

# HP ProLiant ML350 G6 Server

Data sheet

## Get a competitive edge with the adaptable and reliable HP ProLiant ML350 G6 Server

As enhanced productivity translates into customer satisfaction, it is something that you cannot afford to take for granted. Similarly, you would not want downtime to affect business continuity. So an adaptable, reliable, and expandable infrastructure is a must for your business. The HP ProLiant ML350 G6 Server is designed to help you achieve these business imperatives. It comes with the latest Intel® QuickPath Interconnect (QPI) architecture six-core, quad-core, and dual-core processors; serial performance I/O; DDR3 memory; and tools that simplify management. All these features are available at an affordable price, giving your infrastructure the competitive edge in more ways than one. Additionally, the dual-processor tower server delivers excellence with performance, expandability, and availability. HP Integrated Lights-Out 2 (iLO 2), SmartStart, and HP Systems Insight Manager (SIM) give you ease of management, while the processor and memory upgrades support additional users, thus boosting response times. The HP ProLiant ML350 G6 Server addresses your business needs, whether you are a small/medium business, a large enterprise, or have remote offices.



## Key features and benefits

### A more secure foundation

Designed with best-in-class availability features, you can count on the ProLiant ML350 G6 Server to stay up and running 24x7:

- There is no need to panic if there is a system power, thermal memory, or disk error. The redundant fans, memory, power, and available disk RAID options enable your system to stay up and running.
- The ability to upgrade to the second processor provides the capability to upgrade the system memory to a 192 GB, and to 16 SFF or 8 LFF hot plug HDD that gives your system architecture the room to grow.
- Serial Attached SCSI (SAS) and Serial Advanced Technology Attachment (SATA) RAID 0/1/10/5/50/6/60, which come with the ProLiant ML350 G6 Server, make storage more reliable, versatile, and affordable.
- Your data is more secure with the Trusted Platform Module (TPM) functionalities that include performing cryptographic functions and creating and managing keys while performing digital signature operations.
- You get to plan capacity and power, provision infrastructure consistently, and balance physical/virtual resources while being able to deploy servers quickly and manage them from a remote location as well. All this is made possible by iLO 2.

### Enterprise-class performance

Combining the latest Intel QPI architecture, six-core, quad-core, and dual-core processors, PCI Express Gen 2, and DDR3 memory technology, the ProLiant ML350 G6 Server provides enterprise-class performance that enables your IT administrators to:

- Get high-performance and enhanced throughput with advanced ECC and mirroring and with the DDR3, while SAS simplifies cabling up to 16 TB of data storage capacity
- Speed up execution with the Intel ultimate processor, which has the latest QPI technology and multi-threaded applications
- Take high availability to HDD efficiency with the protection awarded by advanced RAID 0/1/10/5/6/60 with 512 MB BBWC or 1 GB FBWC
- Get increased network throughput and redundancy with integrated dual Gigabit Ethernet



Watch the demo of the HP ProLiant ML350 G6 Server by the HP product marketing manager.



#### Compatible with virtualized environments

Will this server work in tandem with your virtualized IT infrastructure, you may wonder. Put your fears to rest, as the ProLiant ML350 G6 Server is a virtualization-ready server system. Compatible with VMware, Microsoft®, Red Hat, and Linux, your IT administrators get a “single pane of glass” for physical and virtual machine management through which they can provision, configure, start, stop, delete, relocate, and remotely access virtual machines with keyboard and mouse control. Advantages include:

- Server consolidation
- Resource management and high availability
- Cost reduction
- Business continuity through improved disaster recovery solutions

#### Ease of management with SIM and iLO 2 management processor

Tools like SIM, iLO 2, and the ProLiant Essentials software ICE help reduce downtime and improve productivity. In fact, iLO 2 is a key enabling element for Insight Control and Insight Dynamics. Insight Dynamics enables advanced management that includes planning capacity and power, consistently provisioning infrastructure, and balancing physical/virtual resources. Correspondingly, Insight Control facilitates essential management that helps IT administrators to deploy servers quickly, proactively manage performance control from anywhere, and enhance power confidently. This is referred to as unified management across the server infrastructure, which provide for better business outcomes. Forming the core of ProLiant manageability, iLO 2 helps you:

- Get hassle-free setup, health monitoring, and remote administration. You can also access the iLO 2 remotely through a Web browser.

