

A+ Server 2124BT-HTR (Complete System Only)



Views: [Angled View](#) | [Node View](#) | [Front View](#) | [Rear View](#)



Key Features

- Compute Intensive Applications
- HPC, Data Center, Enterprise Server
- Hyperscale / Hyperconverged

Four hot-pluggable systems (nodes) in a 2U form factor. Each node supports the following:

- Dual AMD EPYC™ 7003/7002 Series Processors (7003 Series Processor drop-in support requires BIOS version 2.0 or newer)
- Up to 4TB ECC 3DS LRDIMM, up to DDR4-3200MHz; 16 DIMM slots
- 2 PCI-E 4.0 x16 (LP) slot; 1 SLOM card support (flexible networking) Note: must bundle with Network card
- Integrated IPMI 2.0 + KVM with dedicated LAN
 - Software Out of Band License key (SFT-OOB-LIC) included for OOB BIOS management
- 6 Hot-swap 2.5" SATA3 drive bays
 - M.2 Interface: 1 SATA/PCI-E 3.0 x4
 - M.2 Form Factor: 2280, 22110
 - M.2 Key: M-key
- Video via Aspeed AST2500 BMC
- 2200W Redundant Power Supplies Titanium Level (96%) (Full redundancy based on configuration and application load)



Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Specifications ^

Product SKUs	
AS -2124BT-HTR	A+ Server 2124BT-HTR (Black)
Motherboard (per Node)	
Super H12DST-B	
Processor/Chipset (per Node)	
CPU	Dual AMD EPYC™ 7003/7002 Series Processors (7003 Series Processor drop-in support requires BIOS version 2.0 or newer) Socket SP3 Support CPU TDP/cTDP up to 200W*
Cores	Up to 64 Cores
Note	* Certain CPUs with high TDP may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization
System Memory (per Node)	
Memory Capacity	16 DIMM slots Supports up to 4TB Registered ECC DDR4 3200MHz SDRAM in 16 DIMMs 8-channel memory bus For Dual CPUs: Recommended that memory be populated equally in adjacent memory banks
Memory Type	DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs
Memory Sizes	8GB, 16GB, 32GB, 64GB, 128GB, 256GB
Memory Voltage	1.2V
Error Detection	Corrects single-bit errors Detects double-bit errors (using ECC memory)
On-Board Devices (per Node)	
Chipset	System on Chip
Storage	SATA3 (6Gbps) via AMD EPYC
Network	1 PCI-E 4.0 x16 SLOM LAN Networking Slot for flexible networking, see SLOM LAN options support matrix (Must bundle with at least one SLOM network card)
IPMI	Support for Intellegent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Video	ASPEED AST2500 BMC
Input / Output (per Node)	
LAN	Provided via SLOM (optional) 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear)
Video	1 VGA port
DOM	1 SuperDOM (Disk on Module) port
Others	1 COM port (header) 1 TPM 2.0 header
System BIOS (per Node)	
BIOS Type	AMI 32Mb SPI Flash ROM
Management (per Node)	
Software	IPMI 2.0 KVM with dedicated LAN SSM , SUM SuperDoctor® 5 Watch Dog
Power Configurations	ACPI / APM Power Management

Chassis	
Form Factor	2U Rackmount
Model	CSE-217BHQ+-R2K22BP2
Dimensions and Weight	
Width	17.68" (449mm)
Height	3.47" (88mm)
Depth	28.75" (730mm)
Package	24.33" (618mm) H x 9.57" (243mm) W x 45.08" (1145mm) D
Weight	Gross Weight: 85 lbs (38.6 kg) Net Weight: 54.5 lbs (24.7 kg)
Available Colors	Black
Front Panel (per Node)	
Buttons	Power On/Off button UID button
LEDs	Power status LED HDD activity LED Network activity LEDs Universal Information (UID) LED
Expansion Slots (per Node)	
PCI-Express	2 PCI-E 4.0 (x16) Low-profile slots 1 SLOM card support (must bundle with network card)
M.2	Interface: 1 SATA/PCI-E 3.0 x4 Form Factor: 2280, 22110 Key: M-key
Drive Bays (per Node)	
Hot-swap	6 Hot-swap 2.5" SATA3 drive bays
System Cooling	
Fans	4 Heavy duty 8cm PWM fans
Power Supply	
2200W Redundant Power Supplies with PMBus	
Total Output Power	1200W/1800W/1980W/2090/2200W
Dimension (W x H x L)	45 x 40 x 480 mm
Input	1200W: 100-127Vac / 50-60Hz 1800W: 200-220Vac / 50-60Hz 1980W: 220-230Vac / 50-60Hz 2090W: 230-240Vac / 50-60Hz 2200W: 220-240Vac (for UL/cUL only) 2090W: 180-220Vac (for UL/cUL only) 2200W: 220-240Vac (for UL/cUL only) 2090W: 230-240Vdc (for CCC only)
+12V	Max: 100A / Min: 0A (100-127Vac) Max: 150A / Min: 0A (200-220Vac) Max: 165A / Min: 0A (220-230Vac) Max: 174.17A / Min: 0A (230-240Vac) Max: 174.17A / Min: 0A (180-220Vac, UL/cUL only) Max: 183.33A / Min: 0A (220-240Vac, UL/cUL only) Max: 174.17A / Min: 0A (230-240Vdc, CCC only)
12Vsb	Max: 2.1A / Min: 0A
Output Type	Gold Finger
Certification	[Test Report]

