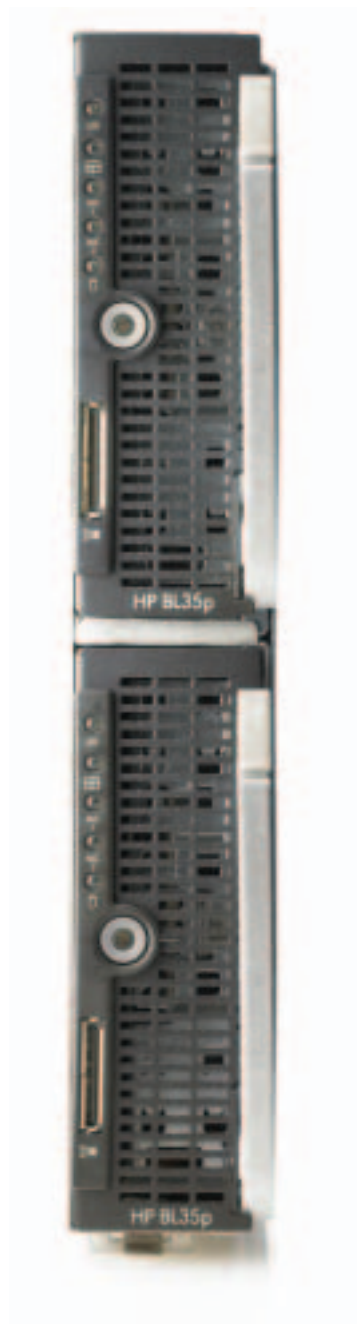# HP ProLiant BL35p Server Blade

Data sheet

The new HP ProLiant BL35p two-way Server Blade delivers uncompromising manageability, maximum compute density and breakthrough power efficiencies to the high-performance data centre.

The ProLiant BL35p Server Blade offers customers a modular, space-saving blade server design that consumes less power, enabling denser rack architectures. The ProLiant BL35p Server Blade shares the same infrastructure components as all ProLiant BL p-Class server blades, allowing customers to enjoy additional benefits from the HP BladeSystem p-Class rack-centralised power subsystem and network interconnect options.

Key features and benefits

• Dual-processor AMD Opteron™ computing power

• Breakthrough compute density and power efficiencies

• Uncompromising manageability

The ProLiant BL35p two-way Server Blade delivers uncompromising manageability, maximum compute density and breakthrough power efficiencies to the enterprise data centre or High Performance Computing (HPC) environment.

The ProLiant BL35p Server Blade delivers maximum compute density and breakthrough power efficiencies to the enterprise data centre or High Performance Computing (HPC) environments with the following features:

Price/performance
- Up to two AMD Opteron 250 processors (2.4 GHz)

- Up to 8 GB of PC3200 DDR (400 MHz) memory

Density and power efficiency
- Ultra-dense design provides up to 96 servers in an industry-standard rack

- Lower power consumption per server (68 watts per AMD Opteron processor)

Management
- Integrated Lights Out (iLO) Advanced standard

- Support for Rapid Deployment Pack

Options
- Fibre-channel support for SAN implementations and clustering

Ideal environments

The ProLiant BL35p Server Blade is ideal for HPC and data-centre environments that are facing rack space and power constraints.

Medium to large enterprise data-centre customers requiring dense two-way server performance
- Maximum 32-bit or 64-bit dual-processor performance for load-balanced or front-end applications

- Ultra-dense design provides up to 96 servers (192 processors) in a standard rack

- Lower power consumption per server (68 watts per processor) enables denser rack architectures

High Performance Computing (HPC) environments
- Support for up to two AMD Opteron 250 processors (2.4 GHz) with on-board memory controllers running at the speed of the processor

- Optimal solution for applications that require high-bandwidth and low-latency access to system memory

- Typical applications: financial, geo, life and material sciences, mechanical engineering/virtual prototyping, electronic design automation, and high-end film and video

Enterprise data centre or HPC environments that optimise external storage architectures
- Dual-port Fibre-channel connectivity option with no trade-offs on other features

- Support for HP and third-party storage area networks (SANs)

