

ServeRAID M1215 SAS/SATA Controller

Product Guide (withdrawn product)

The ServeRAID M1215 SAS/SATA Controller is a low-cost 12 Gbps internal RAID 0/1/10 solution that can be upgraded to a cacheless RAID 5 with a Features on Demand (FoD) license upgrade. The M1215 provides two internal mini-SAS HD connectors with eight lanes of 12 Gbps SAS and eight lanes of PCIe 3.0 to facilitate high data transfer rates.

The M1215 controller is a part of the ServeRAID M Series family that offers a complete server storage solution consisting of RAID controllers, cache/flash modules, energy packs, and software feature upgrades in an ultra-flexible offerings structure.



Figure 1. ServeRAID M1215 SAS/SATA Controller

Did you know?

The M1215 is an entry-level internal data storage solution that provides hardware RAID capabilities and advanced features, such as online capacity expansion and RAID-level migration. The optional RAID 5 upgrade and support for self encrypting drives no longer requires a hardware key because the upgrade functionality is implemented through Features on Demand (FoD) software licenses.

With increased demand for performance and advanced features, the M1215 provides a seamless migration path to the full-featured RAID controllers, such as the ServeRAID M5210. The information about existing arrays can be recognized and imported into the new controller without any reconfiguration.

Rigorous testing of the M1215 by Lenovo through the ServerProven® program ensures a high degree of confidence in storage subsystem compatibility and reliability. Providing an additional peace of mind, this controller is covered under Lenovo warranty.

Part number information

Table 1 provides the ordering part numbers and feature codes.

Note: These options are now withdrawn from marketing.

Table 1. Ordering part numbers and feature codes

Description	Part number	Feature code
ServeRAID M1215 SAS/SATA Controller	46C9114	A45W
ServeRAID M1200 Series Zero Cache/RAID 5 Upgrade-FoD	00AE930	A5H5

The ServeRAID M1215 option part number includes the following items:

- One ServeRAID M1215 adapter card with full-height (3U) bracket attached
- Low-profile (2U) bracket
- Documentation package

The ServeRAID M1200 Series Zero Cache/RAID 5 Upgrade option part number includes the following items:

- M1200 Series upgrade authorization letter
- Feature Activation Instructions

Features

The ServeRAID M1215 SAS/SATA Controller has the following standard features:

- Auto-resume on array rebuild or array reconstruction after loss of system power
Auto-resume uses non-volatile RAM (NVRAM) to save rebuild progress during a host reboot or power failure to automatically resume from the last checkpoint. Auto-resume ensures that data integrity is maintained through the process. The card supports a number of features that are able to be implemented without rebooting the server. Applications, such as email and web server, benefit from avoiding downtime during transition.
- Online Capacity Expansion
Online Capacity Expansion (OCE) allows the capacity of a virtual disk to be expanded by adding new physical disks or making use of unused space on existing disks, without requiring a reboot.
- Online RAID Level Migration
Online RAID Level Migration (also known as logical drive migration) provides the ability to migrate a virtual disk from any RAID level to any other RAID level without requiring a reboot. System availability and application functionality remain unaffected.
- Fast initialization for quick array setup
Fast initialization quickly writes zeroes to the first and last sectors of the virtual drive. This feature allows you to immediately start writing data to the virtual drive while the initialization is running in the background.
- Consistency check for background data integrity
Consistency check verifies that all stripes in a virtual disk with a redundant RAID level are consistent. The consistency check will mirror data when an inconsistent stripe is detected for a RAID 1 and will recreate the parity from the peer disks in the case of a RAID 5. Consistency checks can be scheduled to take place periodically.

