

News Release

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FOR IMMEDIATE RELEASE

SGI ALTIX RETURNS TO SC2003 AFTER BREAKOUT FIRST YEAR

Acclaimed Shared-Memory Architecture, 64-bit Linux, and Itanium 2 Combine to Create World's Fastest Linux Supercomputer

MOUNTAIN VIEW, Calif. (Nov. 13, 2003)—A year after it first previewed the world's most powerful Linux® supercomputer, SGI (NYSE: SGI) on Monday will return to SC2003 with the SGI® Altix™ 3000 family after amassing industry awards and shattering performance records. Available to customers for less than a year, SGI Altix systems already have been adopted by a growing number of bellwether users, from Procter & Gamble and Marathon Oil Company to several U.S. National Laboratories and leading universities.

SGI created a sensation at SC2002 by demonstrating the as-yet-unnamed system running 64 Intel® Itanium® 2 processors in a 64-bit Linux environment and leveraging the SGI® NUMAflex™ shared-memory architecture. Running a series of demanding HPC applications, SGI revealed the power of the system's balanced architecture and its ability to process massive data sets. SGI shipped the first Altix system two months later.

Unlike most clustered-computing schemes that rely on distributed memory (where the memory is specific to each processor), SGI's approach to global shared-memory eliminates data transfer overhead by providing a single memory address space (or single system image), allowing multiple processors and I/O nodes to access all the data in the system's memory directly and efficiently. The comparison of running a data-intensive program on a shared-memory vs. non-shared-memory system would be like the experience of shopping for multiple items at a superstore vs. shopping for those same items at multiple smaller stores that are not physically close together. The superstore experience is much faster, more convenient, and less complicated.

“At SC2002, we previewed a new system designed to combine the scalable SGI NUMAflex architecture with Intel's Itanium 2 processors and 64-bit Linux to bring supercomputer-class performance to open-systems environments. This new system was designed to help solve demanding technical problems at a price/performance advantage that simply isn't possible with proprietary technology,” said Dave Parry, senior vice president and general manager, Server and Platform Group, SGI. “This year, Altix returns with more than 60

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optimized HPC applications, a growing list of performance records and industry awards, unparalleled scalability achievements, and an ever-broadening installed base. And as we approach the Altix system's first anniversary, we look forward to even more exciting advancements in this groundbreaking product line."

"The SGI Altix system provides a well balanced architecture for many important scientific applications," said Dr. Jack Dongarra, director of the University of Tennessee at Knoxville's Innovative Computing Laboratory and Center for Information Technology Research. "The Altix architecture provides a program model which is easy to use and allows for rapid implementation and straight-forward debugging. In many applications the Itanium 2 process provides for relatively high performance with a modest number of processors, leading to uncomplicated scalability."

Breakthrough Performance

The fastest system ever to run the Linux operating system, the SGI Altix 3000 system consistently set performance records in real-world application and industry standard HPC benchmarks throughout its first year.

In tests against competing systems, SGI Altix configurations frequently dominated in a broad range of performance metrics, including floating-point (SPECfp@_rate_base2000), memory bandwidth (STREAM Triad), dense-system linear equations (Linpack), and compute-intensive OpenMP™ shared-memory parallel workloads (SPECComp® M2001 tests).

Altix also screamed past competitors in periodic measurements of real-world HPC application performance, including computational fluid dynamics (CD-adapco Group's STAR-CD™ test suite), computational chemistry (Gaussian® and NWChem), molecular simulation (AMBER®), and biotechnology (BLAST®). Success in these benchmarks underscores the advantage of the balanced Altix system design and the scalability of the SGI® NUMAflex™ shared-memory architecture. Details on all 2003 benchmark announcements are available at www.sgi.com/newsroom.

The Altix line also excelled in third-party performance rankings. In September, the IDC Balanced Ratings Report identified SGI® systems, including Altix, as the most powerful computers in five categories. In terms of overall share, SGI systems also ranked second in all three Divisional class categories – a strong showing driven in large part by the rising popularity of the SGI Altix family.

Mounting Industry Acceptance

From the day it was launched, Altix has received accolades for its performance, scalability, and innovation. Today, SGI announced that it took top honors in six categories in the 2003 HPCWire Innovations Awards (see related release), including a Readers Choice Award for Most Innovative Overall HPC Technology for the SGI Altix family. In January, the launch of the SGI Altix 3000 family earned "Best of Show" at Linux World Conference & Expo 2003. In July, Altix was named Product of the Year by the editors of *Linux Journal*, and in October, Altix earned the magazine's Reader's Choice award for "Favorite Server."

Meanwhile, customers in a broad range of industries and computing environments have embraced the Altix system to solve some of their most demanding supercomputer-class applications. A select profile of these customers includes:

Manufacturing

- Procter & Gamble
- Tata Motors

Oil and Gas

- Total
- Marathon Oil Company

Homeland Security and Safety

- U.S. Government
- U.S. Nuclear Regulatory Commission

Earth and Environmental Sciences Research

- U.S. Naval Research Laboratory
- Harvard University Department of Earth and Planetary Sciences
- NASA Ames Research Center
- Oak Ridge National Laboratory
- Pacific Northwest National Laboratory
- University of Tokyo Earthquake Research Institute

Pharmaceutical and Medical Research

- Memorial Sloan-Kettering Cancer Center
- National Cancer Institute
- Danish Center for Biological Sequencing
- Cornell University Weill Medical College

Physics and Genetic Research

- University of Cambridge COSMOS Project
- SARA (Dutch National HPC and Networking Center)

The SGI Altix family of servers combines industry-standard 64-bit Linux with the Intel Itanium[®]2 processor family and SGI NUMAflex architecture to enable global shared memory systems from a few to hundreds of processors with up to 4 terabytes of shared memory, which is a first for Linux OS-based computing. Powered by the third-generation NUMAflex supercomputing architecture, even the largest data sets can be handled and analyzed with ease and in record time for production workflows with the most demanding stability. Only the SGI Altix 3000 family of servers is designed around this scalable shared-memory architecture that analyzes data sets as whole entities, without breaking them up into smaller segments to be handled by individual processors. The Altix architecture has proven ideal both for complex shared-memory applications running on a large single system image, and for communication-intensive applications optimized for clustering in throughput workflows.

Availability

Scalable SGI Altix 3000 systems are available today in server configurations of 4 to 64 processors, and supercluster configurations of 4 to 512 processors. For customers demanding even larger Altix superclusters, SGI plans to support configurations 1,024 processors in May 2004 and larger over time. Additional Altix system technical and availability information is posted on www.sgi.com/servers/altix.

This news release contains forward-looking statements regarding SGI technologies and third-party technologies that are subject to risks and uncertainties. These risks and uncertainties could cause actual results to differ materially from those described in such statements. The viewer is cautioned not to rely unduly on these forward-looking statements, which are not a guarantee of future or current performance. Such risks and uncertainties include long-term program commitments, the performance of third parties, the sustained performance of current and future products, financing risks, the impact of competitive markets, the ability to integrate and support a complex technology solution involving multiple providers and users, the acceptance of applicable technologies by markets and customers, and other risks detailed from time to time in the company's most recent SEC reports, including its reports on Form 10-K and Form 10-Q.

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