

Compaq AlphaServer 4000/4100 ES40 EV67 Upgrade Solution

AlphaServer ES40
with NEW Alpha 21264 EV67



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NonStop™

Make your move upward!

Reasons to upgrade!

Increased speed by using up to four 500 MHz (EV6) or 667 MHz (EV67) Alpha 21264 processors delivering a performance increase of up to 31,000 transactions per second (tpmC) (4 CPUs)

Increased application scalability with 4 MB or 8 MB of cache per processor and up to 16 GB or 32 GB of memory

Increased performance by 2X boost in application performance over existing *AlphaServer* 4000 or 4100 systems – right out of the box – with no recompiling

New faster 64-bit PCI Ultra2 SCSI RAID controllers and Ultra3-Ready StorageWORKS (EV67)

Increased reliability with ECC-protected memory, processor cache, and system data paths

Increased availability with hot-swap RAID storage, hot-swap redundant fans and power supplies, and advanced clustering technology

Increased flexibility for running your operating system of choice: Compaq Tru64™ UNIX, Compaq Open VMS™, and Linux

Choice of three enclosures: tower, pedestal, and rack-mount

Increased peace of mind with a new 3-year on-site warranty

With the increase in enterprise network technology, you are undoubtedly looking for more power and performance from your servers. Compaq has the solution with next-generation technology – today!

The *AlphaServer*™ ES40 system with next-generation 500 MHz EV6 or 667 MHz EV67 processors are the perfect upgrade for your *AlphaServer* 4000/4100 system. The *AlphaServer* ES40 technology brings you mainframe computing power at the price of a mid-range server. By adding additional SMP processors, the power accelerates for immediate application benefits and keeps pace with your growing enterprise.

Perfect for every application

The *AlphaServer* ES40 system is the ideal high-performance database server, Internet server, and business application server. It is also ideal as a LAN consolidation server, and communications server. Yet its advanced performance features are also well suited for robust technical and scientific applications including 3D rendering, publishing pre-press, as well as CAD, GIS, and CASE applications.

The Compaq *AlphaServer* ES40 system translates into optimum application performance. Choose the server that provides it all – speed, large capacity, data integrity, throughput, efficiency, availability, and scalability – the perfect solution for just about every application.



"AlphaServer ES40 has the power and expandability to keep up with exponential growth"

Robert J. Davis
Principal and CEO Lycos

In a server world where fast is paramount, speed means nothing without reliability. Compaq's proven track record combined with *AlphaServer ES40's* configuration of four *Alpha™* 21264 processors with up to 32 GB of memory and cross-bar switching technology delivers reliability and price/performance unmatched by the competition.

An exceptional leap in performance

The latest Alpha 21264 processors delivers the famous 64-bit superior performance but now with even more speed, scalability and power. The four-way symmetric multiprocessing *AlphaServer ES40* offers increased scalability with up to four 64-bit processors, with 4 or 8 MB L2 cache and 16 or 32 GB of maximum memory.

Revolutionary crossbar-switch technology

When you make the upgrade to the *AlphaServer ES40*— you also benefit from the advantage of crossbar-switch technology. No more bottlenecks! Crossbar-switch technology dynamically connects the *ES40's* CPU, Memory, and PCI allowing large data blocks to transfer directly between system elements using a dedicated bandwidth. Intelligent memory management and 5.2 GB of memory bandwidth allow transactions to fly without competition from other components.

Get the added benefit of Compaq exclusive — high-performance 64-bit memory

Operations perform hundreds of times faster on the Compaq *AlphaServer ES40* than on any other makers' mid-range servers. The reason? *AlphaServer ES40's* exclusive VLM64™ 64-bit memory capability addresses up to 16 or 32 GB of data at one time allowing for phenomenal performance increases. And with no waiting to access disk storage, applications zip for everyone.

64-bit PCI bus technology — more for less

The *AlphaServer ES40* server is based on 64-bit PCI bus technology that is not only faster than the older EISA technology (still used by some servers), it is also less expensive. The *AlphaServer ES40* upgrade provides six or ten 64-bit PCI slots, allowing configurations that use faster, lower-cost industry-standard I/O devices to support improved application performance. And now, the *AlphaServer ES40* with the EV67 processor includes new 64-bit PCI Ultra2 SCSI RAID controllers and Ultra3-ready *StorageWORKS™*.

Gain with the advantage of clusters

Clustering increases the availability and power of your IT environment by enabling multiple independent systems to work together as a single virtual system. To be effective, the servers you employ should be able to operate in multiple popular operating systems environments. Only *AlphaServer ES40* can participate in *OpenVMS™* cluster systems and *Compaq TruCluster™* solutions for *Tru64™ UNIX®* systems. In addition, the PCI-based *AlphaServer ES40* system supports Linux™ as well as SCSI, Memory Channel™, and CI interconnections for a variety of cluster options.

Upgrading your existing *AlphaServer ES40* to the NEW next-generation *Alpha EV67* processor is easy! Just replace your EV6 CPU board with the NEW EV67 board. Call your local Compaq Sales Representative or Business partner today for more details!



Systems Comparison Snapshot			
	<i>AlphaServer 4000/4100 (EV56)</i>	<i>AlphaServer ES40 (EV6)</i> (500 MHz)	<i>AlphaServer ES40 (EV67)</i> (667 MHz)
Number of CPUs	Up to 4	Up to 4	Up to 4
Performance TPC-C	15,100	25,903	30,730
\$per tpmC	64.45	37	29
Maximum memory	8 GB	16 GB	32 GB
Maximum disk (Internal)	760 GB	2.7 TB	2.7TB
I/O slots	5 64-bit PCI/EISA,	Up to 10 64-bit PCI	Up to 10 64-bit PCI

AlphaServer ES40 system is the fastest, most flexible quad-processor UNIX system available today!

Services to safeguard your investment — A 3-year warranty to reduce your maintenance costs

Your *AlphaServer ES40* includes a standard 3-year, next day, on-site warranty, backed by *Compaq*, one of the most widely trusted worldwide service organizations in the business. Available around the clock in 100 countries around the world, *Compaq's* service and support professionals are skilled in multivendor environments and backed by a strong worldwide support organization.

For more information on specific service offerings, please visit the *Compaq Services Web* site at www.compaq.com/services Or, contact your *Compaq Services* business partner or local *Compaq Services Representative*

Special trade-in offers

To support your move to our new generation technology, *Compaq* will apply a generous trade-in value on your current *AlphaServer ES40* system. Contact your local *Compaq Sales Representative* or *Business Partner* today for details about this exciting trade-in offer.

For additional *AlphaServer ES40* system information:

To learn more about *AlphaServer ES40* systems from *Compaq*, please call 1-800-282-6672 in the United States or Canada.

For online product and ordering information, please visit our *AlphaServer Web* site at www.compaq.com/alphaserver

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Part Number

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