- Extensive online configuration options and advanced monitoring and event notification
Management tools provide convenience for the configuration of logical volumes and alerting when errors have occurred or are about to occur.
- Patrol read for media scanning and repairing
Patrol read is a background sentry service designed to proactively discover and correct media defects (bad sectors) that arise normally as a disk drive ages. The service issues a series of verify commands, and if a bad block is discovered, the card's firmware uses RAID algorithms to recreate the missing data and remap the sector to a good sector. The task is interruptible based on controller activity and host operations. The firmware also provides an interface where the patrol read task can be initiated, set up for continuous operation, and terminated from a management application. Patrol read can be activated by manual command or automatically.
- Global and dedicated Hot Spare with Revertible Hot Spare support
A hot spare rebuilds data from all virtual disks within the disk group in which it is configured. ServeRAID provides the ability to define a physical disk as a hot spare to replace a failed drive. Hot spares can be configured as either global or dedicated. A global hot spare allows any physical drive to be designated as a hot spare. A dedicated hot spare allows the user to assign a hot spare drive to a particular array of the same drive type.
- Single controller multipathing (failover) I/O load balancing
The ServeRAID's firmware detects and uses multiple paths from the controllers to the SAS drives that are in enclosures. With redundant paths to the same port of a device, if one path fails, another path can be used to communicate between the controller and the drive. Using multiple paths with load balancing, instead of a single path, can increase reliability through redundancy.
- Human Interface Infrastructure (HII) configuration utility for pre-boot array configuration and management
HII is a utility that allows you to configure drive groups and logical drives before installing or booting the operating system.
- MegaRAID Storage Manager management software
MegaRAID Storage Manager is an easy-to-use advanced RAID management application that is used across the entire family of ServeRAID M controllers. It allows you to configure, monitor, and maintain drive groups, virtual drives, and advanced features with an intuitive GUI, reducing administrative efforts and simplifying troubleshooting.

Note: RAID 10 and 50 drive groups do not support Online Capacity Expansion and Online RAID Level Migration. RAID 0, 1, and 5 drive groups do not support Online Capacity Expansion and Online RAID Level Migration if two or more virtual drives are defined on a single drive group.

The following features are optional and require the purchase of an additional upgrade:

- RAID 5, 50 support with Zero Cache/RAID 5 Upgrade (part number 00AE930)
- MegaRAID SafeStore support for self-encrypting drive (SED) services
MegaRAID SafeStore encryption services offer instant secure erase and local key management for self-encrypting drives. Instant secure erase permanently removes data when repurposing or decommissioning SEDs. SafeStore local key management provides the necessary management and protection of SEDs using a simple pass phrase, security key identifier, and security key file that can be set and applied to all SEDs assigned to a ServeRAID adapter. This feature removes the complexity of managing each SED's unique encryption key, and essentially, it relieves the administrator of most of the daily tasks of securing data. The SafeStore feature is a part of a RAID 5 upgrade (part number 00AE930).

Technical specifications

The ServeRAID M1215 SAS/SATA Controller has the following specifications:

- LSI SAS3008 12 Gbps RAID on Chip (ROC) controller
- PCI Low Profile, Half-length - MD2 form factor
- Eight internal 12 Gbps SAS/SATA ports
- Two internal mini-SAS HD connectors (SFF-8643)
- Supports 12, 6, and 3 Gbps SAS and 6 and 3 Gbps SATA data transfer rates
- Up to 12 Gbps throughput per port
- PCI Express 3.0 x8 host interface
- Support both RAID and JBOD (pass-thru mode with system drives) configurations
 - Up to 32 drives, including hot spares, are supported in a RAID configuration.
 - Up to 64 drives are supported in a JBOD (non-RAID) configuration.
- Support for RAID levels 0, 1, and 10 standard; support for RAID 5, 50 with optional upgrade
- Zero Controller Cache, no battery/flash backup
- Support for SAS and SATA hard disk drives (HDDs) and solid-state drives (SSDs)
- Support for simple swap and hot swap drives
- Support for intermixing SAS and SATA HDDs and SSDs. Mixing different types of drives in the same array (drive group) not supported.
- Optional support for self-encrypting drives (SEDs) with MegaRAID SafeStore
- Support for up to 32 virtual drives, up to 32 drive groups, up to 16 virtual drives per one drive group, and up to 32 physical drives per one drive group
- Support for virtual drive sizes greater than 2 TB
- Fixed stripe size of 64 KB
- Compliant with Disk Data Format (DDF) configuration on disk (COD)
- S.M.A.R.T. support
- MegaRAID Storage Manager management software

Feature upgrade matrix

The ServeRAID M1215 SAS/SATA Controller provides support for RAID 0, 1, and 10 as standard, ready to use or "out-of-the-box" capabilities. An optional feature upgrade is available to expand standard capabilities with RAID 5, 50 and self-encrypting drives. This Features on Demand (FoD) upgrade is a software license. The following table lists the available upgrade and its capabilities.