- Enjoy the power and thermal control features that help you get a peek into the power usage pattern of your IT architecture, thus helping you regulate power supply in your IT architecture. The Dynamic Power Capping feature enables enhanced utilization of power and cooling capacity, which controls the total power consumption for a fixed power input in a rackmount server.
- Benefit from the SmartStart (included in the HP ProLiant Essentials Foundation Pack shipped with the ProLiant ML350 G6 Server) and get the server up and running in three easy steps. It provides a stable and reliable configuration for all ProLiant ML and DL 300, 500, and 700 series and BladeSystem servers.
- Take advantage of SIM and get your staff to concentrate on priority projects. You can also receive alerts on system status.

#### Adaptable and reliable

Intense competition and an ever-changing business landscape underscore the need for you to have an infrastructure that is reliable and adaptable. The ProLiant ML350 G6 Server helps you achieve that by:

- Choosing processor and memory upgrades that support additional users and boost response times
- Allowing you to opt for the HP ProLiant ML350 G5 Server rack when physical location needs change
- Incorporating tape backup solutions to protect business data
- Attaching a wide array of external storage and backup devices as data storage needs increase
- Offering redundancy for power supply and fans for reliability
- Enforcing HP strict worst-case scenario environment testing processes for quality

[Click here to view the demo and get an overview of the HP ProLiant ML350 G6 Server](#)



## HP ProLiant ML350 G6 Server

<b>Processor type</b>	Intel Xeon® 5600 and 5500 series processors
<b>Available processors</b>	<p><b>Six-core processors</b></p> <p>Intel Xeon processor X5675 (3.06 GHz, 12 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor X5670 (2.93 GHz, 12 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)</p> <p>Intel Xeon processor X5660 (2.80 GHz, 12 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3/4/4)</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 E5649 (2.53 GHz, 12 MB L3 Cache, 80 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor E5645 (2.40 GHz, 12 MB L3 Cache, 80 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p><b>Quad-core processors</b></p> <p>Intel Xeon processor X5672 (3.20 GHz, 12 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor E5640 (2.66 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo NA/NA/1/1/2/2)</p> <p>Intel Xeon processor E5630 (2.53 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo NA/NA/1/1/2/2)</p> <p>Intel Xeon processor E5620 (2.40 GHz, 12 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo NA/NA/1/1/2/2)</p> <p>Intel Xeon processor E5607 (2.26 GHz, 12 MB L3 Cache, 80 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor E5606 (2.13 GHz, 12 MB L3 Cache, 80 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor E5603 (1.60 GHz, 12 MB L3 Cache, 80 W, DDR3-1333, HT, Turbo 1/1/2/2/3/3)</p> <p>Intel Xeon processor X5570 (2.93 GHz, 8 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3)</p> <p>Intel Xeon processor X5560 (2.80 GHz, 8 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3)</p> <p>Intel Xeon processor X5550 (2.66 GHz, 8 MB L3 Cache, 95 W, DDR3-1333, HT, Turbo 2/2/3/3)</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 E5530 (2.40 GHz, 8 MB L3 Cache, 80 W, DDR3-1066, HT, Turbo 1/1/2/2)</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 E5507 (2.26 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 E5504 (2.00 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Intel Xeon processor L5630 (2.13 GHz, 12 MB L3 Cache, 40 W, DDR3-1066, HT, Turbo NA/NA/1/1/2/2)</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 L5506 (2.13 GHz, 4 MB L3 Cache, 60 W, DDR3-800)</p> <p><b>Dual-core processors</b></p> <p>Intel Xeon processor E5503 (2.00 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p> <p>Intel Xeon processor E5502 (1.86 GHz, 4 MB L3 Cache, 80 W, DDR3-800)</p>
<b>Processor core</b>	Dual, quad, and six
<b>Cache memory</b>	4 MB, 8 MB, and 12 MB
<b>Maximum processor speed</b>	3.20 GHz
<b>Multiprocessor</b>	1 or 2
<b>Memory type</b>	PC3-6400/8500/10600 (DDR3 800/1066) Registered or Unbuffered memory
<b>Standard memory</b>	4 GB for entry model, 6 GB for base model, and 12 GB for performance model
<b>Maximum memory</b>	192 GB DDR3 Registered Memory 48 GB DDR3 Unbuffered Memory
<b>Memory slots</b>	18
<b>Maximum internal storage</b>	16 TB
<b>Advanced memory protection</b>	Advanced ECC, Mirroring
<b>Storage type</b>	Hot-plug 3.5-inch SAS Hot-plug 3.5-inch SATA Hot-plug 2.5-inch SAS Hot-plug 2.5-inch SATA
<b>Removable media bays</b>	5 (1 for DVD-ROM)
<b>Expansion slots</b>	1 x PCI Express Gen 2 x16 (x8 speed) 1 x PCI Express Gen 2 x8 (x8 speed) 4 x PCI Express Gen 2 x8 (x4 speed) Optional: 2 x PCI-X 100 MHz (replaces 1 x PCI Express slot)
<b>Storage controller</b>	HP Smart Array P410i SAS/SATA controller (integrated)
<b>Form factor</b>	5U Tower
<b>Networking</b>	HP Embedded NC326i PCI Express Dual Port Gigabit Server Adapter HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter HP NC522SFP Dual Port 10GbE Server Adapter
<b>Remote management</b>	HP Integrated Lights-Out 2 (iLO 2) HP Insight Control Environment suite HP Systems Insight Manager HP Foundation Pack
<b>Operating systems supported*</b>	Microsoft Windows® Server 2003 R2 Microsoft Windows Server 2008 Microsoft Windows Small Business Server 2008 and Microsoft Windows Essential Business Server 2008 Microsoft Windows Hyper-V Server 2008 Novell NetWare Red Hat Enterprise Linux SUSE Linux Enterprise Server VMware ESX Citrix XenServer Red Hat and SLEX Xen
<b>Redundant power supply</b>	Optional
<b>Redundant fans</b>	Optional
<b>Warranty (parts/labor/onsite)</b>	3-year/3-year/3-year

