

DSE4XM StorExpress Storage System



Dolphin's StorExpress is a PCI Express based solid state storage system designed to deliver superior response times and storage capacity. StorExpress connects directly to any PCI Express system, providing large capacity, fast direct storage. It is the ideal solution for deploying fast solid state cache solutions to improve the performance of database or web-based applications. StorExpress systems integrate with Dolphin's PCI Express cluster technology enabling businesses to easily build fast distributed storage solutions. Capable of being connected to multiple servers, StorExpress provides a flexible and scalable storage solution which can be distributed within the enterprise to improve access to latency sensitive data.

In a multi-server configuration, StorExpress is also capable of functioning as a clustering switch and can obviate the need for a dedicated clustering fabric for inter-server communication. Offering both superior power utilization and outstanding performance, this flash based solution significantly lowers annual power usage while delivering outstanding performance. StorExpress leverages the latest solid state SLC NAND technology to provide extremely fast storage solution that outperforms traditional disk based systems.

Features

- Capable of 270,000 IOPS
- Enables large capacity flash memory with near DRAM speeds -up to 960 Gbytes of storage capacity per chassis
- Allows for less than 50 microsecond access latency
- Supports up to 2700 MiB/Sec bandwidth to host system
- Delivers a low power solution
- Supports connection to multiple servers
- Integrates with Dolphin's cluster solution
- Disaggregates storage from compute node at distances of 10m with Copper and 300m with Optical cabling

Specifications

Capacity	480 GB 960 GB
I/O per second	80,000/150,000 /270,000
Bandwidth	800/1500/2700 MiB/Sec (Read) 600/1250/2500 MiB/Sec (Write)
Host Support	Support for 1-4 hosts
PCI Express	Base Specification 1.1
Latency	< 50 Microseconds Read
Storage Media	NAND Flash SLC
Power	300 Watt power supply Redundant Hot-Swap
Mechanical Dimensions	482 (W) x 481 (D) x 177 (H) mm
Cables	1 m copper cables Optical cables available
Fans	Two 12cm dual ball bearing fans Up to 208 CFM
Operating Environment	Operating Temperature: 0°C -50°C Relative Humidity: 5% -95% non-condensing
Operating Systems	Windows XP Pro 64 bit(SP2), Windows 2003 64 bit(SP2), Windows Vista 64 bit, Windows Server 2008 64 bit Red Hat Enterprise Linux 4 & 5 SuSe Linux Enterprise Server (SLES) 10 Debian/ Lenny, Etch, SLD Fedora Core 6,8, and 9 Ubuntu 8 CentOS 4 & 5
Regulatory	CE Mark, commercial FCC Class A
Product Codes	DSE4XM1-A0 /480 GB DSE4XM2-A0/960 GB

Configurations

