Fast and available data is critical for today’s dynamic business environments. Organizations must access data at rates that match the competitive nature of the business. Slow data access and processing means slow application responsiveness and possibly lost business. Lengthy risk and trading analysis, long billing cycles, slow e-commerce websites, inefficient customer service queries, and IT’s inability to meet SLAs are common scenarios which challenge businesses today. In the majority of the cases, these performance challenges are the result of storage I/O bottlenecks.

To solve storage I/O bottlenecks, reduce latency and increase throughput, requires changing the way data is accessed. In addition, to meet the needs of the most demanding applications, IT managers must dramatically scale the number of I/O’s per second and do it in a way that protects the data. The Kaminario K2 all solid-state SAN storage solutions powered by Dell PowerEdge blade servers are designed to meet these challenges.

**Revolutionary Capabilities**

Kaminario K2 high performance all solid-state SAN storage eliminates I/O bottlenecks, reduces latency, and increases throughput to accelerate critical business applications, at a lower cost and footprint than legacy SAN storage.

**Freedom of Choice**

The Kaminario K2 is the first enterprise storage system to allow customers the freedom to choose the right SSD media type, DRAM, Flash or both, for their specific application performance requirements, workload, and budget. Now customers can choose between DRAM, Flash, or a combination of the two, to deliver specific performance levels for each set of application data. The Kaminario K2 represents freedom of choice in a single storage system and all without compromising on enterprise high availability or ease of use.

**Revolutionizing SSD Storage with DataProtect™**

Kaminario K2 achieves its extreme performance and reliability through its unique Scale-out Performance Storage Architecture™ (SPEAR) that has been designed specifically for SSDs. SPEAR is a clustered SAN architecture for maximum SSD storage performance, high availability, and data protection, as well as easy storage management and performance monitoring. The SPEAR Storage Operating System includes Kaminario’s DataProtect technology that provides end-to-end high availability and data protection to SSD storage while delivering extreme performance.

Kaminario and Dell have partnered to change the way data is accessed and to accelerate business-critical applications and databases.

**K2 All Solid-state SAN Storage Solutions Are:**

Fast – Consistent, blazingly fast performance is achieved by the unique Kaminario SPEAR design which automatically distributes and manages the data over a cluster of modular, high-end blade-based I/O distribution controllers and all solid-state (DRAM and/or Flash) primary storage.

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**Results:**

- **Data Mining/Warehousing**
  - SQL Server® Cluster Queries — 2x faster
- **Brokerage Reporting**
  - Oracle® DBMS — 7x faster
- **Private Banking**
  - Batch Processing — 11x faster
- **Email Marketing**
  - SQL Server® Clusters Reports — 11x faster
- **Electric Utilities**
  - SAP® Batch Processing — 10x faster
- **Manufacturing**
  - Oracle® RAC ERP — 18x faster
- **Business Intelligence**
  - SAS® Supply Chain Intelligence — 2x faster
storage. As the SPEAR Storage Operating System dynamically balances the load, the Kaminoar K2 delivers ultra-low latency and high throughput for any workload over time.

Safe – Self-healing high availability is assured by redundancy of all components and subsystems. The data resides in solid state drives (SSDs), DRAM and/or Flash, and is automatically backed up onto a mirrored hard disk drive (HDD) or Flash SSD subsystem. The N+1 system redundancy is designed to deliver no single point of failure and is equipped with automated hardware (based on online sparing) and data recovery. The Kaminoar K2 is also protected with redundant UPSs.

Easy – Implementing Kaminoar K2 takes less than a day. Once deployed, it requires no tuning whatsoever and delivers consistent performance regardless of workload, random or sequential. It supports any application and database with no data modeling or program changes.

Low-cost and Efficient – The Kaminoar K2 also has a lower cost and footprint than legacy SAN storage. It is compatible with Green initiatives by enabling IT managers to consolidate storage from multiple systems to a single high performance, efficient, and scalable Kaminoar K2 that also conserves on space and power.

The Dell PowerEdge blade server architecture enables Kaminoar K2 all solid-state storage solutions to scale to meet the most demanding business needs and budgets.

Kaminoar K2 Models

The Kaminoar K2 comes in three models: the K2-F which is Flash only, the K2-H which is a hybrid of DRAM and Flash, and the K2-D which is DRAM only. K2 models come standard with Kaminoar’s DataProtect high availability and data protection. Features of each model are described below.

Kaminoar K2 Models – Specifications and Application Use Cases

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### Features

| Primary Data Media Choices | DDR3 SDRAM (8 GB or 16 GB) Flash (MLC) |
| Data Protection Media Choices | HDD or Flash SSD |
| Connectivity | 2, 4 & 8 Gb/sec Fibre Channel |
| Fibre Channel Ports | At least 16 |

### Physical Specifications

| Rack | 42U rack |
| Power Consumption* | K2-F: 1.5Kwatt (typical)  K2-H: 1.75Kwatt (typical)  K2-D: 1.75Kwatt (typical) |
| Power Source | Two Single Phase 32A 208/220/230 or 240 V outlets |
| Power Protection | Redundant UPS in all Kaminoar K2 models |

*Actual power consumption will be dependent on the individual configuration.

Kaminoar is a registered trademark in IL, US, Europe.