

TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-6039P-TXRT

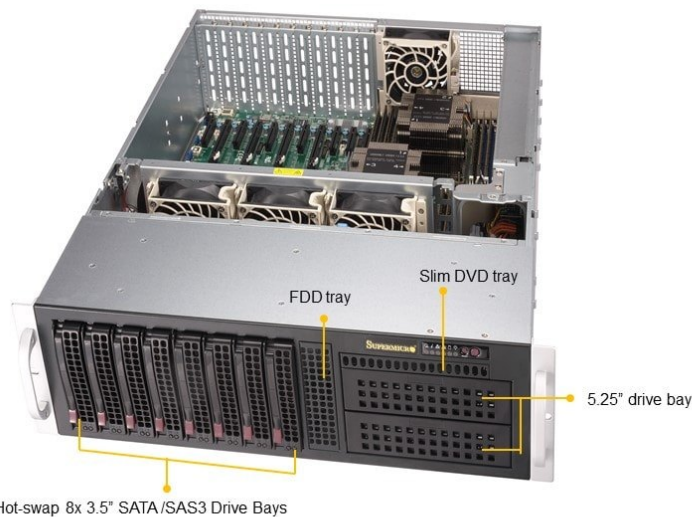
SKU SYS-6039P-TXRT

3U

Supermicro

SuperServer SYS-6039P-TXRT

(Angled View – System)



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FORM FACTOR

3U

MAX POWER (BASE)

602 W

HEAT OUTPUT

2,054 BTU/h

PRICE

On request



REQUEST A QUOTATION ONLINE
serverinvest.com/product/sys-6039p-txrt



01 Product overview

The Supermicro SYS-6039P-TXRT is a server built on dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process processors with up to 4 TB of memory in 16 DIMM slots.

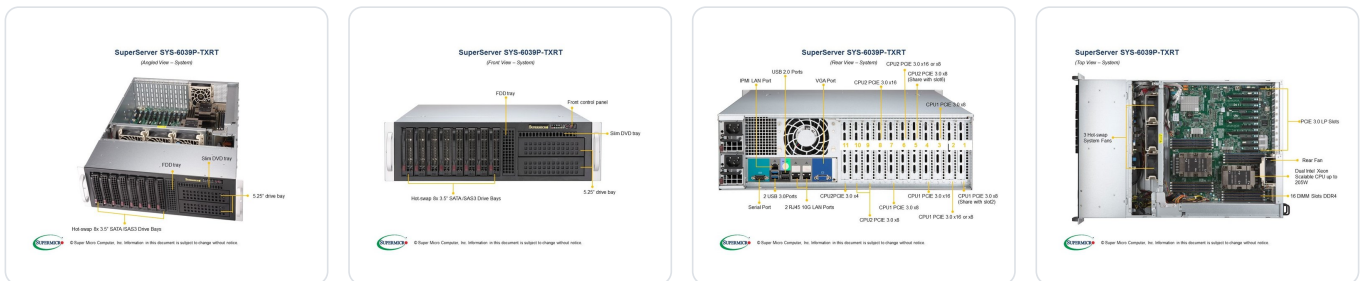
ServerInvest configures every SYS-6039P-TXRT to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
- Up to 4 TB memory · 16 DIMM slots
- 8 Hot-swap 3.5" drive bays
- Power: 100-140 V, 50-60 Hz, 11.5-6.5 Amp
- Networking: Intel X550-AT2 Dual Port 10GBase-T

KEY SPECIFICATIONS

Form factor	3U
Processor	2× Dual Socket P (LGA 3647) 2nd Gen Intel Xeon Scalable Process
Memory	16 DIMM slots, up to 4 TB
Drive bays	8
Typical power draw	750 W
Networking	Intel X550-AT2 Dual Port 10GBase-T
Dimensions (W×H×D)	437 × 133 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
143 W	374 W	602 W	2,054 BTU/h	0.6 kW	—

