

The logo for DDN Storage, featuring the text "DDN" in a large, bold, white sans-serif font with a registered trademark symbol, and "STORAGE" in a smaller, white sans-serif font below it, all contained within a red rectangular box.

DDN[®]
STORAGE

DDN = Performance

DDN #1 for Storage Performance

True FLASH speed *Delivered*

DDN builds the fastest storage platforms
1.2 TB/s | 50 Million IOPs | 2 Racks

SFA | Embedded Appliances

EXAScaler and GRIDScaler - Parallel File Systems Simplified



EXTREME PERFORMANCE

Up to 40GB/s Throughput
Millions of IOPS
ReACT[®] for Mixed-IO
Mirrored Cache for small IO



SCALABLE FABRICS

Custom Full-Fabric Architecture
768 PCIe Lanes
OPA/EDR/FDR
10/40/100GbE



DATA PROTECTION

SFAOS Real-Time Parity Engine
DirectProtect
Real-Time Integrity
Partial Rebuilds



SCALE UP or OUT

Up to 1,752 Devices
Over 20PB in 2 floor tiles
Hybrid SSD/HDD Architecture



Flexibility

DDN[®]

NoSQL database? Fraud Detection? Supercomputer Storage? Analytics at scale? DDN build solutions that perform to suit a breadth of challenging workflows.





*Truly Software-Defined • Commodity Hardware • Flash
Native • Linear Scaling • Low Power • High Density
Removes File System Bottlenecks*

IME240[®]

IME | NVMe Flash Software Data Platform

- ▶ Transparent, Scalable Cache Layer Delivering Unprecedented Performance for Your Workflows
 - Dramatically accelerate random read, random write, shared file, high concurrency and streaming workloads by up to 100X
- ▶ Reduces Footprint and Power by up to 1/3
- ▶ Extend Flash SSD Life by up to 500%
- ▶ Optimally Scale to Requirements at Any Scale
- ▶ Zero Application Modifications Needed
- ▶ Protects Data Against Device and Node Failures

APPLICATIONS

- more IOPs
- more throughput



DEEP STORAGE

AI / Machine Learning at any scale

Ingest, Store, Format

Process, Sample Reduce, Tag
Manipulate and Prep Data

Build & Optimize
Learning Framework

Fastest Answer
per Minute

Production
Service



SCALE
PERFORMANCE

IO ALWAYS MEETS DEMAND



Ingest Fast

Flexible access for
data manipulation

SCALE CAPACITY

Grow quickly and simply all the way to limitless
scale with great economics and efficiency

SFA | 2018 NEWS (June – November)

DDN[®]
STORAGE

DDN[®]
STORAGE



DDN SFA14KX[™]



SFA7990



AI200



IME140

SFA200-NV

SFA7990

AI200

EXAScaler[®] | GRIDScaler[®]

DDN =

- **Performance** (NVMe, SSD, SAS, NL-SAS)
- **Scalability** (scale-out & scale-up)
- **Heterogenous I/O profiles**

for

- **HPC**
- **Big Data**
- **AI & Deep Learning**
- **HPC + Big Data + AI, all together**

Merci !