

# Silicon Graphics® 750

Itanium™ Processor–Based System for Linux®

## Designed for Exceptional Performance at Unprecedented Prices

The Silicon Graphics 750 system is designed to accommodate the most demanding power users in technical and high-performance computing markets at affordable, entry-level prices. As the first offering in the Silicon Graphics® family of Itanium processor–based products for Linux, the 750 incorporates the state-of-the-art Intel® 64-bit architecture, open-source Linux software, and libraries optimized for SGI to set a new standard for high-performance Linux computing.

This combination of high-performance computing power and open-source software for markets such as computational fluid dynamics, MCAE, computational chemistry, scientific computing and visualization, and research and development has never been more accessible—a real win in the new economy.



## Features

## Benefits

Single or dual Intel Itanium processor	The Intel Itanium processor is the first generation in a family of processors based on the new 64-bit Itanium architecture. Breakthrough levels of performance are achieved with state-of-the-art Explicitly Parallel Instruction Computing (EPIC) technology. Based on an innovative floating-point architecture, the 750 is designed specifically for affordable, high-performance, standards-based computing.
High-performance memory subsystem	The 750 features dual memory cards capable of delivering up to 4.2GB per second of peak memory bandwidth, resulting in astounding application and throughput performance. And with 64-bit memory addressability, the Itanium architecture is capable of scaling to 16GB of main memory <sup>1</sup> , ensuring the utmost headroom for the future.
High-performance, high-capacity I/O subsystem	High-bandwidth 64-bit PCI slots provide a flexible expansion platform to accommodate the need for more specialized throughput-intensive peripherals.
Preinstalled Linux distribution	The 750 is ready to power on with the Linux operating system software factory installed and tested for system compliance.
Entry-level visualization	The integrated ATI graphics adapter delivers affordable and convenient 2D visualization and console administration.
Comprehensive one-stop global support for both hardware and software	SGI Support Services leverages SGI's enterprise experience in global services, providing versatile support plans tailored to meet your business objectives and maximizing the return on your technology investment. SGI services provide value and reliability, using proven methodologies to safeguard your technology investment.
Blazingly fast scientific and math library <sup>4</sup>	The 750 has a comprehensive and state-of-the-art collection of scientific and mathematical functions optimized for systems from SGI based on the Itanium architecture running Linux. The SGI Scientific Computing Software Library (SCSL) encompasses a wide variety of industry-standard and proprietary scientific and math functions, including numerical linear algebra, direct solvers for large sparse systems of linear equations, and signal processing routines. It supports 64-bit integer arguments to facilitate porting from legacy platforms.

**Silicon Graphics 750  
Technical Specifications**



<p><b>Core Logic Boardset</b> • Intel W460GXBS2</p>	<p><b>Storage Options</b> • 18GB Ultra SCSI drive [10,000 RPM]</p>	<p><b>Regulatory Compliance</b></p>
<p><b>Processor Support (Single or Dual)</b> • 733 MHz Itanium 2MB L3 cache • 800 MHz Itanium 2MB L3 cache<sup>2</sup></p>	<p><b>Display</b> • 19" color monitor (optional)</p>	<p><b>Safety</b> • U.S./Canada: UL1950 [CSA 22.2 No. 950] • European Union: -EN60950 A1 to A4, A11 -CE Low Voltage Directive [73/23 EEC] • International: IEC 60950 A1 to A4, A11 • Nordic: EMKO-TSE [74 SEC] 207/94</p>
<p><b>Memory Capacity</b> • 1GB–4GB PC100 SDRAM • Dual interleaved memory expansion cards • Up to 16GB PC100 SDRAM<sup>1</sup></p>	<p><b>Software</b> • 64-bit Linux<sup>3</sup> [preinstalled] • SGI Developer's Bundle<sup>4</sup>—NAG Libraries, NAGware f95, NAG IRIS Explorer, SCSL, and various other tools</p>	<p><b>EMC</b> • U.S.: FCC Class B • Canada: ICES-003 Class B • International: CISPR 22 Class B • European Union: -EN55022:1994 Class B -EN55082-1:1992 Immunity Characteristics -CE EMC Directive • Japan: VCCI Class B • Australia and New Zealand: AS/NZS 3548 Class B • Taiwan: CNS 13438 Class B</p>
<p><b>System Graphics</b> • ATI Technologies® XPERT 2000 PRO™ AGP adapter</p>	<p><b>Support and Warranty</b> • <b>Warranty:</b> One-year on-site hardware warranty with 5x9 coverage hours and next-business-day response • <b>Software:</b> 90-day advisory support for Linux and SGI software [business hours] • <b>Hardware:</b> Support upgrades available for same-day and up to 7x24 on-site response • <b>Software support upgrades:</b> Available up to 7x24 annual contracts</p>	<p><b>Product Certification Markings</b> • U.S.: UL and ULc, FCC Class B • Canada: UL and ULc, ICES-003 Class B • European Union: CE • Japan: VCCI Class B • Australian: C-Tick • Taiwan: BSMI Class B</p>
<p><b>Storage and I/O</b> • Three front-accessible 5.25" media bays • One front-accessible 3.5" media bay • Five internal 1" hard drive bays for up to 90GB internal hard disk capacity • Integrated 5.25" 52x CD-ROM • Integrated 3.5" Super Disk drive • Integrated 1" 18GB Ultra3 SCSI disk • Integrated dual-channel Ultra3 SCSI QLA12160 PCI adapter • Integrated EIDE/ATAPI interface controller</p>	<p><b>Physical Dimensions</b> • 16" W x 18" H x 24" D • 84 lb [without keyboard, mouse, monitor] • 19" monitor: 18.4" H x 18" W x 18.8" D</p>	
<p><b>Communication</b> • One 9-pin serial port [UART] • Four Universal Serial Bus [USB] ports • One PS/2 mouse port • One PS/2 keyboard port • On-board audio [mic, line in, line out]</p>	<p><b>Voltage and Frequency</b> • 100–240 VAC, 47–63 Hz • Japan: 100 VAC 6.10 A • North America: 120 VAC 5.10 A • Europe: 230 VAC 2.66 A</p>	
<p><b>Expansion Options</b></p> <p><b>PCI</b> • Five 64-bit/66 MHz, 3.3 V PCI slots • Two 64-bit/33 MHz, 5 V PCI slots</p> <p><b>Networking</b> • On-board NIC 10/100Base-T, RJ45 connector, autosensing</p> <p><b>AGP</b> • AGP PRO 110 [4x at 66 MHz]</p>	<p><b>Acoustics</b> • &lt;5.7 bels</p> <p><b>Ambient Temperature</b> • +10 to +40°C [operating] • -40 to +70°C [nonoperating]</p>	

<sup>1</sup>When 1GB DIMMs become available [initial maximum configurations up to 4GB].  
<sup>2</sup>Special, please check with your local SGI sales office for availability.  
<sup>3</sup>Please check with your local SGI sales office for availability of specific IA-64 Linux distributions.  
<sup>4</sup>Special, limited promotional bundle. Please check with your local SGI sales office for availability [not available in Japan].



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