HP ProLiant BL685c G7 Server Blade

Data sheet

Get a competitive edge with dense four-processor computing capability.

Your server needs to deliver an ideal combination of performance, networking capability, and memory capacity for compute-intensive workloads. And, it must also deliver value for your money. The HP ProLiant BL685c G7 server blade does just that.

The BL685c G7 server blade features the latest AMD Opteron 6100 Series processors, integrated HP Virtual Connect FlexFabric architecture, and HP Integrated Lights-Out 3 (iLO3) remote management, helping to simplify network connections, and lower infrastructure costs. All these benefits are ideal for your virtualization and compute-intensive database workloads. Incorporating superior technologies, this enhanced server blade comes with an HP Smart Array Controller, support for hot-plug drives, 32 DIMM sockets, and Virtual Connect FlexFabric networking. What's more, the BL685c G7 server blade gives you the competitive advantage with enhanced memory capacity and advanced networking capabilities.

All new features at a great price

- **Improve performance of your compute-intensive applications**

  The HP ProLiant BL685c G7 server blade provides outstanding compute power and superior performance with up to four Multi-Core AMD Opteron 6100 Series processors. With the latest power-efficient technologies such as AMD CoolCore, PowerNow!, and CoolSpeed Technologies, the BL685c G7 server blade has the processing power you need to drive virtualization and compute-intensive database applications.

- **Buy less and connect more**

  The BL685c G7 server blade comes with embedded HP FlexFabric 10-Gb Ethernet network adapters to help reduce infrastructure cost and save overall power consumption by converging LAN and SAN connections at the server level.

- **Unleash the power of remote management**

  HP iLO 3 server management software delivers remote console performance almost 8x (eight times) faster than iLO 2. It sends alerts from iLO 3 regardless of the state of the host server and helps you access advanced troubleshooting features. Control your data center remotely—reducing travel time and server management expense.

Key features and benefits

Uncompromising scalability

With the latest 12-core and 8-core AMD Opteron processors, you can defy the barriers of server consolidation and get enhanced compute power for your compute-intensive database applications.

- Up to four 8-core and 12-core AMD Opteron processors deliver outstanding compute power.
- Up to 512 GB of DDR3 Registered DIMM memory with advanced error checking and correcting (ECC) provides a large memory footprint for demanding applications.
- High-performance Smart Array P410i controller, with 1 GB flash-backed write cache (FBWC) module, is ideal for RAID levels 0 and 1.
- Up to two hot-plug small form factor (SFF) SAS, SATA, or SSD drives provide versatile configuration and deployment options.
- Internal USB and MicroSD card slots enable simple and flexible hypervisor deployments.

Improved networking technology

With two embedded HP NC551i Dual-Port FlexFabric 10-Gb Ethernet Converged Network Adapters, the BL685c G7 server blade delivers improved performance and cost savings of converged network connectivity. It helps:

- Sustain sufficient bandwidth for network-intensive applications
- Optimize network and storage traffic with hardware acceleration and stateless TCP/IP offload, TCP Offload Engine (TOE), Fibre Channel over Ethernet (FCoE), and iSCSI protocols
- Reduce infrastructure costs and simplify management by converging LAN and SAN traffic over the same flexible 10-Gb Ethernet connection
- Provide (up to) sixteen connections to network and storage without the need for add-in mezzanine cards
- Divide and fine-tune network and storage bandwidth to match application requirements

Industry-leading infrastructure management

The HP Insight Dynamics suite for ProLiant servers is an advanced infrastructure management software toolkit that allows you to analyze and enhance your adaptive infrastructure—giving you a powerful means of accelerating complex technology projects and simplifying daily operations. The Insight Dynamics suite is based on proven HP technologies, such as HP Virtual Connect, HP Insight Control, HP iLO 3, and HP Systems Insight Manager.

HP Insight Control is essential server management software that helps deploy servers quickly, proactively manage the health of virtual or physical servers, control servers remotely, and streamline power consumption. Insight Control helps you manage HP servers running Microsoft® Windows® and Citrix XenServer environments. You can integrate Insight Control with leading third-party enterprise management consoles, such as Microsoft System Center and VMware vCenter.

The iLO 3 subsystem is a standard component of the BL685c G7 server blade that facilitates remote server manageability. It includes an intelligent microprocessor, secure memory, and a dedicated network interface. This design makes iLO 3 independent of the host server and its operating system. 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 Insight Software for ProLiant servers, visit: **www.hp.com/go/insightcontrol**

Why choose the BL685c G7 server blade?

Your business environment and its growing needs will determine your server choice. It is recommended that you consider what you need in order to:

- Increase the performance of your compute-intensive database workloads
- Realize your virtualization roadmap
- Enable efficient remote manageability
- Get the right price/performance ratio

The BL685c G7 server blade can help you achieve all of these goals, at a great price—making it the right choice for organizations looking to get value for their money.

HP ProLiant BL685c G7 server blade

Technical specifications

Processor and memory	
Number of processors	4
Maximum number of cores	Up to 48
Processors supported	AMD Opteron 6100 Series
Low wattage processor offerings	Yes
Cache	512 KB L2 per core 12 MB L3 per core
Memory type	DDR3 RDIMM
Standard memory	32 GB or 64 GB (depending on model)
Maximum memory	512 GB
Advanced memory protection	Advanced ECC
Memory slots	32 DIMMs

Storage	
Storage type	Hot-plug SFF SAS Hot-plug SFF SATA Hot-plug SFF SDD
Maximum internal storage	1 TB
Maximum internal drive bays	2
Expansion slots	3 PCIe x8 Gen 2 (mezzanine)
Storage controller	Smart Array P410i Controller with 1 GB FBWC

Deployment	
Form factor	Full-height blade
Rack height	8 server blades in 10U enclosure or 4 server blades in 6U enclosure
Networking	2 HP NC551i Dual-Port FlexFabric 10-Gb Network Adapters Ethernet/iSCSI/Flex-10/FCoE
Remote management	HP Integrated Lights-Out 3 (iLO 3)
Redundant power supply	Enclosure-based power
Warranty	3-year parts/3-year labor/3-year onsite

For additional technical specifications, please visit: **http://h18000.www1.hp.com/products/quickspecs/13655_div/13655_div.pdf**

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, contact your local HP representative or visit:
www.hp.com/go/hpfinancialservices

To learn how the new HP ProLiant BL685c G7 server blade can provide an ideal combination of performance, networking capability, and memory capacity for compute-intensive workloads, visit: **www.hp.com/servers/bl685c**.

To connect with other blade customers, partners, and experts, visit the HP Blade Connect online community: **www.hp.com/go/bladeconnect**

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, with easy-to-buy, easy-to-use support packages.

Minimum recommended HP Care Pack offerings
- Installation and Startup for HP BladeSystem infrastructure
- 3-year, 6-hour or 3-year, 24-hour call to repair

Related service level HP Care Pack offerings
- 24x7 same-business-day
- Onsite 4-hour response coverage
- Support Plus 24—integrated 24x7 hardware and software support
- Proactive Select—access to HP best-in-class technical consultants, service credits, and expertise when needed

Benefit from HP Care Pack services, helping you:
- Reduce deployment time and manage server blade 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/go/proliant/carepack**

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