



## HP ProLiant DL585 G6 Server

Data sheet



Latest six-core AMD Opteron™ processors, support for the Smart Array P410 Controller, and a new power supply backplane with external power connectors make the HP ProLiant DL585 G6 Server an ideal choice for organizations looking for unparalleled performance, scalability, and energy efficiency.

The HP ProLiant DL585 Generation 6 (G6) is a highly-manageable, rack-optimized, four-socket server designed for enhanced performance in an industry-standard architecture. With up to four (4) six-core AMD Opteron™ processors and a large memory footprint, the DL585 G6 delivers the performance and value for compute-hungry database, virtualization, and consolidation applications. Support for the Smart Array P410 Controller facilitates use with RAID 0/1, 1+0, 5+0 and can be upgraded with the 512 MB battery-backed write cache (BBWC) module and Smart Array Advanced through license key for RAID 6 and, 6 +0. What's more, the DL585 G6 features a new power supply backplane with external power connectors to provide supplemental power to slot-based server options.

High-performing six-core processors provide the highest level of x86 floating-point performance that you need to deploy demanding applications. In addition to supporting all 8300-series features, the AMD Opteron™ 8400-series processors feature:

- **AMD Core Select™:** Allows you to select the number of software-visible cores per CPU to provide additional performance and price/performance benefits depending on workload
- **HT Assist™:** Reduces coherence traffic overload on the HT links, resulting in faster queries in both cache and compute-intensive applications

## Ideal environments

### Server consolidation and virtualization

- The high performance and scalability of six-core Opteron™ processors give the DL585 G6 the performance you need to deploy demanding applications
- Management features such as ProLiant Onboard Administrator (powered by iLO2) let you remotely monitor and control your mission-critical applications
- The large 256 GB footprint and nine (9) expansion slots provide the memory and I/O scalability you need to support multiple applications or virtual machines on a single physical server

### Compute-intensive applications

- The high performing six-core AMD Opteron™ processors provide the highest level of x86 floating-point performance for compute-intensive applications
- The large memory capacity provides an ideal platform for Electronic Design Automation (EDA), financial, and petrochemical applications that demand huge amounts of memory

### Database and transaction

- The rack-optimized 4U chassis is ideal for enterprise class database, ERM, CRM, and messaging applications
- Adherence to industry standards, and broad interoperability with operating systems, applications, and storage mean the DL585 G6 can meet your environment's requirements

## Key benefits

### Outstanding performance and reliability

Outstanding 4-processor, 32-bit and 64-bit performance and reliability support the most demanding, compute-intensive application, and virtualization environments

- Six-core AMD Opteron™ 8400-series processors
- 32 DIMM sockets allowing up to 256 GB of dual-channel PC2-6400 DDR2 running at up to 800 MHz
- HP Smart Array P410 with 256 MB cache (base models) and optional 512 MB battery-backed write cache (performance models)
- Up to 8 SFF SAS/SATA hot plug drives for a total of up to 2.0 TB of internal storage
- Dual embedded NC371i Multifunction Gigabit Server Adapters with TOE and iSCSI support
- I/O slots: 3 PCI-Express (x8), 4 PCI-Express (x4), and 2 PCI-X (100 MHz)

- HT3 interconnect links between processors and the I/O subsystem scaling up to 8.8 GB/s of bandwidth per connection
- AMD Dual Dynamic Power Management technology that reduces power consumed while maintaining improved performance
- Hot plug redundant hard drives, fans, and power supplies, and redundant ROM support
- System Insight Display and Status LEDs including system health and UID, help reduce time spent troubleshooting and maintaining the server

### Industry-leading management solutions

Excellent server infrastructures are built with ProLiant servers and HP Infrastructure Management—software that gives you total control, greater flexibility, and tangible savings from your ProLiant investment

- ProLiant Onboard Administrator (powered by iLO2) simplifies server setup, health monitoring, power and thermal control, and remote administration of the server
- Install faster using Rapid Deployment Pack, optional Server Migration Pack, and optional Virtual Machine Management Pack
- Simplified installation with HP SmartStart and the ROM-Based Setup Utility (RBSU)
- HP Systems Insight Manager, which provides a unified, advanced, and extensible environment to centrally manage servers, storage, and other infrastructure devices across multiple operating systems
- The option to move up to Insight Control Environment, time-smart management software that delivers total control, greater flexibility, and tangible savings for your ProLiant server environment

### Flexibility for a variety of enterprise deployments

Inclusion of the AMD Core Select™ feature, adherence to industry standards, broad support for software and hardware options, and key certifications mean the DL585 G6 can support your application's needs

