Be ready for anything

A rock-solid foundation for meeting the tremendous demands of business-critical applications

Companies today need continuous, reliable access to a wide range of applications and data if they hope to remain competitive. And that begins with powerful, cutting-edge systems like the new Compaq *AlphaServer*™ GS Series with Compaq *Tru64*™ UNIX® and Compaq *OpenVMS*™ operating systems. Designed to accommodate multiple generations of emerging technologies, the *AlphaServer* GS Series offers you a powerful combination of exceptional performance, extraordinary scalability, ultra high availability and flexible management. Based on the Compaq *Alpha*™ processor, the Compaq *AlphaServer* GS Series offers impressive performance across a complete range of applications. As a modular system it offers you tremendous scalability. You can start out with a low-cost, single-processor system and expand to 32 *Alpha* processors as needed. The *AlphaServer* GS Series also offers a compatible expansion path, so you can take advantage of future generations of the *Alpha* architecture. Ultra-high-availability features, including leadership clusters, assure continuous 24x7 computing. And flexible, cost-effective management capabilities will help you streamline systems operations and ease burdens on IT personnel. The bottom line is that the *AlphaServer* GS Series provides a solid foundation for the most demanding computing environments, giving you a competitive advantage for the lifetime of your business.

Compaq advantage

> Support for rapid business growth with exceptional system processing power and capacity headroom

> Provide applications that are always available to users with ultra-high-availability systems and clusters

> Quickly accommodate business changes and benefit from extraordinary investment protection with extreme flexibility of system configurations

> Improve operational effectiveness with exceptional system and network management from on-site or remote locations

> Maintain a high level of ongoing operations with a complete portfolio of support services available worldwide

> Adapt to changing business conditions with flexible leasing and financing alternatives

COMPAQ
Inspiration Technology

Exploit rapid business growth

Maximum performance with extraordinary management and high availability

Vast headroom for growth

The *AlphaServer* GS Series comprises powerful, expandable systems for meeting the most demanding and unpredictable business growth requirements of today and tomorrow. Begin with a modest, but powerful configuration of the *AlphaServer* GS80 system and experience cost-effective expansion throughout the entire *AlphaServer* GS Series.

At-a-glance specs

Processor

> Up to 8 x 1 GHz *Alpha* microprocessors

Cache memory

> 8 MB per processor

Maximum memory

> 64 GB

I/O expansion

> Up to 56 PCI slots on 16 buses

OS support

> *Tru64* UNIX, *OpenVMS*, Linux® developer's kit

Form factor

> Single-rack system

Service and support

> Protected by Compaq services, including a 1-year on-site hardware Warranty with 9x5, 24-hour response time[1]

AlphaServer GS160 system

Innovative architecture

For users faced with growing demands for 24x7 availability, the *AlphaServer* GS160 system offers tremendous scalability and performance. Nondisruptive servicing and upgrades with hot-swap and hot-add components enhance system availability.

At-a-glance specs

Processor

> Up to 16 x 1 GHz *Alpha* microprocessors

Cache memory

> 8 MB per processor

Maximum memory

> 128 GB

I/O expansion

> Up to 112 PCI slots on 32 buses
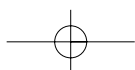
OS support

> *Tru64* UNIX, *OpenVMS*, Linux developer's kit

Form factor

> 2-cabinet system

Service and support

> Protected by Compaq services, including a 1-year on-site hardware Warranty with 9x5, 24-hour response time[1]

Applications that are always available

The ability to access applications or data whenever people want is vital for maintaining customer satisfaction and retention, creating new customers and improving relationships with business partners. That's why Compaq created the *AlphaServer* GS Series with *Tru64* UNIX and *OpenVMS* operating systems—state-of-the-art solutions that maximize single-system uptime by reducing or eliminating both scheduled and unscheduled downtime. The Compaq *AlphaServer* GS Series consists of true, best-in-class systems that offer tremendous built-in reliability and availability features, including:

> Easy expansion and upgrade features, including the ability to hot-swap or hot-add major system components such as processors and power supplies

> Compaq leadership clustering which enables applications to automatically relocate to another cluster member in the event that a required resource, or the current member itself, becomes unavailable

> Non-disruptive servicing and non-disruptive upgrades that enable the system to continue running applications

> Comprehensive data collection and error detection to assist technicians with quick problem resolution

> Remote expert access to enable technical experts to access the system quickly from wherever they are and have all system-management functionality available to them—including the complete hardware console

> Online servicing capabilities

> ECC protection on all cache, memory and major data paths

> Compaq *StorageWorks*™ storage subsystems with no single point of failure from redundant components such as power supplies, array controllers and RAID data protection

> Training, support and factory integration services to ensure that a new *AlphaServer* system gets up and running with minimum disruption and use of customer resources

Enterprise-class performance and scalability

Companies today employ huge applications, process mountains of data and face a lightning-fast flow of information. These extreme demands place extraordinary performance and scalability requirements on server systems. Compaq *AlphaServer* GS systems with *Tru64* UNIX and *OpenVMS* support these challenges, delivering robust processing capabilities across a complete range of applications from OLTP to decision support and complex data analysis. In addition, the system provides swift transaction response times and the fastest complex data analysis on the market.

The high performance provided by the powerhouse *Alpha* processor offers benefits well beyond fast application implementation times, including better service and improved productivity for all users, faster decision making across your organization due to faster information access and an enhanced ability to take advantage of complex new business opportunities.

