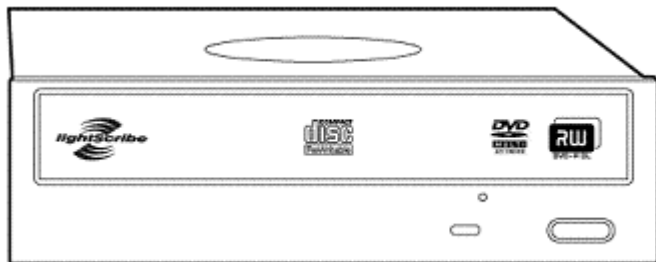


Overview

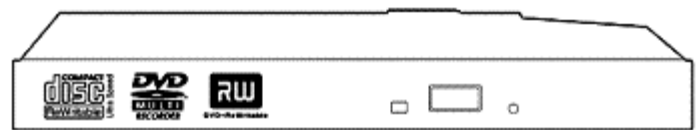
HP SATA DVD RW Optical Drives

The HP SATA optical drives for HP ProLiant servers are offered with an industry-standard SATA interface and are supported on most major operating systems.

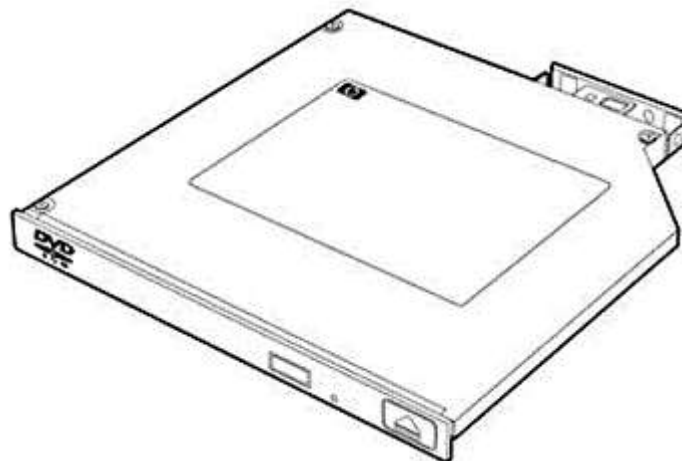
The DVD RW drive will be capable of reading DVD 4.7 GB through 8.5 GB media. It will also be able to read standard stamped, CD-R, and CD-RW media. This drive supports writing to CD-R, CD-RW, DVD +R/RW, and DVD -R/RW media via software utilities. For Microsoft® operating systems, this is available by installing the included Roxio software disk. For other operating systems, an operating system-specific software utility is required for writing to media.



HP Half-Height SATA DVD RW Optical Drive



HP Slim SATA DVD RW Optical Drive



HP 9.5mm SATA DVD RW Optical Drive

What's New

- HP 9.5mm SATA DVD-RW JackBlack G9 Optical Drive

Models

HP 9.5mm SATA DVD-RW JackBlack G9 Optical Drive	726537-B21
HP Half-Height SATA DVD RW JackBlack Optical Drive	624192-B21
HP 12.7mm Slim SATA DVD-RW JackBlack Optical Drive	652235-B21
HP 9.5mm SATA DVD-RW JackBlack Optical Drive	652241-B21
HP Half-Height SATA DVD-RW Optical Drive	447328-B21
HP Slim 12.7mm SATA DVD-RW Optical Drive	481043-B21
HP 9.5mm SATA DVD-RW Optical Drive	481047-B21

Kit Contents

- SATA DVD RW drive
- Installation guide
- Warranty card

Overview

- Roxio software disk
 - SATA data and power cables
-

Product Features

- Higher capacity writable optical drive utilizing DVD and CD media
-

Compatibility

NOTE: This is a list of supported servers. Some may be discontinued.

