

# 32GB Computer memory DDR4 for Asus X99-M WS UDIMM





# 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	32GB
Memory technology	DDR4
ECC support	no
JEDEC Norm	PC4-2666V-U
DRAM Organization	2Gx8
Rank	2Rx8
Туре	UDIMM (Non-ECC unbuffered)
Number of pins	288 Pin DIMM
Memory data transfer rate	2666MHz @ CL19
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	SP305296
EAN	4063369680838

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	Asus
Device type	Motherboard-memory
Device family	Mainboard X
Device series	X99 Serie
Device name	X99-M WS
Maximum memory*	1TB / 256GB according to manufacturer
Number of memory sockets	4

<sup>\*</sup> The specifications for the maximum memory upgrade may differ from those of the manufacturer Asus. 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 Asus X99-M WS

4GB         SP201910         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           8GB         SP201911         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           8GB         SP201908         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           16GB         SP201909         DDR4         UDIMM (Non-ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP201906         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP305296         DDR4         UDIMM (Non-ECC Unbuffered)         288 Pin DIMM         PHS-memory®           64GB         SP201907         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP465137         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           128GB         SP465138         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           256GB         SP465139         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®	Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
ECC unbuffered)           8GB         SP201908         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           16GB         SP201909         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           16GB         SP201906         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP305296         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           32GB         SP201907         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP465137         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           128GB         SP465138         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           256GB         SP465139         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®	4GB	SP201910	DDR4	ECC	288 Pin DIMM	PHS-memory®	
Registered)           16GB         SP201909         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           16GB         SP201906         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP305296         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           32GB         SP201907         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP465137         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           128GB         SP465138         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           256GB         SP465139         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®	8GB	SP201911	DDR4	ECC	288 Pin DIMM	PHS-memory®	
ECC unbuffered)           16GB         SP201906         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           32GB         SP305296         DDR4         UDIMM (Non-ECC unbuffered)         288 Pin DIMM         PHS-memory®           32GB         SP201907         DDR4         RDIMM (ECC Registered)         288 Pin DIMM         PHS-memory®           64GB         SP465137         DDR4         RDIMM (ECC Registered) 3DS         288 Pin DIMM         PHS-memory®           128GB         SP465138         DDR4         RDIMM (ECC Registered) 3DS         288 Pin DIMM         PHS-memory®           256GB         SP465139         DDR4         RDIMM (ECC 288 Pin DIMM         PHS-memory®	8GB	SP201908	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered)         32GB       SP305296       DDR4       UDIMM (Non-ECC unbuffered)       288 Pin DIMM       PHS-memory®         32GB       SP201907       DDR4       RDIMM (ECC Registered)       288 Pin DIMM       PHS-memory®         64GB       SP465137       DDR4       RDIMM (ECC Registered) 3DS       288 Pin DIMM       PHS-memory®         128GB       SP465138       DDR4       RDIMM (ECC Registered) 3DS       288 Pin DIMM       PHS-memory®         256GB       SP465139       DDR4       RDIMM (ECC 288 Pin DIMM       PHS-memory®	16GB	SP201909	DDR4	ECC	288 Pin DIMM	PHS-memory®	
ECC unbuffered)  32GB SP201907 DDR4 RDIMM (ECC Registered)  64GB SP465137 DDR4 RDIMM (ECC Registered) 3DS  128GB SP465138 DDR4 RDIMM (ECC Registered) 3DS  288 Pin DIMM PHS-memory®  RDIMM (ECC Registered) 3DS  288 Pin DIMM PHS-memory®  RDIMM (ECC Registered) 3DS  288 Pin DIMM PHS-memory®	16GB	SP201906	DDR4	,	288 Pin DIMM	PHS-memory®	
Registered)  64GB SP465137 DDR4 RDIMM (ECC Registered) 3DS Registered) 3DS Registered) 3DS PHS-memory®  128GB SP465138 DDR4 RDIMM (ECC Registered) 3DS PHS-memory®  256GB SP465139 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®	32GB	SP305296	DDR4	ECC	288 Pin DIMM	PHS-memory®	
Registered) 3DS           128GB         SP465138         DDR4         RDIMM (ECC Registered) 3DS         288 Pin DIMM         PHS-memory®           256GB         SP465139         DDR4         RDIMM (ECC 288 Pin DIMM PHS-memory®	32GB	SP201907	DDR4	•	288 Pin DIMM	PHS-memory®	
Registered) 3DS  256GB SP465139 DDR4 RDIMM (ECC 288 Pin DIMM PHS-memory®	64GB	SP465137	DDR4	,	288 Pin DIMM	PHS-memory®	
· · · · · · · · · · · · · · · · · · ·	128GB	SP465138	DDR4	•	288 Pin DIMM	PHS-memory®	
	256GB	SP465139	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.

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



# Contact Information

#### Product Datasheet | SP305296 32GB Computer memory for X99-M WS



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