



## HP ProLiant ML330 G6 Server

Data sheet

### Performance and manageability to scale your business

You understand how tough it is to keep your IT infrastructure in sync with rapidly changing demands and in the face of competition. A growing business means growing needs—you can't avoid continuous investments and constant expenses. We also understand that, for IT managers who run remote or duplicate data centers, the lack of an efficient remote management tool can cause sleepless nights.

The HP ProLiant ML330 G6 Server was designed with a unique system architecture using a new dual-processor tower platform and built on the latest Intel® Xeon® processors with Intel QuickPath Interconnect (QPI) technology.

This unique architecture enables you to scale your business as needed and allows you to enhance your IT dollars. Besides delivering excellent performance with the latest technology, it also incorporates one of the most powerful embedded management technologies in the industry, HP Integrated Lights-Out 2 (iLO 2), which allows you to manage servers from any location at any time. This makes it the ultimate affordable remote office server.

With the latest Intel series processors with QPI technology (six core, quad core, and dual core), choice of DDR3 registered or unbuffered DIMMs, Serial Attached SCSI (SAS), and PCI Express

Gen 2 technology, the ProLiant ML330 G6 Server provides a high-performance system ideal for the rapid expansion of your business.

### Key features and benefits

#### Improved performance

An affordable tower server with a brand new design, the ProLiant ML330 G6 Server delivers outstanding performance.

- **Unique architecture:** Up to two 2.66 GHz Intel Xeon X5600 series processors with Turbo Mode or only one 2.93 GHz Intel Xeon W3500 series processors with Turbo Mode allows the improvement of both power consumption and performance. While the first processor is on board, the second processor is on the mezzanine board as an option. You can cut costs when first ordering your server and choose to add the second processor at a later date.
- **Increased memory:** 18 DIMM slots support up to 192 GB of DDR3 memory and 12 DIMM slots support up to 72 GB for DDR3 unbuffered memory—making the ProLiant ML330 G6 Server ideal for memory-intensive applications. DDR3 achieves 20 percent lower power consumption than DDR2 while delivering up to a 10 percent performance gain.<sup>1</sup>
- **Intel QPI Architecture:** Intel QPI Architecture integrates a memory controller into each microprocessor and provides high-speed

<sup>1</sup> HP Performance Engineering Team, 2010 benchmark.



connections between the microprocessors and other components like external memory and the I/O hub. It also allows a processor to access the dedicated memory of any other processor through the QPI, which links all the processors.

- **Energy efficient:** The HP Sea of Sensors technology enhances server performance while reducing energy usage and expense. Achieve up to a 90 percent reduction in power usage at the server level with the HP Sea of Sensors<sup>2</sup>—the heart of HP Thermal Logic technologies. The Sea of Sensors automatically tracks thermal activity across the server through a collection of up to 32 smart sensors. These sensors dynamically adjust system components such as fans, memory, and I/O processing to improve system cooling. In other words, the HP Sea of Sensors makes intelligent decisions about how much cooling is needed for the server to perform efficiently. The ProLiant ML330 G6 Server satisfies the **Climate Savers Computing Initiative Gold criteria**.
- **PCI Express:** Four available (PCIe) Gen 2 expansion slots (standard) with optional PCI Extended (PCIx) slots provide the latest I/O performance technologies to meet different market requirements for various applications.
- **HP Smart Array:** Embedded HP Smart Array B110i SATA RAID Controller with SAS HW RAID meets unique storage needs. An optional advanced RAID controller provides up to RAID 6/60 and battery-supported write-back cache protection adding high availability to HDD efficiency.
- **Data security:** Customer and business information stored on corporate databases is a critical business asset, vulnerable to hackers and other catastrophic mishaps. The HP ProLiant ML330 G6 Server offers an optional feature called Trusted Platform Module (TPM) that encrypts the hard drive and prevents unauthorized access from another system. It also prevents offline viewing of the files that make up the OS itself.
- **Dual-port network adaptors:** Two embedded Gigabit Ethernet network ports provide increased network throughput and redundancy.

### Manageability

The HP ProLiant ML330 G6 Server is equipped with a set of powerful management tools like HP iLO 2 and the SmartStart deployment tool to enhance and control many aspects of your infrastructure. You may also

purchase the HP Insight Control Environment (ICE) suite with new Dynamic Power Capping technology to take charge of power and cooling efficiency throughout your data center.

