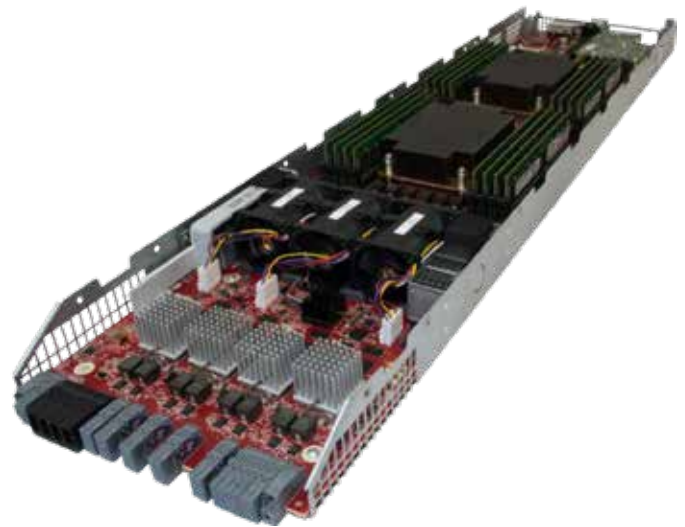


**PRODUCT BRIEF | 2U-24 Bay 2.5" Ultra Performance NVMe/PCIe Solid State Flash Array Quad Server****NSS-2247****2U-24 Bay 2.5" Ultra Performance NVMe/PCIe Solid State Flash Array Quad Server**

The Viking Enterprise Solutions (VES) NSS-2247 Ultra High Performance NVMe/PCIe Solid State Flash Array Quad Server combines twenty four (24) 2.5" NVMe drives of up to 25W write power with four dual socket Intel Xeon™ class Haswell or Broadwell (E5-2600 V3/V4) servers. The NSS-2247 provides ultra low latency access to the flash array while supporting up to 4 x 100Gb Ethernet connectivity. The NSS-2247 allows for dynamic reconfiguration of the NVMe drives and Hot Plug to the four servers to best match data traffic requirements. Each of the two pairs of server can be mirrored via dual link x8 non transparent bridges to the complementary pair when supported by drivers, OS or processors.

Developed as ultra high performance servers with extreme configurability on demand for tier one HPC and caching applications requiring high I/O, high bandwidth and/or sub millisecond access latency in a small form factor.

**Dual Port Access to NVMe Drive**

- ▶ The NSS-2247 architecture supports single or dual port NVMe drives & provides redundant paths to all SSDs in the dual ported configuration

**Hot Plug Functionality NVMe Drives**

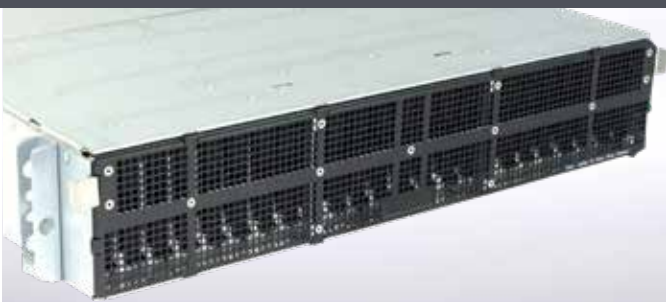
- ▶ The NSS-2247 architecture supports drive Hot Plug without taking offline the unit or any of the other drives

**Quad Servers**

- ▶ Four dual socket servers provide extreme compute power in addition to ample back to back I/O connectivity

**Robust Enterprise-Grade Functionality**

- ▶ The NSS-2247 offers robust enterprise-grade availability, reliability and serviceability. For easy swap-out, all active data path components are contained within field-replaceable units (FRUs), including fans, SSD drives, interposers, power supply units (PSUs), energy storage modules (ESMs) and server modules



# NSS-2247

## Unparalleled Performance

Fully leverages the greater speed of PCIe/NVMe SSDs compared to SAS/SATA SSDs, the NSS\_2247 is the first integrated server to achieve better than 15 M IOPS (4kB read blocks) with sub-millisecond access time in a 2U form factor. Provides up to 400Gb/s Ethernet connectivity.

### 2U Rackmount Enclosure

- ▶ Dimensions:  
Weight for VES NSS-2247 w/24 SSDs Single Shipping Pack: 90 lbs
- ▶ Weight for VES NSS-2247 without SSDs for Rack Installation: 75 lbs

### Monitoring & Reporting

- ▶ Monitoring for temperature, power supplies & fans including fan RPM monitoring & control, SSDs & server units
- ▶ Automatic failover between redundant service processors integrated on the server modules
- ▶ 1GbE data center connection – RJ45 for master server (selected by slot-ID)

### Ethernet Connectivity

- ▶ Up to 100 Gb/s Ethernet connectivity via OCP or PCIe interface (x16)

### AC Power

- ▶ Input Voltage 208-264V AC 47-63 Hz

### Hot-Plug Field Replaceable Units

- ▶ 24 independent PCIe Gen3 NVMe SSDs with interposers & carrier
- ▶ 1+1 redundant 3000W power supply units
- ▶ 1+1 redundant energy storage module
- ▶ 4 Apex server modules with 2+1 redundant fans

### Drive Configuration

- ▶ Four logical groups of six drives (default for most balanced affinity)
- ▶ Other mapping options supported through command line or GUI
- ▶ Flexible Configuration
  - ▶ Each drive can be mapped to each server
  - ▶ Single port (PCIe x4)/ dual port (2x PCIe x2) NVMe drive support

### Safety Standards

- ▶ IEC/EN?UL/CSA 60950-1 2nd Edition

### Environmental Protection

- ▶ RoHS and WEEE compliant

### Fail-Over Power

- ▶ Supercap module integrated into ESM as optional feature

### Monitoring & Reporting

- ▶ Monitoring for temperature, power, cooling (including fan speed control), drives, as well as error rates & quality of service
- ▶ Reporting of all serial number, part number, & revisions of the server modules, power supplies, drives & chassis

