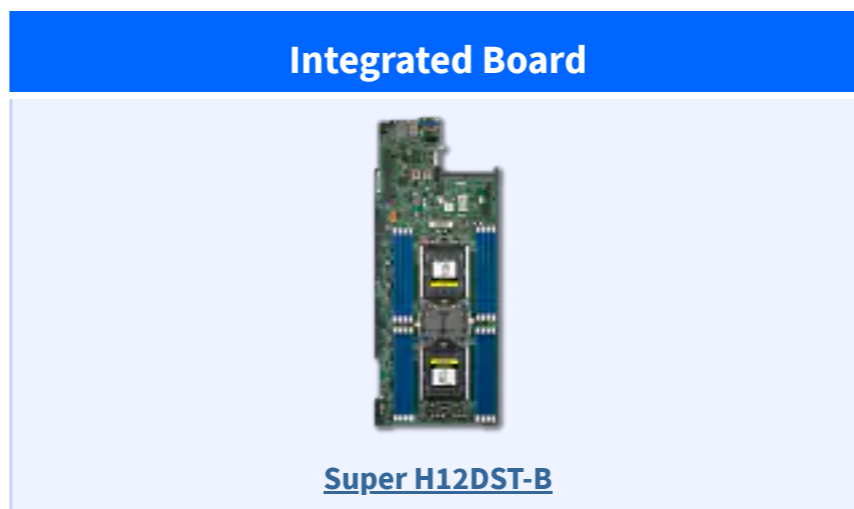


## A+ Server 2124BT-HNTR (Complete System Only)



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 [SIOM](#) 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" drive bays (4 NVMe [Gen3] + 2 SATA3, or 6 SATA3)  
**M.2 Interface:** 1 SATA/PCI-E 3.0 x4 and 1 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)



**Complete System Only:** To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 2 CPUs, 8 DIMMs, 1 HDD and 1 SIOM card per node).

[Drivers & Utilities](#) [BIOS](#) [IPMI](#) [Tested Memory](#) [Tested M.2 List](#) [NVMe Options](#) [Tested AOC](#) [Manuals](#) [OS Certification Matrix](#) [Quick-References Guide](#)

[Drive Options](#)

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



### Specifications

Product SKUs	
<b>AS -2124BT-HNTR</b>	A+ Server 2124BT-HNTR (Black)
Motherboard (per Node)	
<b>Super H12DST-B</b>	
Processor/Chipset (per Node)	
<b>CPU</b>	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 225W*
<b>Cores</b>	Up to 64 Cores
<b>Note</b>	* 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)	
<b>Memory Capacity</b>	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
<b>Memory Type</b>	DDR4 3200 MHz Registered ECC, 288-pin gold-plated DIMMs
<b>Memory Sizes</b>	8GB, 16GB, 32GB, 64GB, 128GB, 256GB
<b>Memory Voltage</b>	1.2V
<b>Error Detection</b>	Corrects single-bit errors Detects double-bit errors (using ECC memory)
On-Board Devices (per Node)	
<b>Chipset</b>	System on Chip
<b>Storage</b>	NVMe SATA3 (6Gbps) via AMD EPYC
<b>Network</b>	1 PCI-E 4.0 x16 SIOM LAN Networking Slot for flexible networking, see <a href="#">SIOM</a> LAN options support matrix (Must bundle with at least one SIOM network card)
<b>IPMI</b>	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
<b>Video</b>	ASPEED AST2500 BMC
Input / Output (per Node)	
<b>LAN</b>	Provided via SIOM (optional) 1 RJ45 Dedicated IPMI LAN port
<b>USB</b>	2 USB 3.0 ports (rear)
<b>Video</b>	1 VGA port
<b>DOM</b>	1 SuperDOM (Disk on Module) port
<b>Others</b>	1 COM port (header) 1 TPM 2.0 header
System BIOS (per Node)	
<b>BIOS Type</b>	AMI 32Mb SPI Flash ROM
Management (per Node)	
<b>Software</b>	<a href="#">IPMI 2.0</a> KVM with dedicated LAN <a href="#">SSM</a> , <a href="#">SUM</a> <a href="#">SuperDoctor® 5</a> Watch Dog
<b>Power Configurations</b>	ACPI / APM Power Management