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

## Energy efficient—Sea of Sensors

The HP Sea of Sensors technology enhances server performance while reducing energy usage and expense. Achieve up to a 90 percent<sup>1</sup> reduction in power usage at the server level with the HP Sea of Sensors—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 input/output processing to enhance 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.

## Ideal environments and applications

### Growing businesses

Easy on your pocket, the ProLiant ML350 G6 Server's modular chassis provides both the flexibility to deploy in a tower or rack environment and the ability to expand—you can add a second processor, additional hard drive space, more memory, and more storage.

### Remote and branch office deployment

Security is the key issue in remote and branch office deployments. The HP Onboard Administrator provides more secure and dedicated remote management, and control for communicating with the head office. In addition, the TPM functionalities make your data more secure.

### Midmarket and entry enterprise

The 2.66 GHz, six-core with 12 MB cache, and 6.4 GT/s QPI technology with Turbo Mode, coupled with advanced RAID protection, makes the ProLiant server an ideal choice for highly available environments. In addition, the redundant power and fan maintain the system's performance, thereby reducing downtime. Also, where SIM enhances system health and uptime, the HP Insight Control suite delivers comprehensive system health monitoring, remote control, vulnerability scanning, and patch management, as well as flexible deployment, virtual machine management, and power management in one easy-to-install package.

<sup>1</sup> Energy efficiency based on HP testing.

## 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 offers a comprehensive portfolio of HP Care Pack services to help design, deploy, manage, and support your IT environment, enabling cost-effective upgrades to standard warranty with easy-to-buy, easy-to-use support packages.

#### Minimum recommended HP Care Pack offerings:

- 3-year, 4-hour response onsite 24-hour x 7-day hardware support
- Server Installation and Startup service

#### Enhanced service-level HP Care Pack offerings:

- 3-year Support Plus 24: 24-hour x 7-day coverage, integrated hardware and software OS support
- 3-year, Proactive Select delivers a flexibly priced consultancy portfolio

#### Benefit from HP Care Pack services, helping you:

- Reduce deployment time and manage ProLiant server solutions smoothly and efficiently
- Increase server uptime, performance, and availability to your business
- Detect, diagnose, and repair problems quickly, saving 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)

## HP Financial Services

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To understand how the HP ProLiant ML350 G6 Server delivers excellence with performance, expandability, and availability, visit:

[www.hp.com/servers/proliantml350-g6](http://www.hp.com/servers/proliantml350-g6)

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