

TECHNICAL DATASHEET

SUPERMICRO · MULTI-NODE & TWIN

Supermicro 2U BigTwin Server AS-2124BT-HTR

2U BigTwin with 6 2.5" SATA drives per node

SKU AS-2124BT-HTR

2U

Supermicro



FORM FACTOR

2U

MAX POWER (BASE)

549 W

HEAT OUTPUT

1,873 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/as-2124bt-htr

01 Product overview

The Supermicro AS-2124BT-HTR is a 2U BigTwin Server built on dual Dual Socket SP3 AMD EPYC 7002/7003 Series Processors processors with up to 4 TB of memory in 16 DIMM slots.

2U BigTwin with 6 2.5" SATA drives per node.

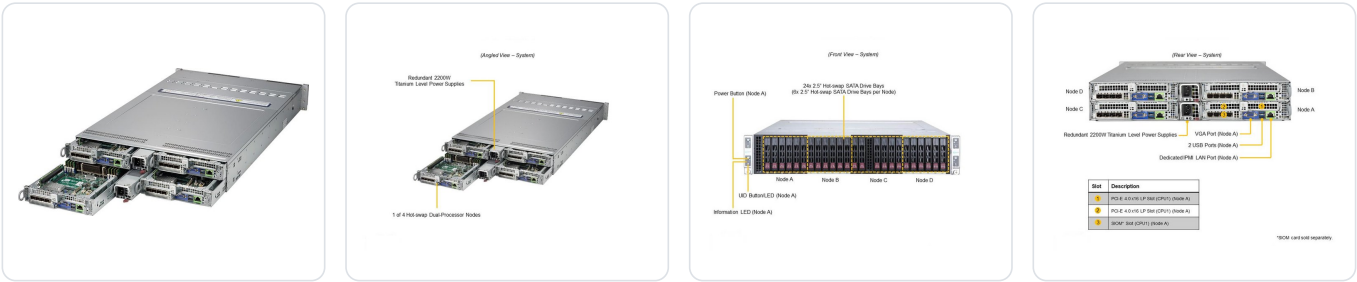
ServerInvest configures every AS -2124BT-HTR to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
- Up to 4 TB memory · 16 DIMM slots
- Total 6 bays 6 front hot-swap 2.5" SATA drive bays
- Power: 2x 2200W
- Networking: Ethernet

KEY SPECIFICATIONS

Form factor	2U
Processor	2× Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
Memory	16 DIMM slots, up to 4 TB
Drive bays	6
Power supply	2× 2200 W
Typical power draw	750 W
Networking	Ethernet
Dimensions (W×H×D)	437 × 89 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
119 W	337 W	549 W	1,873 BTU/h	0.5 kW	25%

Typical 337 W · max 549 W · single PSU rating 2200 W

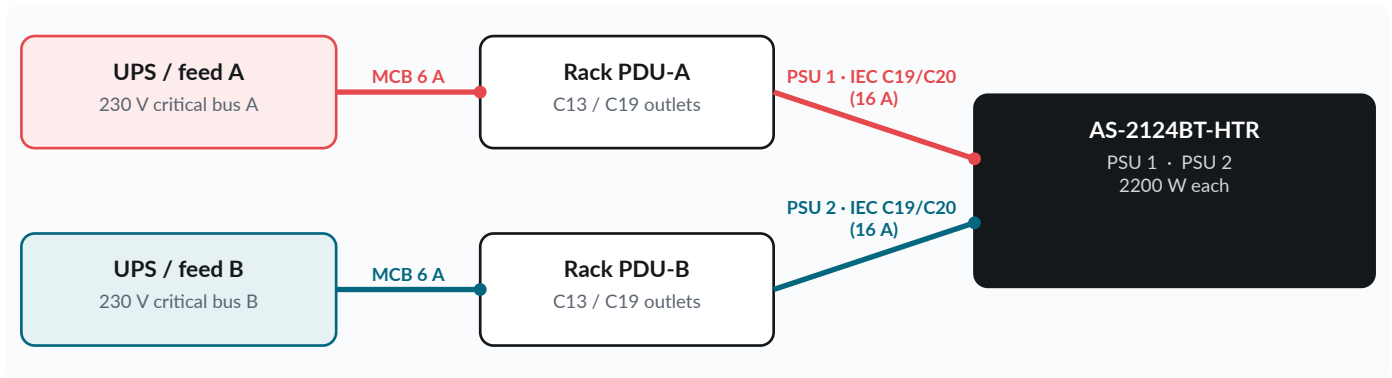
Annual IT energy (24/7)	2,379 kWh
Annual facility energy (PUE 1.5)	3,569 kWh
Annual energy cost	€476 IT · €714 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.93 t (grid factor 0.26 kg/kWh)
Power supplies	2× 2200 W redundant (N+1)

