

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-8049U-E1CR4T

SKU SYS-8049U-E1CR4T

4U

Supermicro

SuperServer SYS-8049U-E1CR4T*(Angled View – System)*

24 Hot-swap 3.5" Drive Bays
(8 Hybrid ports with NVMe support via extra AOC)



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FORM FACTOR

4U

MAX POWER (BASE)

1,034 W

HEAT OUTPUT

3,528 BTU/h

PRICE

On request**REQUEST A QUOTATION ONLINE**serverinvest.com/product/sys-8049u-e1cr4t

01 Product overview

The Supermicro SYS-8049U-E1CR4T is a server built on dual Quad Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process processors with up to 12 TB of memory in 48 DIMM slots.

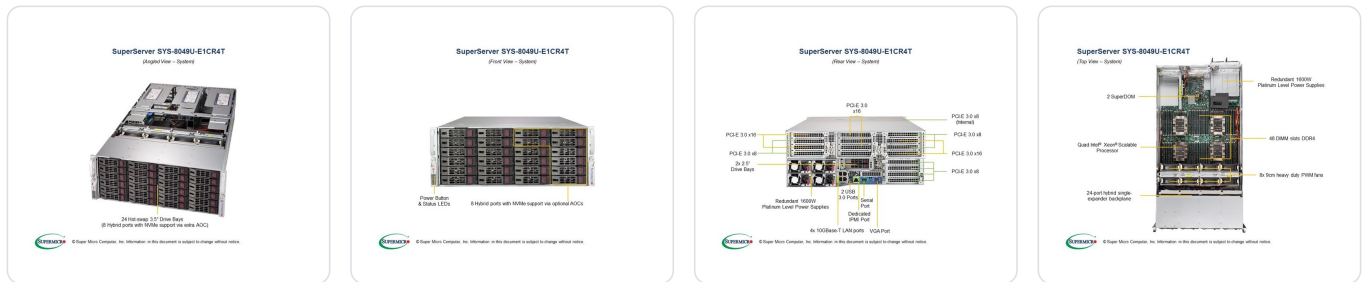
ServerInvest configures every SYS-8049U-E1CR4T to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Quad Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
- Up to 12 TB memory · 48 DIMM slots
- 24 Hot-swap 3.5" SAS3/SATA3 drive bays
- Power: 1000W: 100 – 127Vac
- Networking: 4x 10GBase-T LAN ports via AOC-4UR66-I4XTF-P; Other options

KEY SPECIFICATIONS

Form factor	4U
Processor	4x Quad Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
Memory	48 DIMM slots, up to 12 TB
Drive bays	24 (24 NVMe)
Power supply	1x 1000 W
Typical power draw	1350 W
Networking	4x 10GBase-T LAN ports via AOC-4UR66-I4XTF-P; Other options
Dimensions (W×H×D)	437 × 178 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
209 W	630 W	1034 W	3,528 BTU/h	1 kW	103%

Typical 630 W · max 1034 W · single PSU rating 1000 W

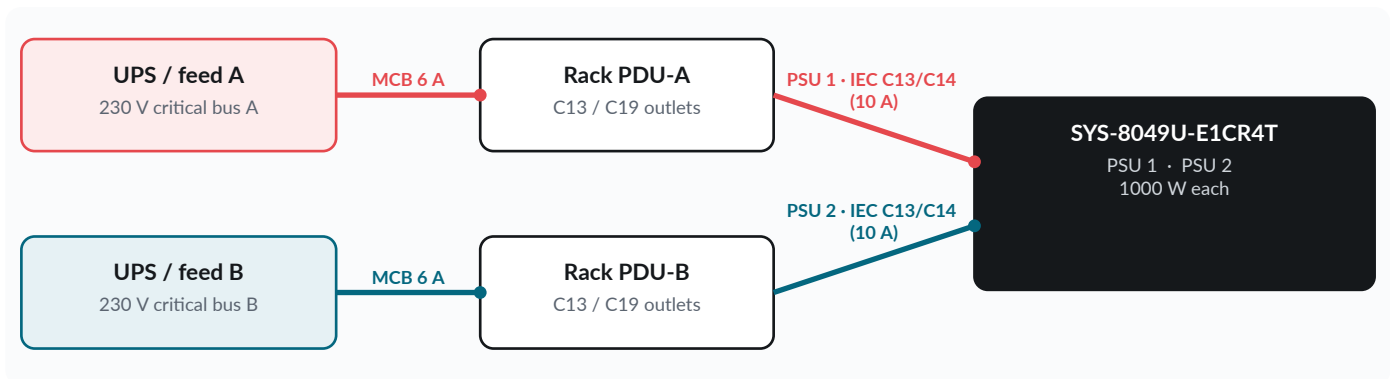
Annual IT energy (24/7)	4,412 kWh
Annual facility energy (PUE 1.5)	6,618 kWh
Annual energy cost	€882 IT · €1,324 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.72 t (grid factor 0.26 kg/kWh)
Power supplies	1x 1000 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 W
4x CPU (base configuration)	100 W	440 W	740 W
8x Memory (base configuration)	24 W	40 W	72 W

DC loads converted to wall power at 94% PSU efficiency; typical load assumed 70% of the time. Engineering estimates — confirm with the manufacturer's power calculator for critical designs.

