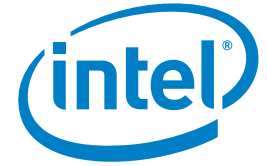
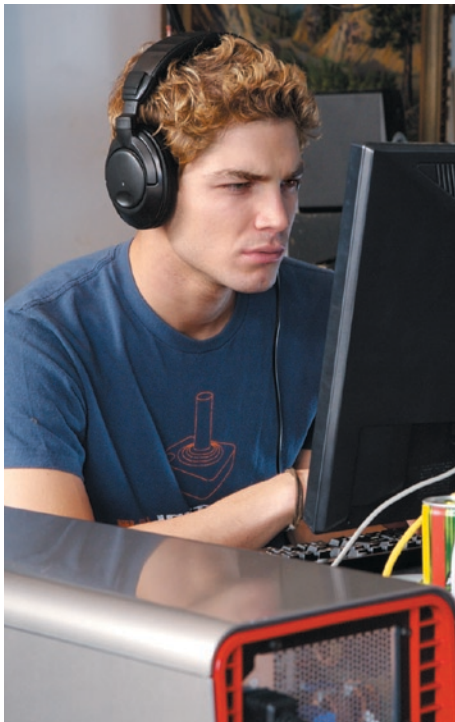


PRODUCT BRIEF

Unlocked Processors with Overclocking Enabled¹



2011 Intel® Unlocked Processors Product Brief



Achieve maximum performance with a gaming experience so amazing, you just might lose yourself in the action.

Product Overview

If you're looking for more flexible performance, the Intel® Core™ i7-2600K and Intel® Core™ i5-2500K processors are the way to go. With faster, smarter technology that dynamically applies processing power when it's needed most, the 2nd gen Intel Core i7-2600K and Intel Core i5-2500K processors give you maximum speed to complete your everyday tasks and also provide you with the power you desire to run heavy-duty applications. Of course, if you want the best of the best, the Intel® Core™ i7-990X is your choice. With up to 12 threads working for you, there is no better way to get ultimate performance.

Shatter Your Performance Limits¹

With advanced tools to help you optimize your PC, these processors are designed to help you get the most out of your overclocking experience. The processors' unlocked multipliers allow you to easily increase the core and memory frequencies independently from the rest of the system, improving your ability to reach high core and memory clock speeds that go beyond the processor specifications.

And if that's not enough, we've got even more for you. You can also increase the

current wattage limits of the processor, pushing the limits of your machine even further. Hit a power wall? With these unique processors, you can go beyond those limits. This means more power to meet the demands of running at higher frequencies. Combined with a robust motherboard, high-performance DDR3 memory based on Intel® Extreme Memory Profiles (Intel® XMP), and a rock-solid cooling solution, you've got the ultimate overclocking flexibility and options for the avid performance enthusiast.

Wanna Game?

Whether you're a hard-core gamer or into more moderate entertainment, the unlocked Intel® Core™ i7 and Intel® Core™ i5 processors can offer you more performance to game away. The unlocked Intel Core i7-2600K processor distributes performance across eight software threads, allowing you to take down the bad guys while your PC handles all the visual details with excellence. If you prefer moderate gaming, the Intel Core i5-2500K processor delivers higher speeds to minimize loading screens across all casual and mainstream games. If you want to build the ultimate gamer machine, the Intel Core i7-990X is the best option for you. With

12 software threads, 12 MB of cache, and discrete graphics, this processor offers everything you need to play a game the way it was meant to be played.

Into Multimedia?

You don't have to be a gamer to take advantage of the benefits of the Intel Core i7-2600K and Intel Core i5-2500K processors. These processors work beautifully for media professionals and mainstream to higher end content creation and consumption.

