

Compaq ProLiant DL590/64

Experience the power

Industry-standard 64-bit enterprise computing



COMPAQ
Inspiration Technology



Welcome

"Compaq's implementation of Intel Itanium technology will enable the bank to undertake projects such as large scale, highly structured statistical modeling of customer data that are currently very difficult to implement."

*François Christen
vice president
Wells Fargo Distribution
Strategies*

Once again, Compaq is defining the standards for industry-standard computing. Until now the relentless performance, availability and scalability of a 64-bit platform seemed reserved for scientific and technical computing. No longer. Introducing the Compaq *ProLiant* DL590/64 server, the first in a revolutionary new line of Intel® Itanium™-based servers poised to redefine industry standards, business boundaries and enterprise potential. The Compaq *ProLiant* DL590/64 server delivers many of the major enterprise-class benefits of a 64-bit platform plus the vital price:performance, reliability and scalability features attainable from every Compaq *ProLiant* server.

No one is better prepared to help you embrace the world of high-performance 64-bit computing than Compaq. Over the past five years, we've worked hand-in-hand with Intel to leverage and enhance its Itanium architecture through a variety of exclusive hardware innovations. We've also built a long-term foundation to support this emerging core technology. At the cornerstone of this foundation lies significant investment in Itanium-based technologies, services and partnerships - and an unwavering commitment to provide you with exceptional price:performance for Itanium-based servers.

to a new era of performance and availability.

Welcome to the world of industry-standard 64-bit computing.

Revolutionary ProLiant servers for revolutionary computing

The ProLiant DL590/64 server features many reliable, productivity-enhancing technologies you will not find in other Itanium-based servers.

Easy-to-service chassis

Designed and tested by our world-renowned engineering team, the ProLiant DL590/64 chassis features tool-free component and drawer removal, hot-plug components with easy-access drawers, and separate processor/memory and media/power supply modules. Removal of the processor/memory and media drawers reduces chassis weight for easier rack installation. Hot-plug fans and front-loading power supplies simplify upgrades and replacements.

Exclusive power distribution system

A breakthrough power distribution system provides redundancy with front-loading hot-plug power supplies and intelligent failover, redundant 220V line cords. The failover switch allows the ProLiant DL590/64 server to automatically switch to a second live power feed in the event of a sag in voltage.

High-performing I/O subsystem

An enhanced I/O subsystem allows for 2.1 GB throughput. 64-bit PCI Hot Plug capabilities include eight 66MHz slots and three 33MHz slots to permit unparalleled server availability and reliability. New ergonomic PCI Hot Plug push-buttons include optical switches instead of mechanical cams for higher reliability.

Support for system management features

The ProLiant DL590/64 server supports a complete range of life-simplifying management tools, including Compaq Insight Manager™ XE, a ROM-Based Setup Utility (RBSU) and Remote Flash Redundant ROM.

Leadership through partnership

To meet your high-performance computing needs for the future as well as today, Compaq is building on a number of key alliances and partnerships. We have worked closely with Intel, Microsoft and our other software partners to drive the transition from 32-bit to 64-bit industry-standard computing for your business-critical applications. Internally, Compaq has established teams dedicated to developing and integrating



ProLiant DL590/64 server

Itanium-based infrastructure - including hardware, software, storage, services and management.

Together with our partners we share a powerful vision: to deliver the most reliable, stable computing solutions based on the Intel Itanium processor for mission-critical enterprise and Internet environments. In other words, define the next generation of industry-standard enterprise computing.

No need to sacrifice space for performance

The advanced chassis and system design of the *ProLiant* DL590/64 server helps you maximize performance without compromising data center floor space. Its dense 7U (12.25") form-factor packs exceptional computing power into an exceptionally small footprint: up to six servers can be rack-mounted in an

industry-standard 42U rack. What's more, 24 Itanium processors and up to 384 GB of memory require just 5.25 square feet of data center space.

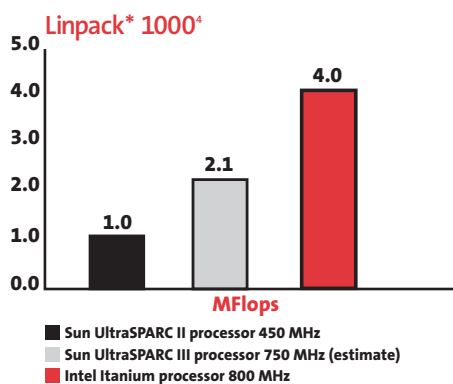
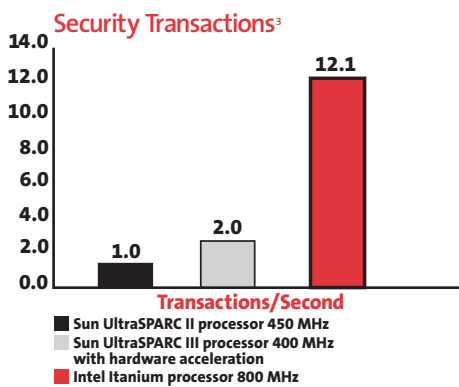
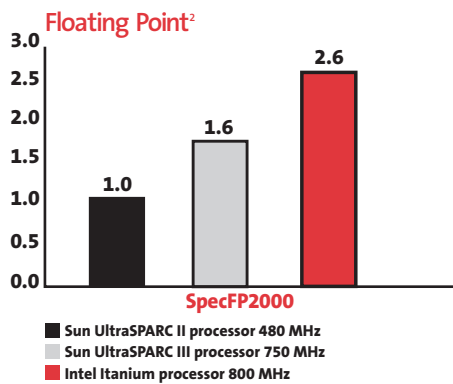
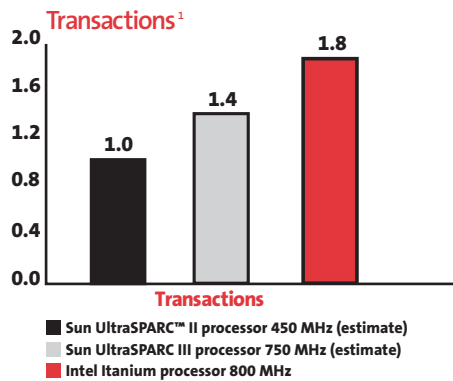
Call on us anywhere, any time

