㈜넥스코시스템

NEX-Workstation

WNQ-4220A

Overview

넥스코시스템의 NEX-Workstation WNQ-4220A 시스템은 4U Rack & Tower 타입 타워형과 RACK마운트 모두 사용가능 시스템으로 Dual Intel Xeon Scalable Family 시리즈 CPU를 지원하며 최대 2TB의 시스템메모리지원과 3.5″, 2.5″ DISKE를 지원하여 다양한 환경에서 사용가능한 시스템 입니다.

3D CAD, CAM / CAE / 3D MAX, MAYA / CATIA등 ISV인증 소프트웨어를 지원하는 NVIDIA QUADRO GPU를 1~4EA까지 장착이 가능한 시스템 입니다.

WNQ-4220A

1. Intel® Xeon® Scalable Processors., Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s
2. Intel® C621
3. Up to 2TB 3DS ECC RDIMM and DDR4-2666MHz, Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slots
4. 4 PCI-E 3.0 x16,
   2 PCI-E 3.0 x8
   M.2 Interface: PCIe 3.0 x4
   M.2 Form Factor: 2260, 2280, 22110
   M.2 Key: M-Key,
   2 PCI-E 3.0 NVMExpress x4 Internal Port(s)
5. 1 VGA port(s)
6. Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
7. Dual LAN with GbE from C621
9. 8 Hot-swap 3.5" SAS3/SATA3 drive bays(SATA3 dafault), 1 M.2 slot, 2 NVMe support with opt. cables
10. 1200W High-efficiency Power Supply Platinum Level Certified

- NVIDIA Quadro GPU Family
- 3DMAX, MAYA
- CATIA, AUTO CAD

Tower or 4U Workstation / 2 CPU

1. Processors

supports dual Intel Xeon Processor Scalable Family series processors in Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s to the motherboard description pages on our web site for a complete listing of supported processors

2. Memory

The motherboard has 16 DIMM slots that can support up to 2 TB of Load Reduced (LRDIMM) or 1.5 TB of Registered (RDIMM) DDR4 ECC, 288-pin, at 2666/2400/2133MHz. DIMMs up to 64 GB at 1.2V. See Chapter 5 for details.
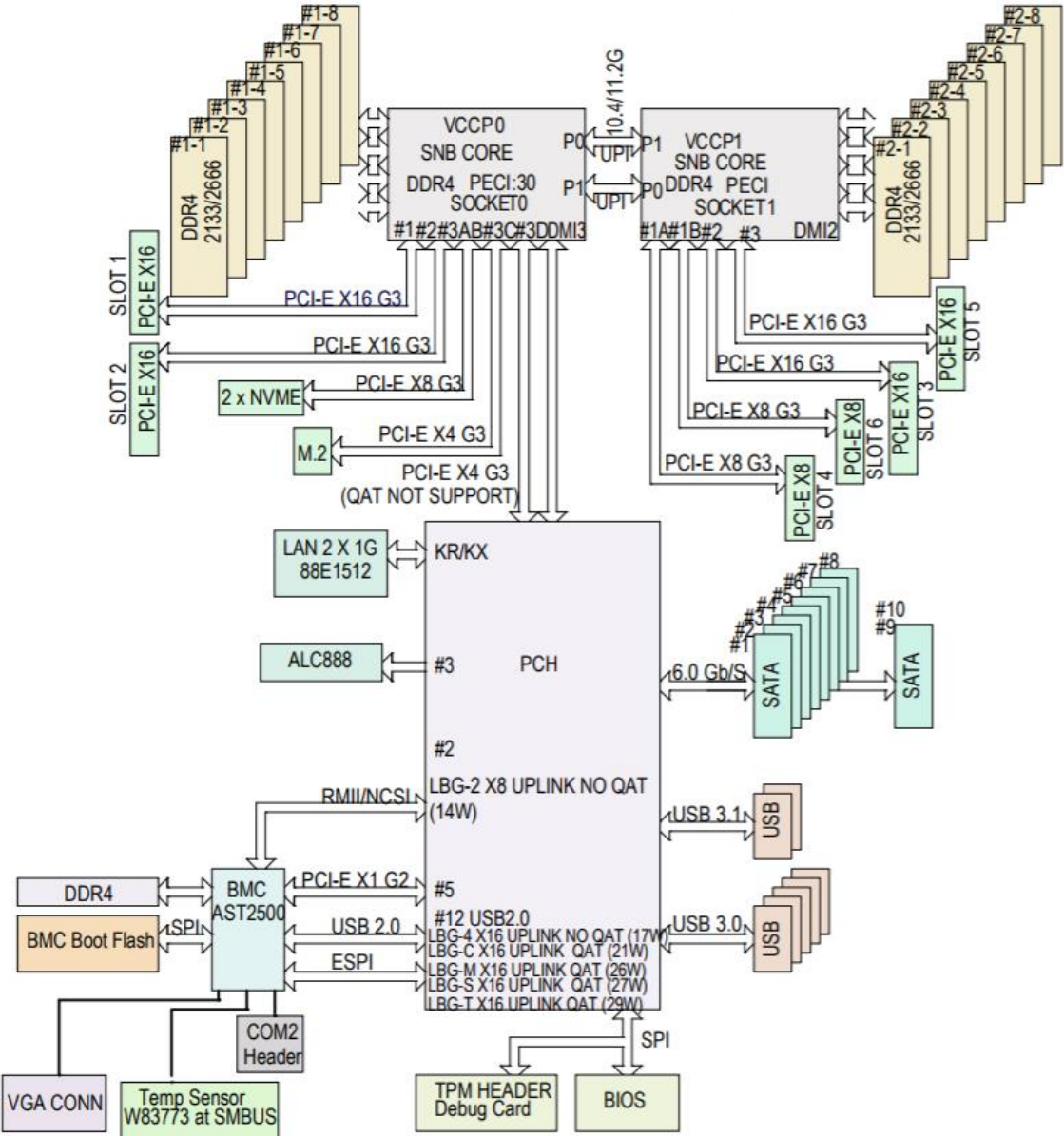
3. Serial ATA

