



Lenovo ThinkSystem Memory Summary

Reference Information

ThinkSystem TruDDR4 Memory delivers trusted, tested, quality, performance, and reliability throughout the ThinkSystem portfolio. We use the highest quality industry-standard memory components sourced from Tier 1 DRAM suppliers. Only memory that meets these strict requirements are selected for TruDDR4 Memory. It is then compatibility tested and tuned on every ThinkSystem server to maximize reliability.

In addition, TruDDR4 Memory DIMMs have a unique signature programmed into them so your system can verify that TruDDR4 Memory is installed in your system. Since the memory will be authenticated, memory stretch goals are enabled only when TruDDR4 Memory DIMMs are detected. Together with lower power consumption, these new DIMMs can provide the lowest TCO for data centers.



Figure 1. Lenovo TruDDR4 Memory DIMM

High Performance Memory

Lenovo offers high-performance and high-capacity memory options in ThinkSystem servers.

Persistent Memory

Lenovo ThinkSystem servers configured with Intel Optane DC Persistent Memory transforms the memory/storage hierarchy enabling faster insights from data. This breakthrough technology delivers large capacity, high speed, affordable memory with data persistence and advanced encryption capabilities. These DDR4 compatible modules significantly increase the capacity of available system memory, keeping more hot data closer to the CPU, and enabling greater operational efficiency by processing larger data sets with more user instances.

3DS RDIMMs

To meet the ever increasing demand for higher density server memory modules, Lenovo offers 3DS (3 Dimensional Stacked) DDR4 RDIMMs which apply TSV (Through Silicon Via) technology from our partnership with a leading Tier 1 DRAM supplier. The new TSV 3DS stack technology enables higher density DRAM stack packages with higher operational frequency and reduced power consumption. The RDIMM configuration along with 3DS TSV DRAM packages exhibits performance benefits and lower power consumption over alternative high density solutions to ultimately provide the lowest TCO for data centers.

Performance+ Memory

Memory intensive workloads needing a competitive advantage will benefit from Lenovo’s Performance+ memory. Lenovo engineers worked in partnership with leading memory suppliers to develop and tune ThinkSystem servers enabling them to exceed the latest industry standard for memory performance. Lenovo’s Performance+ memory delivers increased bandwidth and lower latency at 2933 MHz with memory all channels fully populated.



Figure 2. Intel Optane DC Persistent Memory

Part Number Information

The following tables list the ordering information.

Table 1. 3200 MHz TruDDR4 DIMM ordering information

Part number	Feature code	Description
3200 MHz RDIMMs		
4ZC7A15121	B5XD	ThinkSystem 16GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM-A
4ZC7A15122	B5XE	ThinkSystem 32GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A
4ZC7A15123	B8NU	ThinkSystem 32GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM
4ZC7A15124	B5XC	ThinkSystem 64GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A
3200 MHz 3DS RDIMMs		
4ZC7A15125	B8NT	ThinkSystem 128GB TruDDR4 3200MHz (2S2Rx4 1.2V) 3DS RDIMM
3200 MHz Performance+ RDIMMs		
4X77A12188	BCZY	ThinkSystem 32GB TruDDR4 Performance+ 3200 MHz (2Rx8 1.2V) RDIMM-A
4X77A12189	BCZZ	ThinkSystem 64GB TruDDR4 Performance+ 3200 MHz (2Rx4 1.2V) RDIMM-A