Just as we welcome you into the world of 64-bit computing, we also welcome your questions. With 38,000 IT professionals in 159 countries worldwide, we provide personalized advice, assistance and accountability.

The benefits of 64-bit computing are within your reach. Now is the perfect time to learn more about the *ProLiant* DL590/64 server. Contact your local Compaq Authorized Reseller or Compaq representative, or visit compaq.com/IA64

"Customers preparing for the migration from 32-bit computing to Itanium-based 64-bit computing will benefit from selecting Compaq's reliable combination of hardware platforms, operating systems and applications. Compaq's innovative ProLiant server architecture matched with SAS software offers the technology platform needed for 64-bit computing while delivering the reduced complexity and better price:performance that SAS' customers expect."

*Jim Davis
senior vice president and
chief marketing officer, SAS*



Performance capabilities

The advanced Itanium architecture offers a compelling variety of performance improvements to satisfy your most demanding applications:

- > Maximum memory of 64GB allows applications and databases to run totally in memory
- > Explicitly Parallel Instruction Computing (EPIC) technology means wider, faster pipes for faster execution of instructions or simultaneous execution of multiple instructions
- > 3 Terabytes of addressable kernel space increases application scalability and virtually eliminates bottlenecks
- > Greater high-floating point processing capabilities extend a new level of performance to technical computing and business intelligence applications
- > 4 MB cache speeds processing and response times for data-processing intensive applications

Partnerships

Operating System

- > Microsoft® Windows® Advanced Server Limited Edition
- > Linux on Itanium
 - Red Hat Linux 7.1
 - SuSE Linux 7.2

Database

- > Oracle9i
- > Microsoft SQL 64

ERP

- > SAP R/3
- > J.D. Edwards OneWorld

Business Intelligence

- > SAS/Enterprise Miner

Backup Solutions

- > Veritas/NetBackup 4.5
- > Legato/Networker 6.1

Application Management

- > BMC/PATROL

Clustering Technology

- > Oracle 9i Real Application Clusters
- > Microsoft Cluster Server
- > SteelEye LifeKeeper for Linux v3.1

ProLiant DL590/64 Server Features

System Architecture:	Itanium
Processor Type/Speed:	Itanium 733 MHz, 800 MHz
Cache:	733 MHz 2 MB 800 MHz 4 MB
Processors Supported:	1 to 4
Memory Standard:	2P (800 MHz) - 4 GB RAM 2P (733 MHz) - 1 GB RAM
Maximum Memory:	64 GB utilizing 1 GB DIMMS
PCI Slots:	11 64-bit; all hot plug; 8 x 66 MHz slots; 3 x 33 MHz slots
Hard Drive:	None standard. Optional: 9.1 GB, 18.2 GB, 36.4 GB-10k or 15k rpm
RAID Array Controller:	Integrated Ultra2 Smart Array controller
Form Factor:	7U rack
NIC:	NC3134 64-bit/66 MHz 10/100 dual port modular (upgrade to gigabit and 4 port 10/100)
Removable Media:	Slim-line CD-ROM LS-240 drive*
Power Supply:	Up to three redundant hot-plug load-sharing 1250/700 watt PS

**The LS-240 drive has been qualified using only 1.44 MB floppy and LS-120 media. It is only intended to add function as an LS-120.*

1. All projections based on Intel estimates for Sun US II* 450 MHz, Sun US III* 750 MHz; Itanium™ 800 MHz prototype measurement using online transaction processing (OLTP) workload testing at Intel on test system configurations.

2. Source for Sun US II* and US III* results: results published at www.spec.org. Itanium™ Processor Based System Measurement, 800 MHz/4MB Cache, 266 MHz Bus (133/2X) with 460GX chipset.

3. Source for all data: report from Coradiant under contract with Intel. Sun E420R, 4P US II* 450 MHz, RSA SSL-C libraries; Sun E450, 4P US II* 450 MHz, pen_SSLibraries with hardware SSL acceleration; 4P, Itanium CO 800 MHz/266FSB 4MB Cache w/ RSA SSL-C* libraries. Workload is clients requesting 2KB object. Details at http://www.networkshop.ca/documents/ics_preview.pdf. Different processor MHz on Sun systems based on systems available at time of tests; updated results pending.

4. US II* 450 MHz measurement at www.netlib.org. US III* 750 MHz projection based on Intel estimates. Itanium 800 MHz prototype measurement (test system configuration). 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. For more information on performance tests and on the performance of Intel products, reference www.intel.com/procs/perf/limits.htm or call (U.S.) 1-800-628-8686 or 1-916-356-3104.

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