



## HP ProLiant ML110 G7 Server

Data sheet

Affordability, reliability and simplicity make the HP ProLiant ML110 G7 Server the ideal first server for growing businesses.

Are you using your desktop as a server? If yes, then it is time for a change. A growing business like yours, with its limited in-house IT support, needs a server that is compact and suits the budget – and also one that you can remotely manage.

The HP ProLiant ML110 G7 Server delivers true server reliability and functionality for growing businesses, branch offices and remote locations – all for the price of a typical desktop computer. It perfectly matches your business needs and helps you adapt to the future with confidence.

### What makes the HP ProLiant ML110 G7 Server an ideal first server?

Going beyond the proven ProLiant reliability, the ProLiant ML110 G7 Server is powered by the latest Intel® Xeon®, Intel® Core™ i3, Intel Pentium® processor; network interface controllers (NICs);

and DDR3 memory, which together enhance performance. PCI Express (PCIe) Gen2 slots, DIMM slots, drive bays and server options help deliver the expandability that your growing business needs. Additionally, the HP SmartStart CD augments the installation process and helps you step up to your first server network with ease.

The optional trusted platform module (TPM) is an added advantage that brings further security to your IT architecture. Support for an energy-efficient redundant power supply (RPS) and integrated HP Integrated Lights-Out 3 (iLO 3) remote management software brings down operational expenses by reducing the number of physical visits to the server site – making it a practical and affordable solution.



## More on HP iLO 3

HP Insight Control is essential server management software that helps deploy servers quickly, manage virtual or physical server health proactively, control servers from outside of the office and streamline power consumption. HP iLO 3 is a standard component of the ProLiant ML110 G7 Server that facilitates remote server manageability. It includes an intelligent microprocessor, secure memory and a dedicated network interface. In addition to providing world-class remote management functionality, iLO 3 is also responsible for managing the health of your server. For more information about HP iLO 3 for ProLiant servers, visit [www.hp.com/go/insightcontrol](http://www.hp.com/go/insightcontrol).

## Key features and benefits

### Proven HP dependability and support

- HP conducts some of the most rigorous and thorough testing in the industry. This testing, along with a worldwide network of HP service professionals, allows you to deploy the ProLiant ML110 G7 Server with confidence.
- The ProLiant ML110 G7 Server inherits ProLiant reliability. Our tireless efforts on system testing and process control can provide you with a very dependable solution.

### Ease to expansion and growth with changing business needs

- Delivers off-the-shelf functionality and expandability to grow with your business with features such as two NICs, DDR3 memory, SAS and SATA hard drives, PCIe Gen2 slots and USB 2.0 ports
- Requires less upfront investment due to the server's modular design, and offers an easy-to-use and easy-to-configure platform because all major server components can be removed or reinstalled with reduced effort
- Helps remote locations or branch offices reduce server downtime and improve productivity with iLO 3 – remote management capability from HP

### A true server at a desktop price

- Compact and simple design for better manageability and low-cost expansion
- Efficient power usage and remote management to reduce overall operational costs
- Improved processor and memory performance for better results
- Advanced remote management software drives down the cost of managing your servers by reducing the number of physical visits.

### Proven ProLiant reliability and data protection

- ECC memory helps protect your business from data loss and unplanned system downtime. Unlike standard memory, ECC memory can detect and correct single-bit errors.
- HP Smart Array options provide businesses with RAID mirroring and striping capabilities to protect critical data.
- The TPM hardware-based encryption and authentication feature provides increased data security.
- HP ProLiant 100 series servers have customisable features suitable for the varying usage needs of small and medium businesses and branch offices.
- RPS for better protection against data loss/attack and for essential productivity backup.

## Ideal environment

Here is a quick checklist that can help you decide if the ProLiant ML110 G7 Server is the right solution for you.

### Remote sites or branch offices of small- to medium-sized businesses running light applications, such as:

- File and print
- Web messaging
- Small vertical applications or databases
- Shared Internet access and LAN infrastructure

### Budget-conscious businesses with the need for:

- An entry-level, single-processor server solution that is easy to use and easy to configure
- A reliable server that can protect your data 24x7
- A rack-mountable server that helps save data centre space
- An affordable server that can be remotely managed and controlled
- An expandable server that can grow with your business needs

## Technical specifications

HP ProLiant ML110 G7 Server



### Processor and memory

<b>Processor family</b>	Intel Xeon E3 series, Intel Core i3, Intel Pentium
<b>Number of processors</b>	1
<b>Maximum number of cores</b>	4
<b>Processors supported</b>	E3-1280, E3-1270, E3-1240, E3-1230, E3-1220, i3-2120, i3-2100, G850, G840, G620
<b>Processor cores</b>	Quad-core, Dual-core
<b>Cache</b>	8 MB Intel Smart Cache
<b>Maximum processor speed</b>	3.50 GHz
<b>Memory type</b>	PC3-10600E Unbuffered DDR3 ECC up to 1333 MHz
<b>Memory slots</b>	4 DIMM slots
<b>Standard memory</b>	2 GB or 4 GB, depending on model
<b>Maximum memory</b>	16 GB

