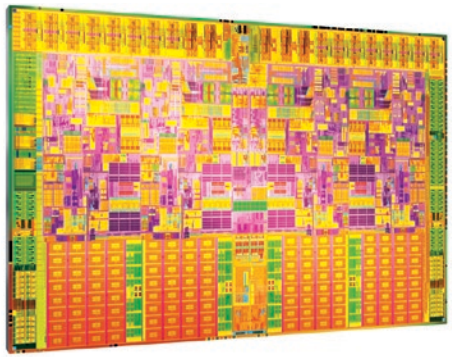
Intel® Core™ i7 Desktop Processor



Product Overview

The leading-edge Intel® Core™ i7 processor delivers unmatched technology for intelligent performance on the most demanding tasks, such as creating digital video and playing intense games.

Intel's Leading-Edge Desktop PC Processors[1]

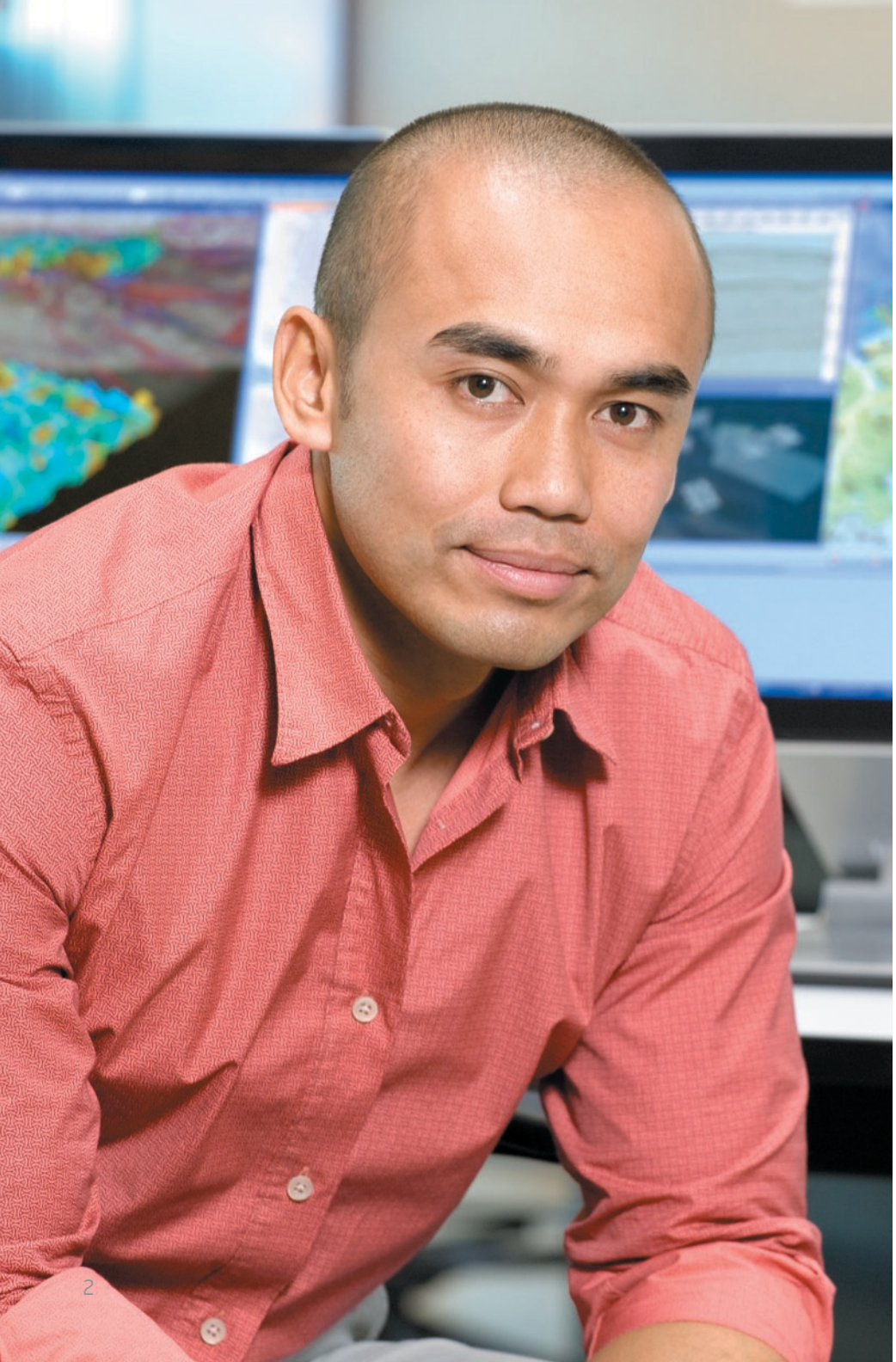
Hardcore multitaskers rejoice. The Intel Core i7 processor family delivers maximum processing performance in response to peak demands. You'll fly through everything you do on your PC—from playing intense games to creating and editing digital video, music, and photos. With Intel® Turbo Boost Technology[2] and Intel® Hyper-Threading Technology,[3] you get intelligent performance when you need it most.