Table 2. 2933 MHz TruDDR4 DIMM ordering information

Part number	Feature code	Description
2933 MHz RDIMMs		
4ZC7A08706	B4H1	ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM
4ZC7A08707	B4LY	ThinkSystem 16GB TruDDR4 2933 MHz (1Rx4 1.2V) RDIMM
4ZC7A08708	B4H2	ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM
4ZC7A08709	B4H3	ThinkSystem 32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM
4ZC7A08710	B4H4	ThinkSystem 64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM
2933 MHz RDIMMs for SR635 and SR655		
4ZC7A08739	B7MS	ThinkSystem 8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM-A
4ZC7A08740	B7MT	ThinkSystem 16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM-A
4ZC7A08741	B7MU	ThinkSystem 16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM-A
4ZC7A08742	B7MV	ThinkSystem 32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM-A
4ZC7A08744	B7MW	ThinkSystem 64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM-A
2933 MHz 3DS RDIMMs		
4ZC7A15113	B587	ThinkSystem 128GB TruDDR4 2933MHz (4Rx4 1.2V) 3DS RDIMM
4ZC7A08727	B4Y3	ThinkSystem 256GB TruDDR4 2933MHz (8Rx4 1.2V) 3DS RDIMM
2933 MHz Performance+ RDIMMs		
4X77A12184	B5N6	ThinkSystem 16GB TruDDR4 Performance+ 2933MHz (2Rx8 1.2V) RDIMM
4X77A12185	B5N7	ThinkSystem 32GB TruDDR4 Performance+ 2933MHz (2Rx4 1.2V) RDIMM
4X77A12186	B5N8	ThinkSystem 64GB TruDDR4 Performance+ 2933MHz (2Rx4 1.2V) RDIMM
2933 MHz Performance+ 3DS RDIMMs		
4X77A12187	B5N9	ThinkSystem 128GB TruDDR4 Performance+ 2933MHz (4Rx4 1.2V) 3DS RDIMM
CTO only*	B5NA	ThinkSystem 256GB TruDDR4 Performance+ 2933MHz (8Rx4 1.2V) 3DS RDIMM

* Configure-to-order only; not available as a field upgrade

Table 3. 2666 MHz TruDDR4 DIMM ordering information

Part number	Feature code	Description
2666 MHz RDIMMs		
CTO only	B21T	ThinkSystem 8GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM
7X77A01301	AUU1	ThinkSystem 8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM
7X77A01302	AUNB	ThinkSystem 16GB TruDDR4 2666 MHz (1Rx4 1.2V) RDIMM
7X77A01303	AUNC	ThinkSystem 16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM
7X77A01304	AUND	ThinkSystem 32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM
2666 MHz LRDIMMs		
7X77A01305	AUNE	ThinkSystem 64GB TruDDR4 2666 MHz (4Rx4 1.2V) LRDIMM
2666 MHz 3DS RDIMMs		
4ZC7A08716	AUW5	ThinkSystem 64GB TruDDR4 2666MHz (4Rx4, 1.2V) 3DS RDIMM
7X77A01307	AUNF	ThinkSystem 128GB TruDDR4 2666 MHz (8Rx4 1.2V) 3DS RDIMM
2666 MHz ECC UDIMMs		
4ZC7A08696	B35J	ThinkSystem 8GB TruDDR4 2666MHz (1Rx8, 1.2V) UDIMM
4ZC7A08699	B35K	ThinkSystem 16GB TruDDR4 2666MHz (2Rx8, 1.2V) UDIMM
4ZC7A15142	B96E	ThinkSystem 32GB TruDDR4 2666MHz (2Rx8, 1.2V) ECC UDIMM
2666 MHz Non-ECC UDIMMs		
4ZC7A08700	B35L	ThinkSystem 4GB TruDDR4 2666MHz (1Rx16, 1.2V) Non-ECC UDIMM
4ZC7A08701	B35M	ThinkSystem 8GB TruDDR4 2666MHz (1Rx8, 1.2V) Non-ECC UDIMM
4ZC7A08702	B35N	ThinkSystem 16GB TruDDR4 2666MHz (2Rx8, 1.2V) Non-ECC UDIMM

Table 4. 2666 MHz Persistent Memory

Part number	Feature code	Description
2666 MHz Persistent Memory		
4ZC7A15110	B4LV	ThinkSystem 128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory
4ZC7A15111	B4LW	ThinkSystem 256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory
4ZC7A15112	B4LX	ThinkSystem 512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory
CTO only*	B691	ThinkSystem 128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650
CTO only*	B692	ThinkSystem 256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650
CTO only*	B693	ThinkSystem 512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650

* Configure-to-order only, not available as a field upgrade.

Server Support

Configurations notes:

- Persistent Memory is not supported by Intel Xeon SP Gen 1 processors
- 2933 MHz memory is not supported by Intel Xeon SP Gen 1 processors
- The support of 32GB UDIMMs on ST50, ST250, SR150 and SR250 requires a Intel Xeon E Series processor and UEFI firmware ISE114H or later
- Some servers support mixing memory speeds; all memory will operate at the lowest speed

Note: Lenovo branded memory shipped as option part numbers, as FRU service parts, or installed in the factory as part of a CTO order, may contain memory parts that *exceed* the technical specification of what is printed on the DIMM label or is stated in the DIMM ordering information. Your server's system UEFI firmware may need to be updated to support such DIMMs. See Lenovo Support Tip [HT509191](#) for additional information.

The following tables list the ThinkSystem servers that are compatible.

