

Intel Introduces Core i7, Xeon 3400 and First i5 Processors

Xeon 3400 line will make up the high-end desktop and low-end server markets

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Intel Corporation introduced several high performance desktop and server processors, bringing the next level of integration and intelligence to computers. The new Intel Core™ i5 processor family, two new Intel Core™ i7 processors and the Intel® Xeon processor 3400 series bring Intel's latest Nehalem microarchitecture to mainstream desktop and entry server markets.

New Intel® Core™ Processors for Consumers

Formerly codenamed "Lynnfield," these new chips are based on Intel's award-winning Nehalem microarchitecture and are designed for consumers who need top-notch performance for digital media, productivity, gaming and other demanding applications. These processors, along with the new Intel P55 express chipset, are available now.

All processors are lead- and halogen-free¹ and feature Intel® exclusive Turbo Boost Technology. The top-of-the-line Core i7 processors also support Intel® Hyper-Threading Technology. Combined, these features give computer users absolute "intelligent" performance when necessary and optimum power-efficiency when the computer is lightly loaded.

Computers Just Got Smaller

The new chipset brings the most revolutionary design changes since the invention of the PCI bus in the early 1990s and sets the stage for Intel's forthcoming 2010 compute platform. The Intel® P55 Express Chipset will be the baseline building block component for motherboards worldwide, delivering great new levels of performance and scalability for everyone from the retail buyer to the technically savvy do-it-yourselfer.

The new Core i7 and i5 processors are the first Intel processors to integrate both a 16-lane PCI Express 2 graphics port and two-channel memory controller, enabling all input/output and manageability functions to be handled by the single-chip Intel P55 Express Chipset. Previous Intel chipsets required two separate chips. A new Direct Media Interface (DMI) connects between the processor and chipset.

The chipset supports 8 PCI Express 2.0 x1 Ports (2.5GT/s) for flexible device support. Dual graphics cards are supported in a "2x8" configuration. The chipset also supports 6 SATA 3 Gb/s Ports with Intel® Matrix Storage Technology providing RAID levels 0/1/5/10. Up to 14 USB 2.0 Ports can be supported with the chipset's integrated USB 2.0 Rate Matching Hub, along with Intel® High Definition Audio for premium digital sound. The new processors are the first to be supported by the new Land Grid Array (LGA) 1156 package and socket technology.

Better Entry Servers

Small businesses requiring 24/7 operation and educators now have more reasons than ever to buy a purpose-built server with Intel's new Xeon processors and Intel® 3400 and 3420 chipsets. These new products improve small business productivity by running email, file, print and dynamic Web serving tasks more efficiently. They also improve education by enabling dependable classroom collaboration and making school administrative services more productive.

Servers based on Xeon 3400 processors provide more dependability over desktop systems through

differentiated features such as Error Correcting Code memory and RAID 0/1/5/10 for server operating systems. They are designed to help small businesses grow by enabling up to 64 percent more sale transactions and up to 56 percent faster business response time. This improvement is enabled with Intel's Nehalem microarchitecture and a 4x improvement in memory capacity (32 GB).

Intel® Turbo Boost Technology and Intel® Hyper-Threading Technology enable these servers to automatically adapt their performance to unique business needs. The processors launched today also include the Intel® Xeon® L3426, a low-power variant that delivers up to 188 percent improvement in energy efficiency per dollar than the previous-generation Intel® Xeon® X3380, and enables innovative server form factors for space and thermally constrained environments.

More Information at: www.intel.com