



HP ProLiant BL490c G6 Server Blade

Data sheet



Achieve high levels of virtual machine performance, while reducing your data center footprint and lowering your cost per virtual machine with the HP ProLiant BL490c G6 Virtualization Blade. With more memory, I/O scalability, flexible storage option, and more network throughput, the BL490c G6 can help you reduce costs even as you improve the flexibility of your IT environment.

While hardware consolidation yields much-needed cost and space savings in the data center, it demands higher levels of performance from IT equipment. Servers that host virtual machines require large memory and network throughput. This creates bottlenecks that often become inhibitors to unlocking the full savings available from consolidation projects.

Look to the HP ProLiant BL490c G6 Virtualization Blade, which raises the bar for memory capacity and I/O bandwidth in a half-height blade. Optimized for virtualization, it includes embedded 10 GbE controllers and support for solid state drives (SSD). Coupling up to two Intel® Xeon® processors with 18 DIMM slots and support for up to 24 NICs, the BL490c G6 gives enterprise data center managers the right server platform for hosting virtual machines.

With high-performance virtualization from features such as Intel Quick Path Interconnect and Intel Hyper-Threading Technology, up to 144 GB of memory, and support for high network throughput, the BL490c G6 effectively removes the constraints that limit virtual machine hosts.

It is now possible to fit more virtual servers per blade for maximum consolidation. Moreover, extensive management tools make it easy to accelerate virtual server setup and streamline server configuration management.

Key features and benefits

Reduce bottlenecks to enhance performance

- Get quicker responses from your applications with up to two Intel Xeon processors 5500 series featuring Quick Path Interconnect and Intel Hyper-Threading Technology
- Fit more virtual machines onto your blades with the 18 DIMM slots using DDR3-1333 memory—supporting up to 144 GB
- Make use of the two embedded 10 GbE ports for maximum network throughput—resulting in lower network connection costs
- Fine-tune network bandwidth to your workloads by using the integrated dual-port 10 GbE server adapter with Flex-10 technology that helps to adapt to virtual server workloads on-the-fly—even as you use less number of switches and cables

Manage your infrastructure with ease

- Achieve your goal of a lights-out data center by using the Integrated Lights-Out 2 (iLO 2) Standard Blade Edition management software for high-speed management including virtual KVM and graphical remote console
- Conserve power without performance impact with the built-in HP Power Regulator, and reclaim trapped power in your data center by safely limiting server power consumption with Dynamic Power Capping
- Improve your server uptime and health with HP Systems Insight Manager, available at no additional cost
- Achieve balance across physical and virtual resources with support for advanced infrastructure management using Insight Dynamics – VSE

Take control of your virtualized environment

- Connect to the many separate networks needed by all your workloads without buying additional NICs by dividing the embedded 10 gigabit Ethernet ports into 8 Flex NICs using Virtual Connect Flex-10
- Enhance virtualization performance using hardware-assisted Intel® Virtualization Technology (Intel® VT) with new capabilities including Extended Page Tables and Virtual Processor ID (VPID)
- Maintain the memory-to-virtual-machine ratios right for your applications with up to 144 GB of DDR3 memory with Advanced ECC memory protection
- Reduce tedious hypervisor set-up tasks with HP ProLiant iVirtualization that integrates industry-leading virtualization technology into the server, including support for VMware and Citrix offerings

Reduce the cost per virtual machine

- Capture more value from expensive hypervisor licenses by fitting more virtual machines per hypervisor with the highest memory footprint of any 2-processor half-height blade
- Take advantage of the half-height form factor to pack up to 16 blades into 10U in the HP BladeSystem c7000 enclosure
- Get even more network ports for your VMs with support for up to 24 NICs per server blade using Virtual Connect Flex-10
- Lower networking costs by reclaiming unused Ethernet capacity with Virtual Connect Flex-10

Choose from deployment options

- Increase your I/O bandwidth even more with optional Fibre Channel, iSCSI, Ethernet, InfiniBand, and SAS adapters
- Access data the way you prefer with options including internal solid state drives, direct-attached hot plug SAS hard drives, Fibre Channel and iSCSI SAN connectivity, SAS-connected storage shared between multiple blades, and more
- Improve IT ROI with access to HP best-in-class technical experts using Proactive Select, a service access program based on a simple credit system to build the plan you need—no more, no less
- Make use of HP Insight Remote Support (Insight RS) Software that enables 24x7 automated, more secure remote monitoring, notification, and service dispatch for HP servers and storage

Ideal environment

The HP BL490c G6 is an ideal platform for virtualized environments that require sufficient memory, storage, and excellent networking connectivity to enhance server performance.

