Memory - DDR5-4800

Supermicro 64GB 288-Pin DDR5 4800 (PC5-38400) Server

Green Computing at Scale, from Supermicro

Supermicro Environment, Health, Safety and Sustainability Statement

Supermicro Lot 9 Compliance

Memory - DDR5-4800

16 GB · 32 GB · 64 GB · 96 GB · 128 GB

Part Number	Description	Wide Temp	DRAM Size	# of Ranks	Profile	Buy
MEM-DR564MC-ER48	64GB DDR5-4800 2RX4 (16Gb) RDIMM	N	16Gb	2	Low Profile	

⚠ NOTE: Supermicro lists these memory modules as a convenience to its general customer base. Supermicro does not make any representations or warranties whatsoever regarding quality, reliability, functionality or compatibility of these memory modules. Further, Supermicro is not obligated to provide any support, installation, or other assistance with regard to these devices. It is recommended that the customer base confirm with the vendor compatibility and revision level of these devices.

NOTE: Under "Wide Temp" field, "Y" indicates supported "Industrial grade" memory modules.

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BIOS List : Intel / AMD
Serial Number Guide
Software Code Library
OS Compatibility

Product Matrices

System / Motherboard / Chassis / SuperBlade® / MicroBlade™
Networking AOC Matrix :
Ultra / Standard / SIOM / AIOM / MicroLP / TwinPro
Accessories :
Power Supply / Riser Card / Heatsink / System Fan / Front Chassis Bezels

Home › Supermicro (Micron) 64GB 288-Pin DDR5 4800 (PC5-38400) Server Memory (MEM-DR564MC-ER48)

Build Your Next High Performance Workstation

<u>Configure Now</u>

Supermicro (Micron) 64GB 288-Pin DDR5 4800 (PC5-38400) Server Memory (MEM-DR564MC-ER48)

- 64GB DDR5 4800 Server Memory
- 1.1V 2Rx4 ECC RDIMM
- MEM-DR564L-CL01-ER48
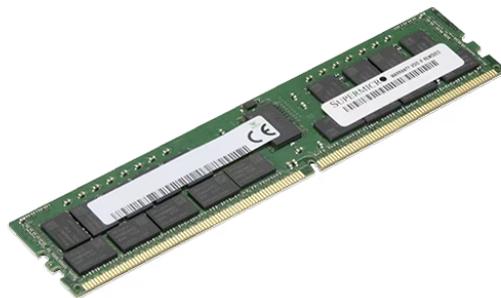- Supermicro Certified

$228.00

FREE SHIPPING

OUT OF STOCK

This item is out of stock but we may still be able to fulfill your order. <u>Contact Us</u> for more details!

NOTIFY ME WHEN THIS PRODUCT IS IN STOCK

Qty [1]

Notify Me

IS THIS VALIDATED FOR MY SYSTEM OR MOTHERBOARD?

System

Motherboard

SKU #:

SYS-241H-TNRTTP

CHECK VALIDITY	Clear	ℹ️

**This component has been validated with this system**

SYS-241H-TNRTTP   VIEW VALIDATED PARTS

Description ⌄

Detailed Specification ⌃

Brand	Micron
Memory Capacity	64 GB
Memory Technology	DDR5
Memory Speed	4800 MHz
ECC	ECC REG DIMM
Rank	2 rank
CAS Latency	CL40
Manufacturer Part Number	MTC40F2046S1RC48BA1
Warranty	5 year warranty
Product Environmental Compliance	RoHS and REACH compliant, details available upon request

Prop 65 Warning ⌄
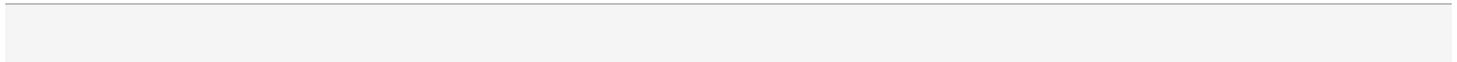
SYS-241H-TNRTTP

Motherboard

SKU #:

