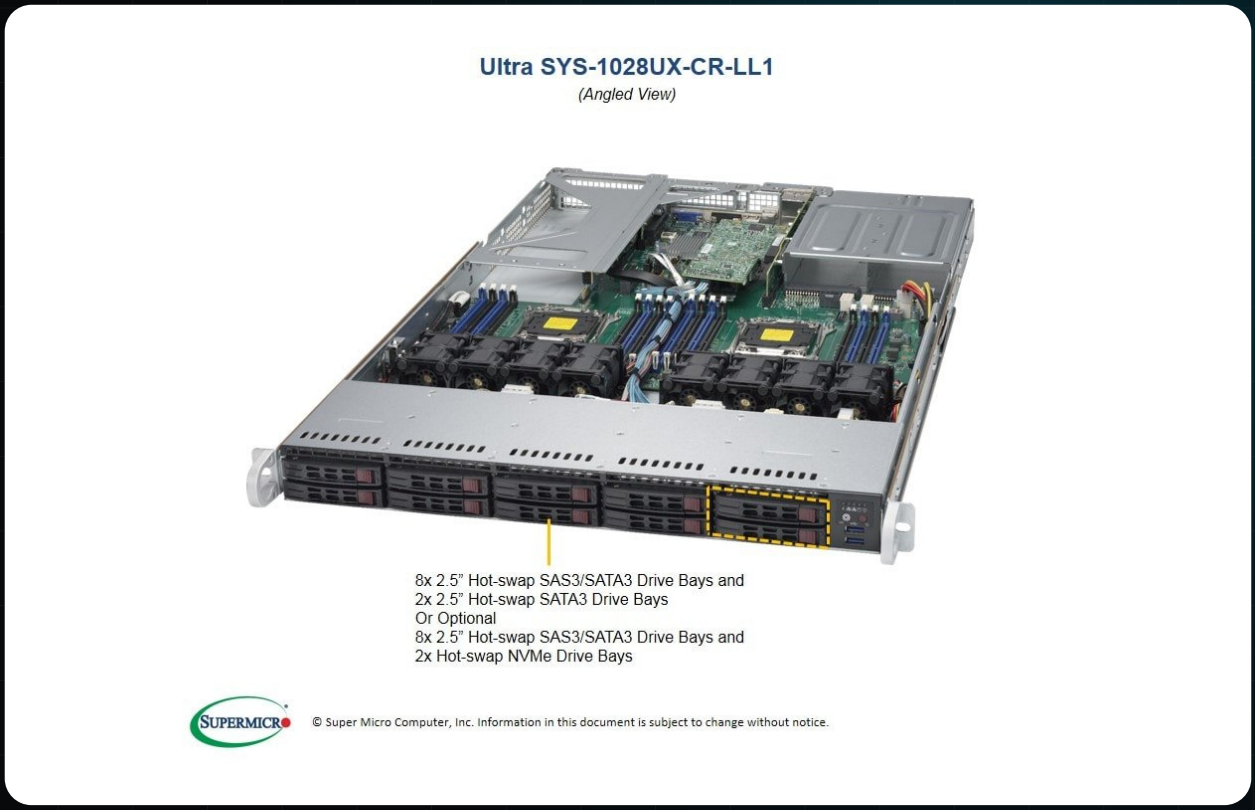
TECHNICAL DATASHEET

SUPERMICRO · RACKMOUNT SERVERS

Supermicro Server SYS-1028UX-CR-LL1

SKU SYS-1028UX-CR-LL1 | 1U | Supermicro



FORM FACTOR	MAX POWER (BASE)	HEAT OUTPUT	PRICE
1U	522 W	1,781 BTU/h	On request

ISO 9001 · ISO 14001 · ISO 27001 · cisco · tp-link · Omada by tp-link

REQUEST A QUOTATION ONLINE
serverinvest.com/product/sys-1028ux-cr-ll1

01 Product overview

The Supermicro SYS-1028UX-CR-LL1 is a server built on dual Intel Xeon processor E5-2643 v3 Dual Socket R3 (LGA 2011) processors with up to 2 TB of memory in 4 DIMM slots.

