NPA Series

Nexcom new 1U & 2U Server Grade appliances are for the Cloud Data Centers, and Edge Computing; Built with the dual Intel Xeon® Scalable Processors and chipsets, features to accelerate the network transformation and high virtualization applications. The modular-based is designed for easy upgradable, reducing time to market with up-to-date microprocessor technology.

Besides, our future proof NVMeOF appliance is an emerging low latency technology (simple feature-less JBOF); It magnitude speed improvement to storage systems. The NVMe Storage Server and JBOF disaggregate storage space with block access delivers scale-out, high optimization and inline data processing for the massive databases and Big Data analytics applications.

NPA7100 features dual Intel Xeon E5-2600 v5/v6 Series processors providing additional processor improvement and higher memory bandwidth. Besides, with the add-on GPU or FPGA adapter on the ultra-fast PCIe x 16 expansion; accelerates the data processing performance.

Specifications

Platform Processor
- 2* Intel® Xeon® Scalable Processors Family E5-2600 v5 and v6 Series
- Support Intel Cascade Lake Processors

BIOS
- 32Mb SPI Flash EEPROM with AMI

Memory
- 24* DIMM slots, support up to 32GB DDR4 2133-2666MHz RDIMM/LRDIMM/NVDIMM, total capacity up to 768GB
- Support up to Intel 12 pcs Apache Pass (18W) in Cascade Lake

System management
- Aspeed AST2500 Integrated Processor w/ VGA

Internal Storage
- 2* M.2 2280 SATA/PCIe x4 SSD
- 2* SATA DOM

Modular Expansion
- 4* HHHL/LP PCIe Gen3 x16 SLED Module /Hot plug

Expansion Slots (Rear)
- 2* PCIe Gen3 x16 (Add-on card)

I/O
- 1* Dedicated IPMI LAN port,
- 1* VGA port (D-Sub), 1* RS232 COM port,
- 2* USB3.0 port (Back), 1* USB2.0 port (Front Panel)

Power Supply
- 1200W Redundant CRPS Power Supply

Environmental Specification
- 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)

Certifications
- FCC/CE, RoHS/WEEE

Dimension
- 790.76mm (D) x 436mm (W) x 44.5mm (H) (1U, 4*HHHL Rack Chassis)

NPA7101 supports node-based deployment which CPU and Storage capacity can be scale and expand using JBOF to achieve Business Continuity.

Specifications

Platform Processor
- 2* Support Intel® Xeon® Scalable Processors Family E5-2600 v5 and v6
- Support Intel Cascade Lake Processors

BIOS
- 32MB Dual SPI Flash EEPROM (AMI code base

BMC
- Aspeed AST2500 Integrated Processor w/ VGA

BMC firmware
- 32MB Dual SPI Flash EEPROM (AMI code base)

Memory
Up to 768GB DDR4 2133-2666 RDIMM/LRDIMM/NVDIMM
- Support up to Intel 12 pcs Apache Pass (18W) in Cascade Lake

PCH
- Intel Lewisburg C621-1G PCH

Internal Storage
- 2* M.2 2280 SATA/PCIe Gen3 X4 SSD
- 2* SATA DOM

Drive Bays
- 24* Hot-Swap Dual Port(PCIe 2x2) NVMe U.2 SSD

I/O
- 2* 10GBase-T LAN
- 1* Dedicated IPMI LAN port
- 1* VGA port (D-Sub) ; 1* RS232 COM port
- 2* USB3.0 (Back), 1* USB2.0 (Front Panel)

PCIe Slots
- 2* PCIe Gen3 X16 Slot (FHHL)Storage
- 1* PCIe Gen3 x16 (HHHL)
- 1* PCIe Gen3 X8 Slot (OCP)

Power Supply
- Up to 2000W Redundant CRPS Power Supply

Environmental Specification
- 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)

Certifications
- FCC/CE, RoHS/WEEE

Dimension
- 448mm(W)*840mm(D)*88.9mm(H) (2U2N, Rackmount)

NPA7800 gives data centers unprecedented access to NVMe SSD/HDD storage. The NVMeOF enables faster access between hosts and storage systems, drives new levels of business agility and competitiveness.

Specifications

Base Board
- 2* PCIe Fabric Switch, Broadcom PEX9797
- 9*-Gigabit Ethernet Ports (Switch)
- 2* Gigabit Dedicated LAN for Management
- 2* PCIe Riser for 6 *PCIe x16 slots
- ASpeed 2500 for BMC

Drive Bays
- 24*2.5" U.2 (SFF-8639) Single Port NVMe drive
- Hot-pluggable NVMe drive

PCIe Slots
- 2* PCIe Gen3 X16 Slot (FHHL)Storage
- 1* PCIe Gen3 x16 (HHHL)
- 1* PCIe Gen3 X8 Slot (OCP)

System FAN
- 5* 6038 heavy duty PWM fans

Broadcom Stingray Smart NIC Support (optional)
- Up to 6* Stingray Smart NIC
  Stingray Smart NIC specification:
  - Broadcom Stingray SoC
  - 1* 100Gbps port, QSFP28
  - 1* 1Gbps port for Management
  - 2* VLP RDIMM sockets

Chassis Management
- OpenBMC, IPMI 2.0, RESTful API, DMTF Red Fish API

System Software
- Standard-based, NVMeOF 1.0 Protocol
- Linux Kernel NVMeOF target
- Access Control List (ACL)
- SPDK for NVMe driver & NVMf target
- Support for multiple hosts/ subsystems/ control/ name-space
- SSD pooling (Big SSD, RAID 0)
- SW-configurable name spaces
- NVMe hotplug support
- DC integration: Openstack
- SDS integration: Ceph RBD

Power Supply
- 2* 1200W Redundant Power Supply

Environmental Specification
- 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)

Certifications
FCC/CE, RoHS/WEEE

Dimension
- 448mm(W)*594.7mm(D)*87.2mm(H) (2U Rackmount)