Table 2. ServeRAID M1215 optional upgrade and its features

		Feature		RAID 5, 50	SED
Option description	Part Number	Type			
ServeRAID M1200 Series Zero Cache/RAID 5 Upgrade FOD	00AE930	FoD		Yes	Yes

Server support

The following tables list the servers that the M1215 controller is supported in.

Note: The M1215 controller does not support 6 Gb SAS/SATA internal storage backplanes that can be installed in x3500 M4 and x3550 M4 servers.

Support for System x and dense servers with Xeon E5/E7 v4 and E3 v5 processors

Table 3. Support for System x and dense servers with Xeon E5/E7 v4 and E3 v5 processors

Part number	Description	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	x3850 X6/x3950 X6 (6241, E7 v4)	nx360 M5 (5465, E5-2600 v4)	sd350 (5493)
46C9114	ServeRAID M1215 SAS/SATA Controller	Y	Y	Y	Y	N	Y	N
00AE930	ServeRAID M1200 Zero Cache/RAID 5 Upgrade FOD	Y	Y	Y	Y	N	Y	N

Support for servers with Intel Xeon v3 processors

Table 4. Support for servers with Intel Xeon v3 processors

Part number	Description	x3100 M5 (5457)	x3250 M5 (5458)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	x3850 X6/x3950 X6 (6241, E7 v3)	nx360 M5 (5465)
46C9114	ServeRAID M1215 SAS/SATA Controller	N	N	Y	Y	Y	N	Y
00AE930	ServeRAID M1200 Zero Cache/RAID 5 Upgrade FOD	N	N	Y	Y	Y	N	Y

Support for servers with Intel Xeon v2 processors

Table 5. Support for servers with Intel Xeon v2 processors

Part number	Description	x3500 M4 (7383, E5-2600 v2)	x3530 M4 (7160, E5-2400 v2)	x3550 M4 (7914, E5-2600 v2)	x3630 M4 (7158, E5-2400 v2)	x3650 M4 (7915, E5-2600 v2)	x3650 M4 BD (5466)	x3650 M4 HD (5460)	x3750 M4 (8752)	x3750 M4 (8753)	x3850 X6/x3950 X6 (3837)	x3850 X6/x3950 X6 (6241, E7 v2)	dx360 M4 (E5-2600 v2)	nx360 M4 (5455)
46C9114	ServeRAID M1215 SAS/SATA Controller	Y	N	Y	N	N	Y	N	Y	Y	N	N	N	N
00AE930	ServeRAID M1200 Zero Cache/RAID 5 Upgrade FOD	N	N	N	N	N	N	N	Y	Y	N	N	N	N

For more information about the servers that support each adapter, see the ServerProven website:
<http://www.lenovo.com/us/en/serverproven/xseries/controllers/matrix.shtml>

Drive support

The ServeRAID M1215 SAS/SATA Controller supports the drives that are supported in the servers listed in the following tables. The maximum number of drives that can be connected to the RAID controller is limited by the maximum number of internal drive bays for a supported server.

- Table 6: [1.8-inch SSDs](#)
- Table 7: [2.5-inch hot-swap 12 Gb SAS/SATA HDDs](#)
- Table 8: [2.5-inch hot-swap 6 Gb SAS/SATA HDDs](#)
- Table 9: [2.5-inch hot-swap 12 Gb SAS/SATA SSDs](#)
- Table 10: [2.5-inch hot-swap 6 Gb SAS/SATA SSDs](#)
- Table 11: [3.5-inch hot-swap 12 Gb SAS/SATA HDDs](#)
- Table 12: [3.5-inch hot-swap 6 Gb SAS/SATA HDDs](#)
- Table 13: [3.5-inch hot-swap 12 Gb SAS/SATA SSDs](#)
- Table 14: [3.5-inch hot-swap 6 Gb SAS/SATA SSDs](#)
- Table 15: [2.5-inch simple-swap 6 Gb SAS/SATA HDDs](#)
- Table 16: [3.5-inch simple-swap 6 Gb SAS/SATA HDDs](#)
- Table 17: [2.5-inch internal 12 Gb HDDs for NeXtScale](#)
- Table 18: [2.5-inch internal 6 Gb HDDs for NeXtScale](#)
- Table 19: [3.5-inch internal 12 Gb HDDs for NeXtScale](#)
- Table 20: [3.5-inch internal 6 Gb HDDs for NeXtScale](#)
- Table 21: [2.5-inch internal 6 Gb SSDs for NeXtScale](#)