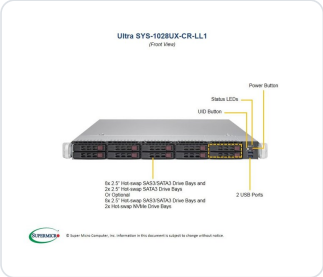
ServerInvest configures every SYS-1028UX-CR-LL1 to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

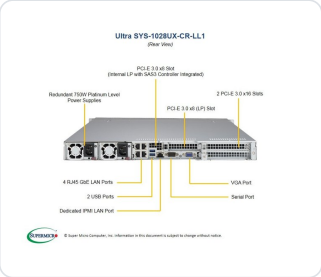
HIGHLIGHTS

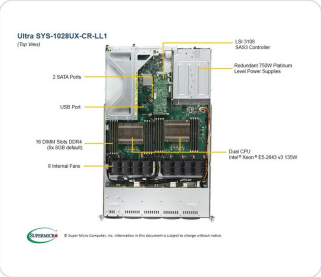
- Dual Intel Xeon processor E5-2643 v3 Dual Socket R3 (LGA 2011)
- Up to 2 TB memory · 4 DIMM slots
- 8 Hot-swap 2.5" SAS3 drive bays
- Power: 750W: 100 – 127Vac
- Networking: Intel C612 chipset

KEY SPECIFICATIONS

Form factor	**1U**
Processor	**2× Intel Xeon processor E5-2643 v3 Dual Socket R3 (LGA 2011)**
Memory	**4 DIMM slots, up to 2 TB**
Drive bays	**10 (10 NVMe)**
Power supply	**1× 750 W**
Typical power draw	**750 W**
Networking	**Intel C612 chipset**
Dimensions (W×H×D)	**437 × 44 mm**







02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
106 W	**318 W**	**522 W**	**1,781 BTU/h**	**0.5 kW**	**70%**

Typical 318 W · max 522 W · single PSU rating 750 W

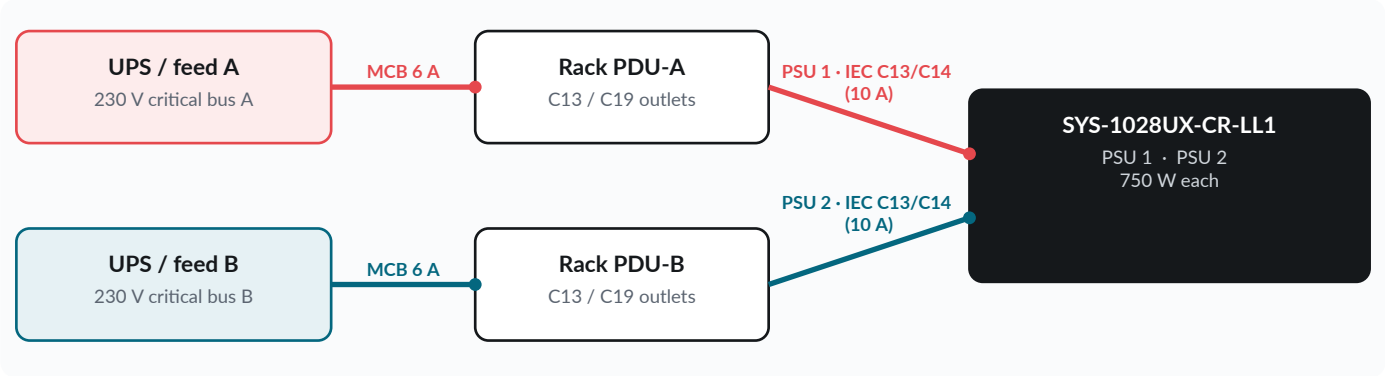
Annual IT energy (24/7)	2,229 kWh
Annual facility energy (PUE 1.5)	3,344 kWh
Annual energy cost	€446 IT · €669 incl. cooling (at 0.20 €/kWh)
CO_2 emissions / year	0.87 t (grid factor 0.26 kg/kWh)
Power supplies	1× 750 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	**85 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 (10 A) power cords.
- Maximum current per feed: 2.4 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: 522 W = 1,781 BTU/h (0.5 kW).

