PRODUCT BRIEF
2nd Generation Intel® Core™ Processor Family for Desktops

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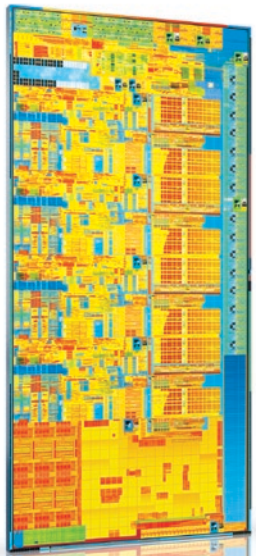

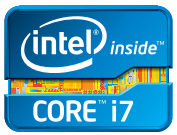

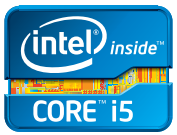

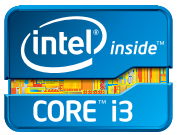

Product Overview

Selecting the right processor is key when purchasing or upgrading your business PCs. The processor must keep pace with new trends in e-commerce, complex applications, and security that are applicable to your business.

Meet your business needs with a processor from the 2nd gen Intel® Core™ processor family, which offers improved adaptive performance and built-in visual capabilities to bring more intelligent performance to your business PC.

Featured Technologies

Get more responsive multitasking with select processors in the 2nd gen Intel Core processor family, which feature Intel® Turbo Boost Technology[1] 2.0 and Intel® Hyper-Threading Technology[1], enabling required security applications and protocols to run efficiently in the background without compromising your productivity.

Information security is vital to business. Securing information and data requires complex encryption software, which slows PC performance. With Advanced Encryption Solution New Instructions (AES-NI) integrated into the processor, the encryption and decryption operation is accelerated, saving you time.

With the increase of video conferencing and social media, business communication has become more visually sophisticated. Intel® HD Graphics 2000, integrated into the 2nd gen Intel Core processors, allows PC hardware to stay in step with these new visual media needs. The need for a discrete graphics card is eliminated, reducing power consumption and system cost.

2nd gen Intel Core processors with Intel® vPro™ technology[2] can help reduce costs and increase efficiency by taking advantage of intelligent performance and unique hardware-assisted security and manageability features. Remote, automated manageability features make PC maintenance easier and keep costs low. The system can be remotely configured or diagnosed, and an infected PC can be isolated or repaired. An Intel vPro technology-based system minimizes disruptions to daily business operations.

These 2nd gen Intel Core processors are also power efficient, enabling more energy-efficient platforms which can meet ENERGY STAR*[3] and other global environmental requirements.

Intel's technologies and innovations can increase the longevity of the computer, protecting your investment and supporting long-term business growth.

Select the 2nd Gen Intel® Core™ Processor that is Best for Your Business

Intel® Core™ i7 Processor—Best-in-Class Performance

The Intel® Core™ i7 processor delivers best-in-class performance for the most demanding applications. This quad-core processor features Intel Turbo Boost Technology 2.0, 8-way multitasking capability, and additional L3 cache.

Intel® Core™ i5 Processor—The Next Level of Productivity

The Intel® Core™ i5 processor delivers the next level of productivity. With Intel Turbo Boost Technology 2.0, this quad-core processor with 4-way multitasking capability delivers extra speed whenever you need it as well as security features to help protect information and data.

Intel® Core™ i3 Processor—Affordable Business PC

The Intel® Core™ i3 processor provides the basis for an affordable business PC. This dual-core processor with 4-way multitasking capability has built-in performance headroom for software upgrades, providing an excellent return on investment.