Table 6. 1.8-inch SSDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
1.8-inch hot-swap SSDs - 6 Gb SATA - Enterprise Entry (<3 DWPD)														
00AJ050	S3500 400GB SATA 1.8" MLC Enterprise Value SSD	N	N	N	Y	N	N	N	Y	N	N	N	N	Y

Table 7. 2.5-inch hot-swap 12 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch hot-swap HDDs - 12 Gb SAS 10K														
00WG685	300GB 10K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG690	600GB 10K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG695	900GB 10K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG700	1.2TB 10K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00NA251	900GB 10K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA241	600GB 10K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA261	1.2TB 10K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA271	1.8TB 10K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb SAS 15K														
00WG660	300GB 15K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG665	600GB 15K 12Gbps SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00NA221	300GB 15K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA231	600GB 15K 12Gbps SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb NL SAS														
00NA491	1TB 7.2K 12Gbps NL SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00NA496	2TB 7.2K 12Gbps NL SAS 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K														
00WG705	300GB 10K 12Gbps SAS 2.5" G3HS SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00WG710	600GB 10K 12Gbps SAS 2.5" G3HS SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA291	600GB 10K 12Gbps SAS 2.5" G3HS 512e SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00WG715	900GB 10K 12Gbps SAS 2.5" G3HS SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00WG720	1.2TB 10K 12Gbps SAS 2.5" G3HS SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00NA301	1.2TB 10K 12Gbps SAS 2.5" G3HS 512e SED	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y

Table 8. 2.5-inch hot-swap 6 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch hot-swap HDDs - 6 Gb SAS 10K														
90Y8877	300GB 10K 6Gbps SAS 2.5" SFF G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
90Y8872	600GB 10K 6Gbps SAS 2.5" SFF G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
81Y9650	900GB 10K 6Gbps SAS 2.5" SFF HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00AD075	1.2TB 10K 6Gbps SAS 2.5" G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00NA441	1.8TB 10K 6Gbps SAS 2.5" G2HS 512e HDD	N	Y	N	Y	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap HDDs - 6 Gb SAS 15K														
90Y8926	146GB 15K 6Gbps SAS 2.5" SFF G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
81Y9670	300GB 15K 6Gbps SAS 2.5" G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00AJ300	600GB 15K 6Gbps SAS 2.5" G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap HDDs - 6 Gb NL SAS														
00AJ121	500GB 7.2K 6Gbps NL SAS 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
90Y8953	500GB 7.2K 6Gbps NL SAS 2.5" SFF G2HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
81Y9690	1TB 7.2K 6Gbps NL SAS 2.5" SFF HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap HDDs - 6 Gb NL SATA														
00AJ136	500GB 7.2K 6Gbps NL SATA 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00AJ141	1TB 7.2K 6Gbps NL SATA 2.5" G3HS HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00NA526	2TB 7.2K 6Gbps NL SATA 2.5" G3HS 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
81Y9726	500GB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
81Y9730	1TB 7.2K 6Gbps NL SATA 2.5" SFF HS HDD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap SED HDDs - 6 Gb SAS 10K														
90Y8913	300GB 10K 6Gbps SAS 2.5" SFF G2HS SED	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
90Y8908	600GB 10K 6Gbps SAS 2.5" SFF G2HS SED	N	Y	N	Y	N	N	N	N	N	N	N	N	N
81Y9662	900GB 10K 6Gbps SAS 2.5" SFF G2HS SED	Y	Y	N	Y	N	N	N	N	N	N	N	N	N

Table 9. 2.5-inch hot-swap 12 Gb SAS/SATA SSDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch hot-swap SSDs - 12 Gb SAS - Enterprise Performance (10+ DWPD)														
00FN379	200GB 12G SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00FN389	400GB 12G SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00FN399	800GB 12G SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00FN409	1.6TB 12G SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
2.5-inch hot-swap SSDs - 12 Gb SAS - Enterprise Mainstream (3-5 DWPD)														
00YC460	400GB Enterprise Mainstream 12Gb SAS G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC465	800GB Enterprise Mainstream 12Gb SAS G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC470	1.6TB Enterprise Mainstream 12Gb SAS G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y