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	50 W	77 W	110 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 C19/C20 (16 A) power cords.
- Maximum current per feed: 2.5 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: 549 W = 1,873 BTU/h (0.5 kW).

04 Full specifications

MOTHERBOARD

Super H12DST-B

PROCESSOR (PER NODE)

CPU	Dual Socket SP3 AMD EPYC 7002/7003 Series Processors
Note	Supports up to 200W TDP CPUs (Air Cooled)

SYSTEM MEMORY (PER NODE)

Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 4TB 3200MT/s ECC DDR4 RDIMM/LRDIMM View Memory Options
Memory Voltage	1.2V

ON-BOARD DEVICES (PER NODE)

Network Connectivity	Ethernet InfiniBand View AOC Options
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

INPUT / OUTPUT (PER NODE)

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 ports (rear)
Video	1 VGA port
DOM	1 Super DOM (Disk on Module) port

SYSTEM BIOS

BIOS Type	AMI 32MB SPI FLASH ROM
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MANAGEMENT

Software	Supermicro Server Manager (SSM) Supermicro Update Manager (SUM) Supermicro SuperDoctor 5 (SD5) KVM with dedicated LAN IPMI 2.0 Watch Dog
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Power configurations	ACPI/APM Power Management
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SECURITY

Hardware	Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant
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Features	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery System Lockdown
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CERTIFICATIONS

Operating Systems	Milan: Hypervisor 8.2, Oracle Linux 8.3, RHEL 8.3, SLES 12 SP5, SLES 15 SP2, SLES 15 SP3, Windows Server 2019, Windows Server 2022 Rome: ESXi 6.7 U3, ESXi 7.0, ESXi 8.0, Hypervisor 8.1, Oracle Linux 7.7, RHEL 7.6, RHEL 8.0, SLES 12 SP5, SLES 15 SP1, Ubuntu 18.04 LTS, Windows Server 2016, Windows Server 2019 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	2U Rackmount
Model	CSE-217BHQ+-R2K22BP2

DIMENSIONS AND WEIGHT

Height	3.47" (88 mm)
Width	17.68" (449 mm)
Depth	28.75" (730 mm)
Package	9.76" (H) x 24.65" (W) x 45.28" (D)
Weight	Gross Weight: 96.6 lbs (43.8 kg) Net Weight: 66.1 lbs (30 kg)
Available Color	Black front & silver body

EXPANSION SLOTS (PER NODE)

PCI-Express (PCIe) Configuration	Default 2 PCIe 4.0 x16 LP slots View AOC Options
M.2	1 M.2 PCIe 3.0 x4 NVMe/SATA slot (M-key 2280/22110)

DRIVE BAYS / STORAGE (PER NODE)

Drive Bays Configuration Default: Total 6 bays 6 front hot-swap 2.5" SATA drive bays
[View Drive Options](#)

SYSTEM COOLING

Fans Up to 4 Heavy-duty PWM 8cm Fan(s)

POWER SUPPLY

2x 2200W
 2x 2200W Redundant (1 + 1) Titanium Level (96%) power supplies
 Dimension (WxHxL)
 45 x 40 x 480 mm

OPERATING ENVIRONMENT

RoHS RoHS Compliant

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

Official manufacturer datasheet: serverinvest.com/product/as-2124bt-htr/datasheet/manufactur