A Stunning Visual Experience

For those users who choose not to utilize the overclocking features but want to take advantage of Intel's built-in visual features², the Intel Core i7-2600K and Intel Core i5-2500K processors deliver everything you need to enjoy a stunning and seamless graphics experience. Intel® Quick Sync Video allows the conversion of media from one device to another at incredible speed, and Intel® Clear Video HD Technology provides visual quality enhancements for exceptionally vivid HD and Blu-ray* playback. In addition, the Intel Core i7-2600K and Intel Core i5-2500K processors come with Intel® HD Graphics 3000, Intel's best graphics solution for playing mainstream 3-D games.

Intel® Core™ i7 and Intel® Core™ i5 Processors with Overclocking Enabled¹

For more information, visit
www.intel.com/go/unleashed

Intel® Core™ i7 and Intel® Core™ i5 Processors Comparison

	INTEL® CORE™ i7-990X PROCESSOR EXTREME EDITION	INTEL® CORE™ i7-2600K PROCESSOR	INTEL® CORE™ i5-2500K PROCESSOR
Number of Simultaneous Threads	12	8	4
Intel® Smart Cache	12 MB	8 MB	6 MB
Processor Frequency	3.46 GHz	3.40 GHz	3.30 GHz
Intel® Turbo Boost Technology ³	3.73 GHz	3.80 GHz	3.70 GHz
Integrated Memory Controller	Yes	Yes	Yes
Number of DDR3 Memory Channels	3	2	2
Unlocked Core, DDR3, and Power ⁴	Yes	Yes	Yes
Recommended Intel® Express Chipset	X58	P67	P67
Built-in Visuals ²	Discrete	Yes	Yes

Features and Benefits of the Intel® Core™ i7 and Intel® Core™ i5 Processors with Overclocking Enabled¹

Feature	Benefit
Multi-Core Processor	Provides independent execution cores in one processor package. Dedicated processing cores 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.
Unlocked Core Multiplier ¹	Unlocked core multipliers provide easy overclocking of the processor and memory frequency, enabling performance beyond the processor's original specifications. Unlocked processors deliver the most flexible overclocking experience.
Intel® Turbo Boost Technology ³ 2.0	Delivers an even greater burst of processor speed automatically when your PC needs extra performance.
Intel® Hyper-Threading Technology ⁵	More threads and smart multitasking equals better performance, faster response time, and less waiting. (Available only on Intel® Core™ i7 processors.)
Intel® Smart Cache	This large last-level cache enables dynamic and efficient allocation of shared cache to all cores to match the needs of various applications for ultra-efficient data storage and manipulation.
Integrated Memory Controller	An integrated memory controller offers amazing memory performance for data-intensive workloads. Combined with the processor's very efficient prefetching algorithms, this memory controller's lower latency and higher memory bandwidth delivers amazing performance for data-intensive applications.
AES-NI Encryption / Decryption Acceleration	Provides six new processor instructions that help to improve performance for AES encryption and decryption algorithms.
Intel® Advanced Vector Extensions (Intel® AVX)	Improves floating point and vector computation for media and high-performance computing applications
Built-in Visuals ²	Intel® Quick Sync Video —Delivers fast conversion of video for portable media players, online sharing, and video editing and authoring. Intel® Clear Video HD Technology —Visual quality and color fidelity enhancements for HD playback and immersive Web browsing. Intel® InTRU™ 3D —Stereoscopic 3-D Blu-ray* playback in full 1080p resolution over HDMI* 1.4 and premium audio. Intel® HD Graphics 3000 —Enhanced 3-D performance for immersive mainstream and casual gaming.

¹ 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 warrant, the operation of the processor beyond its specifications.

² Built-in visual features, including processor graphics and overclocking, require Intel® 6 Series Chipsets with display enabled (H67, Q67, Q65, B65, and H61). When a discrete graphics solution is populated in the PCI Express* connector, all built-in visuals are turned off except Intel® Advanced Vector Extensions (Intel® AVX) which is available on all Intel 6 Series Chipset configurations.

³ 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.

⁴ With unlocked Intel® Core™ processors, users can increase core and memory ratios, as well as the TDP (watts) and current (amps) limits beyond their default tested values.

⁵ 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.

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.

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