



HP ProLiant DL320 G6 Server

Data sheet

Transform your data center cost-effectively with the ultra-dense, efficient, and high-performance HP ProLiant DL320 G6 enterprise-class rack server

Would you consider refreshing your legacy servers to improve performance and consolidation? Many organizations with data centers like yours are looking for solutions that can transform their server environment with solutions that cut costs, boost productivity, and simplify IT management. To help you get the most out of your space-constrained data center, the new HP ProLiant DL320 G6 Server—an enterprise-class rack-optimized server—at an entry-level price. This highly manageable single processor, 1U server is ideal for single-application IT infrastructure, Web, and edge-of-network applications; and it is designed to provide the highest performance in a single socket server.

The remote console and Kernel-based Virtual Machine (KVM) powered by Integrated Lights-Out 2 (iLO 2), coupled with the management features of Systems Insight Manager (SIM), and deployment capabilities of SmartStart and other ProLiant Essentials software, makes DL320 G6 an enterprise-class rack server. The server's support for up to four low-cost Serial ATA (SATA) drives on an integrated RAID 0/1 controller,

with an optional upgrade to highly reliable hot plug Serial-Attached SCSI (SAS) hard drives, makes it truly flexible to meet the needs of your data center. In addition, you get the cost-effective solution of a single-processor platform with options from the new Intel® Xeon® processor (3500, 5500, and 5600 sequence with turbo mode).

What's new with the HP ProLiant DL320 G6 Server?

The DL320 G6 server is now available with the following robust and exciting new features:

- **Support for the Intel Xeon processor 5600 series:** The server supports the future-generation of intelligent four and six core processors with significant performance, security (TXT), and power regulation (low voltage DIMMs) enhancements.
- **Support for new HP Smart Array Hot Plug Advance Pack for B110i (optional upgrade):** The server offers support for SATA Hot Plug through SW enablement without using a slot that reduces the overall solution cost.
- **Memory kits:** The server offers support for memory kits up to 16 GB.



Key features and benefits

Get an enterprise-class rack-dense platform at a low cost

The rack server is available at a low cost and offers the following:

- Includes 1U, 27.56-inch (70.00 cm) deep chassis
- Includes spring-loaded universal sliding rails that fit in both square- and round-hole racks with an optional ambidextrous cable management arm and a Telco rack option
- Supports up to 2.93 GHz Intel Xeon Six, Four, Dual-Core (60, 80, 95, 130 W) processors with Turbo Mode, 1333 FSB, DDR3 1333 MHz DIMMs
- Provides standard support for four 3.5-inch SATA hard drives [8 Small Form Factor (SFF) optional]
- Provides support for the latest Microsoft® Windows®, Novell, and Red Hat Linux operating systems

Simplify and take better control of your infrastructure management

The HP ProLiant DL320 G6 Server comes with powerful management tools to improve and control all aspects of your infrastructure. The HP Insight Control suite—with new Dynamic Power Capping technology—allows you to take charge of power and cooling efficiency across your data center.

HP Insight Control software lets you build infrastructure management capabilities as you need them:

- At the “essential” level of infrastructure management, the HP Insight Control suite allows you to deploy servers rapidly, proactively monitor system health and performance, improve power consumption gradually, and remotely control your entire server environment from anywhere.

- At the advanced level, the Matrix Operating Environment suite for ProLiant delivers comprehensive functions for optimizing and balancing resources and workloads in real time.
- The new HP ProLiant Onboard Administrator (powered by the iLO 2 management processor) simplifies server setup, health monitoring, power and thermal control, and lights-out remote administration of ProLiant ML, DL, and BL servers
- Tools like SmartStart, Insight Rapid Deployment software, PXE, and ROM-Based Setup Utility (RBSU) simplify server configuration and deployment
- Systems Insight Display, a rugged slide-out system diagnostics display, saves administrators’ time with easy-to-find troubleshooting information at the front of the server—enabling walk-up system diagnostics
- Power Regulator and Power Meter for ProLiant deliver integrated power monitoring and server level, policy-based power management with energy efficiency and savings on system power and cooling costs

Gain flexible storage options

The DL320 G6 offers a range of flexible storage options, which include:

- Support for up to four 3.5-inch SATA hard drives, along with an integrated SATA controller that supports RAID 0 or RAID 1 (SATA hard drive options range from low-cost 160 GB hard drives to massive 2 TB hard drives)
- Optional support for hot plug SATA hard drives when using the optional HP Smart Array Hot Plug Advance Pack for B110i
- Optional support for hot plug SAS hard drives when using an optional Host Bus Adapter (HBA) or RAID card, and support for hot plug hard drives