Operating Environment	
RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C ~ 30°C (50°F ~ 86°F) * Support for operating above 30°C is available in certain system configurations. Contact your Supermicro sales rep or Technical Support for more details. 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)

Parts List ^

Parts List - (Items Included)				
	Part Number	Qty	Description	
Motherboard / Chassis	MBD-H12DST-B	4	Super H12DST-B Motherboard	
	CSE-217BHQ+-R2K22BP2	1	2U Chassis	
Backplane	BPN-ADP-6SATA3-1UB	4	Support 6 SATA HDD adaptor card for Big Twin	
Backplane	BPN-SAS3-217BHQ	1	2U 4-Node 24-Port Backplane Supports 6x 2.5" SATA3/SAS3 SSD/HDD per Node	
Drive Tray(s)	MCP-220-00141-0B-BULK	24	Black Gen3 hot-swap 2.5 inch HDD tray with lock improved EMI	
	Parts MCP-240-21722-0N	1	217B/827B BigTwin type II (Edge card) BPN retention bkt assy	
Riser Card	RSC-P-6-X2	4	1U LHS TwinPro riser card with one PCI-E 4.0 x16 slot,HF,RoH	
Riser Card	RSC-PR-6-X2	4	1U RHS TwinPro Riser card with one PCI-E 4.0 x16 slot,HF,RoH	
Software	SFT-OOB-LIC	4	License key for enabling OOB BIOS management	
Heatsink / Retention	SNK-P0062PM	4	1U Passive Front CPU Heat Sink w/ a 30-mm Wide Middle Air Channel for AMD H11 2U4N Big Twin Series Servers	
	SNK-P0062PW	4	1U Proprietary 93-mm Wide Passive Rear CPU Heat Sink for AMD H11 2U4N Big Twin Series Servers	
Power Supply	PWS-2K22A-1R	2	1U 2200W Redundant Power Supply Titanium, 45(W) X 40(H) X 48	
	FAN FAN-0183L4	4	80x80x38 mm, 16.5K RPM, Non-hot-swappable Middle Cooling Fan for X11 Twin Pro, X10 and X11 Big Twin Series Servers	
Cable	CBL-PWCD-0578-1	2	PWCD,US,IEC60320 C14 TO C13,3FT,14AWG,RoHS	

Optional Parts List				
	Part Number	Qty	Description	
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service	
	OSNBD3/2/1	-	3/2/1-year onsite NBD service	
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)	
TPM security module	AOM-TPM-9655V	-	TPM 1.2 module with Infineon 9655, RoHS/REACH,PBF;	
	AOM-TPM-9665V	-	TPM 2.0 module with Infineon 9665, RoHS/REACH,PBF;	
SATADOM	SSD-DM128-SMCMVN1	-	SMC SATADOM, 128GB, SATA 6Gb/s, MLC, uSSD, 15nm,HF,RoHS/REACH	
	SSD-DM480-SMCMVN1	-	SMC SATADOM,480GB,SATA 6Gb/s,3D TLC,uSSD,HF,RoHS	
	SSD-DM064-SMCMVN1	-	SMC SATADOM,64GB,SATA 6Gb/s,MLC,uSSD,15nm,HF,RoHS	
	SSD-DM032-SMCMVN1	-	SMC SATADOM,32GB,SATA 6Gb/s,MLC,uSSD,15nm,HF,RoHS	
	MEM-IDSAVS4-032G	-	SATA3DOM SL 3SE4 32GB SLC LP Pin8 VCC NH (L17725)	
	MEM-IDSAVM8A-128G	-	SATA3DOM SL 3ME3 V2 128GB MLC LP Pin8 VCC NH (S17411)	
	MEM-IDSAVM8A-256G	-	SATA3DOM ML 3ME3 V2 256GB MLC LP Pin8 VCC NH (S17411)	
	MEM-IDSAVE1-064G	-	SATA3DOM SL 3IE3 V2 64GB iSLC LP Pin8 VCC NH (S17411i)	
	MEM-IDSAVS3-032G	-	SATA3DOM SL 3SE 32GB SLC LP No Pin8 Vcc Support (S130710)	
MEM-IDSAVT1-256G	-	IND SATA3DOM SL 3TE7 256GB 3D TLC Pin8VCC Vertical LP		
SIOM	-	-	Supermicro SIOM solutions [Details]	

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