03 Power connection diagram

Dual-feed (A/B) connection for redundant power supplies



- Connect PSU 1 to PDU-A and PSU 2 to PDU-B (independent feeds) using IEC C13/C14 (10 A) power cords.
- Maximum current per feed: 4.7 A at 230 V — each feed must be able to carry the full load if the other fails.
- Recommended protection per PDU circuit: MCB 6 A, curve C; RCD according to local regulations.
- Heat to remove at full load: 1034 W = 3,528 BTU/h (1 kW).

04 Full specifications

PROCESSOR/CACHE

CPU	Quad Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Processors and Intel Xeon Scalable Processors ‡ , 3 UPI up to 10.4GT/s Support CPU TDP 70-205W
Cores	Up to 28 Cores
Note	‡ BIOS version 3.0a or above is required to support 2nd Gen Intel Xeon Scalable processors

SYSTEM MEMORY

Memory Capacity	48 DIMM slots Up to 12TB 3DS ECC DDR4-2933MHz † RDIMM/LRDIMM Supports Intel Optane DCPMM ††
Memory Type	2933 † /2666MHz ECC DDR4 RDIMM/LRDIMM
Note	† 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro †† Cascade Lake only. Contact your Supermicro sales rep for more info.

ON-BOARD DEVICES

Chipset	Intel C621 chipset
SATA	SATA3 (SSD only) via Intel C621; RAID 0, 1
Network Connectivity	4x 10GBase-T LAN ports via AOC-4UR66-I4XTF-P; Other options
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	ASPEED AST2500 BMC

INPUT / OUTPUT

SATA	2 SATA3 (SSD only) (6Gbps) ports at rear
SAS	24 SAS3 ports support via optional Add-on Cards
NVMe	8 Hybrid ports with NVMe support via AOC
LAN	4x 10GBase-T RJ45 LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear)
Video	1 VGA Connector
Serial Port / Header	1 COM port (rear)
DOM	2 Super DOM (Disk on Module) ports

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
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MANAGEMENT

Software	SuperDoctor 5 Watch Dog NMI SUM IPMI 2.0
Power Configurations	ACPI Power Management Power-on mode for AC power recovery

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

CHASSIS

Form Factor	4U Rackmount
Model	CSE-848UTS-R4800P

DIMENSIONS AND WEIGHT

Width	17.2" (437mm)
Height	6.9" (177mm)
Depth	34.5" (876mm)
Weight	Net Weight: 74.5 lbs (33.79 kg) Gross Weight: 115 lbs (52.16 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power status LED HDD activity LED Network activity LEDs System information (overheat/UID) LED

EXPANSION SLOTS

PCI-Express	6 PCI-E 3.0 x16 slots 10 PCI-E 3.0 x8 slots (4 CPUs need to be installed for full access to PCI-E slots and onboard controllers. See AOC Support for details.)
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DRIVE BAYS

Hot-swap	24 Hot-swap 3.5" SAS3/SATA3 drive bays Optional 24 SAS3 ports via AOC Optional 16 SAS3 ports via AOC + 8 NVMe ports via AOC
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SYSTEM COOLING

Fans	8x 9cm heavy duty fans with speed control
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AC/DC240V INPUT REDUNDANT POWER SUPPLY

Total Output Power	1000W: 100 – 127Vac 1600W: 200 – 240Vac 1600W: 200 – 240Vdc (for CCC only)
Dimension (W x H x L)	73.5 x 40 x 185 mm
Input	100 -- 127Vac / 13.8A / 47-63Hz 200 -- 240Vac / 9.6A / 47-63Hz 200 -- 240Vdc / 8.5A (CCC Only)
+12V	Max: 83A / Min: 0A (1000W) Max: 132A / Min: 0A (1600W)
12Vsb	Max: 2.1A / Min: 0A
Output Type	Gold Finger
Certification	Platinum Certified

OPERATING ENVIRONMENT

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)

05 Built, tested & supported by ServerInvest

Engineered configuration

Every option validated for socket, memory channels, PCIe lanes, power and cooling.

48-hour burn-in

Assembled, firmware-updated and stress-tested before it leaves our workshop.

3-year warranty

Standard on every system, with on-site next-business-day upgrades available.

Rack-ready delivery

Rails, cable management and labelling included — delivered across Europe.



Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
office@serverinvest.com