- The new HP iLO 2 simplifies server setup, health monitoring, power and thermal control, and lights-out remote administration of HP ProLiant ML, DL, and BL servers. The HP ProLiant Onboard Administrator functions without additional software, and functionality can be accessed locally from the server or remotely through a Web browser.
- Tools like SmartStart, HP Insight Rapid Deployment software, PxE, and ROM-Based Setup Utility (RBSU) simplify server configuration and deployment.

## Ideal environments

With its unique system architecture, the ProLiant ML330 G6 Server is suited for SMBs and remote-site applications.

## Growing businesses (SMBs)

The ProLiant ML330 G6 Server offers excellent performance with an affordable price and ease of use, making it well suited for SMB applications. With its highly flexible, modular configurations, it provides upgradability. Its modular chassis and whisper-quiet fans make it ideal for small office environments.

## Remote and replicate sites

HP iLO 2 provides the ProLiant ML330 G6 Server with enhanced security features and dedicated remote management and control for communicating with headquarters. Integrated Gigabit Ethernet equips the server with increased network throughput and redundancy. Additional memory slots provide it with flexible configuration for low-cost memory expansion.

## Applications

The ProLiant ML330 G6 Server is suited for various applications like:

- Application/messaging server
- Microsoft® Windows® 2008 Small Business Server
- Microsoft Windows Embedded Server
- Mailing/printing server
- Red Hat/SUSE Linux Enterprise Server

<sup>2</sup> Energy efficiency based on HP testing.

# HP ProLiant ML330 G6 Server

## Technical specifications

<b>Processor type</b>	Intel Xeon 5600, 5500, and 3500 series processors
<b>Available processors</b>	<b>Six-core processors</b> Intel Xeon Processor X5650 (2.66 GHz, 12 MB L3 cache, 95 W) Intel Xeon Processor E5649 (2.53 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5645 (2.40 GHz, 12 MB L3 cache, 80 W) <b>Quad-core processors</b> Intel Xeon Processor E5640 (2.66 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5630 (2.53 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5620 (2.40 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5607 (2.26 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5606 (2.13 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5603 (1.60 GHz, 12 MB L3 cache, 80 W) Intel Xeon Processor E5540 (2.53 GHz, 8 MB L3 cache, 80 W) Intel Xeon Processor E5530 (2.40 GHz, 8 MB L3 cache, 80 W) Intel Xeon Processor E5520 (2.26 GHz, 8 MB L3 cache, 80 W) Intel Xeon Processor E5507 (2.26 GHz, 4 MB L3 cache, 80 W) Intel Xeon Processor E5506 (2.13 GHz, 4 MB L3 cache, 80 W) Intel Xeon Processor E5504 (2.00 GHz, 4 MB L3 cache, 80 W) <b>Dual-core processors</b> Intel Xeon Processor E5503 (2.00 GHz, 4 MB L3 cache, 80 W) Intel Xeon Processor E5502 (1.86 GHz, 4 MB L3 cache, 80 W) <b>Intel Xeon W3500 (UP) family:</b> <b>Quad-core processors</b> Intel Xeon Processor W3540 (2.93 GHz, 8 MB L3 cache, 130 W) Intel Xeon Processor W3520 (2.66 GHz, 8 MB L3 cache, 130 W) <b>Dual-core processors</b> Intel Xeon Processor W3505 (2.53 GHz, 4 MB L3 cache, 130 W) Intel Xeon Processor W3503 (2.40 GHz, 4 MB L3 cache, 130 W)
<b>Processor core</b>	6, 4, and 2
<b>Cache memory</b>	4 MB, 8 MB, or 12 MB
<b>Maximum processor speed</b>	2.93 GHz
<b>Multiprocessor</b>	Up to 2
<b>Memory type</b>	PC3-8500R/10600R DDR3 registered memory PC3-10600E DDR3 unbuffered memory
<b>Standard memory</b>	2 GB for entry model, 2–4 GB for base model, 6 GB for performance model
<b>Maximum memory</b>	192 GB DDR3 registered DIMM, 72 GB DDR3 unbuffered DIMM
<b>Memory slots</b>	18 <ul style="list-style-type: none"><li>• 9 slots on system board</li><li>• 9 slots on mezzanine board in processor option kit</li></ul>
<b>Maximum internal storage</b>	16 TB LFF 3.5 in.
<b>Advanced memory protection</b>	Advanced ECC, mirrored memory
<b>Storage type</b>	Hot-plug 3.5 in. SATA Hot-plug 3.5 in. SAS Non-hot plug 3.5 in. SATA Non-hot plug 3.5 in. SAS
<b>Removable media bays</b>	3 (1 for DVD-ROM)
<b>Expansion slot</b>	4 total: 3 PCIe Gen 2, 1 PCIe Gen 1, optional 2 PCIx
<b>Storage controller</b>	HP Smart Array B110i SATA RAID Controller (integrated) HP Smart Array P212/Zero Memory Controller HP Smart Array P410/256 MB Controller HP Smart Array P411/256 MB Controller
<b>Form factor</b>	5U tower
<b>Networking</b>	HP NC326i Integrated Dual Port PCI Express Gigabit Server Adapter, HP NC112T PCI Express Gigabit Server Adapter, HP NC360T PCI Express Dual Port Gigabit Server Adapter
<b>Remote management</b>	HP Integrated Lights-Out 2 (iLO 2), HP Insight Control Environment (ICE) suite, HP Systems Insight Manager, HP ProLiant Essentials Foundation Pack
<b>Operating systems supported*</b>	Microsoft Windows Server, Microsoft Windows Hyper-V Server, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), Oracle Enterprise Linux (OEL), VMware, Citrix Essentials for XenServer
<b>Redundant power supply</b>	Optional
<b>Redundant fans</b>	Optional
<b>Warranty</b>	3-year parts/1-year labor/1-year onsite