Table 10. 2.5-inch hot-swap 6 Gb SAS/SATA SSDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch hot-swap SSDs - 6 Gb SAS - Enterprise Capacity														
00NA671	3.84TB 6Gb SAS Enterprise Capacity G3HS MLC SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
2.5-inch hot-swap SSDs - 6 Gb SAS - Enterprise Performance (10+ DWPD)														
00AJ207	200GB SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
00AJ212	400GB SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
00AJ217	800GB SAS 2.5" MLC G3HS Enterprise SSD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
49Y6129	200GB SAS 2.5" MLC HS Enterprise SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
49Y6134	400GB SAS 2.5" MLC HS Enterprise SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
49Y6139	800GB SAS 2.5" MLC HS Enterprise SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
49Y6195	1.6TB SAS 2.5" MLC HS Enterprise SSD	N	Y	N	Y	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Performance (10+ DWPD)														
00YC320	Intel S3710 200GB Enterprise Performance SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC325	Intel S3710 400GB Enterprise Performance SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC330	Intel S3710 800GB Enterprise Performance SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Mainstream (3-5 DWPD)														
00YC529	M500DC 480GB Enterprise Mainstream Plus SATA G3HS 2.5" SSD	N	N	N	N	N	N	Y	N	N	N	Y	N	
00AJ395	120GB SATA 2.5" MLC G3HS Enterprise Value SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00AJ400	240GB SATA 2.5" MLC G3HS Enterprise Value SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00AJ405	480GB SATA 2.5" MLC G3HS Enterprise Value SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00AJ410	800GB SATA 2.5" MLC G3HS Enterprise Value SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00AJ355	120GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	N	N	N	N	N	N	N	N	N	N
00AJ360	240GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	N	N	N	N	N	N	N	N	N	N
00AJ365	480GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	N	N	N	N	N	N	N	N	N	N
00AJ370	800GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	N	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Entry (<3 DWPD)														
00WG620	Intel S3510 120GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG625	Intel S3510 240GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG630	Intel S3510 480GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00WG635	Intel S3510 800GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
00AJ000	S3500 120GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00AJ005	S3500 240GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00AJ010	S3500 480GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00AJ015	S3500 800GB SATA 2.5" MLC HS Enterprise Value SSD	Y	Y	N	Y	N	N	N	N	N	N	N	N	N
00YC385	120GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC390	240GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC395	480GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC400	960GB Enterprise Entry SATA G3HS 2.5" SSD	N	N	N	N	Y	Y	Y	Y	N	N	Y	Y	Y
00YC365	120GB Enterprise Entry SATA HS 2.5" SSD	N	Y	N	N	N	N	N	N	N	N	N	N	N
00YC370	240GB Enterprise Entry SATA HS 2.5" SSD	N	Y	N	N	N	N	N	N	N	N	N	N	N
00YC375	480GB Enterprise Entry SATA HS 2.5" SSD	N	Y	N	N	N	N	N	N	N	N	N	N	N
00YC380	960GB Enterprise Entry SATA HS 2.5" SSD	N	Y	N	N	N	N	N	N	N	N	N	N	N

Table 11. 3.5-inch hot-swap 12 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch hot-swap HDDs - 12 Gb NL SAS														
00FN188	2TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	N	N	N	N	Y	Y	Y	N	Y	Y	Y	Y	N
00FN208	4TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	N	N	N	N	Y	Y	Y	N	Y	Y	Y	Y	N
00FN228	6TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	N	N	N	N	Y	Y	Y	N	Y	Y	Y	Y	N
00WH121	8TB 7.2K 12Gbps NL SAS 3.5" G2HS 512e HDD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N

Table 12. 3.5-inch hot-swap 6 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch hot-swap HDDs - 6 Gb SAS 15K														
49Y6092	300GB 15K 6Gbps SAS 3.5" G2HS HDD	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
49Y6102	600GB 15K 6Gbps SAS 3.5" G2HS HDD	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
3.5-inch hot-swap HDDs - 6 Gb NL SAS														
90Y8567	1TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N
90Y8572	2TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	Y	Y	Y	N	N	Y	Y	N	N	N	Y	Y	N
49Y6210	4TB 7.2K 6Gbps NL SAS 3.5" G2HS HDD	N	Y	Y	N	N	N	N	N	N	N	Y	Y	N
00ML213	6TB 7.2K 6Gbps NL SAS 3.5" G2HS 512e HDD	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
3.5-inch hot-swap HDDs - 6 Gb NL SATA														
81Y9786	500GB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N
81Y9790	1TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N
81Y9794	2TB 7.2K 6Gbps NL SATA 3.5" G2HS HDD	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N
00FN113	2TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N
00FN143	4TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N
00FN173	6TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N
00WH126	8TB 7.2K 6Gbps NL SATA 3.5" G2HS 512e HDD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
3.5-inch hot-swap SEDs - 6 Gb NL SAS														
00W1543	4TB 7.2K 6Gbps NL SAS 3.5" G2HS SED	N	Y	N	N	N	N	N	N	N	N	N	N	N