HP 9.5mm SATA DVD-RW ProLiant ML (expansion-optimized):

JackBlack Gen9 Optical Drive

726537-B21

- HP ProLiant ML350 Gen9

ProLiant DL (rack-optimized):

- HP ProLiant DL160 Gen9
 - HP ProLiant DL180 Gen9
 - HP ProLiant DL360 Gen9
 - HP ProLiant DL360 Gen9
-

HP Half-Height SATA DVD ProLiant ML (expansion-optimized):

RW JackBlack Optical Drive

624192-B21

- HP ProLiant ML310e Gen8
- HP ProLiant ML310e Gen8 v2
- HP ProLiant ML350e Gen8
- HP ProLiant ML350p Gen8

ProLiant MicroServer (Just Right First Server):

- HP ProLiant MicroServer
-

HP 12.7mm Slim SATA DVD-RW JackBlack

Optical Drive

652235-B21

ProLiant DL (rack-optimized):

- HP ProLiant DL380e Gen8
 - HP ProLiant DL380p Gen8
 - HP ProLiant DL385p Gen8
-

HP 9.5mm SATA DVD-RW JackBlack Optical Drive

652241-B21

ProLiant DL (rack-optimized):

- HP ProLiant DL160 Gen8
- HP ProLiant DL320e Gen8
- HP ProLiant DL320e Gen8 v2
- HP ProLiant DL360e Gen8
- HP ProLiant DL360p Gen8

ProLiant MicroServer:

- HP ProLiant MicroServer Generation 8 (Gen8)
-

Overview

HP Half-Height SATA DVD-RW Optical Drive 447328-B21

ProLiant DL (rack-optimized):

- HP ProLiant DL370 G6

ProLiant ML (expansion-optimized):

- HP ProLiant ML110 G5
 - HP ProLiant ML110 G6
 - HP ProLiant ML110 G7
 - HP ProLiant ML115 G5
 - HP ProLiant ML150 G5
 - HP ProLiant ML150 G6
 - HP ProLiant ML310 G5p
 - HP ProLiant ML330 G6
 - HP ProLiant ML350 G5
 - HP ProLiant ML350 G6
 - HP ProLiant ML370 G6
-

HP Slim 12.7mm SATA DVD-RW Optical Drive 481043-B21

ProLiant DL (rack-optimized):

- HP ProLiant DL120 G5
- HP ProLiant DL180 G5
- HP ProLiant DL180 G6
- HP ProLiant DL320 G5p
- HP ProLiant DL370 G6
- HP ProLiant DL380 G6
- HP ProLiant DL380 G7
- HP ProLiant DL385 G5p
- HP ProLiant DL385 G6
- HP ProLiant DL385 G7
- HP ProLiant DL580 G5
- HP ProLiant DL580 G7
- HP ProLiant DL585 G7
- HP ProLiant DL980 G7

ProLiant ML (expansion-optimized):

- HP ProLiant ML370 G6
-

HP 9.5mm SATA DVD-RW Optical Drive 481047-B21

ProLiant DL (rack-optimized):

- HP ProLiant DL120 G6
 - HP ProLiant DL120 G7
 - HP ProLiant DL160 G6
 - HP ProLiant DL160se G6
 - HP ProLiant DL165 G7
 - HP ProLiant DL320 G5p
 - HP ProLiant DL320 G6
-

Warranty

The warranty for this device is 1 year parts only. Maximum: The remaining warranty of the HP server product in which it is installed (to a maximum three-year limited warranty).

Overview

- Response - Upgrade on-site response from next business day to same day 4 hours
- Coverage - Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days
- Duration - Select duration of coverage for a period of 1, 3, or 5 years

Warranty upgrade options can come in the form of Care Packs, which are sold at the HP System level this product attaches too.

Service and Support

Service and Support

HP Technology Services

HP Technology Services offers you consultants and support experts to solve your most complex infrastructure problems. We help keep your business running, boost availability, and avoid downtime.

Protect your business beyond warranty with HP Care Pack Services

When you buy HP Options, it's also a good time to think about what level of service you may need. HP Care Pack services provide total care and support expertise with committed response choices designed to meet your IT and business need.

HP Foundation Care services deliver scalable support-packages for HP industry-standard servers and software. You can choose the type and level of service that is most suitable for your business needs. New to this portfolio is HP Collaborative Support. If you are running business critical environments, HP offers Proactive Care or Critical Advantage. These services help you deliver high levels of application availability through proactive service management and advanced technical response.

