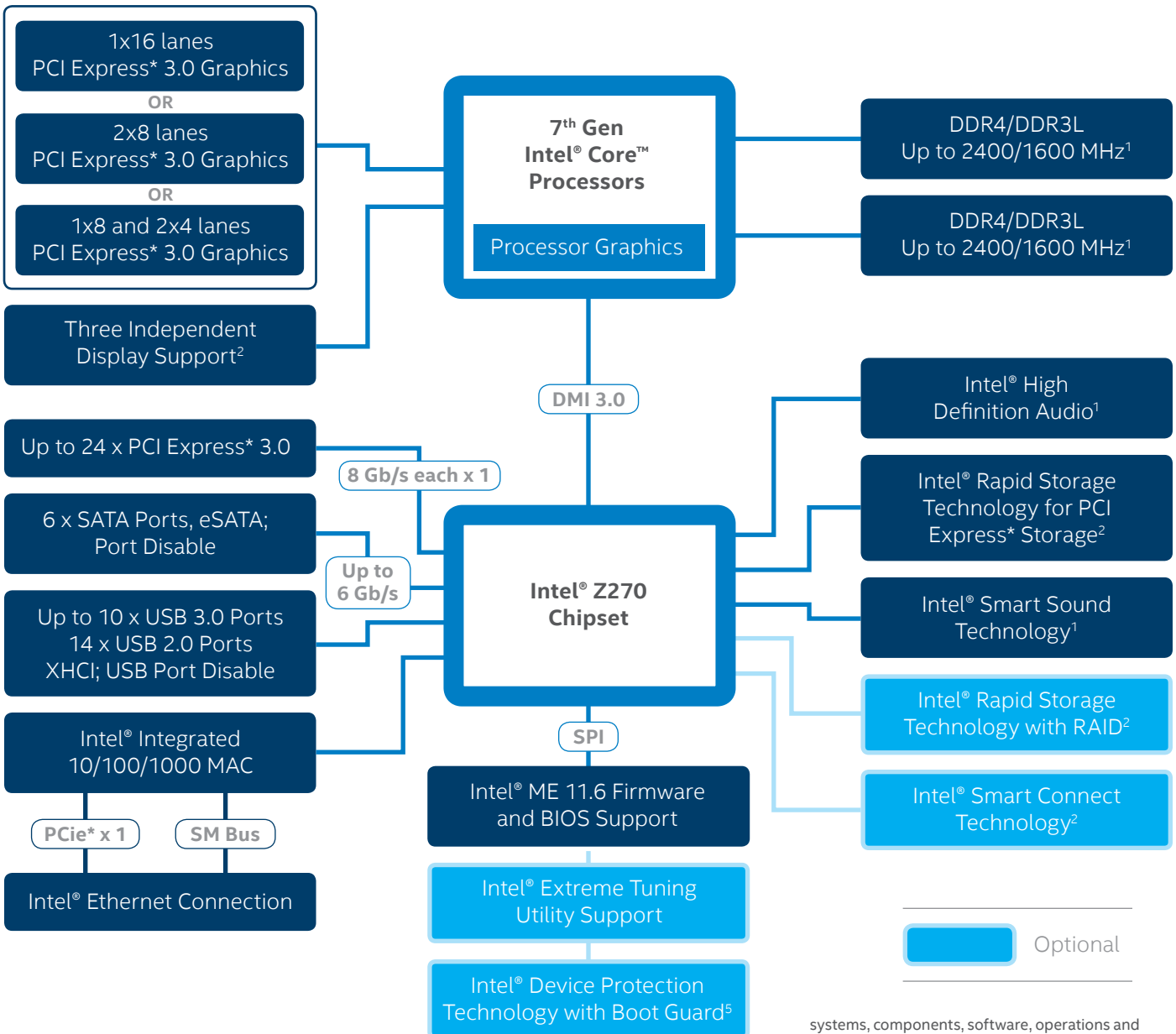


**PERFORMANCE
IMPROVEMENTS
AND FAST APP
RESPONSE**

INTEL® Z270 CHIPSET FEATURES AT A GLANCE

FEATURES	BENEFITS
Support for the 7 th and 6 th Gen Intel® Core™ Processors	Supports the 7 th and 6 th Gen Intel® Core™ processors with Intel® Turbo Boost Technology 2.0, ¹ Intel® Pentium® processors, and Intel® Celeron® processors.
Overclocking ⁴	The Intel® Z270 chipset enables overclocking features of unlocked 7 th and 6 th Gen Intel Core processors.
Intel® Ready Mode Technology ¹	Provides quick access to your PC with applications that are up-to-date and constantly connected.
Intel® Rapid Storage Technology ¹	With additional 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, 5, and 10. Support for external SATA (eSATA) enables the full SATA interface speed outside the chassis, up to 3 Gb/s.
Intel® Optane™ Memory ³	Provides performance improvements as well as fast app response times for system acceleration and responsiveness.
Intel® Rapid Storage Technology for PCI Express* Storage ¹	Enables Intel® Rapid Storage Technology features with PCI Express*-based SSDs.
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.
Intel® Smart Response Technology ¹	Implements storage I/O caching for fast response times of application startup and quick access to user data.
Universal Serial Bus 3.0	Integrated USB 3.0 support provides great enhancement in performance with a design data rate of up to 5 Gb/s.
Universal Serial Bus 2.0	High-Speed USB 2.0 support with a design data rate of up to 480 Mb/s.
Serial ATA (SATA) 6 Gb/s	High-speed storage interface supporting up to 6 Gb/s transfer rates for optimal data access.
Intel® Device Protection Technology with Boot Guard ⁵	Helps protect the system's pre-OS environment from viruses and malicious software attacks.
eSATA	SATA interface designed for use with external SATA devices. Provides a link for 3 Gb/s data speeds to eliminate bottlenecks found with current external storage solutions.
SATA Port Disable	Enables individual SATA ports to be enabled or disabled as needed, helping to provide added protection of data by preventing malicious removal or insertion of data through SATA ports. Especially targeted for eSATA ports.
PCI Express 3.0 Interface	Offers up to 8 GT/s for fast access to peripheral devices and networking with up to eight PCI Express 3.0 x1 ports, configurable as x2, x4, and x8 depending on desktop motherboard designs