- Designed to fit into existing enterprise data centers, with support for full line of HP Smart Array controllers, NICs, and storage options
- Support for the industry's most popular operating systems, including Microsoft® Windows® Server 2008, Microsoft® Windows® Server 2003, Red Hat® Enterprise Linux, SUSE Linux Enterprise Server, Sun Solaris, and VMware
- Tool-free quick deploy sliding rails, cable management, and in-rack server access for both HP and third-party racks

<b>Processor and memory</b>	<b>Processor type</b>	AMD Opteron™ 8400 Series
	<b>Available processors</b>	Six-core processors AMD Opteron™ processor 8435 (2.6 GHz, 6 MB L3 cache, 75W ACP) AMD Opteron™ processor 8431 (2.4 GHz, 6 MB L3 cache, 75W ACP)
	<b>Processor core</b>	6-Core
	<b>Cache memory</b>	Up to 6 MB shared L3 cache
	<b>Maximum processor speed</b>	2.6 GHz
	<b>Multi-processor</b>	4
	<b>Memory type</b>	PC2-6400 registered DDR2
	<b>Standard memory</b>	16 GB (8 x 2 GB) of PC2-6400 DDR SDRAM standard
	<b>Maximum memory</b>	256 GB
	<b>Memory slots</b>	32
	<b>Advanced memory protection</b>	Advanced ECC
	<b>Storage type</b>	Hot plug 2.5-inch SATA Hot plug 2.5-inch SAS
	<b>Number of hard drives</b>	Up to 8 small form factor
	<b>Removable media bays</b>	2
	<b>Expansion slot</b>	9 total (3 PCI-Express x8, 4 PCI-Express x4, 2 PCI-X)
	<b>Storage controller</b>	HP Smart Array P410/256 MB Controller (Raid 0/1/1+0/5/5+0)
<b>Deployment</b>	<b>Form factor</b>	4U Rack
	<b>Networking</b>	Two embedded NC371i Multifunction Gigabit Network Adapters
	<b>Remote management</b>	ProLiant Onboard Administrator (powered by iLO2)
	<b>Redundant power supply</b>	Redundant standard on performance models, optional on entry and base models
	<b>Redundant fans</b>	Hot plug fully redundant
	<b>Warranty—year(s) (parts/labor/onsite)</b>	3/3/3

## Compelling performance and price/performance

System and processor technologies deliver industry-leading performance per watt in a 4-processor x86 server

- AMD Opteron™ processors require less power to run and less power to cool
- HP Power Regulator built into BIOS allows the server to be throttled up and down depending on utilization
- Independent Dynamic Core Technology™ and AMD CoolCore™ Technology reduce the power used by controlling the power used by each processor subsystem
- Small Form Factor hard drives use up to 50 percent less power than traditional 3.5-inch form-factor drives

## HP Financial services

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 local HP representative, or visit [www.hp.com/go/hpfinancialservices](http://www.hp.com/go/hpfinancialservices)

## For more information

For more information about the HP ProLiant DL585 G6 Server, contact your local HP representative, or visit [www.hp.com/servers/dl585](http://www.hp.com/servers/dl585)

## HP Services

### When Technology Works. Business Works.

The challenge of virtually every IT organization is similar: To develop and maintain an agile, efficient server infrastructure that delivers the service levels your business needs.

HP Technology Services offer a comprehensive portfolio of HP Care Pack Services to help design, deploy, manage, and support your IT environment, with easy-to-buy, easy-to-use support packages.

### Minimum Recommended HP Care Pack offerings

- Three-year, same business day 4-hour response onsite, 24-hour x 7-day coverage, hardware support.
- Hardware Installation plus operating system installation and startup.

### Enhanced service level Care Pack offerings

- **Three-year Support Plus 24:** Integrated 24x7 hardware and software support.
- **Proactive Select:** Access to HP best-in-class technical consultants. Purchase service credits and obtain expertise when needed.

### Benefit from HP Care Pack Services helping you

- Reduce deployment time and manage ProLiant server solutions smoothly and efficiently.
- Increase uptime and performance of servers availability to your business.
- Detect, diagnose, and repair problems to quickly save time, money, and resources.

For more information, visit

[www.hp.com/services/proliantservices](http://www.hp.com/services/proliantservices) or  
[www.hp.com/go/proliant/carepack](http://www.hp.com/go/proliant/carepack)

## Technology for better business outcomes

To learn more, visit [www.hp.com/servers/dl585](http://www.hp.com/servers/dl585)

© Copyright 2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation. AMD, the AMD Arrow logo, AMD Opteron and combinations thereof, are trademarks of Advanced Micro Devices, Inc.

4AA2-6094ENW, May 2009

