



Lenovo ThinkSystem HDD Summary

Reference Information

Overview

Lenovo offers a broad range of hard disk drives (HDD) ranging from entry-level drives to industry leading capacity and high-RPM offerings. Lenovo HDDs are optimized to deliver maximum performance on Lenovo ThinkSystem servers and all HDDs undergo stringent compatibility and reliability testing to ensure best performance in 24x7 operational environments.

Lenovo HDDs are available with a variety of features:

- 3.5-inch or 2.5-inch form factors
- Hot-swap, simple-swap or non-hot-swap trays
- 12 Gbps or 6 Gbps interface speeds
- SAS, NL SAS or NL SATA protocols
- 15K, 10K or 7200 RPM rotational speeds
- Self-encrypting drives (SEDs)
- Capacities up to 18TB

Lenovo HDDs provide outstanding performance, high capacity and reliability.

- Outstanding performance for all mission critical applications
Enterprise HDDs with enhanced sequential and random read/write performance, designed for critical business applications
- Offering highest capacity HDDs from industry leaders
Lenovo offers a wide range of HDDs from storage industry leaders to ensure the best technology and highest capacity points are available to our customers
- Excellent reliability and performance in 24x7 operational environments
Lenovo uses comprehensive validation and quality control measures to ensure best reliability and performance for all application workloads under 24x7 operation
- Protect data with Self-Encrypting drives
Lenovo offers Self-encrypting drives to protect customer data against loss or theft as well as secure drive retirement, disposal, or repurposing
- Helium-filled drive assemblies for drives 12TB and larger
Helium provides a more stable environment and less turbulence and resistance to the flying heads. This enables a larger number of platters which results in larger storage capacity. The use of Helium also results in lower power consumption compared to air-filled drives.

Workload limit: All Enterprise 7200 RPM NL SAS and NL SATA drives have a workload limit of 550TB/year. 10K and 15K SAS drives do not have a workload limit.

The following tables list the HDDs available for ThinkSystem servers. They are grouped as follows:

- [2.5-inch Hot Swap drives](#)
- [3.5-inch Hot Swap drives](#)
- [Simple Swap drives](#)

2.5-inch Hot Swap drives

The following tables list the ThinkSystem servers that are compatible.

Table 1. 2.5-inch Hot Swap drives (Part 1 of 2)

Part Number	Description	E	2S Intel V2				AMD				Dense V2				4S V2	8S	
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)
2.5-inch hot-swap HDDs - 12 Gb SAS 10K																	
7XB7A00024	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00025	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00026	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	Y
7XB7A00027	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00028	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00069	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	N	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb SAS 15K																	
7XB7A00021	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00022	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00023	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb NL SAS																	
7XB7A00034	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00035	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K																	

Part Number	Description	E	2S Intel V2				AMD				Dense V2				4S V2	8S	
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)
7XB7A00030	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD SED	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y
7XB7A00031	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00033	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD SED	N	N	Y	Y	N	N	N	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00070	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	Y	Y	N	N	N	Y	Y	N	N	N	N	Y	Y	N
2.5-inch hot-swap SED HDDs - 12 Gb NL SAS																	
7XB7A00064	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2.5-inch hot-swap HDDs - 6 Gb NL SATA																	
7XB7A00036	ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
7XB7A00037	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y

Table 2. 2.5-inch Hot Swap drives (Part 2 of 2)

Part Number	Description	1S Intel			2S Intel V1								Dense V1			4S V1				
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
2.5-inch hot-swap HDDs - 12 Gb SAS 10K																				
7XB7A00024	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
7XB7A00025	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
7XB7A00026	ThinkSystem 2.5" 900GB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
7XB7A00027	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y

Part Number	Description	1S Intel			2S Intel V1								Dense V1				4S V1			
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
7XB7A00028	ThinkSystem 2.5" 1.8TB 10K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
7XB7A00069	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb SAS 15K																				
7XB7A00021	ThinkSystem 2.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
7XB7A00022	ThinkSystem 2.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
7XB7A00023	ThinkSystem 2.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
2.5-inch hot-swap HDDs - 12 Gb NL SAS																				
7XB7A00034	ThinkSystem 2.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
7XB7A00035	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
2.5-inch hot-swap SED HDDs - 12 Gb SAS 10K																				
7XB7A00030	ThinkSystem 2.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD SED	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y
7XB7A00031	ThinkSystem 2.5" 600GB 10K SAS 12Gb Hot Swap 512n HDD SED	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y
7XB7A00033	ThinkSystem 2.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD SED	N	N	N	N	Y	N	N	N	N	Y	Y	N	N	N	Y	Y	Y	Y	Y
7XB7A00070	ThinkSystem 2.5" 2.4TB 10K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	Y	Y	N	Y	N	N	N	N	N	N
2.5-inch hot-swap SED HDDs - 12 Gb NL SAS																				
7XB7A00064	ThinkSystem 2.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	Y	Y	N	Y	N	N	N	N	N	N
2.5-inch hot-swap HDDs - 6 Gb NL SATA																				
7XB7A00036	ThinkSystem 2.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
7XB7A00037	ThinkSystem 2.5" 2TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y