Here is the support service recommendation from the Foundation Care and Proactive Care portfolio. For customized support service solution, HP can work with you to tailor a service solution for your unique support requirements using broader services portfolio of Foundation Care and Proactive Care.

Recommended HP Care Pack Services for optimal satisfaction with your HP product

Recommended Services

3-Year HP 24x7 4 hour Response, Hardware Support Onsite Service

Provides you with rapid remote support and if required an HP authorized representative who will arrive on site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/5982-6547EEE.pdf>

OR

3-Year HP 24x7 4 hour Response, HP Collaborative Support

Offers customers a single point of contact for server problem diagnosis, hardware problem resolution, and basic software problem diagnosis, fault isolation, and resolution if available to HP. If the problem is with HP HW, the representative will arrive on site any time and day of the year to begin hardware maintenance service within 4 hours of the service request being logged. In case, the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, HP will contact the third-party vendor and create a problem incident on your behalf.

HP ProLiant Server Hardware Installation

Provides for the basic hardware installation of HP branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner

<http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN.pdf>

Related HP Care Pack Services to enhance your HP product experience

Related Services

3-Year HP 24x7 4 hour Response, Proactive Care or Critical Advantage

Helps optimize your systems and delivers high levels of application availability through proactive service management and advanced technical response. A skilled Technical Manager will own your query or issue end to end until resolved, delivering a single point of contact for you

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-2140ENW.pdf>

OR

3-Year HP 6-hour Onsite Call-to-Repair, HP Collaborative Support

Offers customers a single point of contact for server problem diagnosis, hardware problem resolution

Service and Support

to return the hardware in operating condition within 6 hours of the initial service request to the HP Global Solution Center, and basic software problem diagnosis, fault isolation, and resolution if available to HP. In case, the issue is with HP or supported third-party software product and cannot be resolved by applying known fixes, HP will contact the third-party vendor and create a problem incident on your behalf.

HP Proactive Select Service

Provides a flexible way to purchase HP best-in-class consultancy and technical services. You can buy Proactive Select Service Credits when you purchase your hardware and then use the credits over the next 12 months.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENN.pdf>

Insight Remote Support Provides 24 X 7 remote monitoring, proactive notifications, and problem resolution. Learn more <http://www.hp.com/go/insightremotesupport>

HP Support Center Personalized online support portal with access to information, tools and experts to support HP business products. Submit support cases online, chat with HP experts, access support resources or collaborate with peers. Learn more <http://www.hp.com/go/hpsc>

HP's Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime. HP Insight Remote Support and HP Support Center are available at no additional cost with a HP warranty, HP Care Pack or HP contractual support agreement.

*HP' Support Center Mobile App is subject to local availability

Parts and materials HP will provide HP-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements. Supplies and consumable parts will not be provided as part of this service; standard warranty terms and conditions apply. Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual or the technical product data sheet will not be provided, repaired or replaced as part of this service.

Warranty / Service Coverage For ProLiant servers and storage systems, this service covers HP-branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22" and tower UPS products; these items will be covered at the same service level and for the same coverage period as the server unless the maximum supported lifetime and/or the maximum usage limitation has been exceeded. Coverage of the UPS battery is not included; standard warranty terms and conditions apply.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HP due to malfunction. It does not apply to any exchange of Disk or SSD/Flash Drives that have not failed. SSD/Flash Drives that are specified by HP as consumable parts and/or that have exceeded maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual or the technical data sheet are not eligible for the defective media retention service feature option.