> Please enter your server SKU

CHECK VALIDITY   Clear   ⓘ

Description   ⌄

Detailed Specification   ⌃

Manufacturer	Samsung
Memory Capacity	64 GB
Memory Technology	DDR5
Memory Speed	4800 MHz
ECC	ECC REG DIMM
Rank	2 rank
CAS Latency	CL40
Manufacturer Part Number	M321R8GA0BB0-CQK
Warranty	5 year warranty
Product Environmental Compliance	RoHS and REACH compliant, details available upon request

GREEN COMPUTING: TOP TEN BEST PRACTICES FOR A GREEN DATA CENTER

HOW TO BUILD AND OPERATE AN ENERGY-EFFICIENT DATA CENTER AND REDUCE OPEX

Green Computing at Scale, from Supermicro

Globally, data centers use between two and four Terawatt Hours (TWh) of electricity per year (about 1 to 3% of global energy use), with an expectation to grow to between 2% and 8% by 2030. Therefore, reducing energy consumption in a data center is both good for the environment and good for business. Lowering a data center's Power Usage Effectiveness (PUE) by reducing the computing infrastructure's electricity consumption and the facility consumption for cooling lowers the OPEX and carbon emissions from power generation.

Green computing is about maximizing the performance of a server and a data center while minimizing the environmental impact. Specific actions and purchasing decisions can affect power usage at the server level and the lifecycle of the server, while other actions can reduce the PUE of the data center.

Supermicro is a leader in designing and delivering the components that make up Green computing. Supermicro servers are designed to require less power at a given performance level. This feature is accomplished through a design that shares components when possible. In addition, Supermicro servers are designed so that individual subsystems, such as the CPU, Memory, or storage, can be upgraded without the need to replace the entire chassis. Using this disaggregated design greatly reduces E-waste and lowers costs when acquiring new technology.

Supermicro products reduce power consumption in the following ways:

Disaggregated Server Architecture

Reduces E-Waste by allowing for subsystem upgrades as technology improves. Minimizing entire server refresh can reduce E-waste by up to XX percent.

Sharing Resources

Reduces power consumption by sharing fans and power supplies, resulting in a more optimized operation. This can reduce electricity use by an estimated 10%.

Systems Designed for Free-Air Cooling and Higher Inlet Temperatures

Supermicro servers are designed for maximum airflow, resulting in the CPU's ability to operate at higher temperatures.

Servers Ready for Liquid Cooling

A wide range of Supermicro servers are ready to be used with liquid cooling, which reduces fan speed, and the need for HVAC, thus reducing PUE. The server's power draw reduction has been shown to be about 10% per server.

Resources

Green Computing: Top Ten Best Practices for a Green Data Center

How to Build and Operate an Energy-Efficient Data Center and Reduce OpEx

Data Centers use a tremendous amount of electricity, contributing to global warming. However, there are a number of actions that data center operators can take to reduce their carbon footprint. From choosing the location of a data center down to the choice of components, these Top 10 Best Practices will result in lower power usage. Read this report to learn some simple steps that can be taken.

Read the White Paper

Supermicro Products Reduce Environmental Impact

Innovative Server Designs Lower Power Usage and Reduce E-waste

Climate change is affecting billions of people, and the contribution to this phenomenon by greenhouse gasses is well understood. Using finite resources (oil, natural gas, and coal) for electricity generation produces CO2, which traps heat in the earth's atmosphere. Data centers, comprising thousands of servers, are huge electricity consumers. According to a Forbes report, data centers use about 1% of all electricity.