Intel's Best-in-Class Desktop Platform Performance[1]

The Intel® Core™ i7-900 processor series, in combination with the Intel® X58 Express Chipset, offers best-in-class platform performance with three-channel DDR3 memory support and full 2 x16 PCI Express* 2.0 graphics for the most demanding, compute-intensive environments.

Balanced Desktop Platform Performance

Desktop platform performance for the mainstream customer just got better. By combining the leading-edge Intel® Core™ i7-800 desktop processor series with motherboards built around the new Intel® P55 Express Chipset, it's now possible to achieve an unparalleled balance of value and performance.



Intel® Core™ i7 Desktop Processor

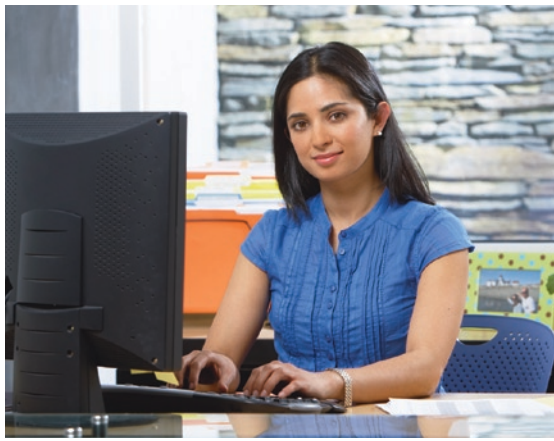
Features and Benefits of the Intel® Core™ i7 Processor Family

Feature	Benefit
Quad-Core Processing	Provides four complete execution cores in a single processor package. Four dedicated physical cores help operating systems and applications deliver additional performance, so users can experience better multitasking and multithreaded performance across many types of applications and workloads.
Intel® Hyper-Threading Technology (Intel® HT Technology)[3]	Delivers two processing threads per physical core for a total of eight threads for massive computational throughput. With Intel® HT Technology, highly threaded applications can get more work done in parallel, completing tasks sooner. With more threads available to the operating system, multitasking becomes even easier. This amazing processor can handle multiple applications working simultaneously, allowing you to do more with less wait time.
Intel® Turbo Boost Technology[2]	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.
8 MB Intel® Smart Cache	This large last-level cache enables dynamic and efficient allocation of shared cache to all four cores to match the needs of various applications for ultra-efficient data storage and manipulation.
Integrated Memory Controller	An integrated memory controller offers stunning memory read/write performance through efficient prefetching algorithms, lower latency, and higher memory bandwidth making the Intel® Core™ i7 processor family ideal 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.
Intel® QuickPath Interconnect (Intel® QPI)	For the Intel® Core™ i7-900 processor series, Intel® QPI increases bandwidth and lowers latency, while achieving data transfer speeds as high as 25.6 GB/s.