For more information To learn more on services for HP ESSN Options, please contact your HP sales representative or HP Authorized Channel Partner. Or visit: <http://www.hp.com/services/proliant> or www.hp.com/services/bladesystem

Technical Specifications

HP Half-Height SATA DVD RW Optical Drive (including Jackblack)

Shipping Dimensions (H x W x D)	6.0 x 9.88 x 10.88 in (15.24 x 25.1 x 27.64 cm)		
Drive Dimensions (H x W x D)	1.62 x 5.75 x 7.8 inches (4.13 x 14.6 x 20 cm)		
Device Type	DVD+/-RW Drive	(Super-Multi Drive)	
Disk	Applicable Disk	DVD-ROM DVD-R DVD-R DL DVD-RW DVD+R DVD+R DL DVD+RW DVD-RAM Ver. 1.1 (Read Only) DVD-RAM Ver. 2.2 (Rev. 2) CD-ROM XA CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD Audio disc CD-Extra CD-RW CD-R Photo CD CD-I CD-DA	
	Capacity	DVD-ROM	DVD-SL 4.7 GB/side DVD-DL 8.5 GB/side Double Sided 9.40 GB DVD+/-R 4.7 GB/side DVD +/-RW 4.7 GB/side DVD+R DL 8.5 GB/side DVD-R DL 8.5 GB/side DVD-RAM Ver.1.1, 120 mm 2.6 GB/side Double Sided 5.2 GB Ver. 2.2, 120 mm 4.7 GB/side CD-ROM Mode-1 650 MB (550 MB) Mode-2 742 MB (640 MB)
	Block Size	DVD	2,048 bytes
		CD	Mode-1 2048, 2352 bytes Mode-2 Form1 2048, 2328, 2336, 2340, 2352 bytes Mode-2 Form2 2328, 2336, 2340, 2352 bytes
Loading Mechanism	Diameter	120 mm, 80 mm (with adapter at vertical mounting mode)	
Interface	Tray type	SATA 1.5	
Access Times (typical)	Random	DVD-ROM < 130 ms, CD-ROM < 120 ms	
	Full-Stroke	DVD-ROM < 240 ms, CD-ROM < 200 ms	
Data Transfer Rate (sustained)	DVD-ROM	Read	Up to 16X
	DVD+R/-R	Read/Write	Up to 16X
	DVD+R DL/-R DL	Read	Up to 12X

Technical Specifications

	DVD+R DL/-R DL	Write	Up to 8X
	DVD+RW	Read/Write	Up to 8X
	DVD-RW	Read	Up to 8X
	DVD-RW	Write	Up to 6X
	DVD-RAM	Read/Write	Up to 5X
	CD-ROM	Read	Up to 40X
	CD-R	Read/Write	Up to 40X
	CD-RW	Write	Up to 24X
Cache Buffer	0.5MB (Minimum)		
Spin-up Time (typical)	less than 10 seconds (not including tray in)		
MTBF	125,000 Power On Hours (POH), 25% Duty Cycle		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)	
	Storage	-22° to 140° F (-30° to 60° C)	
Relative Humidity	Operating	10% to 90%	
	Storage	5% to 95%	

HP Slim SATA DVD RW Optical Drive (including Jackblack)

Shipping Dimensions (H x W x D) 3.97 x 7.81 x 10.75 in (10.08 x 19.84 x 27.31 cm)

Drive Dimensions (H x W x D) 0.5 x 5.2 x 5.45 in (1.27 x 13.2 x 13.8 cm)

Device Type DVD+/-RW Drive (Super-Multi Drive)

Disk Applicable Disk
 DVD-ROM
 DVD-R
 DVD-R DL
 DVD-RW
 DVD+R
 DVD+R DL
 DVD+RW
 DVD-RAM
 CD-ROM XA
 CD-ROM Mode-1 data disc
 CD-ROM Mode-2 data disc
 CD Audio disc
 CD-Extra
 CD-RW
 CD-R
 Photo CD
 CD-I
 CD-DA

Capacity	DVD-ROM	DVD-SL	4.7 GB/side	
		DVD-DL	8.5 GB/side	
Block Size		Double Sided	9.40 GB	
		DVD+/-R	4.7 GB/side	
		DVD+/-RW	4.7 GB/side	
		DVD+R	DL	8.5 GB/side
		DVD-R	DL	8.5 GB/side
		DVD-RAM	Ver.2.2, 120 mm	4.7 GB/side
		CD-ROM	Mode-1	650 MB (550 MB)
			Mode-2	742 MB (640 MB)
		DVD		2,048 bytes
		CD	Mode-1	2048 bytes

