

IoT SuperServer SYS-210TP-HPTR

Integrated Board: X12SPT-PT

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Key Applications

- Multi-Access Edge Computing
- Telecom DRAN, CRAN, and Edge Core Application
- Flex-RAN, Open-RAN vBBU
- Enterprise Edge Computing

Key Features

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

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processor (per node)
- Intel® C621A Chipset
- 8 DIMMs; Up to 2TB 3DS ECC DDR4-3200: RDIMM/LRDIMM (per node)
- 2 PCI-E Gen4 x16 HHHHL slot (per node)
- 2 NVMe M.2 2280/22110 (per node)
- Front hot-swappable 2.5” HDD/SSD tray (6 tay per node)
- 4 heavy duty 8cm PWM fans with optimal fan speed control (Per System)
- 1+1 Redundant 2000W Titanium Level AC Power Supplies (per system)
- Intel® X710 Dual port 10G SFP+ onboard

Specifications

Product SKUs SuperServer SYS-210TP-HPTR (Silver)
Motherboard Super X12SPT-PT
Processor (per Node) CPU Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Support CPU TDP 85-270W Please contact Supermicro Technical Support for supporting conditions of high power (TDP >240W) processors. Cores Up to 32C/64T; Up to 48MB Cache System Memory (per Node) Memory Memory Capacity: 8 DIMM slots Memory Type: 3200MHz ECC DDR4 RDIMM/LRDIMM Memory Voltage 1.2 V Error Detection ECC On-Board Devices (per Node) SATA SATA3 (6Gbps) Chipset Intel® C621A Network Connectivity 2x 10GbE port(s) 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 Dedicated IPMI LAN port 2x 10GbE SFP+ USB 2 USB 3.2 Gen1 port(s) (2 USB) Video 1 VGA port(s)
System BIOS BIOS Type AMI 32MB UEFI
Management Software SSM SUM SPM Redfish API Intel® Node Manager KVM with dedicated LAN NMI Watch Dog SuperDoctor® 5 IPMI 2.0 Power Configurations Power-on mode for power recovery ACPI Power Management
PC Health Monitoring CPU Monitors for CPU Cores, Chipset Voltages, Memory FAN Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature CPU thermal trip support, PEPI Monitoring for CPU and chassis environment

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis		
Part Number	MBD-X12SPT-PT	CSE-217HQ+-R2K04BP4
Qty	4	1
Description	Super X12SPT-PT Motherboard	2U Chassis
Backplane		
Part Number	BPN-ADP-6SATA3P	BPN-SAS3-217HQ3
Qty	4	1
Description	Backplan adapter card; 6SATA ports,RoHS/REACH,PBF	2U 4-Node TwinPro Backplane for 6x2.5â€? SAS3/SATA3 HDD/SDD
Cable		
Part Number	CBL-PWCD-0900	

Chassis Form Factor 2U Rackmount Model CSE-217HQ+-R2K04BP4
Dimensions and Weight Height 3.5" (88mm) Width 17.25" (438mm) Depth 28.75" (730mm) Package 9.8" (H) x 20.7" (W) x 38" (D) Weight Net Weight: 70 lbs (31.8 kg) Gross Weight: 90 lbs (40.8 kg) Available Color Silver
Front Panel Buttons Power On/Off button Power On/Off UID button LEDs HDD activity LAN1 activity LAN2 activity Network activity LED Power status Power status LED System information System information (overheat/UID) LED
Expansion Slots (per Node) PCI-Express (PCI-E) 2 PCIe 4.0 x16 FHHL, 1 PCIe 4.0 x16 LP Drive Bays / Storage (per Node) Hot-swap 6x 2.5" hot-swap SATA drive bays M.2 2 M.2 NVMe M-Key, 2280/22110 System Cooling Air Shroud 4 Air Shroud(s) Air Shroud(s) Fans 4x 8cm heavy duty fans with optimal fan speed control 80x80x38mm Fan(s)
Power Supply 2000W 100-240VAC/50-60Hz power supply Dimension (W x H x L) 76 x 40 x 360 mm AC Input 1000W: 100-127Vac / 9.5A-12A / 50-60Hz 1800W: 200-220Vac / 9.8A-10A / 50-60Hz 2000W: 220-230Vac / 9.8A-10A / 50-60Hz 2000W: 230-240Vac / 9.8A-10A / 50-60Hz +12V Max: 83A / Min: 0A (100Vac-127Vac) Max: 150A / Min: 0A (200Vac-220Vac) Max: 166A / Min: 0A (220Vac-240Vac) Certification  Titanium Level [Test Report]
Operating Environment Environmental Spec. Operating Temperature: 0°C ~ 35°C (32°F ~ 95°F) Non-operating Temperature: 0°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)

Qty	2	
Description	PWCD,US/EU/Canada/China/Australia,IEC60320 C14 TO C13,4FT,17	
Air Shroud		
Part Number	MCP-310-21735-0B	
Qty	4	
Description	SC217HQ+ Twin Pro mylar air shroud for X12SPT-PT	
Manual		
Part Number	MNL-2514-QRG	
Qty	1	
Description	210TP-HPTR(D) Quick Reference Guide	
Riser Card		
Part Number	RSC-P-6G4	RSC-PR-6-X2
Qty	4	4
Description	1U LHS TwinPro Riser card with one PCI-E 4.0x16lotH,RoHS	1U RHS TwinPro Riser card with one PCI-E 4.0 x16 slot,HF,RoH
Software		
Part Number	SFT-OOB-LIC	
Qty	4	
Description	License key for enabling OOB BIOS management	
Heatsink / Retention		
Part Number	SNK-P0077P	
Qty	4	
Description	1U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms	
*Power Supply		
Part Number	PWS-2K04A-1R	
Qty	2	
Description	AC-DC 2000W, Titanium Level, Redundancy, 1U, PMBus 1.2, +12V/+5Vsb, 360x76x40mm,HF,RoHS/REACH	
*Power Distributor		
Part Number	PDB-PT217-H2412	
Qty	1	
Description	2U support redundancy input powers up to 2.6KW for Twin seri	
*Fan		
Part Number	FAN-0183L4	
Qty	4	
Description	80x80x38 mm, 16.5K RPM, Non-hot-swappable Middle Cooling Fan for X11 Twin Pro, X10 and X11 Big Twin Series Servers	
*Drive Tray(s)		
Part Number	MCP-220-00047-0B	
Qty	24	
Description	Black gen 3rd hot-swap 2.5inch HDD tray	
*Rail Set		
Part Number	MCP-290-00053-0N	
Qty	1	
Description	Rail set, quick/quick, default for 2,3U 17.2";W	
*Fan Holder		
Part Number	MCP-320-21701-0N	
Qty	2	
Description	Twin Pro fan holder (hold 2 80x38 fans),RoHS/REACH	

- Notes:
- 1. Parts with * are inside the chassis
 - 2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.