2.5-inch VLH drive offerings

The drives in the following table are available from Lenovo under the Vendor Logo Hardware (VLH) program.

Table 3. ThinkSystem server support

Description and part number	E	1S Intel				2S Intel				AMD				4S Intel				Dense/ Blade								
	SE350 (7Z46/7D1X)	ST50 (7Y48/7Y50)	ST250 (7Y45/7Y46)	SR150 (7Y54)	SR250 (7Y51/7Y52)	ST550 (7X09/7X10)	SR530 (7X07/7X08)	SR550 (7X03/7X04)	SR570 (7Y02/7Y03)	SR590 (7X98/7X99)	SR630 (7X01/7X02)	SR650 (7X05/7X06)	SR670 (7Y36/37/38)	SR635 (7Y98/7Y99)	SR655 (7Y00/7Z01)	SR645 (7D2Y/7D2X)	SR665 (7D2W/7D2V)	SR850 (7X18/7X19)	SR850P (7D2F/2D2G)	SR860 (7X69/7X70)	SR950 (7X11/12/13)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	
300G 15K SED SAS HDD (Seagate ST300MP0016), 4HD7A64418	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
600G 15K SED SAS HDD (Seagate ST600MP0016), 4HD7A64111	N	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N

3.5-inch Hot Swap drives

The 3.5-inch drives are grouped into [12Gb SAS drives](#) and [6Gb SATA drives](#).

3.5-inch 12Gb SAS HDDs

The following tables list the ThinkSystem servers that are compatible.

Table 4. 3.5-inch 12Gb SAS HDDs (Part 1 of 2)

Part Number	Description	E	2S Intel V2				AMD				Dense V2				4S V2	8S	
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)
3.5-inch hot-swap HDDs - 12 Gb SAS 10K																	
7XB7A00063	ThinkSystem 3.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N
4XB7A77004	ThinkSystem 3.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3.5-inch hot-swap HDDs - 12 Gb SAS 15K																	
7XB7A00038	ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	N	N	Y	Y	N	N	N	N	N	N	N
7XB7A00039	ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00040	ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	N	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
3.5-inch hot-swap HDDs - 12 Gb NL SAS																	
7XB7A00041	ThinkSystem 3.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00042	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00043	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00044	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00045	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	N	Y	Y	Y	N	N	N	N	N	N	N
4XB7A17222	ThinkSystem SR635 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N
7XB7A00046	ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00067	ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	N	Y	Y	Y	N	N	N	N	N	N	N

Part Number	Description	E	2S Intel V2				AMD				Dense V2				4S V2	8S	
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)
4XB7A17223	ThinkSystem SR635/SR655 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N
4XB7A13906	ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	N	Y	Y	Y	N	N	N	N	N	N	N
4XB7A17224	ThinkSystem SR635/SR655 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N
4XB7A13911	ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	N
4XB7A38266	ThinkSystem 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	Y	Y	N	Y	N	Y	Y	N	N	N	N	N	N	N
4XB7A76340	ThinkSystem SR635/SR645/SR655 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N
3.5-inch hot-swap SED HDDs - 12 Gb NL SAS																	
7XB7A00065	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00047	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	N	N	N
7XB7A00048	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N	N
7XB7A00066	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	Y	Y	N	N	N	Y	Y	N	N	N	N	N	N	N

Table 5. 3.5-inch 12Gb SAS HDDs (Part 2 of 2)

Part Number	Description	1S Intel				2S Intel V1								Dense V1				4S V1		
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
3.5-inch hot-swap HDDs - 12 Gb SAS 10K																				
7XB7A00063	ThinkSystem 3.5" 300GB 10K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A77004	ThinkSystem 3.5" 1.2TB 10K SAS 12Gb Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N

