

TECHNICAL DATASHEET

SUPERMICRO · TOWER SERVERS & WORKSTATIONS

Supermicro Server SYS-5038A-IL

SKU SYS-5038A-IL

Tower

LGA4677

Supermicro



FORM FACTOR

Tower

MAX POWER (BASE)

243 W

HEAT OUTPUT

829 BTU/h

PRICE

On request



CONFIGURE & QUOTE ONLINE

serverinvest.com/product/sys-5038a-il



01 Product overview

The Supermicro SYS-5038A-IL is a server built on Intel Xeon Scalable 4th/5th Gen with up to 32 GB of memory in 3 DIMM slots.

ServerInvest configures every SYS-5038A-IL 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

- Intel Xeon Scalable 4th/5th Gen
- Up to 32 GB memory · 3 DIMM slots
- 4x 3.5" SAS/SATA HDD Bays
- Power: 100 - 240V, 50-60Hz, 7-3.5 Amp
- Networking: Intel i217LM + Intel i210AT Controllers

KEY SPECIFICATIONS

Form factor	Tower
Processor	Intel Xeon Scalable 4th/5th Gen
Socket	LGA4677
Memory	3 DIMM slots, up to 32 GB
Memory type	DDR5-5600 ECC RDIMM
Drive bays	4
Typical power draw	450 W
Networking	Intel i217LM + Intel i210AT Controllers

02 Base configuration

Components included in the listed base price — every part can be changed in the online configurator

COMPONENT	DESCRIPTION	QTY
Base system	Supermicro Server SYS-5038A-IL	1
Processor	Intel Xeon Bronze 3408U Processor 8 Cores (22.5M Cache, 1.80/1.90 GHz) 125W	1
Memory	16GB 5600MT/s DDR5 ECC Registered DIMM Module	2
Warranty & support	3-year return-to-base warranty (included)	1

Price on request — contact us for a tailored quotation

03 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
67 W	160 W	243 W	829 BTU/h	0.2 kW	—



Typical 160 W · max 243 W

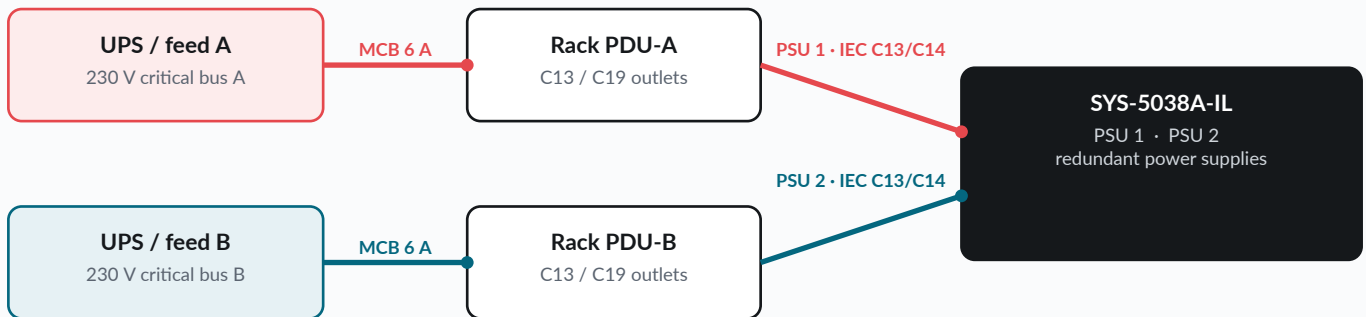
Annual IT energy (24/7)	1,157 kWh
Annual facility energy (PUE 1.5)	1,736 kWh
Annual energy cost	€231 IT · €347 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.45 t (grid factor 0.26 kg/kWh)
Power supplies	Redundant hot-swap PSUs — rating depends on the final configuration

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	85 W
CPU — Intel Xeon Bronze 3408U Processor 8 Cores	19 W	81 W	125 W
2× Memory 16 GB DIMM	6 W	10 W	18 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.

04 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: 1.1 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: 243 W = 829 BTU/h (0.2 kW).

05 Full specifications

PROCESSOR/CACHE

CPU	Intel Xeon processor E3-1200 v3/v4 and 4th/5th Gen Core i7/i5/i3, Pentium, Celeron processors Single Socket H3 (LGA 1150) A Graphic Integrated CPU is required to have the on-board video functioned. Examples: E3-1265L v3, E3-1275 v3 *
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SYSTEM MEMORY

Memory Capacity	4x 240-pin DDR3 DIMM slots Supports up to 32GB DDR3 ECC/Non-ECC Un-Buffered memory (UDIMM)
Memory Type	1600MHz ECC/non-ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	8GB, 4GB, 2GB, 1GB
Memory Voltage	1.5V, 1.35V
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory)

ON-BOARD DEVICES

Chipset	Intel C226 Express PCH
SATA	SATA3 via PCH w/ RAID 0, 1, 5, 10 SATA3 via ASM1061
Network Controllers	Intel i217LM + Intel i210AT Controllers Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Audio	RealTek ALC1150 High Definition Audio

INPUT / OUTPUT

SATA	6x SATA3 (6Gbps) ports via PCH 2x SATA3 (6Gbps) ports via ASM1061 Total of 8x SATA3 ports (6Gbps)
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LAN	2x RJ45 Gigabit Ethernet LAN ports
USB	6x USB 3.0 ports (2 rear, 4 via headers) 10x USB 2.0 ports (4 rear, 6 via headers)
Audio	7.1 HD Jacks
Display *	1x VGA, 1x HDMI, 1x DVI, 1x Display port (Triple Display)
Serial Port / Header	2x COM ports (headers)

EXPANSION SLOTS

PCI-Express	2x PCI-E 3.0 x16 slots - Function as: 16/NA or 8/8 3x PCI-E 2.0 x1 (in x4) slots
PCI	2x PCI 32-bit slots

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	Plug and Play (PnP) APM 1.2 DMI 2.3 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI

CHASSIS

Form Factor	Mid-Tower
Model	CSE-732D4F-500B

DIMENSIONS AND WEIGHT

Height	16.7" (424mm)
Width	7.6" (193mm)
Depth	20.68" (525.3mm)
Gross Weight	40 lbs (18.1 kg)
Available Colors	Black

FRONT PANEL

Buttons	Power On/Off button
LEDs	Power LED Hard drive activity LED Network activity LED System Overheat LED
Ports	2x front USB 3.0 Ports 2x front USB 2.0 Ports 2x front 1394a Ports 2x front HD/AC97 Audio Ports

DRIVE BAYS

Internal	4x 3.5" SAS/SATA HDD Bays (90° rotatable drive cage) Enterprise SATA HDD only recommended
Peripheral	2x 5.25" peripheral drive bays

SYSTEM COOLING

Fans	1x 12cm rear exhaust fan with Optimal Fan Speed Control Optimized cooling technology for Whisper-Quiet Operation
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POWER SUPPLY

AC Voltage	100 - 240V, 50-60Hz, 7-3.5 Amp
+5V	20 Amp
+5V standby	3 Amp
+12V1	17 Amp
+12V2	17 Amp
+12V3	17 Amp
+12V4	18 Amp
-12V	0.5 Amp
+3.3V	15 Amp
Certification	Bronze Certified [Test Report]

PC HEALTH MONITORING

CPU	Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. 6-Phase-switching voltage regulator
FAN	Low noise fan speed control
Temperature	Monitoring for CPU and chassis environment Thermal Control for 8x fan connectors PECI

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)

06 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.



Ready to order or need changes?

Configure this system online or talk to a solutions engineer — we reply within one business day.

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