Read the White Paper

Resource-Saving Architecture @ Fortune 100 Datacenter

Supermicro MicroBlade Powers One of the World's Most Energy Efficient Data Centers with a PUE of 1.06

Taking the We Keep IT Green® mission to the next level, Supermicro's disaggregated Resource-Saving systems are already deployed in volume at multiple Fortune 100 datacenters.
A Fortune 100 Company has deployed over 50,000 MicroBlade™ disaggregated Intel® Xeon® processor based servers at its Silicon Valley data center, one of the world's most energy efficient data centers.

Read the Success Story

Achieving Exceptional TCO Savings with 8U SuperBlade®

Reduce Operating Costs With Supermicro Servers

Supermicro high performance, density optimized and energy efficiency blade server solutions can significantly reduce initial capital and operational expenses for many organizations. In particular, Supermicro's new generation SuperBlade® product portfolio has been designed to optimize key components of TCO for today's datacenters, such as free-air cooling, power efficiency, node density and networking management.

Read the White Paper

Memberships & Compliance

The Green Grid

To promote better decisions for our customers, Supermicro leaders participate in industry consortia focused on new cooling alternatives, including Liquid Cooling. We co-chair the Liquid Cooling Standing Working Group in The Green Grid and recently completed an updated Total Cost of Ownership modeling tool for analysts to evaluate different liquid cooling options.

Learn More

Read The Press Release　　**TGG Executive Council**

Lot 9 Compliance

Lot 9 regulations are a new set of product standards that deal with data storage devices such as enterprise-level servers. Learn how Supermicro meets European Union (EU) Eco-design requirements for servers and storage products as part of Lot 9 Compliance.

View Details

Featured Products

The Resource-Saving Architecture operates in a large-scale datacenter environment leveraging Supermicro Rack Scale Design (RSD) to manage racks of disaggregated servers, pooled composable storage, and networking with industry-standard Redfish management. When view over a three- to-five-year refresh cycle, disaggregated rack scale design will deliver on-average a higher performance and more efficient servers at lower costs than a traditional rip-and-replace model by allowing data centers to independently optimize adoption of new and improved technologies.