Virtual machine host for enterprise data centers

Unmatched capacity for virtual machines using the industry's most popular virtualization software from Citrix, Microsoft, and VMware.

Ideal applications

- Hosting virtual machines with solutions such as VMware®, Citrix XenServer, and Microsoft Hyper-V
- Multi-tiered enterprise applications such as SAP, PeopleSoft®, Siebel, Oracle®, and JDE
- Performance sensitive client/server infrastructure services, such as VDI and Citrix Terminal Services

HP ProLiant BL490c G6 Server Blade



| Processor and memory | |
|--|---|
| Processor type | Intel® Xeon® 5500 series |
| Available processors | Intel® Xeon® Processor X5570 (2.93 GHz, 8M L3 Cache, 95W) Intel® Xeon® Processor E5540 (2.53 GHz, 8M L3 Cache, 80W) Intel® Xeon® Processor E5504 (2.00 GHz, 4M L3 Cache, 80W) |
| Processor core | Quad |
| Processor cache | 4 MB or 8 MB shared Level 3 cache depending on processor |
| Maximum processor speed | 2.93 GHz |
| Multi-processor | 2 |
| Memory type | PC3-10600 (DDR3-1333) Registered DIMMs (RDIMMs) or PC3-10600 (DDR3-1333) Unbuffered DIMMs (UDIMMs) |
| Standard memory | 6 GB |
| Maximum memory | 144 GB |
| Memory slots | 18 |
| Advanced memory protection | Advanced ECC Support for mirrored memory |
| Maximum number of hard drives | Up to two (2) Non Hot Plug (NHP) SATA SSD 32 GB NHP SATA SSD 64 GB NHP SATA SSD Support for up to 6 hot plug SAS hard drives with an attached SB40c Storage Blade |
| Expansion slot | 2 |
| Storage controller | HP Embedded SATA controller |
| Deployment | |
| Form factor | Blade |
| Rack height | 16 blades in 10U (c7000); 8 blades in 6U (c3000) |
| Networking | Embedded NC532i Dual Port Flex-10 10GbE Multifunction Server Adapter, plus One (1) additional 10/100 NIC dedicated to iLO 2 Management |
| Remote management | Integrated Lights-Out 2 Standard Blade Edition |
| Redundant power supply | Enclosure-based power |
| Warranty—year(s) (parts/labor/onsite) | 3/3/3 |

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

For more information

For more information about the HP ProLiant BL490c G6 Server Blade please contact your local HP representative, or visit

<http://www.hp.com/servers/bl490c>

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 offer a comprehensive portfolio of HP Care Pack Services to help design, deploy, manage, and support your Blades environment, with easy-to-buy, easy-to-use support packages.

Minimum Recommended HP Care Pack offerings

- Three-year 4-hour response onsite 24-hour x 7-day hardware support.
- Blades Infrastructure plus Enhanced Network Installation and Startup services.
- Enhanced service level Care Pack offerings.
- Three-year Support Plus 24: Integrated 24x7 hardware and software support.
- Proactive Select: Access to HP best-in-class technical consultants. Purchase service credits and obtain expertise when needed.

Benefit from HP Care Pack Services helping you:

- Reduce deployment time and manage blade server solutions smoothly and efficiently.
- Increase uptime and performance of server availability for your business.
- Detect, diagnose, and repair problems to quickly save time, money, and resources.

For more information, visit

www.hp.com/services/bladesystem

or www.hp.com/go/proliant/carepack

Technology for better business outcomes

To learn more, visit www.hp.com/servers/bl490c

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