## phs memory®

## 256GB Computer memory DDR4 for Supermicro SuperServer 2028U-TNRT+ 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	256GB		
Memory technology	DDR4		
ECC support	yes		
JEDEC Norm	PC4-25600-L		
DRAM Organization	3DS 4H 16Gx4		
Rank	8Rx4 (2S4Rx4)		
Туре	LRDIMM (ECC LR DIMM) 3DS		
Number of pins	288 Pin DIMM		
Memory data transfer rate	3200MHz @ CL22		
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	SP472232		
EAN	4067488357411		

#### overRAMing maximize your RAM



Most systems - including the Supermicro SuperServer 2028U-TNRT+ - can be upgraded with more memory than originally specified by the device manufacturer.

Therefore, our memory specialists continuously analyze new memory solutions in selected systems. Due to improved manufacturing technologies, new memories with higher performance and capacity will be tested for stability and functionality.

Then the new memory solutions are released for the respective systems. Use the benefits of larger computer memory capacity with the PHSmemory® overRAMing memory solutions.

https://www.phs-memory.es/-BOR

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	Supermicro		
Device type	Server		
Device family	SuperServer		
Device series	2028 Serie		
Device name	SuperServer 2028U-TNRT+		
Maximum memory*	6TB RDIMM / 3TB according to manufacturer		
Number of memory sockets	24		

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

Memory modules with our overRAMing-symbol are approved by us for maximum memory expansion.

## 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.
- Memory slots without a processor may not be used.
- A higher memory clock of the memory module automatically adapts to the memory clock specified by the system. This can be the case especially with larger capacities.

## 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.

# phs memory®

## Further memory options for Supermicro SuperServer 2028U-TNRT+

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
8GB	SP253686	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
16GB	SP253684	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
32GB	SP253685	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
64GB	SP466945	DDR4	RDIMM (ECC Registered)	288 Pin DIMM	PHS-memory®	
64GB	SP253683	DDR4	LRDIMM (ECC LR DIMM)	288 Pin DIMM	PHS-memory®	
64GB	SP472231	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
128GB	SP253681	DDR4	LRDIMM (ECC LR DIMM)	288 Pin DIMM	PHS-memory®	
128GB	SP472230	DDR4	RDIMM (ECC Registered) 3DS	288 Pin DIMM	PHS-memory®	
256GB	SP472232	DDR4	LRDIMM (ECC LR DIMM) 3DS	288 Pin DIMM	PHS-memory®	
256GB	SP472229	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