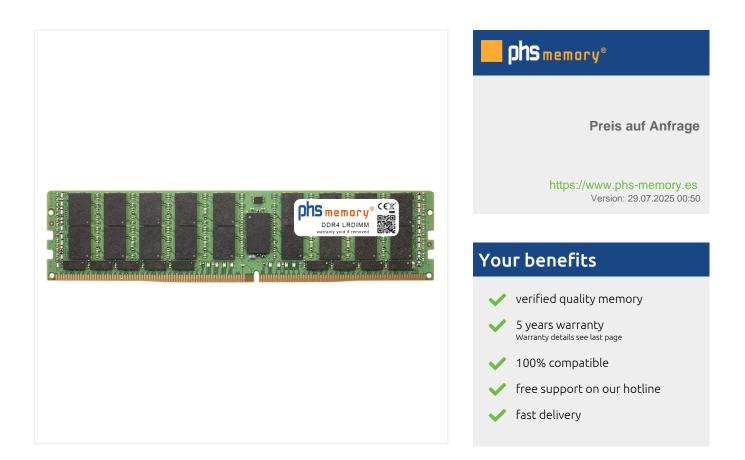
phs memory®

128GB Computer memory DDR4 for Gigabyte S451-3R1 (rev. 100) LRDIMM 3DS



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	128GB
Memory technology	DDR4
ECC support	yes
JEDEC Norm	PC4-23400-L
DRAM Organization	3DS 4H 8Gx4
Rank	8Rx4 (2S4Rx4)
Туре	LRDIMM (ECC LR DIMM) 3DS
Number of pins	288 Pin DIMM
Memory data transfer rate	2933MHz @ CL21
Voltage	1,2 Volt
Speciality	3DS
Board dimensions	133,35 x 31,25 (LxB mm)
Operating temperature	0° C - 85° C
Storage temperature	-40° C - +95° C
RoHS compliant	yes
SKU	SP473767
EAN	4067488372810

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	Gigabyte	
Device type	Server	
Device family	Storage Server	
Device series	S451 Serie	
Device name	S451-3R1 (rev. 100)	
Maximum memory*	4TB / 2TB according to manufacturer	
Number of memory sockets	16	

* The specifications for the maximum memory upgrade may differ from those of the manufacturer Gigabyte. 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

Information on memory configuration

The following technical specifications should be considered in advance:

- The system supports RDIMM and RDIMM 3DS (Registered DIMM) or LRDIMM and LRDIMM 3DS (Load Reduced DIMM) memory modules. Large memory capacities can be realised with LRDIMM 3DS modules.
- RDIMM and RDIMM 3DS memory modules cannot be operated together with LRDIMM and LRDIMM 3DS main memories.
- If a memory expansion is to be made with the already existing RAM memories, it must be checked which basic memory technology (RDIMM / LRDIMM) is available.
- When using a multiprocessor system, the memory slots should always be configured identically for each CPU.
- Memory slots without a processor may not be used.
- If memory modules are provided with higher speeds than specified by the system, the memory speed is automatically adjusted to the system specifications.
- The CPU supports 6 DIMMs per memory channel.

Maximum memory speed of possible CPUs

Xeon CPUs of the 2nd generation are offered in Bronze, Silver, Gold or Platinum. The different processor series also support different maximum memory speeds:

Xeon	CPU-series	max. Speed MHz	max. memory capacity je CPU	
Bronze	3200	2133	1 TB	
Silver	4200	2400	1 TB	
Gold	5200	2666	1 TB, 2 TB, 4,5 TB	
Gold	6200	2666	1 TB, 2 TB, 4,5 TB	
Platinum	8200	2933	1 TB, 2 TB, 4,5 TB	
Platinum	9200	2933	1,5 TB	

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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 Gigabyte S451-3R1 (rev. 100)

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
8GB	SP384090	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
16GB	SP384087	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
32GB	SP384088	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
64GB	SP384089	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
64GB	SP384086	DDR4	LRDIMM (ECC LR DIMM)	288 Pin DIMM	PHS-memory®	
128GB	SP470626	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
128GB	SP473767	DDR4	LRDIMM (ECC LR DIMM) 3DS	288 Pin DIMM	PHS-memory®	
128GB	SP384085	DDR4	LRDIMM (ECC LR DIMM)	288 Pin DIMM	PHS-memory®	
256GB	SP470625	DDR4	LRDIMM (ECC LR DIMM) 3DS	288 Pin DIMM	PHS-memory®	
256GB	SP473768	DDR4	RDIMM (ECC Registered) 3DS	288 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.es/-W5Y



Contact Information

PHS-electronic gmbh - www.phs-memory.es -Karl-Götz-Str. 5 97424 Schweinfurt Alemania Phone: +49 9721 784678 E-Mail: info@phs-memory.es Web: www.phs-memory.es



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