7 th Gen Intel® Core™ Processors, PCI Express 3.0 Interface	Intel® Z270-based platforms enable the processor PCI Express 3.0 port to be configurable as a 1x16, 2x8, or 1x8 and 2x4, which enables support for Intel® Thunderbolt™ Technology ¹ depending on desktop motherboard designs.
USB Port Disable	Enables individual USB ports to be enabled or disabled as needed, helping to provide added protection of data by preventing malicious removal or insertion of data through USB ports.
Intel® Integrated 10/100/1000 MAC	Support for the Intel® Ethernet Connection I219-V.
Conflict Free	"Conflict-free" refers to products, suppliers, supply chains, smelters, and refiners that, based on our due diligence, do not contain or source tantalum, tin, tungsten or gold (referred to as "conflict minerals" by the U.S. Securities and Exchange Commission) that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or adjoining countries.
Green Technology	Manufactured with lead-free and halogen-free ⁵ component packages.

INTEL® Z270 CHIPSET BLOCK DIAGRAM



1 Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer or learn more at www.intel.com.

2 Requires the use of a 6th or 7th generation Intel® Core™ processor. This feature is dependent on your system configuration.

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

4 **WARNING:** Altering clock frequency and/or voltage may: (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications. Intel assumes no responsibility that the processor, including if used with altered clock frequencies and/or voltages, will be fit for any particular purpose. For more information, visit <https://www-ssl.intel.com/content/www/us/en/gaming/overclocking-intel-processors.html>. Altering PC memory frequency and/or voltage may (i) reduce system stability and use life of the system, memory and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional heat or other damage; and (v) affect system data integrity. Intel assumes no responsibility that the memory, included if used with altered clock frequencies and/or voltages, will be fit for any particular purpose. Check with memory manufacturer for warranty and additional details.

5 Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709A requirements, and the PCB/Substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.

Software and workloads used in 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.

Cost reduction scenarios described are intended as examples of how a given Intel- based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

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