1U 32-bay E1.L EDSFF SuperStorage

Learn more

6U SuperBlade®

Learn more

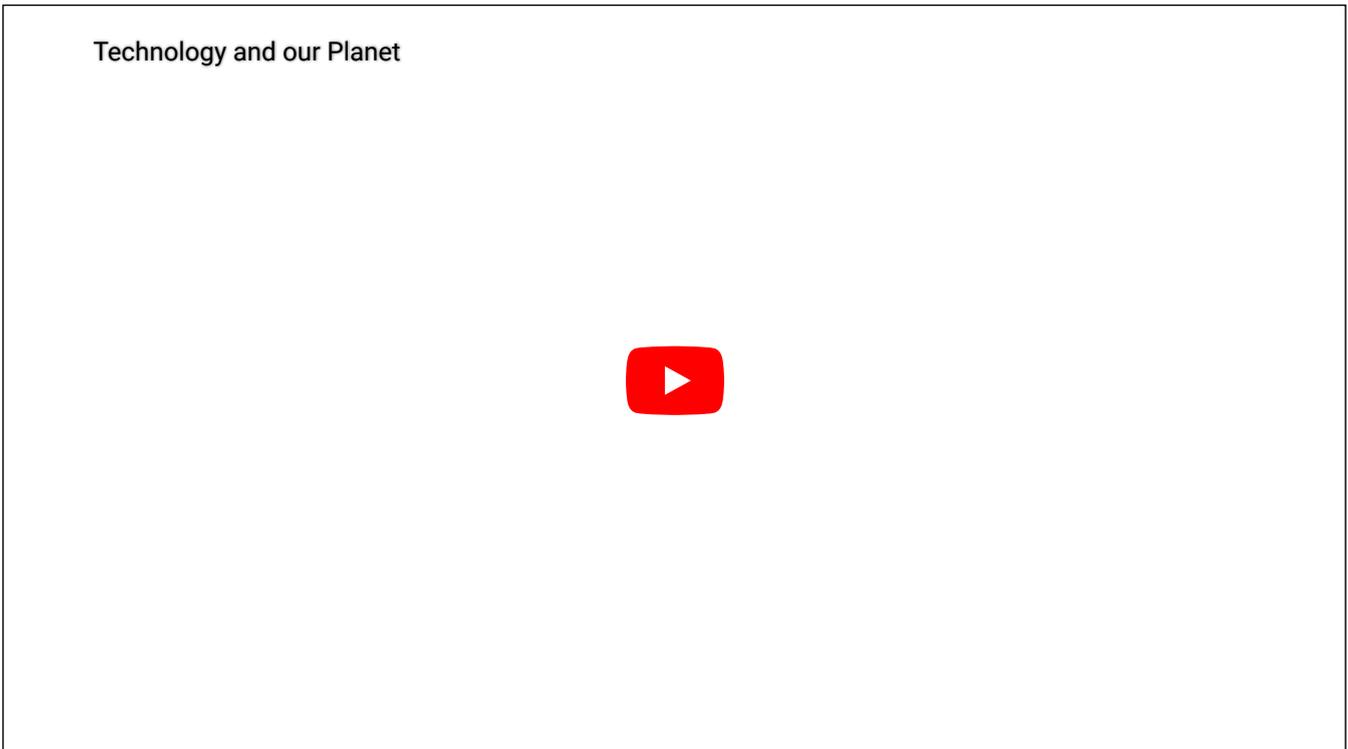**2U 4-Node BigTwin®**

Learn more

Videos

Green Computing at Scale

Supermicro continues to lead the market in Green IT innovation. Our Resource-Saving Architecture is designed to reduce the impact of technology on our planet, with modular designs that reduce both TCO and TCE (Total Cost to the Environment).

Watch the Webinar ›

Technology & Our Planet

Supermicro continues to lead the market in Green IT innovation. Our Resource-Saving Architecture is designed to reduce the impact of technology on our planet, with modular designs that reduce both TCO and TCE (Total Cost to the Environment).

Mission: Green Computing (2018) - Full Movie

Mission: Green Computing (2018)
IT Industry's responsibility towards a Greener Earth

Step Up Declaration: Powering Mission 2020

Global Climate Action Summit (GCAS) – Step Up Tech Declaration

Supermicro has announced at the Global Climate Action Summit (GCAS) – Step Up Tech Declaration, a metric for "Total Cost to the Environment," for IT leaders to measure their data centers' environmental impact by urging them to incorporate Resource-Saving technologies into their plans to help the data centers reach an average PUE of 1.30 and reduce their E-waste by 2025.

Supermicro Rack Scale Design 2.1

Supermicro Rack Scale Design 2.1

The latest Supermicro Rack Scale Design total solution is the high performance, high density, and disaggregated NVMe storage. The arrival of this innovative technology marks the beginning of a paradigm shift to deploy truly disaggregated resource pools in today's large scale data centers that will dramatically improve data center efficiency, increase utilization and reduce costs.

Supermicro Liquid Cooling Solutions

Superior Effectiveness of Liquid Cooling with Proven Deployments at Scale

Learn More

Cooling Capacity	Thermal Conductivity	Transport Energy
H_2O has 1000X more cooling capacity than Air	**Water is 25X Better at transfering Heat**	**Water requires 10X less Energy to move Heat**

Packaging Recycling Information

Learn More

Contact Supermicro to Learn More about Green Computing

Contact Us

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Supermicro Environment, Health, Safety and Sustainability Statement

We are committed to responsible and sustainable business practices. We balance social, environmental and economic considerations in how we manage our business. We believe that operating with leading standards of environmental, health and safety (EHS) management, participating in efforts to address climate change, and engaging with stakeholders in all locations, enhances our corporate reputation and is a source of competitive advantage. This enables new business opportunities, helps attract and retain the best people, improves our risk management, and supports business continuity.

