

IBM System Storage™ DS4100 or DS4300 SAN Express Kit



Highlights

- **Simple all-in-one SAN solution tailor-made for the SMB market with unparalleled scalability and price**
- **A complete and fully-tested SAN solution for the SMB IT department with Microsoft's Simple SAN for Windows Server designation for simplified implementation.**
- **Allows HBAs, switches and disk arrays to be installed in minutes using the simple SANsurfer Wizard**
- **Enjoy the benefits of networked storage without having to hire a SAN expert**
- **PCI-X to 2Gb Fibre Channel, single optical port HBA**
- **10 port, expandable 2Gb auto-sensing switch**

Product Description

Building upon the legendary performance of IBM's DS4000 series of storage arrays, IBM now brings enterprise-class storage to the SMB space by partnering with Microsoft and Qlogic. Reliable, scalable, & highly-available, IBM's Systems Storage™ SAN Express Kits break the traditional SMB hurdles encountered when migrating to a SAN environment; price, and complexity. This complete solution contains all the required components necessary to get your SAN up and running

in no time. By leveraging Microsoft's VDS framework, the DS4100 or DS4300 array can be easily configured and managed by Qlogic's SANsurfer Express software. Fibre Channel connectivity is provided by Qlogic QLA200 host bus adapters and a Qlogic SANbox Express 1400 Fibre Channel switch; all necessary cables are also included. All components are WHQL certified and have been extensively tested together to ensure seamless performance. IBM & Qlogic finally bring true plug-n-play technology to the Microsoft SAN space at a price you can afford.

Microsoft Platforms and Operating Systems supported:

- Windows Storage Server 2003
- Windows Professional 2000
- Windows Server 2003 32 bit
- Windows Server 2003 64 bit
- Windows Server 2003 R2 32 bit
- Windows Server 2003 R2 64 bit

Software supported:

- Array Management

Storage Network supported:

- FC HBA
- FC Switches

Storage Hardware and Platforms supported:

- Storage Array
- Simple SAN Solution

Microsoft Technology Areas supported:

- Virtual Disk Service (VDS)
- Volume Shadow Copy Service (VSS)
- Fiber Channel Information Tool (HBA Tool)
- Boot from SAN (Fabric)

Market Focus:

- Media
- Retail
- Manufacturing
- Network Service Providers
- Government
- Systems Integration
- Healthcare
- Consumer
- Energy
- Travel
- Financial Services
- Web Hosting

Includes either:

IBM Total Storage DS4100 (Qty 1)		BM Total Storage DS4300 (Qty 1)	
Model	1724-100	Model	1722-60U
RAID Controller	Single/Dual Active 2GB	RAID Controller	Single/Dual Active 2GB
Cache Mem	256MB/512MB total/ BBU	Cache Mem	256MB/512MB total/ BBU
Host Interface	2/4 FC Switched and FC-AL	Host Interface	2/4 FC Switched and FC-AL
Drive Interface	2Gbps FC-AL	Drive Interface	2Gbps FC-AL
Support Drives	SATA - 250GB	Support Drives	FC - 36GB, 73GB, 147GB & 300GB SATA - 250GB & 400GB
RAID Levels	0, 1, 3, 5, 10	RAID Levels	0, 1, 3, 5, 10
Max Drives	112 SATA (with 7 DS400 EXP100 exp units)	Max Drives	56 FC (with 3 DS4000 EXP700 or EXP710 expansion units) 112 SATA (with 7 DS400 EXP100 exp units)

Additional Hardware: QLogic SANbox 1400 (Qty 1)	
Fabric Speed	2Gb/s, full-duplex, auto-negotiating for compatibility with existing 1-Gb devices
Point-to-Point Bandwidth	412 MB/s Full Duplex per port
Fabric Aggregate Bandwidth	Single chassis: Over 40 Gb/s (full duplex) end-to-end (Non-blocking architect)
Ports Per Chassis	(10) 2Gb / 1Gb ports

QLogic SANblade QLA210 (Qty 2)	
Speed	133-MHz, 32-bit PCI-X 1.0
Voltage	3.3 V bus supported
FC Speed	2-Gbps

Software – QLogic SANsurfer Express (Qty 1)	
Operating System Support	• Manage HBAs, switches and VDS compliant storage subsystems in Windows 2002; Linux Red Hat AS 3.0, 4.0; Linux SuSE 8, 9; Solaris 9, 10; Novell Netware 6.0, 6.5 from a Windows Server 2003 management console.
Hardware Support	• SANblade QLA2310, QLA2340/QLA2342L, QLA2344, QLA200, QLA210 • All QLogic SANbox Switches

IBM TotalStorage DS4000 Storage Manager	
Common Management Functions	<ul style="list-style-type: none"> • Storage partitioning – divide the physical disk capacity • Dynamic array expansion – add drives to an array • Dynamic volume expansion – expand the capacity of a logical drive • Dynamic RAID migration – change the RAID level of an array • System cache – system cached flush algorithm adjustment • Hot add – Automatic global drive sparing • Dynamic segment sizing – change the segment size • Logical drive cache – logical drive cache and read-ahead adjustment
Additional features	• FlashCopy – 4 per logical drive / 512 per system