The motherboard supports a ten SATA 3.0 ports. That is four I-SATA, two more I-SATA with SuperDOM support, and four S-SATA. RAID 0, 1, 5 and 10 can beenabled.
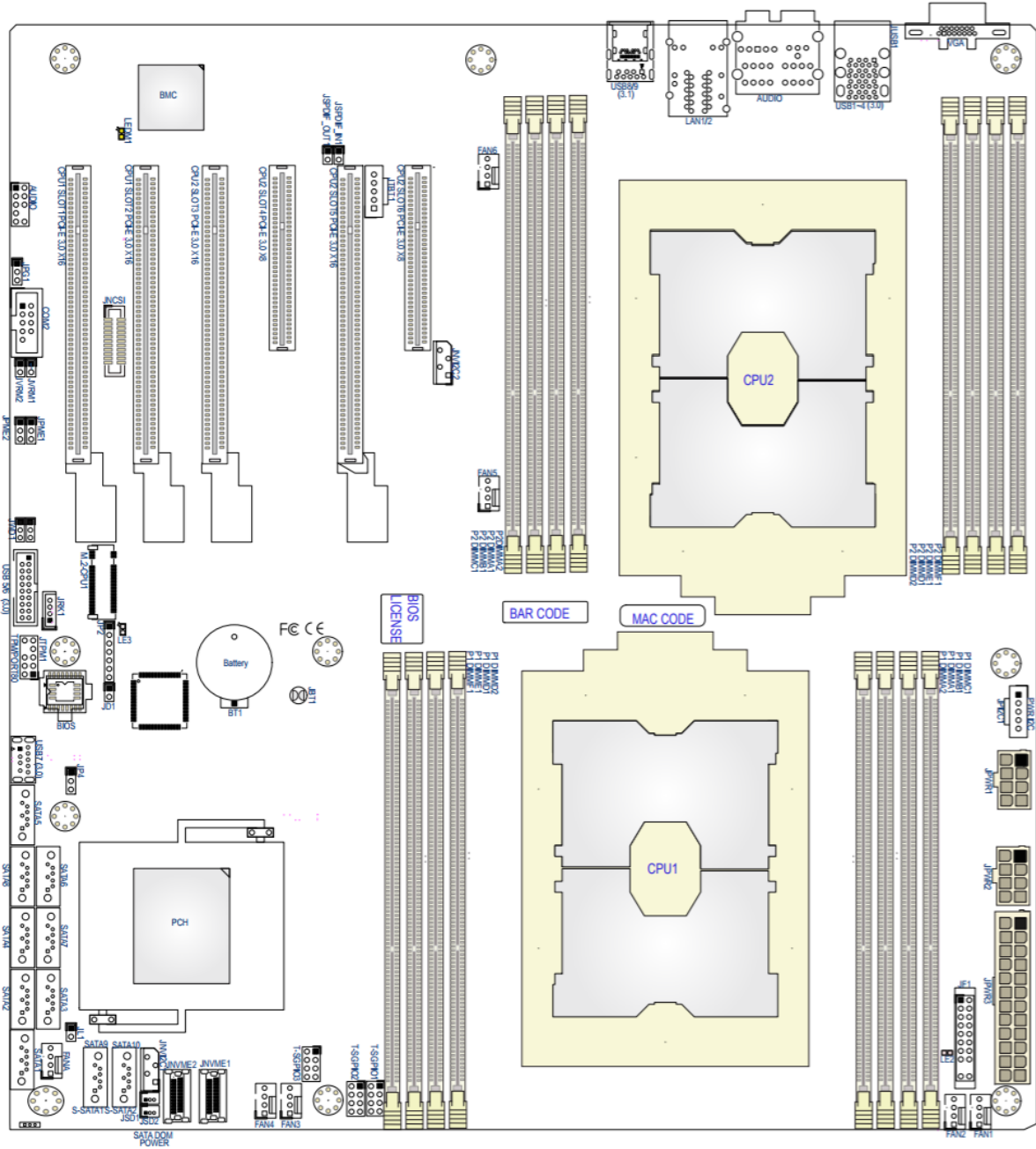
4. PCI Expansion Slots

