Intel Unveils Seven New Itanium Processors

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Underscoring strong momentum and industry support, Intel Corporation today unveiled Dual-Core Intel Itanium Processor 9100 series processors. Built for managing high-end applications and armed with advanced features that improve reliability and reduce power consumption, the 9100 series accentuates the ongoing shift from proprietary RISC products to the choice offered by Itanium-based servers. The 9100 series represents the sixth generation of Itanium chips, with three future generations under development.

The Itanium platform's mission-critical support is strengthened by a new feature called Core Level Lock-Step that improves the data integrity and reliability of applications by eliminating undetected errors in the core. Core Level Lock-Step joins existing Socket Level Lock-Step technology to deliver greater reliability, availability and serviceability (RAS) by guaranteeing that calculation results are consistent among the cores and sockets.

Another new feature, Demand Based Switching (DBS), reduces server power consumption during low utilization periods, which can result in energy cost savings.

The 9100 series features clock speed of up to 1.66 GHz and 667 MHz Front Side Bus (FSB) within a 104W power envelope. A three-load bus – two processors and a chipset on the same bus - provides increased bandwidth for enterprise and high-performance computing tasks.

"The Itanium ecosystem continues to grow as customers choose industry

standard platforms supported by leading system OEMs that provide them with the broadest choice of applications." said Pat Gelsinger, senior vice president and general manager, Intel's Digital Enterprise Group.

Unlike products from the remaining RISC vendors, the 9100 series continues to offer end-user freedom through a broad choice of software with more than 12,000 applications in production, and flexibility to support multiple operating systems, including Linux, Windows, HP-UX, HP NonStop, HP OpenVMS, z/OS and Solaris/SPARC.

"Microsoft continues to be a committed supporter of the Itanium architecture, and with the 9100 series our enterprise customers can run even more highly scalable and reliable databases and business applications," said Bill Laing, general manager, Windows Server Division at Microsoft. "Supporting the Demand-Based Switching feature on Microsoft Windows Server 2008 for Itanium-Based Systems will help businesses better manage power consumption and improve the efficiency of their enterprise operations."

"Red Hat is excited about the launch of Intel's latest Itanium processor-based platforms," said Paul Cormier, Red Hat's executive vice president of Worldwide Engineering. "We have worked closely with Intel in an effort to ensure that our upcoming release of Red Hat Enterprise Linux 5.1 fully supports the latest RAS and virtualization features that Intel delivers with this platform. By working closely together, we are able to deliver the industry-leading 64-bit platform our customers are asking for, presenting them with an opportunity to significantly drive down their total cost of ownership in the datacenter."

Customers in industries that rely on real-time decision-making based on large amounts of data, such as energy, financial services, healthcare, manufacturing and telecommunications, are taking advantage of Itanium's open architecture, advanced parallelism, and extreme

scalability and flexibility.

All server-maker members of the Itanium Solutions Alliance (ISA) will launch new Dual-Core Intel Itanium Processor 9100 series-based products, including Bull, Fujitsu, Fujitsu Siemens Computers, HP, Hitachi, Intel, NEC, SGI and Unisys.

The 9100 series, with its extensive virtualization partitioning features, is the premier platform for RISC and mainframe migration. Itanium offers a single platform for virtualization of diverse OS environments such zOS, legacy Unix, Linux and Windows; allowing for the consolidation of applications from old proprietary platforms. The 9100 series has also garnered virtualization support from key developers, including Transitive and SWsoft.

"SWsoft Virtuozzo 4.0 on the new Itanium processor will enhance operating-system level virtualization support for Windows and Linux server infrastructure," said SWsoft CEO Serguei Beloussov. "The combination of scalability in Itanium platforms and the proven density and performance characteristics of Virtuozzo virtualization make an ideal platform for consolidation of mission-critical applications."

"Transitive is releasing its QuickTransit for Solaris/Sparc-to-Linux/Itanium solution today." said Transitive President and CEO Bob Wiederhold. "The combination of QuickTransit with servers equipped with Itanium processors provides datacenter operators with the ability to run legacy Solaris/SPARC applications on standards-based platforms without porting or recompilation, thereby allowing them greater efficiency, flexibility and return on investment."

Six Intel dual-core and a single-core Itanium 9100 series processors are shipping today, with prices ranging from $696 to $3,692 depending on order volume, features and performance. Parts supporting Core level

Lock-Step will begin shipping in the first quarter of 2008.

Source: Intel