Technical Specifications

		Mode-2 Form1	2048, 2352 bytes
		Mode-2 Form2	2352 bytes
	Diameter	120 mm, 80 mm (with adapter at vertical mounting mode)	
Loading Mechanism	Tray type	Manual Load	
Interface	SATA 1.5		
Access Times (typical)	Random	DVD-ROM < 120 ms, CD-ROM < 110 ms	
	Full-Stroke	DVD-ROM < 250 ms, CD-ROM < 210 ms	
Data Transfer Rate	DVD-ROM	Read	Up to 8X
	DVD+R/-R	Read/Write	Up to 8X
	DVD+RW	Read/Write	Up to 8X
	DVD-RW	Read	Up to 8X
	DVD-RW	Write	Up to 6X
	DVD+R DL/-R DL	Read	Up to 8X
	DVD+R DL/-R DL	Write	Up to 6X
	DVD-RAM	Read/Write	Up to 5X
	CD-ROM	Read	Up to 24X
	CD-R/-RW	Read/Write	Up to 24X
Cache Buffer	0.5MB (Minimum)		
Spin-up Time (typical)	less than 15 seconds		
MTBF	35,000 Power On Hours (POH), 25% Duty Cycle		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)	
	Storage	-22° to 140° F (-30° to 60° C)	
Relative Humidity (non-condensing)	Operating	10% to 80%	
	Storage	5% to 90%	

HP 9.5mm SATA DVD RW Optical Drive (including Jackblack)

Shipping Dimensions (H x W x D)	3.97 x 7.81 x 10.75 in (10.08 x 19.84 x 27.31 cm)		
Drive Dimensions (H x W x D)	0.374 x 5.1 x 5.2 in (9.5 x 130 x 132 mm)		
Device Type	DVD+/-RW Drive	(Super-Multi Drive)	
Disk	Applicable Disk	DVD-ROM DVD-R DVD-R DL DVD-RW DVD+R DVD+R DL DVD+RW DVD-RAM CD-ROM XA CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD Audio disc CD-Extra CD-RW CD-R Photo CD CD-I CD-DA	
	Capacity	DVD-ROM	DVD-SL 4.7 GB/side DVD-DL 8.5 GB/side Double Sided 9.40 GB

Technical Specifications

		DVD+/-R	4.7 GB/side
		DVD+/-RW	4.7 GB/side
		DVD+R	M-Disc 4.7 GB/side
		DVD+R	DL 8.5 GB/side
		DVD-R	DL 8.5 GB/side
		DVD-RAM	Ver. 2.2, 120 mm 4.7 GB/side
		CD-ROM	Mode-1 650 MB (550 MB)
			Mode-2 742 MB (640 MB)
	Block Size	DVD	2048 bytes
		CD	Mode-1 2048 bytes
			Mode-2 Form1 2048, 2352 bytes
			Mode-2 Form2 2352 bytes
	Diameter	120 mm, 80 mm (with adapter at vertical mounting mode)	
Loading Mechanism	Tray type Manual Load		
Interface	SATA 1.5		
Access Times (typical)	Random	DVD-ROM < 160 ms, CD-ROM < 140 ms	
	Full-Stroke	DVD-ROM < 300 ms, CD-ROM < 275 ms	
Data Transfer Rate	DVD-ROM	Read	Up to 8X
	DVD+R/-R	Read/Write	Up to 8X
	DVD+RW	Read/Write	Up to 8X
	DVD-RW	Read	Up to 8X
	DVD-RW	Write	Up to 6X
	DVD+R DL/-R DL	Read	Up to 8X
	DVD+R DL/-R DL	Write	Up to 6X
	DVD-RAM	Read/Write	Up to 5X
	CD-ROM	Read	Up to 24X
	CD-R	Read/Write	Up to 24X
	CD-RW	Write	Up to 16X
Cache Buffer	0.5 MB (Minimum)		
Spin-up Time (typical)	less than 15 seconds		
MTBF	35,000 Power On Hours (POH), 25% Duty Cycle		
Ambient Temperature	Operating	41° to 122° F (5° to 50° C)	
	Storage	-22° to 140° F (-30° to 60° C)	
Relative Humidity (non-condensing)	Operating	10% to 80%	
	Storage	5% to 90%	