- Support for boot from SAN

Dual AMD Opteron processor computing power

The ProLiant BL35p Server Blade features the AMD Opteron 250 processor (2.4 GHz), which delivers outstanding price/performance for front-end and load-balanced applications. Additionally, applications that require high-bandwidth and low-latency access to system memory, such as those found in HPC environments, will benefit from the use of the AMD Opteron processor in the ProLiant BL35p Server Blade design, featuring:

- Up to two AMD Opteron 250 processors (2.4 GHz) with 1-MB L2 cache/68 watt

- PC3200 DDR SDRAM (400 MHz), expandable to 8 GB

- Dual embedded Gigabit Ethernet network adapters

- HyperTransport (processor interconnect) runs at 800 MHz

- On-die memory controller, which runs at processor core frequency

Breakthrough compute density and power efficiencies

The ProLiant BL35p Server Blade utilises an AMD Opteron processor 250 (2.4 GHz) with a 68-watt power envelope. This lower power processor enables lower power consumption per server blade. Therefore, the ProLiant BL35p Server Blade is an ideal solution for environments where power constraints are an issue or where denser rack architectures are required.

The ProLiant BL35p Server Blade features include:

- Ultra-dense blade provides up to 192 AMD Opteron 250 processors (2.4 GHz) in an industry-standard rack

- Lower power consumption per server (68 watts per processor) enables denser rack architectures

- Up to 120 GB of internal storage on dual ATA disks

- Dual-port Fibre-channel support for HP and third-party SANs

Uncompromising manageability

- Integrated Lights-Out (iLO) Advanced technology for industry-leading virtual administration

- ProLiant Essentials Rapid Deployment Pack automates system configuration and deployment

- Easy to integrate, maintain and troubleshoot with industry-standard management tools, including HP Systems Insight Manager software

HP ProLiant BL35p Server Blade

Technical specifications

Processor	AMD Opteron 250 2.4 GHz with 68-watt power envelope
Upgradability	Upgradable to dual processing
Cache	1-MB L2 cache
Chipset	AMD Opteron 8000 Series chipset
RAM standard/maximum	Standard: 1 GB or 2 GB
	Maximum: 8 GB
Internal storage	Maximum internal storage: 120 GB (2 x 60-GB small form-factor ATA, 5400-RPM hard drives)
Maximum internal drives	2
Maximum blades per 42U rack	96
Hard drive controller	Integrated with chipset
Media bays	2 optional small form-factor ATA 60-GB hard drives
Density	16 server blades per 6U enclosure
Network adaptor	2 NC7781 PCI-X Gigabit NICs (on a Mezzanine card) with WOL and PXE
	1 10/100Base-T NIC (embedded) dedicated to iLO management
Server management	Integrated Lights-Out (iLO) Advanced
Power	Rack-centralised redundant power subsystem, with hot-plug power supplies
Operating systems supported	Microsoft® Windows Server™ 2003
	Linux®

HP ProLiant BL35p Server Blade

Environmental specifications

Altitude	Maximum for storage: 70 KPa minimum
Temperature range	Operating: 10° to 35° C (50° to 95° F)
	Shipping: –40° C to 60° C (–40° F to 140° F)
	Storage: –20° to 60° C (–4° to 140° F)
Wet bulb temperature	30° C (86° F)
Humidity (noncondensing)	Operating: 10% to 90%
	Shipping: 10% to 90%
	Storage: 10% to 95%
Dimensions	4.1 cm x 64.4 cm x 12.0 cm (1.61 in x 25.35 in x 4.72 in)
Weight	Maximum: 3.72 kg (8.19 lb)
	No drives installed: 3.52 kg (7.76 lb)
Input specifications	Rated input voltage: –43 VDC to –53 VDC; nominal: –48 VDC
	Rated input current: 14.6 A at –48 VDC
Individual server blade bay ratings	Rated input power: 700 W

HP ProLiant BL35p Server Blade

Ordering information

Part number	Product name	Description
374211-B21	HP ProLiant BL35p Server Blade	2.4 GHz – 1 MB, 1 GB, 1 processor
374212-B21	HP ProLiant BL35p Server Blade	2.4 GHz – 1 MB, 2 GB, 2 processors
374214-B21	HP ProLiant BL35p Server Blade Multipack	2.4 GHz – 1 MB, 2 GB, 2 processors

For more information

For more information about the HP ProLiant BL35p Server Blade, visit **www.hp.com/servers/bl35p**

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