



# Intel® Core™ i7 Processor

## Product Overview

The Intel® Core™ i7 Processor is a revolution in multi-core performance. With faster, intelligent microarchitecture that applies processing power dynamically when needed most, the new Intel® Core™ i7 processors deliver an incredible breakthrough in PC performance. Whether you're casually checking e-mail and surfing the Web or multi-tasking compute-intensive applications such as HD video encoding, you will experience maximum PC performance. They're the best desktop processors on the planet.<sup>1</sup>

# FEATURES AND BENEFITS OF THE INTEL® CORE™ I7 PROCESSOR

- **Intel® Hyper-Threading Technology<sup>3</sup>:** Two processing threads per physical core for a total of eight threads provide massive computational throughput.
- **Intel® Turbo Boost Technology<sup>2</sup>:** Dynamically increases the processor's frequency for more performance automatically, when you need it the most.
- **8 MB Intel® Smart Cache Integrated Memory Controller:** Large last-level cache for ultra-efficient data storage and manipulation.
- **Intel® QuickPath Interconnect:** Interconnect design increases bandwidth and lowers latency and data transfer speeds.
- **Integrated Memory Controller:** Lower latency and higher memory bandwidth deliver amazing performance for data-intensive applications.
- **Intel® HD Boost:** Allows a new level of processing efficiency with SSE4-optimized application.
- **Digital Thermal Sensor (DTS):** More efficient processor and platform thermal control for significantly lower noise emissions.
- **Intel® Wide Dynamic Execution:** Improves execution speed and efficiency, delivering more instructions per clock cycle.
- **Intel® Smart Memory Access:** Improves system performance and reduces the effective latency of memory accesses.

Everyday  
Performance

Gaming  
and HD

Best Desktop Processor  
on the Planet<sup>1</sup>

Extreme  
Gaming



System Performance and Multitasking Capabilities



Power Efficiency and Energy Savings



Gaming Performance



Multimedia Performance for HD Video, Photos, Music and Gaming



<sup>1</sup> 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](http://www.intel.com/performance) for additional information.

<sup>2</sup> 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](http://www.intel.com/technology/turboboost) for more information.

<sup>3</sup> 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](http://www.intel.com/info/hyperthreading). Copyright © 2008 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Core, and Core Inside are trademarks of Intel Corporation in the U.S. and other countries.

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