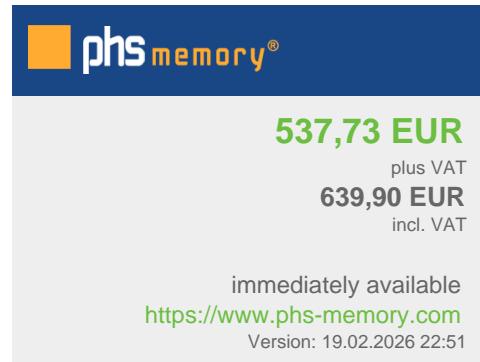


64GB Computer memory DDR4 for ASRock X99 Extreme4/3.1 RDIMM 3DS



Your benefits

- ✓ verified quality memory
- ✓ 5 years warranty
Warranty details see last page
- ✓ 100% compatible
- ✓ free support on our hotline
- ✓ fast delivery

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	64GB
Memory technology	DDR4
ECC support	ja
JEDEC Norm	PC4-21300R
DRAM Organization	3DS 2H 4Gx4
Rank	4Rx4 (2S2Rx4)
Type	RDIMM (ECC Registered) 3DS
Number of pins	288 Pin DIMM
Memory data transfer rate	2666MHz @ CL19
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	SP438988
EAN	4067488015632

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 system:

System manufacturer	ASRock
Device type	Motherboard-memory
Device family	Extreme
Device series	X99 Serie
Device name	X99 Extreme4/3.1
Maximum memory*	2TB / 512GB according to manufacturer
Number of memory sockets	8

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

memory for Core i7 5th Generation CPU:

- Optimal performance is achieved by 4 or 8 identical memories per CPU.
- If an i7 processor is used, UDIMM memory modules must be installed.

memory for Xeon CPU:

- When using an XEON CPU, ECC and RDIMM memory must be used.
- The device supports ECC DIMM (with error correction code) or RDIMM (Registered DIMM) RAM memories. RDIMM memories are recommended when large memory capacities are to be achieved.
- The different memory technologies (ECC / RDIMM) may not be mixed.
- If a memory expansion is to be made with the already existing RAM memories, it must be checked which memory technology (ECC/ RDIMM) is already installed in the system.

CPU im System	UDIMM	UDIMM ECC	RDIMM
Core i7-5960X	4GB UDIMM		
Core i7-5930K	8GB UDIMM		
Core i7-5820K	16GB UDIMM 32GB UDIMM		
Xeon E5-1600 v3		8GB UDIMM ECC	8GB RDIMM

Xeon E5-2600 v3				16GB RDIMM
				32GB RDIMM
				64GB RDIMM DDP
				128GB RDIMM 3DS
				256GB RDIMM 3DS

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 ASRock X99 Extreme4/3.1

Size	SKU	Technology	Type	Number of pins	Brand	Reference no.
4GB	SP159563	DDR4	UDIMM (Non-ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP159564	DDR4	UDIMM (Non-ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP159561	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
8GB	SP159558	DDR4	UDIMM ECC (ECC unbuffered)	288 Pin DIMM	PHS-memory®	
16GB	SP160761	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
32GB	SP159560	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
64GB	SP438988	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
128GB	SP464136	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
256GB	SP464137	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.com/-W5Y>



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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>