Table 13. 3.5-inch hot-swap 12 Gb SAS/SATA SSDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch hot-swap SSDs - 12 Gb SAS - Enterprise (10+ DWPD)														
00WG675	300GB 15K 12Gbps SAS 3.5" G2HS HDD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
00WG680	600GB 15K 12Gbps SAS 3.5" G2HS HDD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N

Table 14. 3.5-inch hot-swap 6 Gb SAS/SATA SSDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Performance (10+ DWPD)														
00YC340	Intel S3710 400GB Enterprise Performance SATA HS 3.5" SSD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
00YC345	Intel S3710 800GB Enterprise Performance SATA HS 3.5" SSD	N	N	N	N	Y	Y	Y	N	N	N	Y	Y	N
3.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Mainstream (3-5 DWPD)														
00AJ435	120GB SATA 3.5" MLC HS Enterprise Value SSD	N	N	Y	N	Y	Y	Y	N	N	N	Y	Y	N
00AJ445	480GB SATA 3.5" MLC HS Enterprise Value SSD	N	N	Y	N	Y	Y	Y	N	N	N	Y	Y	N
3.5-inch hot-swap SSDs - 6 Gb SATA - Enterprise Entry (<3 DWPD)														
00WG770	Intel S3510 120GB Enterprise Entry SATA HS 3.5" SSD	N	N	N	N	Y	Y	Y	N	N	N	N	N	N
00WG775	Intel S3510 240GB Enterprise Entry SATA HS 3.5" SSD	N	N	N	N	Y	Y	Y	N	N	N	N	N	N
00WG780	Intel S3510 480GB Enterprise Entry SATA HS 3.5" SSD	N	N	N	N	Y	Y	Y	N	N	N	N	N	N
00YC420	960GB Enterprise Entry SATA HS 3.5" SSD	N	N	Y	N	Y	Y	Y	N	N	N	Y	Y	N

Table 15. 2.5-inch simple-swap 6 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch simple-swap HDDs - 6 Gb NL SATA														
00NA597	500GB 7.2K 6Gbps NL SATA 2.5" G3SS HDD	N	N	N	N	N	Y	Y	N	N	N	Y	Y	N
00NA622	1TB 7.2K 6Gbps NL SATA 2.5" G3SS HDD	N	N	N	N	N	Y	Y	N	Y	Y	Y	Y	N
00NA536	2TB 7.2K 6Gbps NL SATA 2.5" G3SS 512e HDD	N	N	N	N	N	Y	Y	N	Y	Y	Y	Y	N

Table 16. 3.5-inch simple-swap 6 Gb SAS/SATA HDDs

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch simple-swap HDDs - 6 Gb NL SATA														
81Y9802	500GB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	Y	Y	N	N	Y	Y	Y	N	Y	Y	Y	Y	N
81Y9806	1TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	N
81Y9810	2TB 7.2K 6Gbps NL SATA 3.5" G2SS HDD	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	N

Table 17. 2.5-inch internal 12 Gb HDDs for NeXtScale

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch NeXtScale HDDs - 12 Gb SAS 10K HDDs														
00WG725	300GB 10K 12Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00WG730	600GB 10K 12Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00WG735	900GB 10K 12Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00WG740	1.2TB 10K 12Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Table 18. 2.5-inch internal 6 Gb HDDs for NeXtScale

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch NeXtScale HDDs - 6 Gb SAS 15K HDDs														
00WG670	300GB 15K 12Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00AJ290	600GB 15K 6Gbps SAS 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
2.5-inch NeXtScale HDDs - 6 Gb NL SATA HDDs														
00NA566	2TB 7.2K 6Gbps NL SATA 2.5" 512e HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
2.5-inch NeXtScale HDDs - 6 Gb SATA HDDs														
00AD035	500GB 7.2K 6Gbps SATA 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00AD040	1TB 7.2K 6Gbps SATA 2.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Table 19. 3.5-inch internal 12 Gb HDDs for NeXtScale