Table 5. ThinkSystem server support (Part 1)

Part number	Description	Intel 2S								AMD			
		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)
3200 MHz RDIMMs													
4ZC7A15121	16GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	Y	Y
4ZC7A15122	32GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	Y	Y
4ZC7A15123	32GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	N	N	N	N	N	Y	Y
4ZC7A15124	64GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	Y	Y
3200 MHz 3DS RDIMMs													
4ZC7A15125	128GB TruDDR4 3200MHz (2S2Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	N	N	Y	Y
3200 MHz Perf+ RDIMMs													
4X77A12188	32GB TruDDR4 Perf+ 3200 MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	Y	Y
4X77A12189	64GB TruDDR4 Perf+ 3200 MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	Y	Y
2933 MHz RDIMMs													
4ZC7A08706	8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
4ZC7A08707	16GB TruDDR4 2933 MHz (1Rx4 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
4ZC7A08708	16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
4ZC7A08709	32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
4ZC7A08710	64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
2933 MHz RDIMMs for AMD-based servers													
4ZC7A08739	8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	N	N
4ZC7A08740	16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	N	N

Part number	Description	Intel 2S								AMD			
		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)
4ZC7A08741	16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	N	N
4ZC7A08742	32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	Y	Y	N	N
2933 MHz 3DS RDIMMs													
4ZC7A15113	128GB TruDDR4 2933MHz (4Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	Y	Y	N	Y	Y	N	N
4ZC7A08727	256GB TruDDR4 2933MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	N	N	N	N
2933 MHz Perf+ RDIMMs													
4X77A12184	16GB TruDDR4 Perf+ 2933MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	N	N	N	N
4X77A12185	32GB TruDDR4 Perf+ 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	N	N	N	N
4X77A12186	64GB TruDDR4 Perf+ 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	N	N	N	N	N
2933 MHz Perf+ RDIMMs													
4X77A12187	128GB TruDDR4 Perf+ 2933MHz (4Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	Y	Y	N	N	N	N	N
B5NA	256GB TruDDR4 Perf+ 2933MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	N	N	N	N
2666 MHz RDIMMs													
B21T	8GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	N	N	N	N	N	N	N
7X77A01301	8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
7X77A01302	16GB TruDDR4 2666 MHz (1Rx4 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
7X77A01303	16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
7X77A01304	32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
2666 MHz LRDIMMs													
7X77A01305	64GB TruDDR4 2666 MHz (4Rx4 1.2V) LRDIMM	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N
2666 MHz 3DS RDIMMs													
4ZC7A08716	64GB TruDDR4 2666MHz (4Rx4, 1.2V) 3DS RDIMM	N	N	N	N	N	Y	Y	N	N	N	N	N
7X77A01307	128GB TruDDR4 2666 MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	Y	Y	N	N	N	N	N
2666 MHz ECC UDIMMs													
4ZC7A08696	8GB TruDDR4 2666MHz (1Rx8, 1.2V) UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A08699	16GB TruDDR4 2666MHz (2Rx8, 1.2V) UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A15142	32GB TruDDR4 2666MHz (2Rx8, 1.2V) ECC UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
2666 MHz Non-ECC UDIMMs													
4ZC7A08700	4GB TruDDR4 2666MHz (1Rx16, 1.2V) Non-ECC UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A08701	8GB TruDDR4 2666MHz (1Rx8, 1.2V) Non-ECC UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A08702	16GB TruDDR4 2666MHz (2Rx8, 1.2V) Non-ECC UDIMM	N	N	N	N	N	N	N	N	N	N	N	N
2666 MHz Persistent Memory													
4ZC7A15110	128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	Y	Y	Y	Y	N	N	N	N	N

Part number	Description	Intel 2S								AMD			
		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)
4ZC7A15111	256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	Y	Y	Y	Y	N	N	N	N	N
4ZC7A15112	512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	Y	Y	Y	Y	N	N	N	N	N
B691	128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	N	N
B692	256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	N	N
B693	512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	N	N

Table 6. ThinkSystem server support (Part 2)

