COMPAQ

AlphaServer GS60 and GS140 Series with Alpha 21264 Processor

Product Profile

The Compaq AlphaServer GS60 and GS140 family delivers superior business application performance with the most powerful 64-bit processors in the world, 64-bit very large memory (VLM64) and advanced clustering technology. Where high-powered productivity is a must, the AlphaServer GS series provides the highest performance, scalability and availability for your mission-critical applications. The AlphaServer GS60 and GS140 offer up to 14 Alpha 21264 processors, with built-in support for future Alpha processors—for the ultimate in investment protection. Combined with the latest high-availability features, including hot swap disks, RAID, and fault management, the AlphaServer GS60 and GS140 family are designed to support your most demanding enterprise-wide or global server needs.

What's New?

▶ World's fastest microprocessors. Now available to solve your most demanding business problems and grow your most complex applications.

▶ Advanced server and network management capabilities

▶ More internal storage capacity

▶ High-performance PCI I/O allows:
  132 PCI slots (GS60)
  144 PCI slots (GS140)

▶ Processor support up to:
  6 CPUs (GS60)
  14 CPUs (GS140)

▶ Up to 12 GB memory (GS60) and up to 28 GB memory (GS 140)

New Model

AlphaServer GS60/GS140
Alpha 21264

AlphaServer GS60/GS140

Key Features

▶ 2-6 (GS60) or 2-14 (GS140) Alpha 21264 CPU processors with 4 MB ECC per-processor onboard cache

▶ Up to 132 (GS60) or 144 (GS140) PCI expansion slots:

▶ Integral UltraSCSI (40 MB/sec) adapter for internal and external storage devices

▶ Integrated Advanced Server Management features, including ServerWORKS Manager kit

▶ Up to 12 GB of memory with AlphaServer GS60 systems

▶ Up to 28 GB of memory with AlphaServer GS140 systems

▶ Compaq Tru64 UNIX & Compaq OpenVMS operating systems support now. Microsoft Windows NT support in the future.

Benefits at a Glance

▶ Supports N+1 redundant power supplies for high reliability

▶ Better and faster access with 2.1 GBs memory bandwidth

▶ Outstanding performance ratings:
GS60: 27.7 SPECint, 42.5 SPECfp;
GS140: 27.8 SPECint, 45.2 SPECfp,
105 SPECfp95 (8 CPUs), 1600 SPECfp95rate
(8 CPUs), 3087 SPECint95rat (14 CPUs)

▶ Flexibility and choice of operating environments: AlphaServer—available with Tru64 UNIX or OpenVMS. Support for Windows NT in the future.

The Compaq Advantage

▶ Expandable chassis features 40 or 48 internal storage slots

▶ Up to 720 GB of internal storage with AlphaServer GS60 systems

▶ Up to 864 GB of internal storage with AlphaServer GS140 systems

▶ I/O architecture supporting multiple high-speed channels for PCI. EISA, or XMI I/O devices

▶ Integrated Advanced Server Management features, including ServerWORKS Manager kit

▶ High-reliability features, including Hot Swap disk drives, redundant power supplies, ECC memory, heat sensor, fan failure, and power supply sensors

▶ Better-than mainframe performance at a fraction of the cost

▶ Investment protection through 64-bit environment

▶ Choice of operating systems:
Digital UNIX
OpenVMS
Windows NT available in the future.

Compaq Capital Leasing

Compaq offers flexible leasing and financing alternatives, through Compaq Capital, for businesses of all sizes. We can customize financing solutions that enable customers to cost-effectively acquire the technology and services needed to adapt to changing business conditions.

Alpha 21264 Processors

Options

Memory

1 GB memory module
MS7CC-EA

2 GB memory module
MS7CC-FA

4 GB memory module
MS7CC-GA

Pluggable Hard Drives

2.1 GB 7200 RPM 16-bit Wide UltraSCSI
disk drive
DS-RZ1BB-VW

4.3 GB 7200 RPM 16-bit Wide UltraSCSI
disk drive
DS-RZ1CF-VW

9.1 GB 7200 RPM 16-bit Wide
UltraSCSI disk drive
DS-RZ1DA-VW

18.2 GB 7200 RPM 16-bit Wide
UltraSCSI disk drive
DS-RZ1EA-VW

36.4 GB 7200 RPM 16-bit Wide
UltraSCSI disk drive
DS-RZ1FB-VW

9.1 GB 10000 RPM 16-bit Wide
UltraSCSI disk drive
DS-RZ1DD-VW

18.2 GB 10000 RPM 16-bit Wide
UltraSCSI disk drive
DS-RZ1ED-VW

Drive Controllers

Single (UWSE) Ultra SCSI Channel PCI
Backplane RAID Controller w/4 MB cache
memory for Alpha systems
KZPAC-AA

