

HP AlphaServer ES80 system

Data sheet



Flexibility and outstanding performance designed for a wide range of tasks

With up to 8 Alpha processors humming in concert, the HP AlphaServer ES80 system with the EV7 Alpha processor is ideal for building your departmental level environment, especially when you demand absolute, flat-out application and database performance.

Available as a scalable 2-, 4-, 6-, or 8-processor rack system, the AlphaServer ES80 system packs an amazing amount of power and headroom into a small footprint. With the ability to partition into one to four segments, this is the type of flexible mid-range server your computing environment can depend on for years. The AlphaServer ES80 system is powered by the 1.15GHz EV7 processor and can run industry-leading operating system choices of OpenVMS, Tru64 UNIX®, and Linux. The AlphaServer ES80 systems deliver the simplicity, agility, and value that drive an Adaptive Enterprise: business and IT synchronized to capitalize on change.

So whether you have a commercial infrastructure to build, digital special effects software to master, mountains of databases to sift through, or need application performance that goes beyond what's available today, think AlphaServer ES80 systems.

The latest generation of HP AlphaServer systems uses the technical sophistication of the EV7 Alpha "system-on-a-chip" to deliver a complete new family of modular systems, from 2 to 64 processors. Building on a decade of innovation and leadership, these high performance server systems provide immediate benefits with outstanding price/performance, scalability, reliability, flexibility, manageability, and availability.

Key features and benefits

- Binary AlphaServer compatibility: make any changes you want to get the performance you need – seamlessly. Moreover, your applications don't change. They just run faster – and gain greater scalability.
- Easy-to-manage: with a single view across multiple systems – and with clustering to make multiple systems look just like one – you act once, saving time, money and valuable IT resources.
- Maximum uptime: scheduled downtime may now be extinct when you combine HP OpenVMS and HP Tru64 UNIX clusters with pro-active fault management of major system components – and true hot swap for everything else.
- System on a chip: delivers built-in SMP and enhanced single-system availability.
- Advanced hard partitioning: eliminates single points of failure – whether brought on by hardware or application error.
- Shared system elements: modular growth and investment protection across the entire family of EV7 AlphaServer systems.
- Switch-less mesh architecture: through truly linear scalability and fault hardening, your data stream takes the fastest route to its destination.

Achieve the peace of mind you need with the HP Alpha RetainTrust Program

With the HP Alpha RetainTrust Program, you can rely on programs to help you plan for your business and technology requirements when new technologies evolve. We have worked diligently to make sure your transition to HP Integrity servers based on the Intel® Itanium® 2 processors moves at the pace you and your infrastructure demand. Included in this program is the HP AlphaServer Customer Assurance Program.*

Among its many advantages, you will receive money-back satisfaction guarantees on Integrity systems running HP OpenVMS or HP-UX, financial assistance and trade-in incentives, and a wide variety of evolution resources.

* The AlphaServer Customer Assurance Program may not be available in all areas and may be subject to different terms based on local law and regulation.

To learn more, visit: www.hp.com/servers/alphaserver

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Technical Specifications

Availability	Now																						
Processor	1.0 GHz EV7, 1.15 GHz EV7																						
SMP	2, 4, 6, 8 processors																						
Memory	Up to 64 GB (8 GB/processor) RAID memory optional																						
I/O subsystem	Up to 52 PCI-X slots, 12 PCI slots, and 8 AGP 4X slots																						
Partitions	Up to 4 8-processor system (2 CPU minimum)																						
Cabinetry	Rack																						
Performance ^{(1) (2)}	<table><tr><td>SPECint_2000</td><td>882</td></tr><tr><td>SPECfp_2000</td><td>1,494</td></tr><tr><td>SPECint_rate2000/SPECfp_rate2000</td><td></td></tr><tr><td> 2 processors</td><td>20/34</td></tr><tr><td> 4 processors</td><td>40/68</td></tr><tr><td> 8 processors</td><td>81/136</td></tr><tr><td>STREAMS triad</td><td></td></tr><tr><td> 1 processor</td><td>6,300</td></tr><tr><td> 2 processors</td><td>12,600</td></tr><tr><td> 4 processors</td><td>24,700</td></tr><tr><td> 8 processors</td><td>49,700</td></tr></table>	SPECint_2000	882	SPECfp_2000	1,494	SPECint_rate2000/SPECfp_rate2000		2 processors	20/34	4 processors	40/68	8 processors	81/136	STREAMS triad		1 processor	6,300	2 processors	12,600	4 processors	24,700	8 processors	49,700
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Operating environments	Tru64 UNIX v5.1B with IPK OpenVMS v7.3-1 with TIMA update kit Red Hat Linux 7.2 for Alpha																						
Server management	Embedded																						
Reliability features	Redundant hot-swap power, fans. ECC protected memory, cache, microprocessor. Automatic server recovery. Prefailure warnings for disks, I/O, memory, CPUs, power and temperature. RAID memory. Dynamic multi-path I/O. Hot-swappable server management LAN components. In-line data correction on system mesh. System partitions.																						
Warranty	One-year on-site, 9-hour x 5-day warranty with next-business-day response Optional service plans for up to 24x7, 2-hour, same-day response times are available, as well as a complete portfolio of worldwide service offerings to maximize uptime																						

⁽¹⁾ SPECcpu2000: Benchmark scores reflect results published on www.spec.org as of August 2004. For the latest SPEC benchmark results, visit: <http://www.spec.org/osq/cpu2000>

⁽²⁾ "STREAM: Sustainable Memory Bandwidth in High Performance Computers (<http://www.cs.virginia.edu/stream>)

For more information

For more information about AlphaServer systems visit www.hp.com/alphaserver

HP Financial Services provides innovative financing and financial asset management programs to help you cost-effectively acquire, manage, and ultimately retire your HP solutions. For more information on these services, contact your HP sales representative or visit www.hp.com/go/hpfinancialservices.

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