Intel Ships Multi-Core Server Platforms

October 10 2005

Intel Corporation today announced the availability of its first dual-core, hyper-threaded Intel Xeon processor for dual processor servers. The new processor helps to improve the performance and response time of multi-threaded server applications.

"The availability of our first dual-core Intel Xeon processor server platforms accelerates the delivery of Intel's aggressive multi-core server roadmap, giving CIOs and IT managers innovative new technologies and capabilities to help grow and transform their business," said Kirk Skaugen, general manager of Intel's Server Platforms Group.

The new dual-core Intel Xeon processors are expected to help improve the performance of today's dual processor, 64-bit servers by up to 50 percent. Early next year, Intel plans to deliver a new server platform, codenamed "Bensley," consisting of a dual-core Intel Xeon processor, codenamed "Dempsey," a chipset, codenamed "Blackford," and integrated technologies to help improve manageability, IT productivity, and performance of servers in the data center.

Premium server platforms based on the new dual-core Intel Xeon processor are available today. The forthcoming Dual-Core Intel Xeon processor 7000 sequence for multi-processor servers, codenamed "Paxville," is expected to be available in the next 60 days. Over the next few months, servers and workstations based on both platforms are expected to be available worldwide from system manufacturers including ASUSTek, Dell, Egenera, Fujitsu Siemens, Gateway, HP, HCL Infosystems Ltd, IBM, Kraftway, Lang chao, Lenovo, Maxdata,

NEC, Samsung, Supermicro, Unisys and Wipro Infotech.

In addition to delivering multi-core processors, Intel will integrate a host of technologies into the silicon including hyper-threading technology, virtualization, security, and management technology. Dual-core processing, combined with Intel Hyper-Threading technology (HT), which allows one core to function as two "logical" cores, enables vast increases in the amount of work a processor can do in the same time as a processor with one core. With HT technology, one dual-core processor is able to simultaneously run four software threads. As more processors are added to a server, the number of supported threads increases to help deliver even better overall performance.

The new dual-core Intel Xeon processor runs at 2.80 GHz with an 800 MHz system bus and 2 MB of Level 2 cache per core and will use the Intel E7520 chipset. Since each core is equipped with its own cache, the amount of traffic on the system bus is reduced and each core has faster access to data. Other features include Intel EM64T, HT technology, Execute Disable Bit, and Demand Based Switching. Servers based on these processors are well suited for applications such as web server, infrastructure and email.

The Dual-Core Intel Xeon processor 7000 sequence for multi-processor servers is expected to run at speeds up to 3.0 GHz and includes a new chipset, the Intel® E8501, to support an 800 MHz system bus and support for the existing Intel® E8500 chipset. The platform will also include a dual, independent system bus, DDR2 Memory, PCI Express, memory RAID and I/O technologies. Initial preliminary testing resulted in up to 60 percent performance improvement over previous generations.*** These server platforms are targeted at mid-tier enterprise applications such as database, financial services and supply chain management.

Intel plans to deliver three more server platforms to round out its initial dual-core server and workstation portfolio. Later this year, Intel will ship dual-core Intel Itanium processors. In the first half of 2006, Intel is expected to deliver a volume dual-core Intel Xeon processor platform and ship dual-core Intel Xeon processors designed for systems requiring low power consumption. All of these systems are currently shipping as evaluation platforms to customers.

The Dual-Core Intel Xeon processor 2.80 GHz is available for $1,043 in 1,000-unit quantities. Pricing for the forthcoming dual-core server processors will be provided within the next 60 days.

Source: Intel