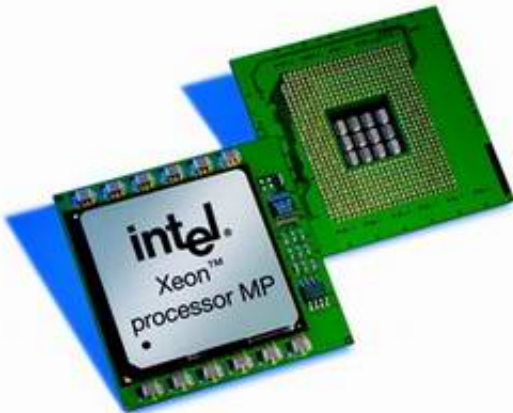


# Intel releases 'Truland' 64-Bit Server Platform with Xeon MP

March 30 2005

---



Intel today added to its portfolio of 64-bit offerings with a platform that increases application performance, improves server uptime and the ability to manage large sets of data, and can lower utility costs. Targeted at the mid-tier enterprise market segment, the platform consists of five new processors for servers that use four or more processors, and a new chipset.

The platform, codenamed "Truland," includes 64-bit Intel Xeon processors MP (multiprocessor) that span value to performance configurations, and the Intel E8500 chipset. Architected for dual-core technology, the new chipset prepares customers for the forthcoming transition to multiple cores and new innovations such as Intel

## Virtualization Technology.

There are two key advantages to platforms with 64-bit capabilities. First, a 64-bit processor transcends the 4GB memory limit encountered with 32-bit processors, and can directly access virtually unlimited physical memory.<sup>1</sup> This allows an application to store vast amounts of data in main memory, which is several orders of magnitude faster than today's fastest mass-storage subsystems. Large, memory-intensive applications that can take advantage of this extra capacity can see dramatic performance increases. Secondly, a 64-bit processor can manipulate data and execute instructions in chunks that are twice as large (64-bits versus 32-bits). This can be a key advantage for complex calculations that require a high-level of precision.

"This year, Intel celebrates 10 years in the multiprocessor server market segment that began with the Intel Pentium processor and today adds a sixth generation of the Intel Xeon processor MP," said Pat Gelsinger, senior vice president and general manager of Intel's Digital Enterprise Group. "Over the past 10 years, Intel has helped to fundamentally change the mid-tier server market segment from expensive, proprietary machines, to affordable, powerful and innovative servers based on standards. Intel has played a leading role in delivering leading edge performance and innovation at superior value."

For the first time in any MP server platform, Intel has combined Intel Extended Memory 64 Technology(\*1), PCI Express, DDR2-400 Memory and Demand Based Switching with Enhanced Intel SpeedStep Technology. Collectively, these features help to expand memory addressability, increase server performance and improve reliability.

The 64-bit Intel Xeon processor MP has price/performance advantages for mid-tier enterprise applications, such as supply chain management, enterprise resource management, customer relationship management,

and small and medium business databases. The platform complements Intel Xeon processors for dual-processor servers -- which target applications such as web and email servers -- and Intel Itanium processors that target proprietary and costly RISC-based servers that run applications such as large databases and high performance computing areas.

"Working with companies such as Intel, Microsoft is committed to enabling customers with the best price/performance software platform in the industry, leveraging innovations such as the new Intel Xeon processor MP and dual-core technology," said Andy Lees, corporate vice president of Server and Tools Marketing and Solutions, Microsoft Corp. "With Windows Server 2003 x64 Editions, Microsoft is delivering a single platform that will provide high-performance benefits for existing 32-bit applications, plus breakthrough performance and scalability for 64-bit applications. This is part of our work with Intel to deliver the largest portfolio of 64-bit offerings across a broad spectrum of hardware - from the desktop up to enterprise servers."

These new platforms are ready to take advantage of the Intel Software Network, which Intel also announced today. The Intel Software Network provides development tools, training and advice for corporate and independent software developers building applications for 64-bits, multi-core architectures and other future Intel platform technologies.

The 64-bit Intel Xeon processor MP platform delivers performance increases up to 70 percent across a range of enterprise and scientific applications over the previous generation Intel Xeon processor MP.<sup>(\*)</sup> The platform is available with up to 8 MB of Level 3 (L3) cache, a memory reservoir that helps to improve performance.

The Intel E8500 chipset has a 667 MHz dual, independent front side bus and is designed with 10.6 GBs of system bandwidth, more than three

times the bandwidth of the previous generation. These and other features provide the infrastructure to support forthcoming dual-core Intel Xeon processors MP including "Paxville," currently planned for the first quarter of 2006.

A wide range of 64-bit Intel Xeon processor MP systems ranging from 4-way blade, rack and pedestal servers up to systems with 32-processors inside are currently expected to be available from leading manufacturers worldwide including Dell, Egenera, Fujitsu, Fujitsu Siemens, HCL Infosystems, HP, Hitachi, IBM, Kraftway, Langchao, Lenovo, NEC, Maxdata, Samsung, Stratus, Supermicro, Toshiba, Unisys and Wipro. In addition, Intel currently plans to make available a rack and pedestal Intel Xeon processor MP server platform for systems builders and product integrators.

Current Intel Price List(\*3) ( in 1,000 unit quantities )

*Performance Processors*

64-bit Intel Xeon processor MP 3.33 GHz with 8 MB L3 cache \$3692

64-bit Intel Xeon processor MP 3.00 GHz with 8 MB L3 cache \$1980

64-bit Intel Xeon processor MP 2.83 GHz with 4 MB L3 cache \$1177

*Value Processors*

64-bit Intel Xeon processor MP 3.66 GHz with 1 MB L2 cache \$963

64-bit Intel Xeon processor MP 3.16 GHz with 1 MB L2 cache \$722

**Notes:**

\*1 64-bit Intel Xeon processors with Intel EM64T requires a computer system with a processor, chipset, BIOS, OS, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel EM64T-enabled OS, BIOS, device drivers and applications may not be available. Check with your vendor for more information.

\*2 Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing.

\*3 The stated prices are provided for informational purposes only and are subject to change without notice. They are not to be construed as a quote or an offer from Intel to sell at these prices.

Citation: Intel releases 'Truland' 64-Bit Server Platform with Xeon MP (2005, March 30)  
retrieved 19 April 2024 from  
<https://phys.org/news/2005-03-intel-truland-bit-server-platform.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.