2nd Generation Intel® Core™ Processor Family for Desktops

For more information on the 2nd Generation Intel® Core™ processor family for desktops, visit **www.intel.com**

2nd Generation Intel® Core™ Processor Family for Desktops Comparison

	INTEL® CORE™ i7 PROCESSOR	INTEL® CORE™ i5 PROCESSOR	INTEL® CORE™ i3 PROCESSOR
Number of Processor Cores / Threads	4 / 8	4 / 4	2 / 4
Intel® Turbo Boost Technology[1] 2.0	Yes	Yes	No
Intel® Hyper-Threading Technology[1]	Yes	No	Yes
Intel® Smart Cache	8 MB L3 shared	6 MB L3 shared	3 MB L3 shared
AES New Instructions (AES-NI)	Yes	Yes	No
Supports Intel® vPro™ Technology[2]	Yes	Yes	No
Intel® Stable Image Platform Program (Intel® SIPP)	Yes	Yes	No
Intel® Virtualization Technology (Intel® VT-x)[1]	Yes	Yes	Yes
Intel® Virtualization Technology for Directed I/O (Intel® VT-d)[1]	Yes	Yes	No
Intel® Trusted Execution Technology (Intel® TXT)[1]	Yes	Yes	No
Recommended Intel® 6 Series Express Chipset	Q67	Q65 / Q67	H61 / B65

2nd Gen Intel® Core™ processors support Intel® HD Graphics 2000, two-channel DDR3 memory at 1333 MHz, and are in the LGA1155 socket.

Features and Benefits of the 2nd Generation Intel® Core™ Processor Family for Desktops

Feature	Benefit
Intel® Turbo Boost Technology[1] 2.0	Dynamically increases the processor's frequency as needed by taking advantage of thermal and power headroom when operating below specified limits.
Intel® Hyper-Threading Technology[1]	Delivers two processing threads per physical core. Highly threaded applications can get more work done in parallel, completing tasks sooner.
Integrated Memory Controller	An integrated memory controller offers stunning memory read/write performance through efficient prefetching algorithms, lower latency, and higher memory bandwidth.
Intel® Smart Cache	The shared cache is dynamically allocated to each processor core, based on workload. Significantly reduces latency, improving performance.
Intel® Virtualization Technology and Intel® Virtualization Technology for Directed I/O[1]	Allows one hardware platform to function as multiple "virtual" platforms. Offers improved manageability by limiting downtime and maintaining productivity by isolating computing activities into separate partitions.
Advanced Encryption Standard New Instructions	New AES instructions add hardware acceleration to AES algorithms and speeds up the execution of AES applications.
Intel® Advanced Vector Extensions	A set of new instructions to improve software performance for floating point-intensive applications such as audio processing and audio codecs, image and video editing applications, financial services analysis and modeling software, and manufacturing and engineering software.
Intel® Trusted Execution Technology[1]	Highly versatile set of hardware extensions for Intel® processors and chipsets which, with appropriate software, enhance platform security capabilities.
Intel® Stable Image Platform Program	Standardizing on platforms based on Intel® Stable Image Platform Program (Intel® SIPP) components can help reduce the number of client configurations supporting a standardized software image for at least 12 months, resulting in lower hardware support costs and improved IT responsiveness.
Thermal Solution for Boxed Processors	Includes a four-pin connector for fan speed control to help minimize the acoustic noise levels generated from running the fan at higher speeds for thermal performance.[4]

[1] Intel® Turbo Boost Technology, Intel® Hyper-Threading Technology, Intel® Virtualization Technology, and Intel® Trusted Execution Technology require a computer system with a processor, chipset, BIOS, enabling software and/or operating system, device drivers, and applications designed for these features. Performance will vary depending on your configuration. Contact your vendor for more information.

[2] Not all units of these processors support Intel® vPro™ Technology. Visit the Processor Spec Finder at http://processorfinder.intel.com or contact your Intel representative for more information.

[3] ENERGY STAR* denotes a system level energy specification, defined by the U.S. Environmental Protection Agency, that relies upon all of the system's components, including processor, chipset, power supply, HDD, graphics controller, and memory to meet the specification. For more information, visit www.energystar.gov/

[4] The acoustic benefits of the 4-pin header are reliant on a properly designed motherboard. Contact your board manufacturer for compatibility.

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