Part Number	Description	1S Intel				2S Intel V1								Dense V1				4S V1		
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
3.5-inch hot-swap HDDs - 12 Gb SAS 15K																				
7XB7A00038	ThinkSystem 3.5" 300GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00039	ThinkSystem 3.5" 600GB 15K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00040	ThinkSystem 3.5" 900GB 15K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
3.5-inch hot-swap HDDs - 12 Gb NL SAS																				
7XB7A00041	ThinkSystem 3.5" 1TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00042	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00043	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00044	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00045	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A17222	ThinkSystem SR635 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00046	ThinkSystem 3.5" 10TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00067	ThinkSystem 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A17223	ThinkSystem SR635/SR655 3.5" 12TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13906	ThinkSystem 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A17224	ThinkSystem SR635/SR655 3.5" 14TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13911	ThinkSystem 3.5" 16TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A38266	ThinkSystem 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A76340	ThinkSystem SR635/SR645/SR655 3.5" 18TB 7.2K SAS 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Part Number	Description	1S Intel				2S Intel V1								Dense V1				4S V1		
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
3.5-inch hot-swap SED HDDs - 12 Gb NL SAS																				
7XB7A00065	ThinkSystem 3.5" 2TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N
7XB7A00047	ThinkSystem 3.5" 4TB 7.2K SAS 12Gb Hot Swap 512n HDD FIPS	N	N	N	N	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00048	ThinkSystem 3.5" 6TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N
7XB7A00066	ThinkSystem 3.5" 8TB 7.2K SAS 12Gb Hot Swap 512e HDD FIPS	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	N

3.5-inch 6Gb SATA HDDs

The following tables list the ThinkSystem servers that are compatible.

Table 6. 3.5-inch 6Gb SATA HDDs (Part 1 of 2)

Part Number	Description	E	2S Intel V2					AMD				Dense V2				4S V2		8S
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)	
3.5-inch hot-swap HDDs - 6 Gb NL SATA																		
7XB7A00049	ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	Y	Y	Y	N	N	Y	Y	N	N	N	N	N	N	N	
7XB7A00050	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	
7XB7A00051	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	
7XB7A00052	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	
7XB7A00053	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	
4XB7A17225	ThinkSystem SR635 3.5" 8TB 7.2K SATA 12Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00054	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	
7XB7A00068	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	
4XB7A17226	ThinkSystem SR635/SR655 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	
4XB7A38184	ThinkSystem SR635/SR655 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	
4XB7A13907	ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	
4XB7A13914	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	
4XB7A38130	ThinkSystem 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	N	N	
4XB7A76341	ThinkSystem SR635/SR645/SR655 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	

Table 7. 3.5-inch 6Gb SATA HDDs (Part 2 of 2)

Part Number	Description	1S Intel				2S Intel V1								Dense V1				4S V1		
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)
3.5-inch hot-swap HDDs - 6 Gb NL SATA																				
7XB7A00049	ThinkSystem 3.5" 1TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00050	ThinkSystem 3.5" 2TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00051	ThinkSystem 3.5" 4TB 7.2K SATA 6Gb Hot Swap 512n HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00052	ThinkSystem 3.5" 6TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00053	ThinkSystem 3.5" 8TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A17225	ThinkSystem SR635 3.5" 8TB 7.2K SATA 12Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00054	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
7XB7A00068	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A17226	ThinkSystem SR635/SR655 3.5" 12TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A38184	ThinkSystem SR635/SR655 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13907	ThinkSystem 3.5" 14TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A13914	ThinkSystem 3.5" 16TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A38130	ThinkSystem 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N
4XB7A76341	ThinkSystem SR635/SR645/SR655 3.5" 18TB 7.2K SATA 6Gb Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Simple Swap drives

The following tables list the ThinkSystem servers that are compatible.

Table 8. Simple Swap drives (Part 1 of 2)

