

Compaq *AlphaServer* ES40 Systems with
Tru64 UNIX and Oracle Real Application Cluster

Standard Features

Processor	One or two Alpha 21264 68 833-MHz CPUs each with 8-MB L2 Dual Data Rate Backup Cache	
Upgradability	Supports upgrades of memory and hard drives	
Memory	Standard Maximum	1 GB or 4 GB depending on configuration 24 GB (32 DIMM slots)
Network Controller	Two DE600 Ethernet cards	
Expansion	PCI I/O slots	10 slots (8 used)
Storage	Diskette Drive CD-ROM M2 Storage Shelf Fibre Channel RAID controllers Fibre Channel Switches Fibre Channel Host Bus Adapters Hard Drives	1.44-MB diskette drive in dedicated slot 600-MB 40X IDE CD-ROM 2200 Dual RAID to 6 SCSI storage shelf with dual power supply Two HSG80 disk controllers with 256-MB mirrored cache each Two Fibre Channel SAN switch/8 with fabric software Four KGPSA dual loop adapters, 64 bit (2x PCI) 18.2-GB Ultra3 SCSI 10K rpm, two drives in the first cluster member and one drive in the second cluster member 36.4-GB Ultra3 SCSI 10K rpm, 4-84 drives shared (one mirror set, two spares)
Interfaces	Parallel Serial USB Keyboard/trackball Remote systems management SCSI connectors	One 25-pin parallel port Two 9-pin serial ports Dual USB ports One One dedicated remote systems management port Two 68-pin SCSI connections knockouts
Form Factor	2-meter Rackmount Cabinet HWD, 79/201, 24/61, 39/99 (in/cm) Power requirements, DA/GA – 120v, 3 L5-30P cords, DB/GB – 240v, 3 IEC309 cords	
Power Supply	Auto sensing power supplies, hot swappable, N+1	
Manageability	Compaq Insight Manager	
OS Support	Systems include pre-installed software (V5.1), unlimited-user license, server extension license, and TruCluster Server software	
Service and Support	Protected by Compaq Services including a 3-year on-site hardware warranty with next business day response. Compaq Tru64 Software warranty is a 90-day telephone advisory. Training, consulting, network integration, software support, comprehensive system maintenance and guaranteed uptime services are also available for customers requiring higher levels of service and support. For additional information, refer to the Compaq AlphaServer ES40 QuickSpecs.	

Systems

System	CPU	Memory	Order No.
Dual Rackmounted AlphaServer ES40	One Alpha 21264 833-MHz CPU	1 GB Memory	(NA) DA-64CCS-DA (EMEA) DA-64CCS-DB
Dual Rackmounted AlphaServer ES40	Two Alpha 21264 833-MHz CPUs	4 GB Memory	(NA) DA-64CCS-GA (EMEA) DA-64CCS-GB

Sizing Guide for Upgrades

DA-64CCS-DA/DB			
Processors per node	Number of Disks	Minimum Memory Per Node	Maximum Memory
1	4-22	1 GB	24 GB
2	4-42	2 GB	24 GB
3	4-84*	3 GB	24 GB
4	4-84*	4 GB	24 GB
DA-64CCS-GA/GB			
2	42	4 GB	24 GB
3	42-84*	4 GB	24 GB
4	42-84*	4 GB	24 GB

*If more than 42 disks are added, a Modular Array 8000(MA8000) RAID array and cabinet are required.

Additional disks must be added in pairs to support mirroring for high availability.

For each processor, the system requires a minimum of 1 GB of memory.

Compaq TruCluster Server

Benefits

- Ability to manage multiple systems as one from anywhere
- Slashes management costs with superior "onboard" management
- Easily scales applications to suit business growth
- Provides high availability at an affordable price

Compaq Tru64 UNIX

Benefits

- Makes system management simple and cost effective
- Provides scalability beyond the limits of a single system
- Provides single system management for multiple systems
- Provides single network access to multiple systems
- Provides single access to shared storage for multiple systems
- Powers the most performance-hungry applications
- Facilitates explosive growth
- Provides Compaq NonStop™ availability

Software

Software Processor Code = E

Compaq Tru64 UNIX– (Media and documentation included)

TruCluster Server License	QL-6BRAE-AA
TruCluster Server Doc kit	QA-6BRAA-GZ
StorageWorks Software Package, with licenses for Logical Storage Manager and AdvFS Utilities	QB-5RXAE-AA
Tru64 UNIX media and online documentation on CD-ROM	QA-6ADAA-H8
Layered products media and documentation for Tru64 UNIX on CD-ROM	QA-054AA-H8
VIS services for Oracle OPS ES40 platform	YT-EBVIS-AA

Systems

Software (continued)

Oracle Products

30-day trial version of Oracle9i, enterprise edition (including Real Application Clusters) - single user versions

Oracle Licenses (one required)

Oracle licenses must be purchased separately.

Oracle 9i Real Application Cluster Enterprise Edition for Tru64 UNIX O/S Perpetual License

Oracle 9i Real Application Cluster Enterprise Edition for Tru64 UNIX O/S 4-year License

Oracle 9i Real Application Cluster Enterprise Edition for Tru64 UNIX O/S 2-year License

Services

CarePak Priority Services

CarePak Priority Services are available for Compaq AlphaServer systems running Compaq Tru64 UNIX operating system. Priority Services are designed for the growing number of customers who need support beyond the basic warranty. Five services packages are available - Priority, Priority 24, Priority Silver, Priority Gold, and Priority Executive with coverage for both principal server systems and SSPs (Subsequent System Packages) - that meet a full range of customer support requirements.

Model CarePak Priority Service	Principal Server 1 year	Principal Server 3 years	Subsequent Systems 1 year	Subsequent Systems 3 years
Priority	FP-F01DA-12	FP-F01DA-36	FP-F21DA-12	FP-F21DA-36
Priority 24	FP-F02DA-12	FP-F02DA-36	FP-F22DA-12	FP-F22DA-36
Priority Silver	FP-F04DA-12	FP-F04DA-36	FP-F24DA-12	FP-F24DA-36
Priority Gold	FP-F08DA-12	FP-F08DA-36	FP-F028DA-12	FP-F028DA-36
Priority Gold Exec.	FP-F09DA-12	FP-F09DA-36	FP-F29DA-12	FP-F29DA-36
Installation	FP-FINST-DA	FP-FINST-DA	FP-FINST-DA	FP-FINST-DA
Installation & Startup	FP-FSTAR-DA	FP-FSTAR-DA	FP-FSTAR-DA	FP-FSTAR-DA

Notes:

- AlphaServer ES40 systems include three years hardware warranty with 5x9, on-site Next Business Day response.
- New Compaq hardware options internal to the AlphaServer enclosure receive the same warranty or service level as purchased with the server.
- External storage devices/cabinets carry their own level of warranty and should be quoted separately for uplifted warranty services (CarePak Priority Service).

In addition to the CarePak Priority Services, uplifted warranty Supplemental Services are available for separate hardware and software support. For more information on Hardware and Software Supplemental Services and other Compaq service options available for AlphaServers, consult a Compaq Sales Account Manager or visit <http://www.compaq.com/services/>

Technical Specifications

Refer to the AlphaServer ES40 QuickSpecs for technical specifications – <http://www.compaq.com/alphaserver/es40/index.html>