



Storageflex™ Solid State Disk SSD 16

An external random-access I/O acceleration appliance now made affordable for all data centers running transaction-intensive applications. SSD 16 delivers network I/O acceleration with simplicity and flexibility, providing instant productivity gains at a fraction of the cost of enterprise-level DDR-SDRAM Solid State Disks available today. With no compromise in functionality, performance or reliability, SSD 16 breaks the SSD cost barrier to conquer I/O bottleneck problems encountered in large database enterprise applications.

Storageflex™ SSD 16

Input/Output Bottlenecks

Even with dramatic increases of CPU speed (in GHz), disk drive storage capacity (in GB), and network bandwidth (in Gbps), meeting I/O demands of high performance computing represents a major challenge to IT infrastructure. System I/O delays are caused by the inherent data access rate limitations of mechanical disk drives. Because of such I/O bottlenecks, storage access optimization remains a critical issue for IT managers and data base administrators.

Eliminating I/O Bottlenecks

The Solid State Disk is a proven solution to I/O bottleneck problems that does not disrupt the existing IT infrastructure. The key to this solution is off-loading identified I/O demanding files ("hot files", typically less than 5% of the content) onto an SSD device for processing at RAM speed with microsecond data access rates. Cold files continue to be processed on mechanical disk drives (or RAID's) with millisecond access rates. This instantly improves the efficiency of application servers by recovering CPU cycles formerly lost in I/O wait loops. Despite their dramatic I/O performance improvement, however, the high cost of SSDs has been a major barrier to their wide scale use ... until now.

Storageflex™ introduces SSD 16

The SSD 16 is a new breed of I/O acceleration appliance based on patent pending technology that breaks through the SSD cost barrier, delivering the extraordinary performance benefits of DDR-SDRAM Solid State Disks at an affordable cost. The degree of efficiency reached on all levels (components, production, connectivity, and future path) through a novel design architecture makes SSD 16 a truly disruptive innovation.

What distinguishes SSD 16 from conventional SSDs

By incorporating best-of-breed standard industry components in its novel design architecture, SSD 16 assures cutting-edge performance and offers advantages that further distinguish it from competitive SSD products:

- Dramatic cost reduction at all GB storage capacity levels
- Widest range of connectivity options available for DDR-SDRAM SSDs
- Multiprotocol access via SCSI, Fibre Channel and SAS
- Rapid deployment of performance upgrades
- Thousands of MB/s of internal system bandwidth
- Unmatched ROI, TCO and investment protection



Storageflex SSD 16 -
10µs access time

New Model SSD 16

Our latest product generation – the SSD 16 – has a 2U rack mount form factor, a maximum storage capacity of 256 GB, and supports up to 3.6 GB/s aggregated bandwidth via multi FC links. The capacity can be scaled up by linking SSD 16 devices in 19" rack cabinets. SSD 16 supports virtually all connectivity options on the market including 320 MB/s SCSI-3 Ultra-Wide LVD, 3 Gb/s SAS and 4 Gb/s Fibre Channel interfaces. Connectivity can be rapidly modified and adapted to your data center's evolving requirements. SSD 16 supports resource leveraging where multiple host computers share SSD 16 capacity. It is an ideal resource in switched fabric environments (SAN) for processing frequently accessed data.

SSD 16 is a plug-and-play device that appears as a conventional SCSI or Fibre Channel disk drive to the host computer's operating system and supports all major operating systems. The new SSD 16 includes expanded SSD 16 management utilities. Reliability is assured by SSD 16's sole use of standard industry components of proven performance and reliability and its assembly by a world-class, ISO 9001:2000 certified manufacturer-integrator. Features include: hot swappable redundant power supply (2 Power Input Sources); redundant fans; up to 4 hot swappable data retention HDDs; Error Detection/Correction (64 bytes dedicated per 512 bytes sector), Chipkill. SSD 16 is covered by a three year warranty.

Contact us at www.storageflex.com for more information



SCSI

Ready



Storageflex™ SSD 16 Specifications

Specifications	SSD 16
Product Availability	Now Shipping (3 to 6 Weeks Delivery Time)
Capacities	16GB/32GB/64GB/128GB/256GB
Host Interface & Maximum Transfer Rate per Port	FC 4 Gb/s, SCSI 320 MB/s, SAS 3Gb/s
Number of Ports: Fibre Channel or SCSI or SAS at Standard Configuration	2 / 2 / 2
Maximum Number of Ports: Fibre Channel or SCSI or SAS	8 / 4 / 4
Ethernet Port for Remote Management	Yes
SCSI, Fibre Channel and SAS Multiprotocol Access Support	Yes
Multiport Mix Configuration	Per Request
Maximum IOPS per Port	SCSI 25,000 / FC 95,000 / SAS 72,000
Number of Data Retention SCSI Disks at Standard Configuration	2 (Hot Swap)
Maximum Data Retention Disks	4 (Hot Swap)
Save/Restore Rate (GB/min)	3.5
Error Detection / Correction	64 Bytes Dedicated per 512 Bytes Sector / Chipkill
Redundant Power Supply	Yes (Hot Swap)
LED Indicators: Power, System Overheat, HDD,	Yes
Power Input Sources	2
Redundant Fans	Yes
On Board UPS / External UPS Option (Rack Mount 1U)	No / Yes
Front Panel LCD and Keys Y	es
Power Voltage (VAC, Autoranging)	115 / 230
Power Frequency (Hz)	50 / 60
Rack Mount Width (in.)	19"
Height (Rack Unit/in.)	2U / 3.5"
Depth (in.)	25"
Approximate Weight (lbs)	36
Supports All Major OS (Including Stratus VOS, FTX)	Yes
Operating Temperature	32-105 F (0 to 41 C)
Relative Humidity (Non-condensing)	10 - 90 %
Operating Altitude (Feet Above Sea Level)	10,000 ft
Management Utilities	
Supported Hardware Interface	Ethernet TCP / IP
Front Panel Basic Management	Yes
Supported Software Interface	TELNET
Monitoring - SCSI, FC, SAS Ports & Controller Boards	Yes
Diagnostic Function Test	Yes
Administration/Configuring Parameters	Yes
Date/Time	Yes
Disk Backup	Yes
Ethernet IP Configuration	Yes
Administrator Password	Yes
LUN Mapping to Ports/ LUN Masking (16)	Yes / Yes
Fibre Channel Topology	Yes
Fibre Channel ALPA	Yes
SCSI ID	Yes
Viewing Logs	Yes
Shutdown Command	Yes

Specifications and descriptions are subject to change without notice