

# 4GB Computer memory DDR3 for Dell PowerEdge M610x UDIMM ECC





# 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	4GB		
Memory technology	DDR3		
ECC support	ja		
JEDEC Norm	PC3-10600E		
DRAM Organization	256Mx8		
Rank	2Rx8		
Туре	UDIMM ECC (ECC unbuffered)		
Number of pins	240 Pin DIMM		
Memory data transfer rate	1333MHz @ CL9		
Speciality	-		
Board dimensions	133,35 x 30 (LxB mm)		
Operating temperature	0° C - 85° C		
Storage temperature	-40° C - +95° C		
RoHS compliant	Yes		
SKU	SP148098		
EAN	4055069225259		

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	Dell		
Device type	Server		
Device family	PowerEdge		
Device series	M600 Serie		
Device name	PowerEdge M610x		
Maximum memory*	384GB		
Number of memory sockets	12		
Annotation	You can use ECC UDIMM or RDIMM, but not mixed in the server. 96GB maximum with UDIMM (12 x 8GB) 384GB maximum with RDIMM (12 x 32GB). Optimal performance: Distribute the memories evenly across the memory slots and CPUs. We are happy to advise you!		

<sup>\*</sup>The specifications for the maximum memory upgrade may differ from those of the manufacturer Dell. 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

#### Computer memory configuration:

Our memory team will be happy to help you choose the right memory and configure your server.

Technologie	Technologie GB /Modul		Total
UDIMM ECC	8GB RAM	12	96GB
RDIMM	16GB RAM	12	192GB
RDIMM	32GB RAM	12	384GB

UDIMM ECC memory and RDIMM (Registered) server memory can not be shared. Bei einer Aufrüstung sollten Sie deshalb wissen, welche memory bereits vorhanden sind, or komplett auf RDIMMcomputer memory upgrade.

Principles of memory assembly

■ Es können nur die memorysteckplätze genutzt werden, bei denen die jeweilige CPU vorhanden ist.

Memory configuration for good system performance

- Verteilen Sie die memory gleichmäßig auf die memorysteckplätze and gleichmäßig auf die CPUs
- Wenn mehr als eine CPU vorhanden sind, sollten die memory pro CPU identisch (gespiegelt zur anderen CPU) bestückt werden.



## 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 Dell PowerEdge M610x

Size	SKU	Technology	Туре	Number of pins	Brand	Reference no.
4GB	SP148098	DDR3	UDIMM ECC (ECC unbuffered)	240 Pin DIMM	PHS-memory®	SNPYWJTRC/4G , A7303660
8GB	SP148106	DDR3	RDIMM (ECC Registered)	240 Pin DIMM	PHS-memory®	SNPP9RN2C/8G, A6996808, SNPPKCG9C/8G, A7990613
8GB	SP148099	DDR3	UDIMM ECC (ECC unbuffered)	240 Pin DIMM	PHS-memory®	SNP96MCTC/8G , A6960121
16GB	SP148100	DDR3	RDIMM (ECC Registered)	240 Pin DIMM	PHS-memory®	SNPMGY5TC/16 G, A6996789, SNP20D6FC/16 G, A6994465, JR5VJ, 319-1815, 370-23526
32GB	SP148102	DDR3	RDIMM (ECC Registered)	240 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