Chassis	
<b>Form Factor</b>	2U Rackmount
<b>Model</b>	<b>CSE-217BHQ+-R2K22BP</b>
Dimensions and Weight	
<b>Width</b>	17.68" (449mm)
<b>Height</b>	3.47" (88mm)
<b>Depth</b>	28.75" (730mm)
<b>Package</b>	24.33" (618mm) H x 9.57" (243mm) W x 45.08" (1145mm) D
<b>Weight</b>	Gross Weight: 85 lbs (38.6 kg) Net Weight: 54.5 lbs (24.7 kg)
<b>Available Colors</b>	Black
Front Panel (per Node)	
<b>Buttons</b>	Power On/Off button UID button
<b>LEDs</b>	Power status LED HDD activity LED Network activity LEDs Universal Information (UID) LED
Expansion Slots (per Node)	
<b>PCI-Express</b>	2 PCI-E 4.0 (x16) Low-profile slots 1 <a href="#">SIOM</a> card support (must bundle with network card)
<b>M.2</b>	Interface: 1 SATA/PCI-E 3.0 x4 and 1 PCI-E 3.0 x4 Form Factor: 2280, 22110 Key: M-key
Drive Bays (per Node)	
<b>Hot-swap</b>	4 Hot-swap 2.5" NVMe (Gen3)/SATA3 + 2 Hot-swap 2.5" SATA3 drive bays Note: NVMe Gen4 drives may only operate at Gen3 speed
System Cooling	
<b>Fans</b>	4 Heavy duty 8cm PWM fans
Power Supply	
2200W Redundant Power Supplies with PMBus	
<b>Total Output Power</b>	1200W/1800W/1980W/2090/2200W
<b>Dimension (W x H x L)</b>	45 x 40 x 480 mm
<b>Input</b>	1200W: 100-127Vac / 50-60Hz 1800W: 200-220Vac / 50-60Hz 1980W: 220-230Vac / 50-60Hz 2090W: 230-240Vac / 50-60Hz 2090W: 180-220Vac (for UL/cUL only) 2200W: 220-240Vac (for UL/cUL only) 2090W: 230-240Vdc (for CCC only)
<b>+12V</b>	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)
<b>12Vsb</b>	Max: 2.1A / Min: 0A
<b>Output Type</b>	Gold Finger
<b>Certification</b>	<b>Titanium Level</b> [ <a href="#">Test Report</a> ]
Operating Environment	
<b>RoHS</b>	RoHS Compliant
<b>Environmental Spec.</b>	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	
<b>Motherboard / Chassis</b>	MBD-H12DST-B	4	Super H12DST-B Motherboard	
	CSE-217BHQ+-R2K22BP2	1	2U Chassis	
<b>Backplane</b>	BPN-ADP-6SATA3H4-1UB	4	Hybrid BPN to support 4 SATA and/or NVMe in addition to 2 SATA ports,HF,RoHS	
<b>Backplane</b>	BPN-SAS3-217BHQ-N4	1	2U 4-Node 24-Port Backplane Supports 2x 2.5" SATA3/SAS3 SSD/HDD and 4x 2.5" SATA3/SAS3/NVMe Storage Media per Node	
<b>Drive Tray(s)</b>	MCP-220-00144-0B-BULK	16	Black Gen3 hot-swap 2.5 inch HDD tray with lock, orange tab	
<b>Drive Tray(s)</b>	MCP-220-00141-0B-BULK	8	Black Gen3 hot-swap 2.5 inch HDD tray with lock improved EMI	
<b>Parts</b>	MCP-240-21730-0N	1	217B BigTwin type I (Impact) BPN retention bkt w/ foam assy	
<b>Riser Card</b>	RSC-P-6-X2	4	1U LHS TwinPro riser card with one PCI-E 4.0 x16 slot,HF,RoH	
<b>Riser Card</b>	RSC-PR-6-X2	4	1U RHS TwinPro Riser card with one PCI-E 4.0 x16 slot,HF,RoH	
<b>Software</b>	SFT-OOB-LIC	4	License key for enabling OOB BIOS management	
<b>Heatsink / Retention</b>	SNK-P0062P	4	1U Passive CPU Heat Sink for AMD Socket SP3 Processors	
<b>Heatsink / Retention</b>	SNK-P0062PW	4	1U Proprietary 93-mm Wide Passive Rear CPU Heat Sink for AMD H11 2U4N Big Twin Series Servers	
<b>Power Supply</b>	PWS-2K22A-1R	2	1U 2200W Redundant Power Supply Titanium, 45(W) X 40(H) X 48	
<b>FAN</b>	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	
<b>Air Shroud</b>	MCP-310-21728-0B	4	SC217B H12 mylar air shroud	
<b>Cable</b>	CBL-PWCD-0578-1	2	PWCD,US,IEC60320 C14 TO C13,3FT,14AWG,RoHS	

Optional Parts List				
	Part Number	Qty	Description	
<b>Power Supply</b>	PWS-3K04A-1R	-	1U 1400W/2880W/3000W AC/DC PSU with C21 inlet, Titanium, For Bigtwin	
<b>Power Supply</b>	PWS-2K60A-1R	-	1U 2600W Redundant Titanium PWS, 45(W) X 40(H) X 48(L)	
<b>Global Services &amp; Support</b>	<a href="#">QS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service	
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service	
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)	
<b>TPM security module</b>	<a href="#">AOM-TPM-9655V</a>	-	TPM 1.2 module with Infineon 9655, RoHS/REACH,PBF;	
	<a href="#">AOM-TPM-9665V</a>	-	TPM 2.0 module with Infineon 9665, RoHS/REACH,PBF;	
<b>SATADOM</b>	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		
<b>SIOM</b>	-	-	Supermicro SIOM solutions <a href="#">[Details]</a>	

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