Intel® Core™ i7 Desktop Processor
Processor Comparison

Intel® Core™ i7-900 Processor Series	INTEL® CORE™ i7-975 PROCESSOR EXTREME EDITION	INTEL® CORE™ i7-950 PROCESSOR	INTEL® CORE™ i7-920 PROCESSOR
Processor Frequency	3.33 GHz	3.06 GHz	2.66 GHz
Intel® Smart Cache	8 MB	8 MB	8 MB
Intel® Turbo Boost Technology[2]	Single-core performance up to 3.6 GHz	Single-core performance up to 3.33 GHz	Single-core performance up to 2.93 GHz
Number of Simultaneous Threads	8 (with Intel® HT Technology)	8 (with Intel® HT Technology)	8 (with Intel® HT Technology)
Processor Integrated Memory Controller	Yes	Yes	Yes
Number of Memory Channels	3 (DDR3 1066 MHz)	3 (DDR3 1066 MHz)	3 (DDR3 1066 MHz)
Intel® Express Chipset	X58	X58	X58
Socket	LGA1366	LGA1366	LGA1366
Microsoft* Windows* 7 Ready	Yes	Yes	Yes

Intel® Core™ i7-800 Processor Series and Intel® Core™ i5-700 Processor Series	INTEL® CORE™ i7-870 PROCESSOR	INTEL® CORE™ i7-860 PROCESSOR	INTEL® CORE™ i5-750 PROCESSOR
Processor Frequency	2.93 GHz	2.8 GHz	2.66 GHz
Intel® Smart Cache	8 MB	8 MB	8 MB
Intel® Turbo Boost Technology[2]	Single-core performance up to 3.6 GHz	Single-core performance up to 3.46 GHz	Single-core performance up to 3.20 GHz
Number of Simultaneous Threads	8 (with Intel® HT Technology)	8 (with Intel® HT Technology)	4
Processor Integrated Memory Controller	Yes	Yes	Yes
Number of Memory Channels	2 (DDR3 1333 MHz)	2 (DDR3 1333 MHz)	2 (DDR3 1333 MHz)
Intel® Express Chipset	P55	P55	P55
Socket	LGA1156	LGA1156	LGA1156
Microsoft* Windows* 7 Ready	Yes	Yes	Yes



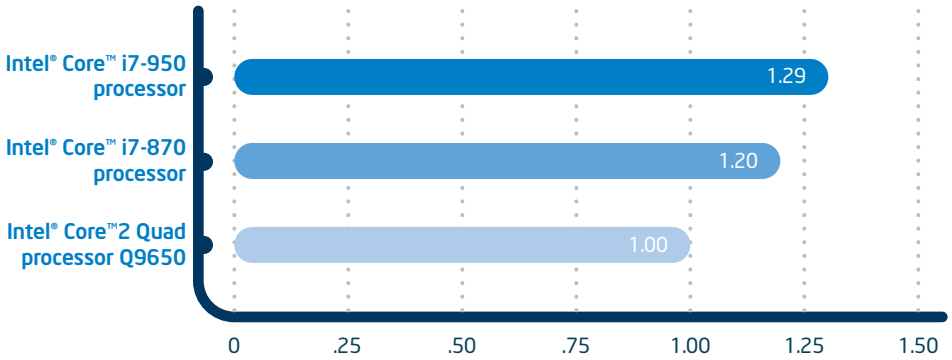
With faster, intelligent multi-core technology that dynamically accelerates performance to match your workload, the Intel® Core™ i7 processor delivers an incredible breakthrough in PC performance.

Intel® Core™ i7 Desktop Processor
Performance Comparison

For more information on the Intel® Core™ i7 processor, visit
www.intel.com/products/processor/corei7/index.htm