Four PCI-Express 3.0 x16 slots (Slot1/Slot2 supported by CPU1, Slot3/Slot5 supported by CPU2) Two PCI-Express 3.0 x8 slots (Slot4/Slot6 supported by CPU2)

WNQ-4220A System Block Diagram

Motherboard Details

5. 7.1 HD (High-Definition) Audio

This motherboard features a 7.1 Channel High-Definition Audio (HDA) codec that provides 8 DAC channels. The HD audio supports multiple-streaming 7.1 sound playback through the front_panel stereo output via the subwoofer speakers. Download the appropriate software from our website to enable this function.

6. System Power

The SuperWorkstation 7049A-T has a single 1200 watt power supply. This power unit is equipped with low-noise technology, making the system ideal for workstation environments.

The power supply has an auto-switching capability that enable it to automatically sense and operate with 100 or 240 volt inputs

7. Storage Drives

A total of eight SATA drives may be housed in the SC743TS-1200BP-SQ chassis. The drive IDs are preconfigured as 0 through 7 in order from bottom to top (or from left to right if rackmounted).

The drives are mounted in drive carriers to simplify their installation and removal from the chassis. (Both procedures may be done without removing power from the system.)

8. Cooling System

Two 8-cm PWM chassis fans provide air intake while one 9-cm PWM exhaust fan expels hot air from the chassis. All are low-noise fans that result in "Whisper-Quiet" operation (~28 dB). The fans should be connected to
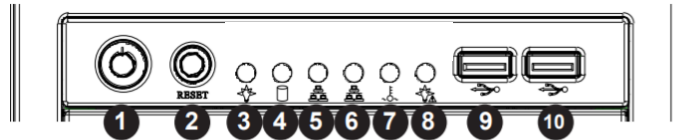
headers on the motherboard.

