vikingmemory
TECHNOLOGY

PRODUCT BRIEF | Persistent Memory

DDR4 NVDIMM-N

Viking Technology's DDR4 NVDIMM is a DDR4 Non-Volatile DIMM that delivers both performance and reliability to enterprise applications. This non-volatile memory module has been designed to be integrated into Intel's new NVDIMM enabled servers via DDR4 DIMM sockets. Designed to preserve critical data in the event of a power or system failure. Viking's DDR4 NVDIMM enables the host system to recover from a failure event with simplicity and ease.

Introducing NVDIMM solution with Supercap integrated on the module, eliminating the need for external supercap, mounting screws and cables.

FEATURES

Non-Volatile DDR4 Memory	100% Data Security	Unlimited Write Endurance
JEDEC Standard DDR4 Interface	10 Year Data Retention	End-to-end RAS Coverage

PLATFORM SUPPORT

NVDIMM ENABLED ON SUPERMICRO
See Supermicro website for full validated boards

Motherboards	Systems
X10 Series	Multiple servers/chassis available
X11 Series	Multiple servers/chassis available

NVDIMM ENABLED ON AIC

Server Boards	Processor
Llbra	Haswell/Broadwell
Phoenix	Haswell/Broadwell

NVDIMM ENABLED ON INTEL

Server Boards	Processor
S2600WT (WildCat Pass)	Haswell/Broadwell
S2600kp (Kennedy Pass)	Haswell/Broadwell
S2600TP (Taylor Pass)	Haswell/Broadwell
S2600CW (CottonWood Pass)	Haswell/Broadwell
Wolf Pass	Skylake
Buchanan Pass	Skylake
Sawtooth Pass	Skylake

OS SUPPORT

‣ Linux Kernel > v. 4.4+

‣ Linux distribution support – RedHat 7.3, Ubuntu, Fedora, Centos, etc.

‣ Windows server 2016

‣ VMWare support in 2018

APPLICATION SUPPORT

Compatible with APIs & Libraries developed in SNIA – pmem.io

VIKING SDK

Reference Drivers & tools to integrate NVDIMMs in a system.
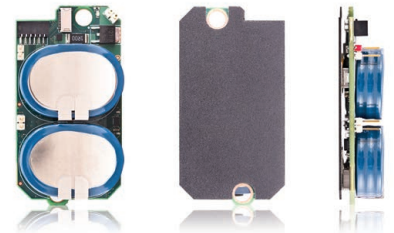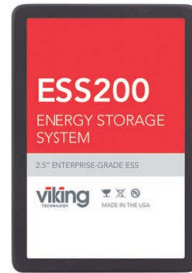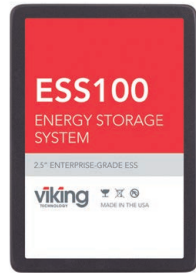
DDR4 NVDIMM-N

NVDIMM Energy Sub-System (ESS)

Viking Technology's DDR4 NVDIMM is a DDR4 Non-Volatile DIMM enabled by an energy subsystem (ESS) which provides enough power to the module in an event of power-loss to safely store all mission critical data. These ESS come in a variety of standard form factors, PCIe, FanBay and SuperCaps without casing. Viking Technology has the ability to customize ESS to fit customer's open slot within the server/storage appliance. Form factors can vary from PCIe, 2.5" drive bays, fan bays, and customized form factors.

FUNCTIONAL SPECS

▸ Host initiated health monitoring

▸ Designs charging up to 12V

▸ Fully charged in 3 minutes

▸ LED for ESS status

- ▸ Enterprise Storage Array – IO cache/Buffer, Metadata
- ▸ Tiered data management
- ▸ Distributed memory computing
- ▸ Clusters
- ▸ File systems

- ▸ HPC/OLTP environments that can leverage low latency high IOPs
- ▸ Financial Trading
- ▸ Video streaming
- ▸ Cloud

- ▸ Datacenter
- ▸ CDN
- ▸ Big Data Analytics
- ▸ Social Media
- ▸ Hyperscale
- ▸ AWS
- ▸ Azure
- ▸ SAP Hana

- ▸ Database Accelerator
- ▸ In-Memory Databases
- ▸ Check-pointing
- ▸ Journaling
- ▸ Logging tables
- ▸ Scratchpad performance
- ▸ Analytic servers

Viking's NVDIMM provides persistence feature to DIMMs by combining low latency DRAM and Flash technologies. DDR4 NVDIMMs are geared towards improving application performance substantially along with safe guarding the data in Server and Storage systems.

JEDEC compliant NVDIMMs from Viking can be plugged into a standard DIMM slot and functions as a regular DIMM for host applications. DRAM Data gets backed up to onboard Flash during a catastrophic failure or planned downtime and in turn restored back to DRAM once power is reapplied. SAVE and Restores are managed by Viking's proprietary controller technology.

vikingmemory
TECHNOLOGY

Global Locations

US Headquarters

2950 Red Hill Avenue
Costa Mesa, CA 92626
Main: +1 714 913 2200
Fax: +1 714 913 2202

India Office

A 3, Phase II, MEPZ-Special Economic Zone
NH 45, Tambaram, Chennai-600045
India

Singapore Office

No 2 Chai Chee Drive
Singapore, 109840

For all of our global locations, visit our website under global locations. For price and availability, please email us at sales@vikingtechnology.com.