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch NeXtScale HDDs - 12 Gb SAS 10K HDDs														
00NA356	1.8TB 10K 12Gbps SAS 2.5" 512e HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Table 20. 3.5-inch internal 6 Gb HDDs for NeXtScale

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
3.5-inch NeXtScale HDDs - 12 Gb NL SAS HDDs														
00FN213	4TB 7.2K 12Gbps NL SAS 3.5" 512e HDD for NextScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
3.5-inch NeXtScale HDDs - 6 Gb NL SATA and SATA														
00FN123	2TB 7.2K 6Gbps NL SATA 3.5" 512e HDD for NextScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00FN183	6TB 7.2K 6Gbps NL SATA 3.5" 512e HDD for NextScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00WH131	8TB 7.2K 6Gbps NL SATA 3.5" 512e HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00AD010	1TB 7.2K 6Gbps SATA 3.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00AD025	4TB 7.2K 6Gbps SATA 3.5" HDD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y

Table 21. 2.5-inch internal 6 Gb SSDs for NeXtScale

Part number	Description	Xeon v2				Xeon v3				Xeon v4 & v5				
		x3500 M4 (7383, E5-2600 v2)	x3550 M4 (7914, E5-2600 v2)	x3650 M4 BD (5466)	x3750 M4 (8753)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	nx360 M5 (5465, E5-2600 v3)	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	nx360 M5 (5465, E5-2600 v4)
2.5-inch NeXtScale SSDs - 6 Gb SATA - Enterprise Performance (10+ DWPD)														
00YC350	Intel S3710 200GB Enterprise Performance SATA 2.5" SSD for NeXtScale	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00YC355	Intel S3710 400GB Enterprise Performance SATA 2.5" SSD for NeXtScale	N	N	N	N	N	N	N	Y	N	N	N	N	Y
2.5-inch NeXtScale SSDs - 6 Gb SATA - Enterprise Entry (<3 DWPD)														
00FN020	120GB SATA 2.5" MLC Enterprise Value SSD for NeXtScale System	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00YC430	240GB Enterprise Entry SATA 2.5" SSD for NeXtScale	N	N	N	N	N	N	N	Y	N	N	N	N	Y
00YC440	960GB Enterprise Entry SATA 2.5" SSD for NeXtScale	N	N	N	N	N	N	N	Y	N	N	N	N	Y

See ServerProven for the latest information about the System x servers and drives support:
<http://www.lenovo.com/us/en/serverproven/xseries/controllers/matrix.shtml>

Operating system support

The adapter supports the following operating systems:

Tip: This table is automatically generated based on data from [Lenovo ServerProven](#).

Table 22. Operating system support for ServeRAID M1215 SAS/SATA Controller, 46C9114

Operating systems	x3250 M6 (3633)	nx360 M5 (5465)	x3500 M5 (5464)	x3550 M5 (5463)	x3550 M5 (8869)	x3650 M5 (5462)	x3650 M5 (8871)
Microsoft Windows Server 2008 R2	N	N	Y	Y	Y	Y	N
Microsoft Windows Server 2012	Y	Y	Y	Y	Y	Y	Y
Microsoft Windows Server 2012 R2	Y	Y	Y	Y	Y	Y	Y
Microsoft Windows Server 2016	Y	Y	Y	Y	Y	Y	Y
Microsoft Windows Server 2019	Y	N	N	N	Y	N	Y
Microsoft Windows Server version 1709	Y	Y	Y	Y	Y	Y	Y
Microsoft Windows Server version 1803	N	N	N	N	Y	N	Y
Red Hat Enterprise Linux 6 Server x64 Edition	Y	Y	Y	Y	Y	Y	Y
Red Hat Enterprise Linux 7	Y	Y	Y	Y	Y	Y	Y
SUSE Linux Enterprise Server 11 for AMD64/EM64T	Y	Y	Y	Y	Y	Y	Y
SUSE Linux Enterprise Server 11 with Xen for AMD64/EM64T	N	Y	Y	Y	Y	Y	Y
SUSE Linux Enterprise Server 12	Y	Y	Y	Y	Y	Y	Y
SUSE Linux Enterprise Server 12 with Xen	N	Y	Y	Y	Y	Y	Y
SUSE Linux Enterprise Server 15	Y	Y	N	N	Y	N	Y
SUSE Linux Enterprise Server 15 with Xen	Y	Y	N	N	Y	N	Y
VMware vSphere 5.1 (ESXi)	N	Y	Y	Y	N	Y	N
VMware vSphere Hypervisor (ESXi) 5.5	Y	N	Y	Y	Y	Y	Y
VMware vSphere Hypervisor (ESXi) 6.0	Y	Y ¹	Y ¹	Y ¹	Y	Y ¹	Y
VMware vSphere Hypervisor (ESXi) 6.5	N	N	N	Y	Y	Y	Y
VMware vSphere Hypervisor (ESXi) 6.7	Y	Y	Y	N	Y	N	Y

