

CAGR  
139%

2014

FORMED

NVDIMM SIG



15+  
MEMBER

\$550  
TAM  
in 2020

### What is NVDIMM?

A Non-Volatile Dual In-line Memory Module (NVDIMM) is a "persistent memory technology" that retains data in the event of a power lost or a system shut down.

### So its a storage device? or RAM DIMM?

Both! NVDIMM(s) come in varies media combinations that leverages itself to both a block and byte addressable access mechanism. You can use it as memory that is persistent or the fastest storage device in your appliance.

#### NVDIMM - N

Memory mapped DRAM with no system access to flash.

Attributes:

Low-Capacity (2GB - 32GB)

Very-low Latency (10s of nanoseconds)

#### NVDIMM - F

Memory mapped Flash where DRAM is not system mapped.

Attributes:

High-Capacity (100GB - 1TB)

Low Latency (10s of microseconds)

#### NVDIMM - P

Memory mapped Flash and memory mapped DRAM with both byte and block drive oriented access.

Attributes:

High-Capacity (100GB - 1TB)

Low Latency (100s of nanoseconds)

### A NEW STORAGE PYRAMID

CPU

DRAM

NVDIMM

SSD (high-performance)  
PCIe, SAS

SSD (mainstream)  
SATA

HDD

CLOUD

TAPE

nanoseconds

LATENCY

milliseconds

"moving storage closer  
to the CPU"

-N | -F

-P

-XPOINT | ReRAM | PCM

-SCM |

2015

2016

2017

2018