Part number	Description	E	1S Intel				4S Intel				Dense/ Blade			
		SE350 (7Z46/7D1X)	ST50 (7Y48/7Y50)	ST250 (7Y45/7Y46)	SR150 (7Y54)	SR250 (7Y51/7Y52)	SR850 (7X18/7X19)	SR850P (7D2F/2D2G)	SR860 (7X69/7X70)	SR950 (7X11/12/13)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)
3200 MHz RDIMMs														
4ZC7A15121	16GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A15122	32GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A15123	32GB TruDDR4 3200MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	N	N	N	N	N	N	N	N
4ZC7A15124	64GB TruDDR4 3200MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N
3200 MHz 3DS RDIMMs														
4ZC7A15125	128GB TruDDR4 3200MHz (2S2Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	N	N	N	N	N
3200 MHz Perf+ RDIMMs														
4X77A12188	32GB TruDDR4 Perf+ 3200 MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N
4X77A12189	64GB TruDDR4 Perf+ 3200 MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N
2933 MHz RDIMMs														
4ZC7A08706	8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	N	Y	Y	N	N
4ZC7A08707	16GB TruDDR4 2933 MHz (1Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	Y
4ZC7A08708	16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y
4ZC7A08709	32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y

Part number	Description	E		1S Intel				4S Intel				Dense/ Blade			
		SE350 (7Z46/7D1X)	ST50 (7Y48/7Y50)	ST250 (7Y45/7Y46)	SR150 (7Y54)	SR250 (7Y51/7Y52)	SR850 (7X18/7X19)	SR850P (7D2F/2D2G)	SR860 (7X69/7X70)	SR950 (7X11/12/13)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)	SN850 (7X15)	
4ZC7A08710	64GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	
2933 MHz RDIMMs for AMD-based servers															
4ZC7A08739	8GB TruDDR4 2933MHz (1Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N	
4ZC7A08740	16GB TruDDR4 2933MHz (1Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N	
4ZC7A08741	16GB TruDDR4 2933MHz (2Rx8 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N	
4ZC7A08742	32GB TruDDR4 2933MHz (2Rx4 1.2V) RDIMM-A	N	N	N	N	N	N	N	N	N	N	N	N	N	
2933 MHz 3DS RDIMMs															
4ZC7A15113	128GB TruDDR4 2933MHz (4Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	
4ZC7A08727	256GB TruDDR4 2933MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	Y	N	N	N	N	
2933 MHz Perf+ RDIMMs															
4X77A12184	16GB TruDDR4 Perf+ 2933MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	
4X77A12185	32GB TruDDR4 Perf+ 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	
4X77A12186	64GB TruDDR4 Perf+ 2933MHz (2Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	
2933 MHz Perf+ RDIMMs															
4X77A12187	128GB TruDDR4 Perf+ 2933MHz (4Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	Y	N	Y	N	N	N	N	
B5NA	256GB TruDDR4 Perf+ 2933MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	Y	N	N	N	N	
2666 MHz RDIMMs															
B21T	8GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	N	N	N	N	N	N	N	N	N	N	N	N	N	
7X77A01301	8GB TruDDR4 2666 MHz (1Rx8 1.2V) RDIMM	Y	N	N	N	N	Y	N	Y	N	Y	N	Y	Y	
7X77A01302	16GB TruDDR4 2666 MHz (1Rx4 1.2V) RDIMM	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	Y	
7X77A01303	16GB TruDDR4 2666 MHz (2Rx8 1.2V) RDIMM	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	
7X77A01304	32GB TruDDR4 2666 MHz (2Rx4 1.2V) RDIMM	Y	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	
2666 MHz LRDIMMs															
7X77A01305	64GB TruDDR4 2666 MHz (4Rx4 1.2V) LRDIMM	Y	N	N	N	N	Y	N	Y	Y	Y	N	Y	Y	
2666 MHz 3DS RDIMMs															
4ZC7A08716	64GB TruDDR4 2666MHz (4Rx4, 1.2V) 3DS RDIMM	N	N	N	N	N	N	N	N	Y	N	N	N	N	
7X77A01307	128GB TruDDR4 2666 MHz (8Rx4 1.2V) 3DS RDIMM	N	N	N	N	N	Y	N	Y	Y	Y	N	Y	Y	
2666 MHz ECC UDIMMs															
4ZC7A08696	8GB TruDDR4 2666MHz (1Rx8, 1.2V) UDIMM	N	Y	Y	Y	Y	N	N	N	N	N	N	N	N	
4ZC7A08699	16GB TruDDR4 2666MHz (2Rx8, 1.2V) UDIMM	N	Y	Y	Y	Y	N	N	N	N	N	N	N	N	
4ZC7A15142	32GB TruDDR4 2666MHz (2Rx8, 1.2V) ECC UDIMM	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	
2666 MHz Non-ECC UDIMMs															