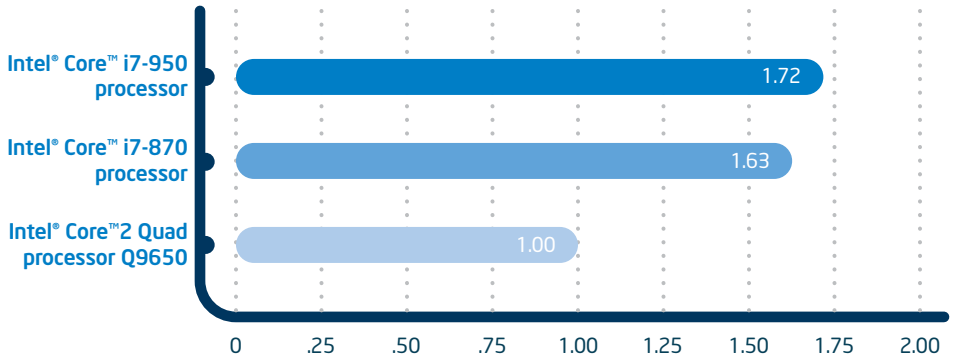
CINEBENCH* 10.0 — 3D RENDERING

Higher is Better



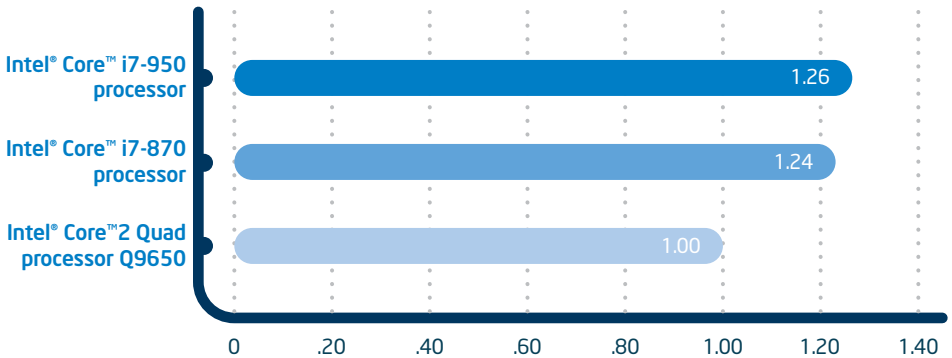
3DMARK* VANTAGE — GAME PHYSICS AND AI

Higher is Better



TMPGENC* XPRESS* 4.4 — HD VIDEO ENCODING

Higher is Better



Intel® Core™ i7-950 processor (8 MB Cache, 3.06 GHz, 4.8 GT/s Intel® QPI) Intel® Hyper-Threading Technology[3] enabled, Intel® Turbo Boost Technology[2] enabled on Intel® Desktop Board DX58SO, tri-channel SS Samsung* 3 GB (3 x 1 GB) DDR3 1066 7-7-7-20 with 1x GF 9600GT PCI Express* graphics, Seagate* 320 GB NCQ SATA2 (BIOS: 2786, INF: 9.1.0.1007, Graphics: NV180.48), Chassis: Antec* NSK6580B, OS: Windows* Vista* Ultimate 32-bit.

Intel® Core™ i7-870 processor (8 MB Cache, 2.93 GHz, 4C/8T, IMC, DDR3 1333) on Intel® Desktop Board DP55KG-400, dual-channel SS Crucial 2 GB (2 x 1 GB) DDR3 1333 9-9-9-24 1T with 1x GF 9600GT PCI Express* graphics, Seagate* 320 GB NCQ SATA2 (BIOS: 2429, INF: 9.1.1.1014, Graphics: NV180.48, IMON compliant with VRD 11.1 requirements), Chassis: Antec* NSK6580B, OS: Windows* Vista* Ultimate 32-bit.

Intel® Core™2 Quad processor Q9650 (12 MB Cache, 3 GHz, 1333 MHz FSB) on Intel® Desktop Board DQ45CB / DG45ID, dual-channel DS Micron* 2 GB (2 x 1 GB) DDR2 800 5-5-5-18 with Integrated Intel® GMA X4500HD onboard graphics subsystem, Seagate* 320 GB Barracuda* NCQ SATA, (BIOS: 0059, INF: 9.0.0.1007, Graphics: 15.9.9.1527), Chassis: Antec* NSK6580B, OS: Windows* Vista* Ultimate 32-bit.

[1] Based on SPECint*_rate_base2006 scores. Results have been estimated based on internal Intel analysis and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance. See www.intel.com/performance for additional information.

[2] 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.

[3] Intel® Hyper-Threading Technology requires a computer system with a processor supporting Intel® HT technology and Intel 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 Intel HT Technology, see www.intel.com/ info/hyperthreading.