Three (UWSE) Ultra SCSI Channel PCI
Backplane RAID Controller w/8 MB cache
memory for Alpha systems
KZPAC-CB

Dual CPU Processor Modules

AlphaServer GS60 21264

AlphaServer GS140 21264

Digital UNIX 762P2-AX

OpenVMS 762P1-AX

Tape Drives

Internal 12/24 GB 5.25" DAT SCSI
TLZ10-VA

8 GB DAT 93 MB/min SCSI
TLZ09-VA

32/64 GB DAT
TLZ9L-VA

20/40 GB DLT 5.25" SCSI (GS140)
DS-TZ88N-VA

35/70 GB DLT 5.25" SCSI (GS140)
DS-TZ89N-VW

External Storage

ESA 10000 high capacity base unit
DS-SWXES-AA/AB

ESA 10000 high bandwidth base unit
DS-SWXES-BA/BB

ESA 10000 dual expansion base unit
DS-SWXES-CA/CB

ESA 10000 single expansion base unit
DS-SWXES-DA/DB

RAID Array 7000 with dual controllers
DS-SWXRA-HA

RAID Array 7000 with single controller
DS-SWXRA-HC

Communications

PCI-based Asynchronous
Communications Adapter
PBXDA-Ax

PCI-based Asynchronous
Communications Controller
PBXDP-Ax

PCI-based ATMworks 351
Bus Adapter
DGLPB-FA/UA

PCI-based Token Ring Adapter
SN-PBXNP-AC

PCI-based FDDI controller Fiber
DEFPA-AB/DB

Other

I/O Expansion cabinet (GS60)
Single Phase power, max 2/system
H9B10-JA

I/O Expansion cabinet (GS140)
Three Phase power, max 2/system
60 Hz, 208V
50 Hz, 380/416V
50/60 Hz, 202V
H9F00-JC/JD/JE

Compaq AlphaServer GS60/GS140 Alpha 21264 Processors

Competitive Comparison Chart*

	Compaq AlphaServer GS60/GS140 Family	Hewlett–Packard 9000 V2250	IBM RS/6000 S70	Sun UE6500
Processor	Alpha 21264	PA-8200	RS64-2	UltraSPARC II
# of Processors	2-6 (GS60) 2-14 (GS140)	16	12	30
Secondary Cache	4 MB	4MB	8 MB	4 MB
Standard ECC Memory	4 GB	1 GB	512 MB	256 MB
Maximum Memory	12 GB/28 GB	16 GB	16 GB	30 GB
Expansion Slots	132 PCI slots (GS60) 144 PCI slots (GS140)	24	-	4 PCI
Max. Internal I/O Slots	36/48	24	56	12
Internal Drive Bays	40/48	0	48	40
Max. Internal Storage	720 GB/864 GB	0 GB	437 GB	382 GB
Max. External Storage	85 TB	40 TB	14 TB	1 TB
Disk Controller	Fast-Wide single-ended & Differential host adapter UltraSCSI	Integrated Fast-Wide Differential SCSI-2	Fast-Wide SCSI-2 (in a slot)	Integrated Fast-Wide SCSI-2 on I/O board UltraSCSI
RAID Controller	RAIDArray 230/plus, Standard	Not supported internally	Not supported internally	Not supported internally
Redundant NICs	Optional	No	No	Optional
Redundant Fans	Yes	Yes	Yes	Yes
Redundant Power Supplies	Yes	Yes	Yes	Optional
Redundant Processor Power Modules	Yes	N/A	N/A	No
Remote Management	Integrated Remote Console (IRC), optional Remote Insight Board	System Management Standard	Integrated Service Processor	Remote Console Support
Server Management Manager	ServerWORKS, Compaq Insight Manager	HP OpenView Opt SMS	Tivoli Opt	Solstice Symon, Std Solstice Enterprise Mgr, Opt
Intelligent Integration	SmartStart	Ignite/ux	AIX	Solaris Webstart
Pre-Failure Warranty	Standard1: Disk Drives, Memory, Processors	-	-	-
Standard Warranty	1-yr on-site; 4 hr same-day resp	1-yr on-site	1-yr on-site	1-yr on-site
Operating Systems Supported	Tru64 UNIX & OpenVMS now; Windows NT in the future.	HP-UX 11.0	AIX	Solaris

* Competitive information is based on manufacturer data available at the time of publication

For More Information

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