Part number	Description	E	1S Intel				4S Intel				Dense/ Blade			
			SE350 (7Z46/7D1X)	ST50 (7Y48/7Y50)	ST250 (7Y45/7Y46)	SR150 (7Y54)	SR250 (7Y51/7Y52)	SR850 (7X18/7X19)	SR850P (7D2F/2D2G)	SR860 (7X69/7X70)	SR950 (7X11/12/13)	SD530 (7X21)	SD650 (7X58)	SN550 (7X16)
4ZC7A08700	4GB TruDDR4 2666MHz (1Rx16, 1.2V) Non-ECC UDIMM	N	Y	N	N	N	N	N	N	N	N	N	N	N
4ZC7A08701	8GB TruDDR4 2666MHz (1Rx8, 1.2V) Non-ECC UDIMM	N	Y	N	N	N	N	N	N	N	N	N	N	N
4ZC7A08702	16GB TruDDR4 2666MHz (2Rx8, 1.2V) Non-ECC UDIMM	N	Y	N	N	N	N	N	N	N	N	N	N	N
2666 MHz Persistent Memory														
4ZC7A15110	128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	Y
4ZC7A15111	256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	Y
4ZC7A15112	512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	Y
B691	128GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	Y	N	N
B692	256GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	Y	N	N
B693	512GB TruDDR4 2666MHz (1.2V) Intel Optane DC Persistent Memory for SD650	N	N	N	N	N	N	N	N	N	N	Y	N	N

Operating system support

Most memory is operating system independent, however Persistent Memory is supported only by specific operating systems as listed in the following table.

Table 7. Operating system support for ThinkSystem 128GB TruDDR4 2666MHz (1.2V) Intel® Optane™ DC Persistent Memory, 4ZC7A15110

Operating systems	SD530 (Gen 2)	SD650 (Gen 2)	SN550 (Gen 2)	SN850 (Gen 2)	SR570 (Gen 2)	SR590 (Gen 2)	SR630 (Gen 2)	SR650 (Gen 2)	SR850 (Gen 2)	SR850P	SR860 (Gen 2)	SR950 (Gen 2)
For OS support info. please refer to LeSI Best Recipe.	N	Y ¹	N	N	N	N	N	N	N	N	N	N
Microsoft Windows Server 2019	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
Red Hat Enterprise Linux 7.6	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
Red Hat Enterprise Linux 7.7	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
Red Hat Enterprise Linux 7.8	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Red Hat Enterprise Linux 8.1	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Red Hat Enterprise Linux 8.2	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
SUSE Linux Enterprise Server 12 SP4	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
SUSE Linux Enterprise Server 12 SP5	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
SUSE Linux Enterprise Server 12 SP5 with Xen	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
SUSE Linux Enterprise Server 15	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
SUSE Linux Enterprise Server 15 SP1	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
VMware vSphere Hypervisor (ESXi) 6.7 U1	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
VMware vSphere Hypervisor (ESXi) 6.7 U3	Y	N	Y	Y	Y	Y	Y	Y	Y ²	Y	Y ²	Y
VMware vSphere Hypervisor (ESXi) 7.0	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

¹ 1. This item is not a general stand-alone option for Lenovo ThinkSystem SD650 (Xeon SP Gen 2), M/T 7X58 (Xeon SP Gen 2). 2. For OS support matrix, pls refer to LeSI Best Recipe. 3. This item shall be installed/removed by Lenovo support rep only.

² 2 When OCPMM (AEP) is installed, the maximum ambient temperature can be 30 °C. When operating above 30 °C, or in the event of a fan failure, the server will continue to function as long as all component temperature requirements are met, however, there may be performance reductions. Detail information please refer to [Support Tip HT508512](#)

Learn More

For more information, see these resources:

- Intel Optane DC Persistent Memory product guide
<https://lenovopress.com/lp1066-intel-optane-dc-persistent-memory>
- Optimizing Memory Performance of Lenovo ThinkSystem Servers
<https://lenovopress.com/lp0697-optimizing-memory-performance-of-lenovo-thinksystem-servers>
- Lenovo ThinkSystem SD530 Performance Considerations with 12 DIMMs and 16 DIMMs
<https://lenovopress.com/lp0659-thinksystem-sd530-performance-considerations>
- ThinkSystem Memory Configurator
https://dcsc.lenovo.com/#/memory_configuration

Related product families

Product families related to this document are the following:

- [Memory](#)

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This document, LP1021, was created or updated on May 19, 2020.

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