

Intel launches quad-core products for high end servers

Intel has unveiled quad-core processors specifically designed for multi-processor (MP) power servers running applications requiring performance, reliability and scalability.

The company says such applications are typically run in virtualised environments for server consolidation and database uses, enterprise resource planning and business intelligence.

The six new Quad-Core Xeon 7300 series processors can deliver more than twice the performance and more than three times the performance per watt over the company's previous generation dual-core products. They complete the company's transition to its Core microarchitecture in less than 15 months.

Customers should be able to achieve significantly lower their total cost of ownership with this platform, due to its energy-efficient performance, coupled with enhanced virtualisation capabilities.

The 7300 series includes frequencies of up to 2.93GHz at 130W, several 80-watt processors and a 50-watt version optimised for four socket blades and high-density rack form factors with a frequency of 1.86GHz. The Intel 7300 chipset with Data Traffic Optimizations provides a balanced platform design with several new technologies that enhance data movement between the processors, memory and I/O connections.

By delivering the benefits of the Intel Core Microarchitecture with quad-core performance and Intel Virtualization Technology to these high-end servers, Intel is providing customers with a platform for virtualisation and server consolidation.

In addition to twice the cores, the 7300 series and Intel 7300 chipset offer up to four times the memory capacity of Intel's previous MP platforms, enabling very large consolidation ratios that can reduce space, power and operation costs. With the introduction of the Xeon 7300, users will now be able to pool all of their Intel Core microarchitecture based server resources, whether they are single-, dual- or multi-processor based, into a dynamic virtual server infrastructure that allows live virtual machine migration that can improve usage models like failover, load balancing, disaster recovery or server maintenance.

The Quad-Core Intel Xeon Processor 7300 Series-based servers were capable of delivering up to 167 percent performance improvement compared to the previous generation. This result was achieved with Virtual Iron 4.0 Software running the vConsolidate benchmark.

A simultaneous release of a 50-watt processor, or 12.5-watt per core, will drive the production of energy-efficient ultra-dense deployments such as four-socket blade servers and dense rack form factors. Intel is also improving business productivity by offering configurations with large memory footprints and up to 32-way scalability.

Starting today, servers based on the Xeon 7300 series processors are expected to be announced by more than 50 system manufacturers, including Dell, Egenera, Fujitsu, Fujitsu-Siemens, Hitachi, HP, IBM, NEC, Sun, Supermicro and Unisys. For channel customers looking for complete platforms based on these new processors, Intel offers the Intel S7000FC4UR server platform. The platform delivers strong, scalable performance, expansive capacity and proven enterprise-class reliability for virtualisation and consolidation.