

# 8GB Computer memory DDR4 for Gigabyte GA-X99-UD4P (rev. 1.0) RDIMM





# 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	8GB		
Memory technology	DDR4		
ECC support	ja		
JEDEC Norm	PC4-2133P-R		
Туре	RDIMM (ECC Registered)		
Number of pins	288 Pin DIMM		
Memory data transfer rate	2133MHz @ CL15		
Voltage	1,2 Volt		
Speciality	-		
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	SP159751		
EAN	4055069312775		

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	Motherboard-memory
Device family	Mainboard GA-X
Device series	GA-X99 Serie
Device name	GA-X99-UD4P (rev. 1.0)
Maximum memory*	2TB / 256GB according to manufacturer
Number of memory sockets	8

<sup>\*</sup> 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

# 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	4GB UDIMM		
	8GB UDIMM		
	16GB UDIMM		
	32GB UDIMM		
Xeon E5		8GB UDIMM ECC	8GB RDIMM



	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 Gigabyte GA-X99-UD4P (rev. 1.0)

4GBSP159753DDR4UDIMM (Non-ECC unbuffered)288 Pin DIMMPHS-memory®8GBSP159754DDR4UDIMM (Non-ECC unbuffered)288 Pin DIMMPHS-memory®8GBSP159751DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®8GBSP159748DDR4UDIMM ECC (ECC unbuffered)288 Pin DIMMPHS-memory®16GBSP160781DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®32GBSP159750DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®64GBSP464190DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®128GBSP464191DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®256GBSP464192DDR4RDIMM (ECC Registered)288 Pin DIMMPHS-memory®	Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
ECC unbuffered)           8GB         SP159751         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           8GB         SP159748         DDR4         UDIMM ECC (ECC unbuffered)         288 Pin DIMM         PHS-memory®           16GB         SP160781         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP159750         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP464190         DDR4         RDIMM (ECC Registered) 3DS         288 Pin DIMM         PHS-memory®           128GB         SP464191         DDR4         RDIMM (ECC Registered) 3DS         288 Pin DIMM         PHS-memory®           256GB         SP464192         DDR4         RDIMM (ECC 288 Pin DIMM         PHS-memory®	4GB	SP159753	DDR4	ECC	288 Pin DIMM	PHS-memory®	
Registered)           8GB         SP159748         DDR4         UDIMM ECC (ECC unbuffered)         288 Pin DIMM         PHS-memory®           16GB         SP160781         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP159750         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP464190         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           128GB         SP464191         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           256GB         SP464192         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®	8GB	SP159754	DDR4	ECC	288 Pin DIMM	PHS-memory®	
(ECC unbuffered)         16GB       SP160781       DDR4       RDIMM (ECC Registered)       288 Pin DIMM       PHS-memory®         32GB       SP159750       DDR4       RDIMM (ECC Registered)       288 Pin DIMM       PHS-memory®         64GB       SP464190       DDR4       RDIMM (ECC Registered) 3DS       288 Pin DIMM       PHS-memory®         128GB       SP464191       DDR4       RDIMM (ECC Registered) 3DS       288 Pin DIMM       PHS-memory®         256GB       SP464192       DDR4       RDIMM (ECC Registered) 3DMM       288 Pin DIMM       PHS-memory®	8GB	SP159751	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered)  32GB SP159750 DDR4 RDIMM (ECC Registered)  64GB SP464190 DDR4 RDIMM (ECC Registered) 3DS  128GB SP464191 DDR4 RDIMM (ECC Registered) 3DS  256GB SP464192 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory® Registered) 3DS	8GB	SP159748	DDR4	(ECC	288 Pin DIMM	PHS-memory®	
Registered)  64GB SP464190 DDR4 RDIMM (ECC Registered) 3DS 288 Pin DIMM PHS-memory®  128GB SP464191 DDR4 RDIMM (ECC Registered) 3DS 288 Pin DIMM PHS-memory®  256GB SP464192 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®	16GB	SP160781	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered) 3DS  128GB SP464191 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®  256GB SP464192 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®	32GB	SP159750	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered) 3DS  256GB SP464192 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®	64GB	SP464190	DDR4	•	288 Pin DIMM	PHS-memory®	
· · · · · · · · · · · · · · · · · · ·	128GB	SP464191	DDR4	•	288 Pin DIMM	PHS-memory®	
	256GB	SP464192	DDR4	•	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.





### Contact Information

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

#### Product Datasheet | SP159751 8GB Computer memory for GA-X99-UD4P (rev. 1.0)



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