GPU SuperServer SYS-210GP-DNR (Complete System Only

2U 2-Node Multi-GPU System with Single Processor (Intel) and Up to 6 PCI-E GPUs per Node



Key Applications

- High Performance Computing
- Al/Deep Learning Training
- Media/Video Streaming
- Industrial Automation, Retail
- Cloud Gaming

Key Features

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

- 1. Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processor
- 2. Intel® C621A Chipset
- 3. 2TB Registered ECC DDR4 3200MHz SDRAM in 8 DIMMs
- 4. 3 PCI-E Gen 4.0 x16 FHFL DW
- 5. 2 front Hot-swap 2.5" U.2 NVMe Gen4 drive bays 2 M.2 NVMe and SATA for boot drive only
- 6. 2600W Redundant (1+1) Power Supplies Titanium Level (96%) (Full redundancy based on configuration and application load)
- 7. AST2500 BMC

Specifications

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SYS-210GP-DNR
SuperServer SYS-210GP-DNR
(Black Front & Silver Body)

Motherboard

Super X12SPG-NF

Processor (per Node)

Processor (per Node)		
СРИ	 Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Support CPU TDP 270W 	
Cores	■ Up to 40C/80T; Up to 60MB Cache	

GPU

GPU-GPU	■ PCI-E
Interconnect	

System Memory (per Node)

Memory	 Memory Capacity: 8 DIMM slots Up to 2TB: 8x 256 GB DRAM Memory Type: 3200/2933/2666MHz ECC DDR4 RDIMM/LRDIMM
Memory Voltage	■ 1.2 V
Error Detection	■ ECC

On-Board Devices (per Node)

Chipset	■ Intel® C621A
Network Connectivity	■ Via AIOM
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)

Video	■ 1 VGA port(s)
System BIOS	
BIOS Type	■ AMI 32MB SPI Flash EEPROM

Management

Chassis

Form Factor	■ 2U Rackmount
Model	■ CSE-227GTS-R2K63P

Dimensions and Weight

Height	■ 3.47" (88mm)
Width	■ 17.6" (447mm)
Depth	■ 29.9" (760mm)
Package	■ 9.44" (H) x 23.62" (W) x 43.3" (D)
Weight	Net Weight: 55 lbs (24.94 kg)Gross Weight: 60 lbs (27.21 kg)
Available Color	■ Black Front & Silver Body

Front Panel

Buttons	Power On/Off buttonSystem Reset button
LEDs	 Hard drive activity LED Network activity LEDs Power status LED System Overheat & Power Fail LED

Expansion Slots (per Node)

PCI-Express	■ Slot 1: PCI-E 4.0 x16 FHFL DW
(PCI-E)	■ Slot 2: PCI-E 4.0 x16 FHFL DW
	■ Slot 3: PCI-E 4.0 x16 FHFL DW

Drive Bays / Storage (per Node)

Hot-swap	 2x 2.5" hot-swap NVMe Support drive bays (2x 2.5" NVMe dedicated)
M.2	■ 2 M.2 NVMe OR 2 M.2 SATA3

System Cooling

Power Supply

2600W Redundant Power Supplies with PMBus

Dimension	■ 73.5 x 40 x 265 mm	
(W x H x L)		
AC Input	■ 2600W: 200-240Vac / 15A Max	
DC Input	 2600W: 200-240Vdc For CQC Only/ 15A Max / 50-60Hz 	
+12V	 Max: 216A / Min: 0A (11.4Vdc- 12.6Vdc) (12V output) 	
Output Type	■ 25 Pairs Gold Finger Connector	
Certification	Ritanium Level	

[Test Report]

Software OOB Management Package (SFT-OOB-LIC) Redfish API **IPMI 2.0** <u>SSM</u> ■ Intel® Node Manager ■ SPM KVM with dedicated LAN <u>SUM</u> NMI Watch Dog ■ SuperDoctor® 5 ACPI Power Management Power ■ Power-on mode for AC power **Configurations** recovery

Operating Environment

Environmental Spec.

- Operating Temperature: 10°C ~ 35°C (50°F ~ 95°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)

PC Health Monitoring

CPU	 7 +1 Phase-switching voltage regulator Monitors for CPU Cores, Chipset Voltages, Memory
FAN	 Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control
Temperature	Monitoring for CPU and chassis environmentThermal Control for fan connectors

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPG-NF	2	Super X12SPG-NF Motherboard
	CSE-227GTS-R2K63P	1	2U Chassis
Cable 1	CBL-CDAT-1056	1	2x5,PH2.54 to 2x5,PH2.54,7cm,28AWG,RoHS
Cable 2	CBL-PWCD-0376-IS	2	PWCD,US,IEC60320 C19 TO C20,940mm (3ft),14AWG,15A,250V,Black
Cable 3	CBL-PWEX-1093-36	2	MicroFit,2x2, P3.0,F to MicroFit,2x2,P3.0,F,36CM,10A/pin
Cable 4	CBL-PWEX-1148-20	2	MicroHi,2x4,PH3. to 2x4,PH4.2,MiniFit,20CM,8.5A/p,18AWG,
Cable 5	CBL-PWEX-1148-50	4	MicroHi,2x4,PH3. to 2x4,PH4.2,MiniFit,50CM,8.5A/p,18AWG,
Cable 6	CBL-PWEX-1257	1	2x4,PH3.0 to 2x4,PH3.0,7CM,4A,22AWG,RoHS
Cable 7	CBL-SAST-1235-85	2	Slimline x8 (STR) to Slimline x8 (STR),INT,35CM,85 OHM
Fan Holder	MCP-220-82620-0N	2	Dual 2.5 NVMe4 Drive Kit for 216B/826B/417B/846X/847B,RoHS
Air Shroud	MCP-310-22711-0B	2	Mylar air shroud sets X12SPG-NF for SC227G(3x GPU)
Riser Card	RSC-GB-6G4	2	1U Rear LHS GPU riser card withonePCI-E4.0X16 slot,HF,Ro
Riser Card	RSC-GF-6G4	4	1U Front LHS GPU Riser card with onePCI-E4.0x16slot,HF,R
Storage Controller Card	SCC-P2N2FG-P1A-A	1	PDB with 2x NVMe, paired with SCC-P2N2FG-P1A-B
Storage Controller Card	SCC-P2N2FG-P1A-B	1	PDB with 2x NVMe, paired with SCC-P2N2FG-P1A-A
Software	SFT-OOB-LIC	2	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0077V	2	X12 ICX/CPX CPU Heatsink (78x113x25.5mm), VC Base, Cu Fin
*Power Supply	PWS-2K63A-1R	2	1U 2600Wredundant single outpupowersupply with wide range in
*Cable 8	CBL-PWEX-1251	2	[NR] FAN,2x4 to 2x 1x4 and 1x4,5A/pin,42.5CM,22/24AWG
*Cable 9	CBL-PWEX-1252	2	[NR] FAN,2x4 to 2x 1x4 and 1x4,5A/pin,58CM,22/24AWG
*FAN 1	FAN-0219L4	4	80x80x80 mm, 14.2K-15K RPM Counter-rotating, Hot- swappable F
*Front Panel	FPB-FP827BR	1	2U BigTwin front control board - right side
*Rail Set	MCP-290-00144-0N	1	2U fixed rail set, quick release, default for 2,3U 17.6"W
*Front Panel	FPB-FP827BR	1	2U BigTwin front control board - right side
*Rail Set	MCP-290-00145-0N	1	Left fixed rail (quick) for 2U 17.6";W chassis
*Rail Set	MCP-290-00146-0N	1	Right fixed rail (quick) for 2U 17.6";W chassis

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.