Typical 374 W · max 602 W

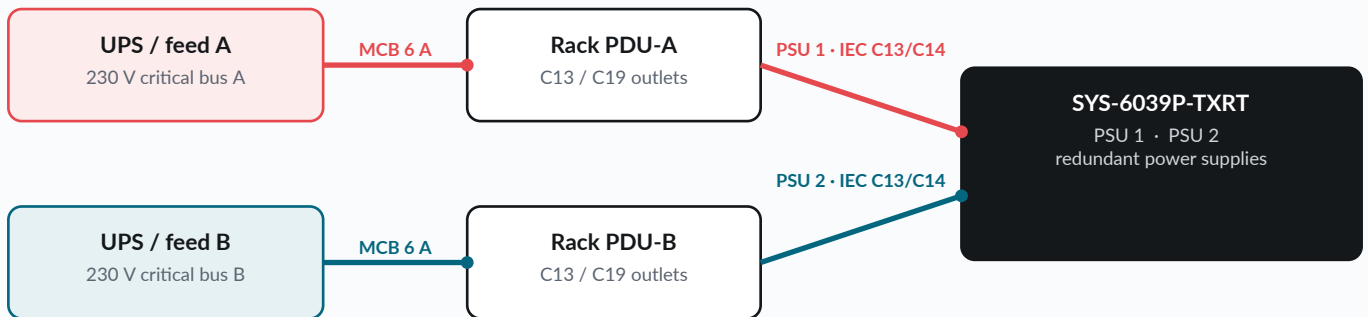
Annual IT energy (24/7)	2,669 kWh
Annual facility energy (PUE 1.5)	4,004 kWh
Annual energy cost	€534 IT · €801 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.04 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 W
2× CPU (base configuration)	50 W	220 W	370 W
4× Memory (base configuration)	12 W	20 W	36 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 power cords.
- Maximum current per feed: 2.8 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: 602 W = 2,054 BTU/h (0.6 kW).

04 Full specifications

PROCESSOR/CACHE

CPU	Dual 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 205W
Cores	Up to 28 Cores
Note	‡ BIOS version 3.2 or above is required to support 2nd Gen Intel Xeon Scalable processors (codenamed Cascade Lake-R)

SYSTEM MEMORY

Memory Capacity	16 DIMM slots Up to 4TB 3DS ECC DDR4-2933MHz † RDIMM/LRDIMM Supports Intel Optane DCPMM ††
Memory Type	2933 † /2666/2400/2133MHz 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 (6Gbps) with RAID 0, 1, 5, 10
Network Controllers	Intel X550-AT2 Dual Port 10GBase-T
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

Serial ATA	8 SATA3 (6Gbps) ports
LAN	2 RJ45 10GBase-T ports 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear) 2 USB 2.0 ports (rear)
Serial Port / Header	1 COM port
VGA	1 VGA port
DOM	2 Super DOM (Disk on Module) ports
TPM	1 TPM 2.0 Header

SYSTEM BIOS

BIOS Type	AMI UEFI
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MANAGEMENT

Software	Intel Node Manager IPMI 2.0 KVM with dedicated LAN NMI SSM , SPM , SUM SuperDoctor 5
Power Configurations	ACPI Power Management

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	3U Rackmount
Model	CSE-835XTQ-R982B

DIMENSIONS

Width	17.2" (437mm)
Height	5.2" (132mm)
Depth	25.5" (648mm)
Gross Weight	72 lbs (32.6kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
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LEDs	Power status LED Hard drive activity LED Network activity LEDs System information (overheat/UID) LED Power fail LED
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EXPANSION SLOTS

PCI-Express	2 PCI-E 3.0 x16 slots 2 PCI-E 3.0 x16 slots (or 4 PCI-E 3.0 x8 by MUX) 4 PCI-E 3.0 x8 slots 1 PCI-E 3.0 x4 (in x8 slot)
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DRIVE BAYS

Hot-swap	8 Hot-swap 3.5" drive bays
Others	2 5.25" drive bays

PERIPHERAL BAY

Peripheral Bay	1 slim DVD-ROM drive
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SYSTEM COOLING

Fans	3 Middle fans 1 Rear exhaust fan
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POWER SUPPLY WITH POWER DISTRIBUTOR

AC Input	100-140 V, 50-60 Hz, 11.5-6.5 Amp 180-240 V, 50-60 Hz, 6.5-4.5 Amp
DC Output	4 Amp @ +5V Standby 70 Amp @ +12V (100-140Vac) 81 Amp @ +12V (180-240Vac)
With Power Distributor	+5V: 30 Amp +3.3V: 28 Amp -12V: 0.6 Amp
Certification	Platinum Level [Test Report]

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