### Storage

<b>Storage type</b>	Non-hot-plug 3.5 in. SAS Non-hot-plug 3.5 in. SATA
<b>Drives supported</b>	4 LFF HDD NHP and HP SAS/SATA 8 SFF
<b>Maximum internal storage</b>	8 TB
<b>Maximum internal drives</b>	4
<b>Removable media bays</b>	2
<b>Expansion slots</b>	<b>4 slots:</b> <ul style="list-style-type: none"><li>• Slot 1: PCIe Gen2, x16 (x16 connector), full height and full length</li><li>• Slot 2: PCIe Gen2, x4 (x8 connector), full height and full length</li><li>• Slot 3: PCIe Gen2, x4 (x8 connector), full height and full length</li><li>• Slot 4: PCIe Gen2, x4 (x1 connector), full height and full length</li></ul>
<b>Storage controller</b>	HP Embedded Smart Array B110i SATA RAID Controller (RAID 0/1/10)

### Operating system

<b>Windows</b>	<ul style="list-style-type: none"><li>• Microsoft® Windows® Server 2008 for Embedded Systems – SP2 and R2 with SP1</li><li>• Microsoft Windows Server 2008, Standard Edition (x86 and x64) – SP2 and R2 with SP1</li><li>• Microsoft Windows Server 2008, Enterprise Edition (x86 and x64) – SP2 and R2 with SP1</li><li>• Microsoft Windows Server 2008, Web Server (x86 and x64) – SP2 and R2 with SP1</li><li>• Microsoft Windows Foundation Server 2008 (x64) – SP2 and R2 with SP1</li><li>• Microsoft Windows Server 2008 Embedded Systems (x64) – SP2 and R2 with SP1</li><li>• Microsoft Windows Small Business Server 2011 Essentials (Aurora)</li><li>• Microsoft Windows Small Business Server 2011</li><li>• Microsoft Windows 8 Server</li></ul>
<b>Linux</b>	<ul style="list-style-type: none"><li>• RHEL 5 (includes KVM) • RHEL 6 (includes KVM)</li><li>• SLES 10 (includes XEN) • SLES 11 (includes XEN)</li></ul>
<b>Enabled OS</b>	<ul style="list-style-type: none"><li>• OEL 6 • Asianux (latest version based on RHEL 6) • CentOS (latest version based on RHEL 6)</li><li>• Debian (latest version) • Ubuntu (latest version) • Fedora (latest version) • OpenSUSE (latest version)</li></ul>

### Deployment

<b>Form factor</b>	Tower with rackmount option kit
<b>Rack height</b>	4U
<b>System fans</b>	Standard
<b>Power supply</b>	Standard 350 W non-hot-plug, non-redundant power supply (70% <sup>1</sup> efficiency) RPS 460 W (92% <sup>2</sup> efficiency)
<b>Graphics card (tested)</b>	64 MB; supports all display resolutions up to 1600 x 1200 @ 75 Hz NVIDIA Quadro 600 NVIDIA Quadro FX 380 LP
<b>Port</b>	10 USB 2.0
<b>Networking</b>	2 Intel 82574 Gigabit NIC
<b>Remote management</b>	HP Integrated Lights-Out 3 HP SmartStart CD
<b>Warranty</b>	Worldwide, except Brazil: 1-year parts/1-year labour/1-year onsite Brazil only: 3-year parts/1-year labour/1-year onsite

<sup>1</sup> ML110 Power Supply Single PS Efficiency test conducted by Foxconn, January 2011.

<sup>2</sup> The 80 PLUS certification is an incentive program funded by electric utilities to encourage manufacturer development and customer application of more energy-efficient power supplies. To earn the 80 PLUS certification, a power supply must be proven through independent testing to be 80 per cent (or more) energy efficient – when delivering 20, 50 and 100 per cent of the rated load capacity with a true power factor of 0.9 or more. For further information on the 80 PLUS program, visit [www.80plus.org](http://www.80plus.org)

## HP Financial Services

HP Financial Services provides innovative financing and financial asset management programmes to help you cost-effectively acquire, manage and ultimately retire your HP solutions. For more information, contact your local HP representative or visit [www.hp.com/go/hpfinancialservices](http://www.hp.com/go/hpfinancialservices).

## Take your organisation to the next level of productivity and efficiency

For a simple, surprisingly affordable and reliable server-based computing, choose the HP ProLiant ML110 G7 Server. Visit [www.hp.com/servers/ml110-g7](http://www.hp.com/servers/ml110-g7) for more information.

## HP Services

### When technology works, business works.

HP Technology Services has a robust range of packaged lifecycle support solutions that enable you to leverage ProLiant server support for better business outcomes.

**Optimised Care:** delivers superior performance and availability of crucial ProLiant systems through deployments and proactive management practices.

- HP ProLiant Server Hardware Installation
- 3-year HP 6-hour Hardware Support Onsite Call-to-Repair

**Standard Care:** maintains a high level of server availability along with expert help to cut the cost and complexity of implementing and supporting ProLiant servers.

- HP ProLiant Server Hardware Installation
- 3-year HP 24x7 4-hour response, Hardware Support Onsite Service

**Basic Care:** delivers minimum recommended support service level with expert advice, implementation and support.

- HP ProLiant Server Hardware Installation
- 3-year HP 13x5 4-hour response, Hardware Support Onsite Service

All come with HP Insight Remote Support, available at no additional cost, delivering remote monitoring, diagnosis and problem resolution.

Only HP brings together deep expertise, proactive and business-critical support and a strong partner network.

For more information, visit [www.hp.com/services/proliant](http://www.hp.com/services/proliant).



### Get connected

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

Current HP driver, support, and security alerts delivered directly to your desktop

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4AA3-3719EEW, Created May 2011; Updated June 2011, Rev. 1