Environment-friendly Products and Approach **End-of-life Management and Recycling** Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Summary of Changes

Date	Version History	Action	Description of Change:
09-Sep-2014	From Version 19 to 20	Changed	What's new was updated Compatibility was revised in Overview Technical Specifications section was revised.
12-Jul-2013	From Version 18 to 19	Changed	Compatibility was revised in Overview Applicable Disk and Capacity were revised in Technical Specifications
27-Jun-2013	From Version 17 to 18	Changed	Model descriptions, Compatibility, and Technical Specifications were revised.
06-Mar-2012	From Version 16 to 17	Changed	Changes were made throughout for new models.
23-Jun-2011	From Version 15 to 16	Changed	Link was corrected in Service and Support.
20-Jun-2011	From Version 14 to 15	Removed	Mentions of StorageWorks were removed.
05-Apr-2011	From Version 13 to 14	Added	HP ProLiant ML110 G7 and DL120 G7 were added to Compatibility.
05-Oct-2010	From Version 12 to 13	Changed	Warranty was moved into the Overview Cache Buffer was revised in Technical Specifications HP ProLiant DL980 G7 was added to HP Slim SATA DVD RW Optical Drive Compatibility Service and Support section was added
16-Jul-2010	From Version 11 to 12	Changed	URL for HP Care Pack Information was changed in Service and Support, HP Care Pack, and Warranty Information Cache Buffer was changed to 1.5 MB in HP Half-Height SATA DVD RW Optical Drive in Technical Specifications HP ProLiant DL580 G7 and DL585 G7 were added to HP Slim SATA DVD RW Optical Drive Compatibility
27-Apr-2010	From Version 10 to 11	Added	HP ProLiant DL380 G7 and DL385 G7 were added to HP Slim SATA DVD Optical Drive.
29-Mar-2010	From Version 9 to 10	Added	HP ProLiant DL165 G7 was added to HP 9.5mm DVD RW Optical Drive.
16-Nov-2009	From Version 8 to 9	Changed	HP ProLiant ML110 G6, ML350 G6, DL120 G6 and DL160se G6 were added and HP ProLiant ML115 G6, ML150 G5 and ML310 G5 were removed from Compatibility.
02-Jun-2009	From Version 7 to 8	Added	HP ProLiant ML330 G6 Server to HP Half-Height SATA DVD RW Optical Drives and HP ProLiant DL385 G6 Server to HP Slim SATA DVD RW Optical Drive in the Compatibility section.
27-Apr-2009	From Version 6 to 7	Added	HP ProLiant DL160 G6, DL180 G6, DL320 G6, DL370 G6, DL380 G6 and DL385 G6 Servers and HP ProLiant ML115 G6, ML150 G6, ML310 G5p, ML360 G6 and ML370 G6 Servers to Compatibility in the Overview section.
26-Jan-2009	From Version 5 to 6	Added	HP 9.5mm SATA DVD RW Optical Drive throughout the QuickSpec.
08-Dec-2008	From Version 4 to 5	Added	HP ProLiant DL580 G5 was added to the Compatibility list.
14-Jul-2008	From Version 3 to 4	Changed	The QuickSpec was rewritten to include the HP Slim SATA

Summary of Changes

			DVD RW Optical Drive throughout. NOTE that the title has changed.
31-Mar-2008	From Version 2 to 3	Added	HP ProLiant ML350 G5 was added to HP Half-Height SATA DVD RW Optical Drive in the Compatibility section.
		Changed	HP ProLiant ML115 was changed from G2 to G5 in HP Half-Height SATA DVD RW Optical Drive in the Compatibility section.
14-Nov-2007	From Version 1 to 2	Changed	The title of the document was updated.

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