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| Processor and memory | |
|--|---|
| Processor type | Intel Xeon 3500, 5500, and 5600 series |
| Number of processors | 1 |
| Available processors | <p>Dual-Core Processors</p> <p>Intel Xeon Processor E5502 (1.86 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Intel Xeon Processor E5503 (2.00 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Quad-Core Processors</p> <p>Intel Xeon Processor E5504 (2.00 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Intel Xeon Processor E5506 (2.13 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Intel Xeon Processor E5520 (2.26 GHz, 8 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor E5530 (2.40 GHz, 8 MB L3 Cache, 80 W, DDR3 1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor E5540 (2.53 GHz, 8 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor E5603 (1.66 GHz, 12 MB L3 Cache, 80 W)</p> <p>Intel Xeon Processor E5606 (2.13 GHz, 12 MB L3 Cache, 80 W)</p> <p>Intel Xeon Processor E5607 (2.26 GHz, 12 MB L3 Cache, 80 W)</p> <p>Intel Xeon Processor E5620 (2.40 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor E5630 (2.53 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor E5640 (2.66 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor L5506 (2.13 GHz, 4 MB L3 Cache, 60 W, DDR3-800)</p> <p>Intel Xeon Processor L5520 (2.26 GHz, 8 MB L3 Cache, 60 W, DDR3-1066, HT, Turbo 1/1/2/2)</p> <p>Intel Xeon Processor L5609 (1.86 GHz, 12 MB Cache, 40 W, DDR3-1066)</p> <p>Intel Xeon Processor L5630 (2.13 GHz, 12 MB L3 Cache, 40 W, DDR3-1066, HT, Turbo 1/1/2/2/)</p> <p>Intel Xeon Processor W3520 (2.66 GHz, 8 MB L3 Cache, 130 W, DDR3-1066, HT, Turbo 1/1/1/2)</p> <p>Intel Xeon Processor W3540 (2.93 GHz, 8 MB L3 Cache, 130 W, DDR3-1066, HT, Turbo 1/1/1/2)</p> <p>Six-Core Processors</p> <p>Intel Xeon Processor X5650 (2.66 GHz, 12 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)</p> <p>Intel Xeon Processor E5645 (2.40 GHz, 12 MB L3 Cache, 80 W)</p> <p>Intel Xeon Processor E5649 (2.53 GHz, 12 MB L3 Cache, 80 W)</p> |
| Processor core | 6, 4, or 2 |
| Cache memory | <p>4 MB L3 cache</p> <p>8 MB L3 cache</p> <p>12 MB L3 cache</p> |
| Maximum processor speed | 2.93 GHz |
| Memory type | <p>PC3-8500R DDR3 Registered (RDIMM) memory, operating at 1066 MHz</p> <p>PC3-10600E DDR3 Unbuffered (UDIMM) memory, operating at 1333 MHz</p> |
| Maximum memory | 96 GB |
| Memory slots | 9 DIMM slots |
| Number of disk drives | Up to (4) 3.5-inch or up to (8) 2.5-inch |
| Advanced memory protection | <p>Advanced ECC</p> <p>Unbuffered ECC, mirroring mode</p> |
| Drives supported | <p>Hot plug 2.5-inch SAS/SATA</p> <p>Hot plug 3.5-inch SAS/SATA</p> |
| Expansion slot | Up to 2 |
| Maximum internal storage | Standard: up to 4 LFF HDDs; Optional Support for Solid State Drives (SSD) and (8) SFF Drives; Hot plug SAS/SATA |
| Removable media bays | Optional DVD or DVD-RW drive |
| Storage controller | <p>HP Smart Array B110i SATA RAID Controller (RAID 0/1/10) Standard</p> <p>Performance Model: HP Smart Array P410/256 MB</p> |
| Deployment | |
| Form factor | Rack |
| Rack height | 1U |
| Networking | Embedded NC326i Dual Port Gigabit Server Adapter |
| Remote management software | <p>HP ProLiant Onboard Administrator powered by the HP iLO 2</p> <p>HP Insight Control suite with new Dynamic Power Capping technology</p> |
| Standard storage connection | Up to 4 hot plug 3.5-inch ATA |
| Power supply type | <p>Redundant standard on performance models, optional on entry and base models</p> <p>(2) Redundant Hot Plug 400 W (Performance model),</p> <p>Single 500 W 90% (High efficiency model),</p> <p>Single 400 W (Entry model),</p> <p>92% Efficient Power Supply 460 W (Optional)</p> |
| System fans features | Standard: Fully redundant non-hot plug fans |
| Warranty—year(s) (parts/labor/onsite) | 3/3/3 |

Ideal environment

The DL320 G6 Server is well suited for enterprise data centers running IT infrastructure or edge appliances.

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

To understand how the HP ProLiant DL320 G6 Server can cost-effectively transform your data center, visit www.hp.com/servers/dl320-g6

HP Services

HP Technology Services—consultants and support experts solve your most complex infrastructure problems.

Recommended Service

- **Hardware Support—3-year 4-hour same business day, 13x5**
Helps improve equipment availability and productivity with rapid-response onsite and remote support for your HP server and storage hardware.
- **ProLiant Server Hardware Installation**
Offers the basic installation of HP branded servers.

Related Services

- **Hardware Support—3-year, 24x7 same business day, onsite, 4-hour response coverage**
Provides you with an HP-authorized representative within 4 hours of the service request being logged.
- **Hardware Support—3-year 24x7 hour call-to-repair**
Provides an IT manager with a team of support specialists to quickly begin troubleshooting the system to help return the hardware to operating condition within a specified timeframe from the initial service request.
- **HP Proactive Select Service**
Offers a flexible way to purchase HP best-in-class consultancy and services.

Trust the Services professionals at HP; for more information, contact your HP sales representative or HP-authorized Channel Partner or, visit <http://www.hp.com/services/proliant>

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