

# SGI leads effort to scale Linux to 128 processors in a single-system configuration

National laboratories and major universities to participate in extensive real-world tests of 128-Processor SGI Altix 3000 HPC System

SGI (NYSE: SGI) today announced plans to extend the industry-leading scalability of its SGI Altix(tm) 3000 servers to encompass a record 128 processors within a single instance of the Linux operating environment. SGI, which already provides award-winning Linux OS-based Altix 3000 systems that scale to 64 Intel Itanium 2 processors, intends to site-test 128-processor systems with national laboratories and leading universities around the world. Initial results of testing in customer laboratories are expected in early September. Participants in the global program include in the United States the U.S. Naval Research Laboratory in Washington DC and the Pacific Northwest National Laboratory in Richland, Washington, and abroad, the University of Queensland in Brisbane, Australia, and The Computing Center at Johannes Kepler University in Linz, Austria. The program participants conduct complex research in a range of scientific fields. Their demanding work requires massive scalability at levels that can provide effective and revealing stress loads on the 128-processor system prior to its commercial availability as a standard SGI product. "In areas of advanced and important Navy research-such as computational fluid dynamics, climate/weather/oceans modeling and simulation, computational chemistry and materials, and computational electromagnetics and acoustics-complex problems can literally take months to solve," said Wendell Anderson, Senior Research Mathematician, U.S. Naval Research Laboratory. "With large shared memory systems, such as Altix running 128 processors, we can solve our most complex problems and workloads and save weeks of time because of the scalability and efficiency of the SGI architecture." "SGI customers are constantly pushing the limits of computing," said Jan Silverman, senior vice president and general manager, Industry Solutions and Services, SGI. "As soon as we launched the Altix 3000 family they asked when we would scale a single system to 128 processors. With their assistance, we are responding to their need for more processing power and all the benefits of NUMA-based computing combined with the benefits of the Linux operating system." Since its introduction, the Altix supercluster has been recognized as the first Linux cluster to scale to 64 processors within a single node and the first cluster to allow global shared-memory access across nodes. Inspired by the success of the Altix family and the powerful combination of standard Linux on Intel Itanium 2 processors, developers have ported more than 60 commercially available high-performance manufacturing, science, energy and environmental applications to the 64-bit Linux environment. More than two-thirds of those applications have been certified and optimized for the platform. The 128-processor beta program continues the growing momentum generated by the Altix 3000 family of servers and supercomputers, which earned "Best of Show" honors at its Linux World debut in January and recently was named "Product of the Year" by the editors of Linux Journal. The momentum continued in June, when the Altix family also won "Best Linux Hardware" honors at the LinuxUser & Developer Expo. Since its introduction, the SGI Altix\* 3700 supercluster has been recognized as the first Linux cluster to scale to 64 processors within a single node and the first cluster to allow global shared-memory access across nodes. Inspired by the success of the SGI Altix family and the powerful combination of standard Linux on Intel Itanium 2 processors, developers have ported more than 60 commercially available high-performance manufacturing, science, energy and environmental applications to the 64-bit Linux environment. More than two-thirds of those applications have been certified and optimized for the platform. Availability SGI Altix 3000 servers and superclusters supporting the new 128-processor node size are expected to be available as fully supported configurations in spring of 2004, when the beta program concludes. SGI Altix 3000 servers and superclusters supporting 64-processor nodes, in configurations of up to 128 Intel Itanium 2 processors, are available today from SGI. For customers demanding even larger Altix superclusters, SGI expects to support configurations of 256 processors in September and 512 processors in October 2003. Additional Altix system technical and availability information is posted on [www.sgi.com/servers/altix](http://www.sgi.com/servers/altix) <<http://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 reader 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 ability to integrate and support a complex technology solution involving multiple providers and users, 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. About SGI SGI, also known as Silicon Graphics, Inc., is the world's leader in high-performance computing, visualization and storage. SGI's vision is to provide technology that enables the most significant scientific and creative breakthroughs of the 21st century. Whether it's sharing images to aid in brain surgery, finding oil more efficiently, studying global climate or enabling the transition from analog to digital broadcasting, SGI is dedicated to addressing the next class of challenges for scientific, engineering and creative users. SGI was named on FORTUNE magazine's 2003 list of "Top 100 Companies to Work For." With offices worldwide, the company is headquartered in Mountain View, Calif., and can be found on the Web at [www.sgi.com](http://www.sgi.com). -end- Silicon Graphics, SGI and the SGI logo are registered trademarks and Altix is a trademark of Silicon Graphics, Inc., in the United States and/or other countries worldwide. Linux is a registered trademark of Linus Torvalds in several countries. Intel and Itanium are registered trademarks of Intel Corporation. All other trademarks mentioned herein are the property of their respective owners.