

## 32GB Computer memory DDR3 for Lenovo Flex System x280 X6 7903 (E7-2800 v2) LRDIMM





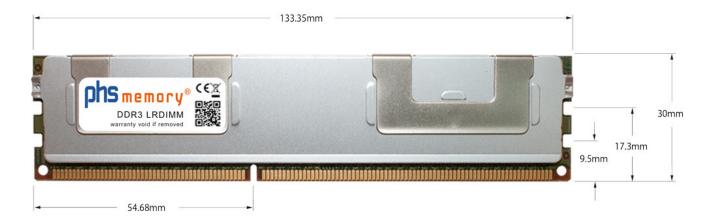


## PHS-memory® - computer memory with 100% quality

- many years of IT competence
- Free support for optimal configuration and product selection
- High availability through professional warehouse management
- Fast delivery in throughout Europe
- Short response times and professional order processing due to full digitalization throughout the entire process with complete traceability
- Incoming goods inspection include checks of the DRAMs, PCBs and the programmed SPDs in order to exclude possible errors (Controlled BOM).
- PHS-memory® brand memories guarantee 100% compatibility to the specified system.
- PHS-memory® memories can be used together with existing memories in the device depends on to the configuration rules of the system.
- The "fallback option" in the SPD of PHS-memory® allows DRAMs with higher clock rates to be operated together with older memory modules with lower clock rates within the system.
- Products with unique serial number for service and warranty
- Pre-sales and after-sales support by technically trained personnel



## Memory Specification



Memory size	32GB		
Memory technology	DDR3		
ECC support	ja		
JEDEC Norm	PC3L-12800L		
DRAM Organization	2Gx4		
Rank	4Rx4 (4DRx4 DDP)		
Туре	LRDIMM (ECC LR DIMM)		
Number of pins	240 Pin DIMM		
Memory data transfer rate	1600MHz @ CL11		
Voltage	1,35 Volt		
Speciality	DDP		
Board dimensions	133,35 x 30 (LxB mm)		
Operating temperature	0° C - 85° C		
Storage temperature	-40° C - +95° C		
RoHS compliant	Yes		
SKU	SP194390		
EAN	4055069629002		

Note: The module specified in this datasheet is one of several possible configurations available under this part number.

Some details may differ from the specifications described here and the illustration, but have no negative influence on the functionality.



## System Specifications

The memory is 100% compatible with this sytem:

System manufacturer	Lenovo
Device type	Server
Device family	IBM Flex System
Device series	x480 x6 Serie
Device name	Flex System x280 X6 7903 (E7-2800 v2)
Maximum memory*	1,5TB
Number of memory sockets	48

<sup>\*</sup> The specifications for the maximum memory upgrade may differ from those of the manufacturer Lenovo. Often the information given in the manual for the maximum memory upgrade is not up to date. New memory technologies, bios updates or newer software versions often allow the use of memory modules with a higher capacity than specified by the manufacturer with the same performance and stability.

## Information on memory allocation

#### Which memory configuration is possible?

Our memory team will be happy to help you choose the right memory and configure your server.

Technologie	max. Ram @ 1 CPU	max.Ram @ 2 CPU
RDIMM	384GB RAM (24 x 16GB RIMM)	768GB (48x16GB RDIMM)
LRDIMM	1,5TB RAM (24 x 64GB LRDIMM)	3TB (48x64GB LRDIMM)

Registered DIMM and Load Reduced LRDIMM memory modules must not be mixed. Bei einer Aufrüstung sollten Sie deshalb wissen, welche memory bereits vorhanden sind or komplett with LRDIMMcomputer memory upgrade.

#### Principles of memory assembly

- Eine CPU ist with 2 memorycontrollern ausgestattet. Jeder memorycontroller verfügt über 2 SMI (Scalable Memory Interface) with until zu 6 memory memory slotsn. Sowith kann eine CPU until zu 24 RAM memory adressieren (2 Controller x 2 SMI x 6 DIMM memory slots)
- Registered DIMM and Load Reduced LRDIMM memory modules must not be mixed
- Bei einer Aufrüstung sollten Sie deshalb wissen, welche memory bereits vorhanden sind or komplett with LRDIMMcomputer memory upgrade.
- memorysteckplätze for die kein Prozessor vorhanden ist dürfen nicht bestückt werden

#### Memory configuration for good system performance

- Optimal performance is achieved by 4 or 8 identical memories per CPU.
- When equipped with 8 DIMMs (1 DimmPerChannel), 16 DIMMs (2 DPC) or 24 DIMMs (3 DPC) per CPU, interleaving is optimally supported via the memory controllers and memory channels. This enables maximum performance in independent mode and lockstep mode.
- Assemblies with 2 DIMMs, 6 DIMMs or 10 DIMMs per CPU are not recommended.
- Distribute the memory evenly among the memory slots and equally among the CPUs.
- Wenn mehr als eine CPU vorhanden sind, sollten die memory pro CPU identisch (gespiegelt zur anderen CPU) bestückt

#### Product Datasheet | SP194390

32GB Computer memory for Flex System x280 X6 7903 (E7-2800 v2)



werden.

## Information on memory installation

- Turn off the system
- Remove the plug of the power supply unit (if connected)
- Remove the battery, according to the user manual of the system
- Always ground yourself before touching electronic components
- Protect the memory module from static voltages:
  - Do not touch the gold pins of the memory module
  - Only touch the sides of the memory module
  - Use a grounding strap and/or ESD glove if possible

General installation instructions are supplied by E-Mail.



# Further memory options for Lenovo Flex System x280 X6 7903 (E7-2800 v2)

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
8GB	SP194392	DDR3	RDIMM (ECC Registered)	240 Pin DIMM	PHS-memory®	00D5036
16GB	SP194389	DDR3	RDIMM (ECC Registered)	240 Pin DIMM	PHS-memory®	46W0672
32GB	SP194390	DDR3	LRDIMM (ECC LR DIMM)	240 Pin DIMM	PHS-memory®	46W0676
32GB	SP464930	DDR3	RDIMM (ECC Registered)	240 Pin DIMM	PHS-memory®	

### PHS-memory® warranty

Every PHS-memory® is equipped with a 5-years-warranty of perfect operation. If the RAM module is defective or fails within 5 years of purchase when used properly, you will receive an appropriate RAM module free of charge. If a suitable memory module is no longer available, we will refund the purchase price.

For more information on warranty and service please visit https://www.phs-memory.com/-W5Y



#### Contact Information

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All information without guarantee. Technical changes and errors excepted. You can find current price information in our online shop at https://www.phs-memory.com