04 Full specifications

PROCESSOR/CACHE	
CPU	Intel Xeon processor E5-2643 v3 Dual Socket R3 (LGA 2011)
Cores / Cache	Up to 6 Cores / Up to 20MB Cache
System Bus	QPI up to 9.6 GT/s
Note	† BIOS version 2.0 or above is required

SYSTEM MEMORY	
Memory Capacity	8x 8GB DDR4 2133MHz (Default) 16x 288-pin DDR4 DIMM slots Up to 2TB † ECC 3DS LRDIMM, 768GB ECC RDIMM
Memory Type	2400 † /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
Memory Voltage	1.2 V
Error Detection	Corrects single-bit errors

ON-BOARD DEVICES	
Chipset	Intel C612 chipset
SAS	Broadcom 3108 SAS3 (12Gbps) controllers; RAID 0, 1, 5, 6, 10, 50 support
SATA	SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2400 BMC
Graphics	ASPEED AST2400 BMC

INPUT / OUTPUT

SAS	8 SAS3 (12Gbps) ports
SATA	2 SATA3 (6Gbps) ports
NVMe	2 NVMe ports support via optional Ultra Riser card (AOC-URN2-i2XT)
LAN	4 RJ45 Gigabit Ethernet ports 1 RJ45 Dedicated IPMI LAN port
USB	5 USB 3.0 ports (2 rear, 2 via header, 1 Type A)
Video	1 VGA Connector
Serial Port / Header	1 Fast UART 16550 serial 1 COM port (rear)

SYSTEM BIOS

BIOS Type	128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	Plug and Play (PnP) APM 1.2 PCI 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1

CHASSIS

Form Factor	1U Rackmount
Model	CSE-119UTS-R751P-T

DIMENSIONS AND WEIGHT

Height	1.7" (43mm)
Width	17.2" (437mm)
Depth	28.5" (724mm)
Gross Weight	48 lbs (21.8 kg)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
LEDs	Power LED Hard drive activity LED 2 Network activity LEDs System Overheat LED / Fan fail LED / UID LED

EXPANSION SLOTS

PCI-Express	Expansion slots via riser card: 2 PCI-E 3.0 x16, Full-height, 10.5" Length 1 PCI-E 3.0 x8, Low-profile 1 PCI-E 3.0 x8 SAS3 integrated

DRIVE BAYS

Hot-swap	8 Hot-swap 2.5" SAS3 drive bays 2 Hot-swap 2.5" SATA3 drive bays Optional NVMe support: 2 NVMe via AOC-URN2-I2XT (w/ 2x 10GBase-T ports)

SYSTEM COOLING

Fans	8 heavy duty fans with optimal fan speed control
Air Shroud	1 Air Shroud

POWER SUPPLY

Total Output Power	750W: 100 – 127Vac 750W: 200 – 240Vac
Dimension (W x H x L)	73.5 x 40 x 203 mm
Input	100-127Vac / 9.5A Max / 50-60Hz 200-240Vac / 4.5A Max / 50-60Hz
+12V	Max: 62.5A / Min: 0A
12V SB	Max: 2.1A / Min: 0A
Output Type	25 Pairs Gold Finger Connector
Certification	Platinum Level [Test Report]

PC HEALTH MONITORING

CPU	Monitors for CPU Cores,+1.5V, +3.3V, +5V, +12V, +5 Stdby, +3.3 Stdby, VBAT, Memory Voltages. CPU Core 6-Phase-switching voltage regulator
FAN	Total of ten 4-pin PWM fans 10x fans with tachometer monitoring Status monitor for speed control Status monitor for on/off control Low noise fan speed control
Temperature	Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 10x Fan Connectors PSU I 2 C temperature sensing logic Thermal Monitor 2 (TM2) support PECI
LED	Power Fail / Overheat LED Suspend-state Indicator LED UID LED
Other Features	SDDC Support

OPERATING ENVIRONMENT / COMPLIANCE

RoHS	RoHS Compliant

Environmental Spec.	Operating Temperature: 10°C to 30°C (50°F to 86°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)

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