We comply with all EHS laws and regulations in the countries where we operate and ensure a safe and healthy workplace for all employees, contractors and temporary labor. We proactively prevent injury, illness, and reduce impact on the environment, and will continuously improve through targets that reflect our business growth.

Implementation and Risk Management:

Supermicro manages risk through incorporation of ISO standards and corresponding management systems. We identify, mitigate and manage EHS risks associated with our products, facilities and operations. We mitigate risks throughout the product lifecycle by: conducting material, energy management and safety testing; requiring supplier conformance with applicable standards; and designing systems for energy efficiency, ease of replacement and waste reduction.

Supervisors at all levels are accountable for conducting EHS risk assessment, preventing harmful incidents, and considering employee suggestions to achieve goals. Supervisors are responsible for assuring their team receives health and safety training appropriate to their role. Supervisors are expected to communicate often with their teams to identify concerns, solicit suggestions, and use a plan-do-check-adjust model to implement improvements.

All employees are trained in this policy, as well as identifying risks like hazards and unsafe work practices, wearing required personal protective equipment, where to report concerns, and emergency response. All employees are made aware of anonymous reporting of EHS concerns and our Whistleblower protections. We conduct regular internal and external audits of our operations to ensure compliance with our business principles, policies and standards.

Supermicro is cognizant of communities impacted by our operations and exercises caution to serve the community interest, including constructing buildings and sites that reduce our environmental impact.

Standard Setting:

Supermicro sets sustainability and EHS improvement objectives and measures progress. We take all customer requirements seriously, recognizing their standards and incorporating where practical. Through acceptance of the RBA Code of Conduct, Supermicro better assures we meet EHS standards that a broad group of corporate stakeholders recognize. And by asking suppliers to follow the RBA Code of Conduct, Supermicro helps assure suitable EHS standards are universally followed, and embedded in our products.

Green Computing:

We support green computing to assure data centers and other computer facilities have maximum energy efficiency and minimum environmental impact. We do this through efficient configuration of our hardware, using sustainable materials in products, maximizing recyclability and reuse of products, promoting environmental impact measures across computing infrastructure, and surveying data centers to share best practices.

Updated: January 2021

Supermicro Lot 9 Compliance

Background:

The EU (European Union) Eco-design Regulation on servers and data storage products comes into effect March 1, 2020. The Regulation applies only to complete servers and storage systems. Manufacturers may not place systems into the EU market with the CE label unless meeting the regulation's requirements. Please find the regulation here.

Compliance:

Supermicro will comply with each of the Regulation's requirements:

- Minimum PSU efficiency and power factor limits.
- Material ease of disassembly for recycling, repair or reuse.
- Availability of a secure data deletion tool.
- Availability of firmware, including security updates. (After March 2021)
- Specific information about energy use and operating conditions on manufacturer website.
- Specific information on product recyclability on manufacturer website.

Location of Product Compliance Information:

On this website Supermicro provides a manual for each product available for sale. To find, either enter the product number into the search function, or navigate from "Products" on the website menu. From the product page, click on "Manuals" to find the Lot 9 Addendum where compliance information is found.

Quick Link to Secure Data Deletion:

Secure data deletion means effective erasure of all traces of existing data from a data storage device, overwriting the data completely in such a way that access to the original data, or parts of them, becomes infeasible for a given level of effort.

Supermicro systems offer two ways to accomplish secure data deletion:

1. Erase Utility provided by Supermicro
2. Erase Utilities provided by third-party vendors

1.	**UEFI Shell Utility Provided by Supermicro**
	UEFI Shell Utility is available on March 1, 2020, and can be downloaded from Supermicro. Please click **here** to download the Secure Erase Utility. Please click **here** to download instructions on how to operate the Erase Utility.
2.	**Erase Utilities provided by third-party vendors** Please contact the manufacturer of your storage device to obtain the deletion utility matching that device.

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