

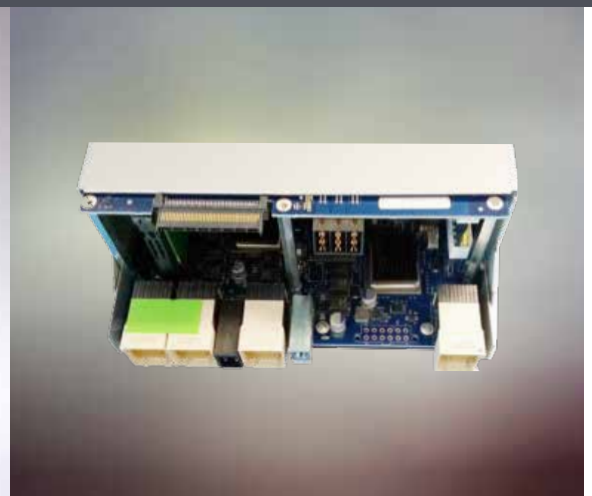
PRODUCT BRIEF | Storage Server Module for 12G SAS NSS-460X or NSS-260X Series Enclosures

NSS-HW2EA/HW1EA

The Viking Enterprise Solutions (VES) NSS-HW2EA and NSS-HW1EA Storage Server Modules are high performance dual Haswell / Broadwell-based enterprise class server modules designed for the 12G SAS 2U60 and 4U60 JBOD chassis. The systems are highly configurable as single or dual server module configuration to cover a broad spectrum of cost-performance requirements. With best-in-class x86 software applications, the JBOD is transformed into a high-availability, ultra high density Storage Server platform delivering superior performance.

The server can be configured as a single socket (HW1EA) or dual socket (HW2EA) server supporting the Intel E5-2600 v3/4

family of Xeon processors for optimal performance at lowest TCO and performance. The modules support a 12Gb/s data path throughout the entire enclosure for SAS drives or 6Gb/s SATA drives and allow for zoning of 5 different drive maps. Module redundancy is provided through NTB mirroring, and data loss protection in the event of power faults is supported through optional energy storage units (ESUs). Three PCIe 3.0 expansion slots offer IO host expansion and flexible high-performance network options.



NSS-HW2EA/HW1EA

The storage sub-system is designed to provide balanced high throughput performance for VES 60 drive enclosure.

NSS-HWxEA server modules support high-availability operation through dual path to all drives, further hot-swap capability and module-to-module interconnect features for full server redundancy. Additionally, all DIMM slots support NVDIMM to protect against data loss in a blackout/brownout power event.

Compute

- ▶ CPU: 2x Intel XEON E5-2600 v3 (Haswell) & v4 (Broadwell)
- ▶ Peripheral Controller Hub C610 (Wellsburg)
- ▶ 2x Boot M.2 SSD

Optional Energy Storage Unit

- ▶ LiFePO4 battery pack

Or

- ▶ SuperCap for NVDIMM support

Communications

- ▶ Bulkhead
 - ▶ 1Gb/E shared management & data
- ▶ 1x x16 PCIe3.0
- ▶ 2x x8 PCIe3.0
- ▶ 2x USB-A
- ▶ 1x USB Mini-B
- ▶ Non-transparent PCIe x16 bridge
- ▶ Inter IO SAS Communications
- ▶ 100 MB/s module Network

Storage

- ▶ Supports 60 SAS3.0/ SATA2.0 Targets (HDD/ SSDs)
- ▶ 4x 12Gb/s SAS Controller
- ▶ 2x 12Gb/s 68 port SAS expander

Memory

- ▶ 8x DDR4 up to 2400MHz

- ▶ 1TB maximum

Management

- ▶ Baseboard Management Controller – IPMI2.0

Orderable Part Numbers

- ▶ NSS-HW1EA
 - ▶ Single socket configuration/2x PCIe Slot
- ▶ NSS-HW2EA
 - ▶ Dual socket configuration/3 PCIe slots

Performance

- ▶ Up to 24GB/s bandwidth for each controller
- ▶ 8M IOPS per controller

