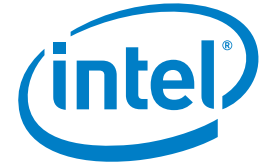
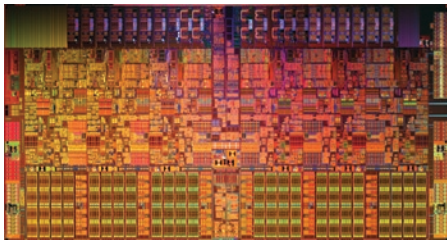


PRODUCT BRIEF

Intel® Core™ i7 Processor Extreme Edition
for Desktop



Intel® Core™ i7-980X Processor Extreme Edition



Product Overview

Outperform, overwhelm, and overthrow your competition with the new Intel® Core™ i7 processor Extreme Edition, featuring Intel's first 32nm processor with 12 computing threads. The Intel Core i7 processor Extreme Edition delivers incredible breakthroughs in gaming and multitasking performance.

Wield the Ultimate Gaming Weapon

The Intel Core i7 processor Extreme Edition can not only take on today's most complex and immersive games, but it's also powerful enough to handle tomorrow's gaming advances. Experience smoother and more realistic gaming made possible by distributing AI, physics, and rendering across six cores and 12 threads, bringing 3D gaming to life for the ultimate desktop experience.

Breakaway Performance for Digital Media Creation

Take digital content creation to a whole new level and enjoy faster video transcoding and image rendering, plus incredible performance for photo retouching and photo editing. Whether you're a serious multitasker or a multimedia enthusiast, performance matters. So why limit yourself? Unlock your full potential with Intel's top-of-the-line family of processors and experience total creative freedom that's limited only by your imagination.

Gear Up for Extreme Processing Power

You'll get maximum PC power for whatever you do, thanks to the combination of intelligent features such as Intel® Turbo Boost Technology¹ and Intel® Hyper-Threading Technology,² which together activate full

processing power exactly where and when you need it. The Intel Core i7 processor Extreme Edition, combined with Intel® X58 Express chipset-based motherboards, offers unprecedented bandwidth and memory performance, including an integrated memory controller with three channels of DDR3, two DIMMs per channel, and up to 25.6 GB/s bandwidth at 1066 MHz.

Intel® Core™ i7 Processor Extreme Edition

For more information on the Intel® Core™ i7 processor Extreme Edition, visit www.intel.com/products/processor/corei7ee/index.htm

Intel® Core™ i7 Processor Comparison

	INTEL® CORE™ i7-980X PROCESSOR EXTREME EDITION	INTEL® CORE™ i7-975 PROCESSOR EXTREME EDITION	INTEL® CORE™ i7-870 PROCESSOR
Number of Processor Cores	6	4	4
Number of Simultaneous Threads with Intel® Hyper-Threading Technology ²	12	8	8
Intel® Smart Cache	12 MB	8 MB	8 MB
Processor Base Frequency	3.33 GHz	3.33 GHz	2.93 GHz
Integrated Memory Controller	Yes	Yes	Yes
Intel® Turbo Boost Technology ¹	Yes	Yes	Yes
Number of DDR3 Memory Channels	3	3	2
Intel® Express Chipset	X58	X58	P55
Overclocking Enabled ³	Yes	Yes	No

Features and Benefits of the Intel® Core™ i7 Processor Extreme Edition

Feature	Benefit
Six-Core Processing	Provides six complete execution cores in a single processor package, delivering 12 computing threads to help operating systems and applications deliver additional performance, so users can experience better multitasking and multi-threaded performance across many types of applications and workloads.
Intel® Hyper-Threading Technology ²	Delivers two processing threads per physical core for a total of 12 threads for massive computational throughput, allowing highly threaded applications to get more work done faster.
Intel® Turbo Boost Technology ¹	Dynamically increases the processor's frequency as needed by taking advantage of thermal and power headroom when operating below specified limits. Get more performance automatically, when you need it the most.
Intel® Smart Cache	This large last-level cache enables dynamic and efficient allocation of shared cache to all six cores to match the needs of various applications for ultra-efficient data storage and manipulation.
Intel® QuickPath Interconnect	Intel's latest system interconnect design increases bandwidth and lowers latency, while achieving data transfer speeds as high as 25.6 GB/s.
Integrated Memory Controller	An integrated memory controller with three channels of DDR3 1066 MHz offers memory performance up to 25.6 GB/s. Combined with the processor's efficient prefetching algorithms, this memory controller's lower latency and higher memory bandwidth delivers amazing performance for data-intensive applications.
Intel® HD Boost	Includes the full SSE4 instruction set, significantly improving a broad range of multimedia and compute-intensive applications. The 128-bit SSE instructions are issued at a throughput rate of one per clock cycle, allowing a new level of processing efficiency with SSE4-optimized applications.
AES-NI Encryption / Decryption Acceleration	Provides 6 new processor instructions that help to improve performance for AES encryption and decryption algorithms.



Outperform, overwhelm, and overthrow your competition with the new Intel® Core™ i7 processor Extreme Edition.

¹ Intel® Turbo Boost Technology requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

² Intel® Hyper-Threading Technology requires a computer system with a processor supporting HT Technology and an HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. For more information including details on which processors support HT Technology, see www.intel.com/info/hyperthreading.

³ 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.

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* Other names and brands may be claimed as the property of others.

