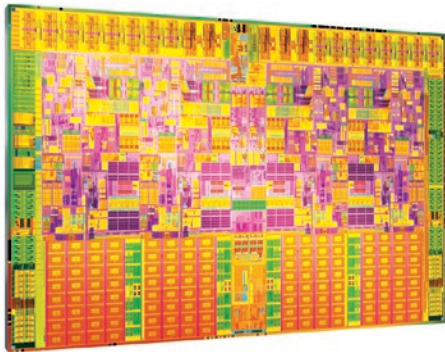


# Intel® Core™ i5 Desktop Processor



## Product Overview

Get a major boost in PC throughput with the intelligent performance of the Intel® Core™ i5 processor, which automatically allocates processing power where it's needed most.<sup>1</sup> You'll move faster when creating HD video, composing digital music, editing photos, and playing the coolest PC games. With the new Intel Core i5 processor, you can multitask with ease and be more productive than ever.<sup>2</sup>

## Benefits

### Performance

- Maximize speed for demanding applications with Intel® Turbo Boost Technology,<sup>1</sup> which accelerates processor clock speed up to 20 percent<sup>2</sup> to match your workload.
- Multitask up to 28 percent faster, so you can do more things at once.<sup>3</sup>
- Enjoy incredibly fast computing with fewer frustrating lags.

### Digital Media

- Unleash an amazing digital media experience with up to 37 percent faster conversion of video for Web upload,<sup>4</sup> up to 15 percent faster photo editing,<sup>5</sup> and up to 17 percent faster conversion of CD music tracks to MP3.<sup>6</sup>

### Gaming

- Get a 32 percent improvement in artificial intelligence for game characters.<sup>7</sup>

## Features and Benefits of the Intel® Core™ i5 Processor

Feature	Benefit
Quad-Core Processing	Provides four complete execution cores in a single processor package. Four dedicated physical threads help operating systems and applications deliver additional performance, so users can experience better multi-tasking and multithreaded performance across many types of applications and workloads.
Intel® Turbo Boost Technology <sup>1</sup>	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™ i5 processor 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® Core™ i5 Desktop Processor Processor Comparison

For more information on the Intel® Core™ i5 processor, visit  
[www.intel.com/products/processor/corei5/index.htm](http://www.intel.com/products/processor/corei5/index.htm)

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 <sup>1</sup>	Single-core performance up to 3.60 GHz	Single-core performance up to 3.46 GHz	Single-core performance up to 3.20 GHz
Number of Simultaneous Threads	8 (with Intel® Hyper Threading Technology <sup>8</sup> )	8 (with Intel® Hyper Threading Technology <sup>8</sup> )	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



Get a major boost in PC power with the intelligent performance of the Intel® Core™ i5 processor.

<sup>1</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>2</sup> Intel® Core™ i5-750 processor with a 2.66 GHz base frequency reaches a maximum turbo frequency of 3.20 GHz. See [www.intel.com/technology/turboboost/](http://www.intel.com/technology/turboboost/) for more information.

<sup>3</sup> PCMark\* Vantage is a collection of various single- and multithreaded processor, graphics, and HDD test sets with the focus on Windows\* Vista\* application tests. Tests have been selected to represent a subset of the individual Windows Vista consumer scenarios.

<sup>4</sup> As measured based on VirtualDub\* 1.7.2 with DivX\* 6.7 codec comparing Intel® Core™ i5-750 processor-based laptops to previous generation Intel® Core™2 Quad processor Q9400. Actual performance may vary. See [www.intel.com/go/consumerbenchmarks](http://www.intel.com/go/consumerbenchmarks) for more information.

<sup>5</sup> As measured based on Adobe\* Photoshop\* Album Starter where the workload consists of running auto smart-fix on fifty 6 MP photos that total about 118 MB in size.

<sup>6</sup> Apple\* iTunes\* 7.4.3 is a digital media application that can be used to manage digital music such as converting one digital audio format to another. In this case, iTunes is used to convert 61 minutes, 24 seconds of music from a WAV to an MP3 format with a bit rate of 160 Kb/s for listening on your iPod\*.

<sup>7</sup> 3DMark\* Vantage processor test covers the two most common processor-side tasks: physics simulation and artificial intelligence. Measurements compared the Intel® Core™ i5-750 processor and the Intel® Core™2 Quad processor Q9400.

<sup>8</sup> 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](http://www.intel.com/info/hyperthreading).

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