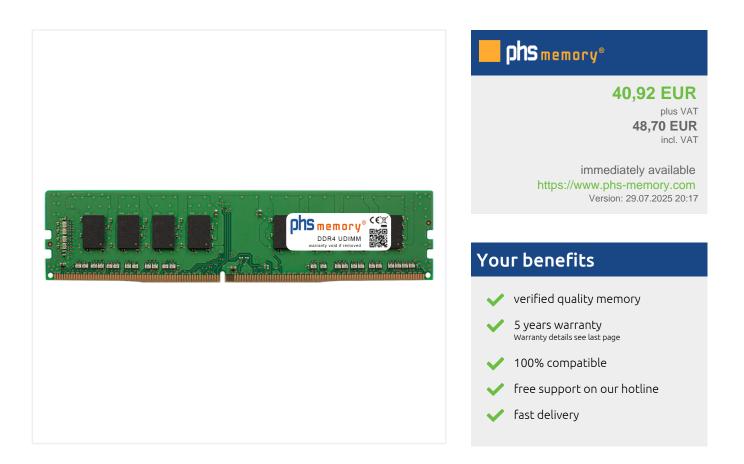
phs memory®

16GB Computer memory DDR4 for Gigabyte GAMING GA-X99 WIFI (rev. 1.0) UDIMM



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

-	133.35mm -	
		31.25mm 30.75mm 17.60mm
◄ 56.10mm	64.60mm	

Memory size	16GB
Memory technology	DDR4
ECC support	NO
JEDEC Norm	PC4-17000U
Туре	UDIMM (Non-ECC unbuffered)
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	SP223568
EAN	4055069915211

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	GAMING
Device series	GA Serie
Device name	GAMING GA-X99 WIFI (rev. 1.0)
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 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:

- Im Gerät können RDIMM and UDIMM RAM-memory installiert werden.
- RDIMM and RDIMM 3DS memory modules können nicht zusammen with UDIMM Computer memoryn gemischt betrieben werden.
- Falls eine memory extension with den bereits vorhandenen RAM-memoryn vorgenommen werden soll, muss gepr
 üft werden, welche Basis-memorytechnologie (RDIMM / UDIMM) vorhanden ist.
- 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.

memory for Intel Xeon CPUs:

CPU / System	RDIMM	
Xeon E5-16xx v3	8GB RDIMM	
Xeon E5-26xx v3	16GB RDIMM	
Xeon E5-46xx v3	32GB RDIMM	
	64GB RDIMM DDP	
	128GB RDIMM 3DS	
	256GB RDIMM 3DS	

phs memory[®]

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 GAMING GA-X99 WIFI (rev. 1.0)

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
4GB	SP223569	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP223570	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
8GB	SP223567	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
16GB	SP223568	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
16GB	SP223565	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
32GB	SP223566	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
32GB	SP305739	DDR4	UDIMM (Non- ECC unbuffered)	288 Pin DIMM	PHS-memory®	
64GB	SP465720	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
128GB	SP465721	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
256GB	SP465722	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



Contact Information

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



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