System Interface

Figure 1-1. Control Panel View

Control Panel Features		
Item	Feature	Description
1	Power Button	Applies or removes power to the system.
2	Reset Button	Resets (reboots) the system
3	Power LED	Indicated power is being supplied to the system.
4	HDD LED	Indicates activity on one or more hard drives.
5	NIC1 LED	Indicates activity on the LAN1 port.
6	NIC2 LED	Indicates activity on the LAN2 port.
7	Overheat/Fan Fail LED	When this LED flashes, it indicates a fan failure. When on continuously it indicates an overheat condition.
8	Power Fail LED	Indicates a power supply fan failure. An alarm will also sound, which can be turned off with the reset switch on the back of the power supply.
9	USB	USB3 Port
10	USB	USB3 Port

1. Control Panel Buttons

Power

The main power switch applies or removes primary power from the power supply to the server but maintains standby power. To perform most maintenance tasks, unplug the system to remove all power.

Reset

The reset button is used to reboot the system.

Power LDE

Indicates power is being supplied to the system power supply units.This LED is illuminated when the system is operating normally.

HDD

Indicates activity on the hard disk drive when flashing.

NIC2

Indicates network activity on GLAN2 when flashing.

NIC1

Indicates network activity on GLAN1 when flashing.

Information LED

Alerts operator to several states, as noted in the table below.

Information LED	
Status	**Description**
Continuously on and red	An overheat condition has occured. (This may be caused by cable congestion.)
Blinking red (1Hz)	Fan failure, check for an inoperative fan.
Blinking red (0.25Hz)	Power failure, check for a non-operational power supply.
Solid blue	Local UID has been activated. Use this function to locate the server in a rack mount environment.
Blinking blue	Remote UID is on. Use this function to identify the server from a remote location.

Power Fail

Indicates a power supply module has failed.

|	LED Color	Blinking Pattern	Behavior for Device
Activity LED	Blue	Solid On	SAS/NVMe drive installed
	Blue	Blinking	I/O activity
Status LED	Red	Solid On	Failure of drive with RSTe support
	Red	Blinking at 1 Hz	Rebuild drive with RSTe support
	Red	Blinking with two blinks and one stop at 1 Hz	Hot spare for drive with RSTe support
	Red	On for five seconds, then off	Power on for drive with RSTe support
	Red	Blinking at 4 Hz	Identify drive with RSTe support

Input/Output Ports
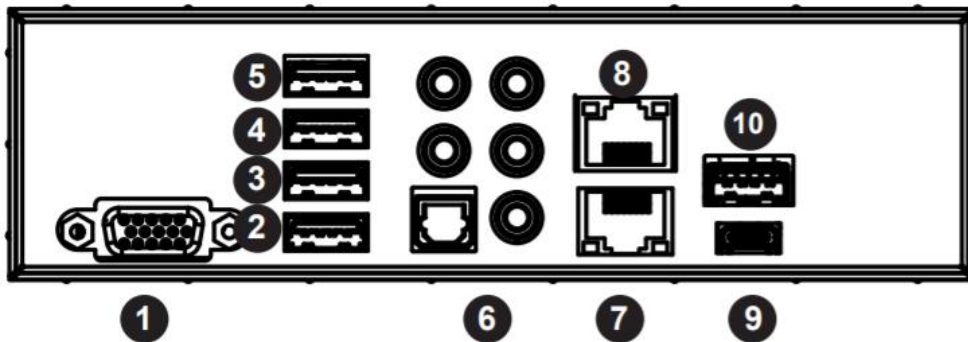
Figure 4-2. Rear I/O Ports

Rear I/O Ports			
#	Description	#	Description
1.	VGA	6.	7.1 HD Audio
2.	USB 1 (USB 3.0)	7.	GLAN1
3.	USB 2 (USB 3.0)	8.	GLAN2
4.	USB 3 (USB 3.0)	9.	USB 8 (USB 3.1) type C
5.	USB 4 (USB 3.0)	10.	USB 9 (USB 3.1) type A