The scalability features of Compaq *AlphaServer* GS systems are just as impressive. Designed for a long life that covers multiple generations of numerous technologies, these systems feature a modular building-block architecture that allows new technologies to be incorporated into the system as they become available, including the upcoming EV7 and EV8 *Alpha* architectures.
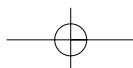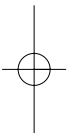
A system with a single *Alpha* processor can grow to a large, extremely powerful system with 32 *Alpha* processors, 256 GB of memory and 12.8 GB per second of I/O bandwidth. And you can add or remove major system resources while applications continue running. In addition, you can maintain the SMP programming model all the way to its maximum capacity, avoid making changes to applications and scale your computing environment to support many thousands of online users—all while processing terabytes of data. This provides huge capacity headroom to support growth in business. When an application environment requires more power than a single system delivers, multiple systems can work cooperatively through Compaq clusters to provide much more power for applications.

Flexible, cost-effective workload management

One of the challenges of a growing business is managing an applications environment that is constantly changing. You face a continuous ebb and flow of users, powerful new applications and an increasing need for complex data analysis. In order to meet these challenges you must improve the effectiveness of your computing environment while maximizing the use of your IT budget. Compaq *AlphaServer* GS systems with *Tru64* UNIX and *OpenVMS* operating systems offer a host of features that help streamline

application workload management and flexibly manage system resources.

Dynamic hardware partitions

Dynamic hardware partitions are a powerful enhancement to the expansion and upgrade capabilities of *AlphaServer* GS systems. A single *AlphaServer* GS system can be subdivided into multiple subsystems, called partitions, to guarantee system resources to certain applications. Each partition has its own operating system that is isolated and protected from software problems in other partitions. Each partition may run a different version of the same operating system or a completely different operating system, and each partition can be easily reconfigured as application requirements change. Additionally, *OpenVMS* Galaxy allows multiple instances of the *OpenVMS* OS to run cooperatively within a single hard partition, allowing you to take full advantage of the powerful *AlphaServer* GS systems.

Resource management

While system hardware partitions allow the dedication of specific system resources to users and applications, customers still must be able to control the use of system resources by users and applications within a single operating system running in a partition. Both the *Tru64* UNIX and *OpenVMS* operating systems address

this need with comprehensive resource management tools to effectively manage and monitor computing environments with multiple applications and changing workloads. IT personnel can easily allocate resources to support applications or users to consistently deliver higher levels of service and reduced management and operating costs. Compaq also provides comprehensive management for its *Tru64* UNIX and *OpenVMS* clusters. These capabilities lower system management costs because they manage a number of systems in a cluster with little more complexity than a single system.

Capacity on demand

Through this program, additional computing resources are placed in your system ready to go. These reserve resources may be put into use when a planned or unplanned event increases demand. And payment for the reserve resources is deferred until closer to the time they are actually put into use.

Complete remote management

Complete remote management capabilities give IT personnel the ability to perform all system management functions, including the complete hardware console, without physically having to be at the site of the system. This greatly increases application uptime because technical experts can access all system management functions instantly, at any hour, without the delay of travel time.

Ultra-high-capacity system for the real world
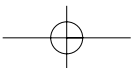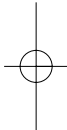
For the highest levels of performance, the *AlphaServer* GS320 system can scale to a fully loaded 32-way system without operational disruption. Extremely flexible management enables you to easily and quickly add capacity and applications. And don't forget the innovative architecture that lets you manage massive amounts of data in record time.

At-a-glance specs

Processor

> Up to 32 x 1 GHz *Alpha* microprocessors

Cache memory

> 8 MB per processor

Maximum memory

> 256 GB

I/O expansion

> Up to 224 PCI slots on 64 buses

OS support

> *Tru64* UNIX, *OpenVMS,* Linux developer's kit

Form factor

> 3-cabinet system

Service and support

> Protected by Compaq services, including a 1-year on-site hardware Warranty with 9x5, 24-hour response time[1]

Service and support

Compaq *AlphaServer* systems deliver the best combination of computing capabilities in the world. When combined with Compaq Global Services' unique portfolio of high-availability services, they are capable of supporting your organization's most demanding business-critical processes.

Installation and QuickStart services ensure that your *AlphaServer* systems are integrated into your environment smoothly and quickly, with no unexpected start-up issues.

Priority Executive Service offers gold-level business-critical support, with two-hour response times 24x7, 30-minute critical software response, named technical account managers and proactive support services.

> For more information on Compaq services, please call 1-800-OK-COMPAQ (1-800-652-6672), or visit us online at www.compaq.com/ services/alpha

Compaq financial services

We provide customized leasing and financial asset management services with competitive rates, simple processing and 100 percent solutions financing.

> For more information, call 1-888-277-5942 or visit us at www.compaq.com/ financialservices

Compaq *AlphaServer* GS Series

"As the nation's premier full-service national health benefits company, First Health demands a reliable and scalable computing platform that provides cost-effective and innovative solutions. The *AlphaServer* GS Series running *Tru64* UNIX offers us the next leap in computing technology to help ensure we continue to offer our customers the service and support they have come to expect from a leader in the health benefits services industry."

Ronald S. Boeving
Vice President Information Systems
First Health

How to learn more

Learn more about how Compaq *AlphaServer* systems and complementary products and services from Compaq and its partners and resellers can help you manage your growing computing environment.

> Call your local Compaq representative, partner or reseller

> Call 1-800-AT-COMPAQ (1-800-282-6672)

> Visit www.compaq.com/alphaserver

Helpful urls

For more detailed information on these and other Compaq products and services, visit the following sites:

> www.compaq.com/alphaserver

> www.compaq.com/support

> www.compaq.com/services

> www.compaq.com/storage

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