

Support both 2.5" U.2 NVMe devices and low-profile size PCIe X8 NVMe add-in-cards for flexibility



Model: NVMeSAN2N-12LP

Model: NVMeSAN2N-24U2

2U NVMe/NVMe/SSD Server/Storage Appliances First to the Market HOT Swap NVMe drives

2U High-Performance NVMe Flash Server Hardware Specifications Document



Optional OCP 2.0 Mezzanine IO slot

Maximized exhaust-vent area design for optimized cooling

Key Features

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- Designed to support standard Grantley/Broadwell, Purley/Skylake and AMD Naples platforms
- Purpose-built for NVMeoF usage model with optimized IO bandwidth and latency
- Perfectly balanced IO design:
 - o Each CPU manages one PEX9781 or PEX9797 PCIe switch
 - Each PCIe switch manages 48x lanes downstream for 12* U.2 or 6* PCIe X8 AIC modules plus one or two PCIe X16 network adapter slots
 - o Maximum throughput with each CPU capable of sustaining over 200Gbps and 4M IOPs
 - RDMA/RoCE/iWARP NIC adapters are linked to NVMe SSDs via PCIe switch
- System is designed to minimize crossing over the QPI/UPI links to avoid additional interrupts
- Unmatched IO bandwidth with in a compact 2U platform
- Over 500Gbps sustained IO performance for the entire system
- Based on COTS components to avoid vendor lock-ins
- Modular design and future-proof, can migrate to new generation platforms with minimum efforts
- Maximized exhaust vents plus high-pressure cooling fans result in high-efficiency cooling
- Support both 2.5" U.2 NVMe devices and low-profile size PCIe X8 NVMe add-in-cards for flexibility
- Designed for OEMs with many options for customizations

- 2U form factor with 26.4" depth, designed to fit 900-mm racks
- 12x hot-swappable trays for COTS low-profile size PCIe3 X8 NVMe add-in-cards or 24x PCIe3 X4 NVMe U.2 SSD drives
- 2 or 4x PCIe X16 expansion slots for up to 448 Gbps (4*112Gb EDR IB) of network IO bandwidth
- Symmetrically-balanced IO between two CPUs for optimal performance with each CPU managing one PCIe switch and half the expansion slots and NVMe devices downstream
- NVMe devices and network adapters are linked directly over PCIe switch for minimized latency
- Optional support for GPGPU cards for VDI applications
- 2x Avago/PLX PEX9781 or 97 PCIe fan-out switches supporting DPC and hot-swap
- Additional PCIe Gen3 X16 rear OCP 2.0 IO module for 40/100Gb options for secondary network storage connectivity
- Supports up to two E5-2699v4 Xeon or Purley/Skylake processors
- 2x hot-swap 2.5"-7mm system disks
- 1200~1600W(230VAC) CRPS redundant power supply options
- 4x 80x38mm high-pressure cooling fans
- Optional lockable front bezel to protect from unauthorized removal of sensitive data
- Optional MCU module for PCIe switch boards for additional OEM-manageable functions





2.5" U.2 NVMe Drive

PCle x8 NVMe Drive



Cheetah RAID Storage 866-322-0788 x1 for more information