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Intel released its first six core processors  
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## [Intel Intros the Six-Core 'Dunnington' Xeon 7400](#)

*The new processor series is designed to deliver leveraged performance for the high-end server segment*

Intel officially announced on Monday the introduction of seven 45 nanometer Intel Xeon Processor 7400 Series products, also known as the six-core 'Dunnington' chips. The new microprocessors are designed for the high-end server segment and are capable of bringing new performance levels to virtualization courtesy of their six processing cores per chip and 16MB of shared cache memory. Applications developed for virtualized environments, including databases, business intelligence, enterprise resource planning and server consolidation, can benefit from performance increases of up to 50 percent in some cases.

The 'Dunnington' processor is the last Penryn chip to be released by the giant manufacturer. The Core i7 processors, also known as the Nehalem architecture, will be launched in the fourth quarter and will follow the Penryn line. The Xeon 7400 is also the first Intel chip to feature a monolithic design. All current processors with more than two cores have been designed by the company to feature two separate pieces of silicon, or die, inside one chip package.

Up to 16 processors of this kind can be packed up on a single platform, which means that vendors can build servers with up to 96 processing cores inside for leveraged scalability and extended computing threads, also delivering unparalleled reliability for enterprise data centers. The Xeon 7400 processor series is compatible with the company's existing Xeon 7300 series platforms as well as with the 7300 chipset which features up to 256GB memory capacity. IT departments can easily deploy the new processor into a stable platform infrastructure.

"The arrival of these processors extends Intel's lead in the high-end server segment," said Tom Kilroy, Intel vice president and general manager of the Digital Enterprise Group. "This new processor series helps IT manage increasingly complex enterprise server environments, providing a great opportunity to boost the scalable performance of multi-threaded applications within a stable platform infrastructure. With new features such as additional cores, large shared caches and advanced virtualization technologies, the Xeon 7400 series delivers record-breaking performance that will lead enterprises into the next wave of virtualization deployments."

The frequencies offered by the new chips rise to 2.66 GHz, while the power level is reduced to 50 watts. There is also a six-core x86 compatible 65 watt chip, meaning that each core features less than 11 watts. The platforms can be used in rack, tower or dense blade form factors. More than 50 manufacturers are expected to announce Intel Xeon 7400 processor-based servers, including four-socket rack servers from Dell, Fujitsu, Fujitsu-Siemens, Hitachi, HP, IBM, NEC, Sun, Supermicro and Unisys, as well as four-socket blade servers from Egenera, HP, Sun and NEC.

IBM, NEC and Unisys are expected to announce up to 16-sockets servers. Many software vendors, including Citrix, IBM, Microsoft, Oracle, Red Hat, SAP and VMware, have also showed interest in supporting Intel Xeon 7400 based platforms with new solutions to enable virtualization and scalable performance for the high-end enterprise.

The prices for the Xeon 7000 Sequence processors range from \$856 to \$2,729 for 1,000 unit quantities.