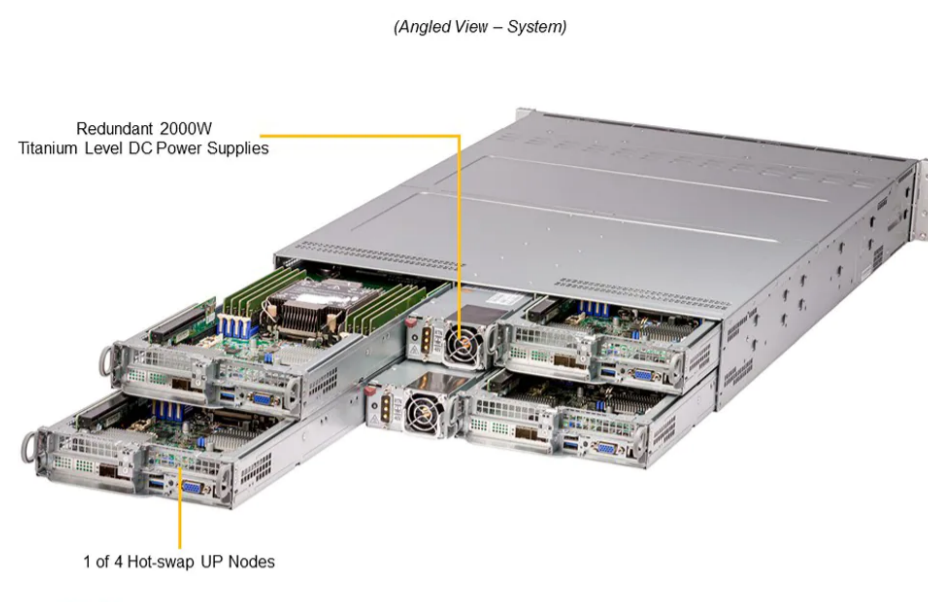


IoT SuperServer SYS-210TP-HPTRD



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 tray per node)

4 heavy duty 8cm PWM fans with optimal fan speed control (Per System)

1+1 Redundant 2000W DC Power Supplies (per system)

Intel® X710 Dual port 10G SFP+ onboard

Specifications

Product SKUs

SuperServer **SYS-210TP-HPTRD** (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

1.2V

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

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 -48Vdc single output

power supply

Total Output Power

2000W : (-45) - (-66) Vdc

Dimension

(W x H x L)

76 x 40 x 360 mm

+12V

Max: 166.6A

5V SB

Max: 6A

Certification

[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)

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 6x2.5" SAS3/SATA3 HDD/SDD

Cable

Part Number	CBL-PWEX-1058
Qty	2
Description	48VDC input power cable for PWS-2K03D-1R, 4M, 8AWG,RoHS

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-2K03D-1R	
Qty	2	
Description	-48V DC input, 12V and 5Vsb 2000W output for 1U redundancy power supports I2C function,RoHS	
*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.