¹ [This is a limitation with Lenovo Customized VMWare image having a downlevel LSI/Avago Provider that doesn't work properly with LSI/Avago native driver This issue should be routed to the Lenovo VMWare team that owns the Customized image Target Fixed Date: 2016/2/1]

Warranty

The ServeRAID M1215 SAS/SATA Controller carries a 1-year limited warranty. When installed in a supported System x server, the adapter assumes your system's base warranty and any Lenovo warranty service upgrade purchased for the system.

Physical specifications

The ServeRAID M1215 SAS/SATA Controller has the following physical specifications:

Dimensions (approximate):

- Height: 69 mm (2.7 in.)
- Width: 17 mm (0.7 in.)
- Depth: 170 mm (6.7 in.)
- Weight: 88 g (0.2 lb.)

Shipping dimensions (approximate):

- Height: 51 mm (2.0 in.)
- Width: 143 mm (5.6 in.)
- Depth: 238 mm (9.4 in.)
- Weight: 193 g (0.4 lb.)

Operating environment

The ServeRAID M1215 SAS/SATA Controller is supported in the following environment:

- Temperature:
 - Operational: 5 to 40 degrees C (41 to 104 F) at 0 to 5,000 m (0 to 16,404 ft)
 - Non-operational: -40 to 60 degrees C (-40 to 140 F) at 10,700 m (35,105 ft)
- Relative humidity: 8% to 93% (noncondensing)

Agency approvals

The adapter conforms to the following regulations:

- UL
- cUL
- IEC60950
- EMC
- FCC
- CE
- VCCI
- BSMI
- C-tick
- KC

Related publications and links

For more information, see the following documents:

- ServeRAID M1215 User's Guide
<https://support.lenovo.com/docs/UM104745>
- ServeRAID M1215 Quick Installation Guide
<https://support.lenovo.com/docs/UM104744>
- System x RAID products home page:
<https://www3.lenovo.com/us/en/data-center/servers/server-options/system-x-options/server-storage/raid-controllers-and-storage-adapters/raid-controllers/c/raid-controllers>
- M1215 support and downloads
<https://support.lenovo.com/us/en/search?query=M1215>
http://ibm.com/support/entry/portal/search_results?q=M1215
- ServerProven
<http://www.lenovo.com/us/en/serverproven/xseries/controllers/matrix.shtml>
- US Announcement Letter:
<http://ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&subtype=ca&&htmlfid=897/ENUS114-076>

Related product families

Product families related to this document are the following:

- [RAID Adapters](#)

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service. Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.
8001 Development Drive
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk. Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

© Copyright Lenovo 2024. All rights reserved.

This document, TIPS1174, was created or updated on March 20, 2019.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:
<https://lenovopress.lenovo.com/TIPS1174>
- Send your comments in an e-mail to:
comments@lenovopress.com

This document is available online at <https://lenovopress.lenovo.com/TIPS1174>.

Trademarks

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo in the United States, other countries, or both. A current list of Lenovo trademarks is available on the Web at <https://www.lenovo.com/us/en/legal/copytrade/>.

The following terms are trademarks of Lenovo in the United States, other countries, or both:

Lenovo®
NeXtScale
NeXtScale System®
ServeRAID
ServerProven®
System x®

The following terms are trademarks of other companies:

Intel® and Xeon® are trademarks of Intel Corporation or its subsidiaries.

Linux® is the trademark of Linus Torvalds in the U.S. and other countries.

Microsoft®, Windows Server®, and Windows® are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.