Part Number	Description	E	2S Intel V2				AMD				Dense V2				4S V2		8S
		SE350 (7Z46 / 7D1X)	ST650 V2 (7Z75 / 7Z74)	SR630 V2 (7Z70 / 7Z71)	SR650 V2 (7Z72 / 7Z73)	SR670 V2 (7Z22 / 7Z23)	SR635 (7Y98 / 7Y99)	SR655 (7Y00 / 7Z01)	SR645 (7D2Y / 7D2X)	SR665 (7D2W / 7D2V)	SD630 V2 (7D1K)	SD650 V2 (7D1M)	SD650-N V2 (7D1N)	SN550 V2 (7Z69)	SR850 V2 (7D31 / 7D32)	SR860 V2 (7Z59 / 7Z60)	SR950 (7X11 / 7X12)
3.5-inch simple-swap HDDs - 6 Gb NL SATA																	
7XB7A00055	ThinkSystem 1TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00056	ThinkSystem 2TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00057	ThinkSystem 4TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00058	ThinkSystem 6TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00059	ThinkSystem 8TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
7XB7A00060	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Simple Swap 512e HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A08584	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Simple Swap 512e HDD	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13554	ThinkSystem ST50 3.5" 1TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13555	ThinkSystem ST50 3.5" 2TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13556	ThinkSystem ST50 3.5" 4TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13557	ThinkSystem ST50 3.5" 6TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A13558	ThinkSystem ST50 3.5" 8TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A76721	ThinkSystem ST50 3.5" 1TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4XB7A76722	ThinkSystem ST50 3.5" 2TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Table 9. Simple Swap drives (Part 2 of 2)

Part Number	Description	1S Intel				2S Intel V1								Dense V1				4S V1			
		ST50 (7Y48 / 7Y50)	ST250 (7Y45 / 7Y46)	SR150 (7Y54)	SR250 (7Y52 / 7Y51)	ST550 (7X09 / 7X10)	SR530 (7X07 / 7X08)	SR550 (7X03 / 7X04)	SR570 (7Y02 / 7Y03)	SR590 (7X98 / 7X99)	SR630 (7X01 / 7X02)	SR650 (7X05 / 7X06)	SR670 (7Y36 / 7Y37)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	SR850 (7X18 / 7X19)	SR850P (7D2F / 2D2G)	SR860 (7X69 / 7X70)	
3.5-inch simple-swap HDDs - 6 Gb NL SATA																					
7XB7A00055	ThinkSystem 1TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00056	ThinkSystem 2TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00057	ThinkSystem 4TB 7.2K 6Gbps SATA 3.5" Simple Swap 512n HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00058	ThinkSystem 6TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00059	ThinkSystem 8TB 7.2K 6Gbps SATA 3.5" Simple Swap 512e HDD	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
7XB7A00060	ThinkSystem 3.5" 10TB 7.2K SATA 6Gb Simple Swap 512e HDD	N	N	N	N	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	
4XB7A08584	ThinkSystem 3.5" 12TB 7.2K SATA 6Gb Simple Swap 512e HDD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A13554	ThinkSystem ST50 3.5" 1TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A13555	ThinkSystem ST50 3.5" 2TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A13556	ThinkSystem ST50 3.5" 4TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A13557	ThinkSystem ST50 3.5" 6TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A13558	ThinkSystem ST50 3.5" 8TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A76721	ThinkSystem ST50 3.5" 1TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD	Y ¹	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
4XB7A76722	ThinkSystem ST50 3.5" 2TB Client 7.2K SATA 6Gb Non-Hot Swap 512e HDD	Y ¹	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	

1. Support for client drives has special conditions of use. See [Special Notice for Client drives](#) for details

Special notice for Client drives

The ThinkSystem ST50 server supports Client HDDs and Enterprise Class HDDs. Client HDDs are designed for 8x5 operating environment whereas Enterprise Class HDDs are designed for 24x7 operating environment. Selecting the correct drive class will enable the critical areas of quality, functionality, performance, and reliability to be optimized for the target implementation.

When using Client Hard Disk Drives, you agree to the following terms of service:

- Update the firmware once you receive the server according to the "Lenovo Client HDD Upgrade for Windows and Linux" document in the download page:
<https://datacentersupport.lenovo.com/products/servers/thinksystem/st50/7y48/downloads/driver-list/component?name=Storage>
- The use of the Lenovo Online SAS/SATA Hard Disk Drive Update Program is not supported.
- Maximum of 2 Client HDDs per server is supported
- Mixing Client HDDs with other drives is not supported.
- Only supported connected to the server's onboard 6Gbps SATA controller. RAID adapters and HBAs are not supported.
- Operational availability: 8 hours/day, 5 days/week.
- Workload rate limit: < 55 TB/year*

Choosing the right drive type depends on the usage pattern. Improper use of Client HDDs (such as the workload rate exceeding 55 TB/year) will lead to significant risk and increase the drives failure rate.

* The specifications for the product assumes the I/O workload does not exceed the average annualized workload rate limit of 55 TB/year. Workloads exceeding the annualized rate may degrade and impact reliability as experienced by the particular application. The average annualized workload rate limit is in units of TB per calendar year.

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Product families related to this document are the following:

- [Drives](#)

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This document, LP1059, was created or updated on August 24, 2021.

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