\* For a complete list of supported operating systems, visit: [www.hp.com/go/ossupport](http://www.hp.com/go/ossupport)

## Enhance performance with additional HP solutions

You can gain even greater performance from your ProLiant ML330 G6 Server by combining it with these HP solutions:

- **HP Insight Control software:** HP Insight Control software lets you build infrastructure management capabilities as you need them:
  - The HP Insight Control Environment suite allows you to deploy servers rapidly, monitor system health and performance, enhance power consumption, and remotely control your entire server environment from any location.
  - At the advanced level, HP Insight Dynamics (VSE suite for ProLiant) delivers comprehensive functions for enhancing and balancing resources and workloads in real time.

## HP Financial Services

HP Financial Services can help reduce your costs as you make a transition from legacy equipment, acquire new hardware and software, manage your data center efficiently, and dispose of equipment safely at the end of its lifecycle. For more information, visit:

[www.hp.com/go/hpfinancialservices](http://www.hp.com/go/hpfinancialservices)

## HP Factory Express

HP Factory Express is designed to help you get a better return from your IT investment by providing customization, integration, and deployment services along with your storage and server purchases. It provides predictable, trusted, and tested IT solutions tailored to your business needs. We allow you to customize hardware to your exact specifications in the factory, helping to speed up deployment and free up internal resources. For more information, visit:

[www.hp.com/go/factoryexpress](http://www.hp.com/go/factoryexpress)

To scale your business as needed and improve the efficiency of how you spend your IT dollars, visit: [www.hp.com/servers/proliantml330-g6](http://www.hp.com/servers/proliantml330-g6)

## HP Services

**HP Technology Services**—Our team of consultants and support experts can help solve your most complex infrastructure problems. We help keep your business running. Boost availability and avoid downtime; trust our expertise to enhance your HP solution.

### Recommended services

Hardware support—3-year, 13x5, same-business-day, 4-hour onsite response coverage

HP Hardware Support Onsite 4-Hour Service provides you with an HP authorized representative who will arrive at the customer's site any time and day of the year to begin hardware maintenance service within four hours of the service request being logged.

### Deployment services

HP Services offers complete implementation support to get your HP server solution up and running rapidly. Options encompass server and storage, and Microsoft, Linux, Solaris, and VMware OS software plus Insight Control management solutions.

### Related services

Hardware support—3-year, 24x7, same-business-day, 4-hour onsite response coverage

Fast, reliable 4-hour response onsite support—Get product expertise for fast and accurate problem resolution with integrated high-quality remote monitoring and problem diagnosis, helping to maintain predictable service levels and reduce unplanned downtime.

Hardware support—3-year, 6- or 24-hour call to repair

This support provides you with a team of support specialists who will quickly begin troubleshooting your system to validate that the hardware is operational within a maximum of 6 hours or 24 hours from your initial service request.

### Proactive Select

Proactive Select is a flexible way to purchase HP first-rate consultancy and services. You can buy Proactive Select service credits when you purchase your hardware, then use the credits over the next 12 months or 3 to 5 years.

Trust the Services professionals at HP. For more information, contact your HP sales representative or HP authorized channel partner or visit: [www.hp.com/hps](http://www.hp.com/hps)



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