

An UltraScalable, ultra-flexible tape library for backup and archival solutions



3584 UltraScalable Tape Library

Highlights

Offers breakthroughs in capacity, performance, and reliability for midrange and network tape storage environments

Provides an UltraScalable solution to protect your technology investment

Increases configuration flexibility to meet a variety of requirements

Adheres to widely supported Linear Tape-Open (LTO**) design specifications**

IBM 3584 UltraScalable Tape Library—A flexible solution

In today's business environment, the number of clients and servers continues to grow almost exponentially. As new applications—such as data analysis and imaging—generate gigabytes of new data that must be stored online longer, you need a storage solution that can protect your resource investment as your business continues to grow.

From midrange systems to large-scale server-based operations, the IBM 3584 UltraScalable Tape Library can handle backup, archive, and disaster recovery data storage needs with ease. With data densities ranging from 1.8 TB to more than 3.48 TB per square foot, the IBM 3584 helps optimize the use of valuable floorspace.

By fully leveraging advanced Linear Tape-Open (LTO) technology, the IBM 3584 is

designed to cost-effectively handle your growing storage requirements.

Ultra-flexibility for a variety of uses

The IBM 3584 is flexible enough to meet your needs now and in the future. Start with an entry base frame and add an expansion frame as you need capacity. You can also choose a media/drive mix based on particular application needs—more drives and fewer media slots or more media slots and fewer drives. Each frame can contain up to 12 drives, with a maximum of 72 drives per library.

As a SCSI-attached tape solution, the IBM 3584 connects to fibre channel server adapters through selected IBM Storage Area Network Data Gateway products. Future plans include Fibre Channel-Arbitrated Loop (FC-AL) attachment. The proven multi-path architecture enables you to simultaneously attach a multitude of different server platforms, and create up to one logical library partition per drive.

Advanced features

The IBM 3584 has a variety of advanced technical features, including a 10-cartridge I/O station. The standard dual media picker has a barcode scanner for optical cartridge recognition. To help ensure data integrity, the library performs a fast auto-inventory any time it is opened. A touch-screen LCD panel enables convenient local review of library status and provides control over local functions. Lockable doors help ensure physical security. In addition, drives, fans, and



power supplies are hot-pluggable, field-replaceable units that enable easy and concurrent maintenance.

The IBM 3584 multi-path architecture is implemented on Controller Area Network (CAN) busses that use point-to-point or broadcast communications to the various components.

Software support

You can maximize the power of the IBM 3584 by managing it with industry-leading tape management solutions such as Tivoli** Storage Manager or other industry-recognized storage software. These solutions offer highly automated, centrally scheduled, policy-managed backup and archive facilities to protect data in distributed enterprises.

Why IBM LTO?

LTO is an open tape architecture developed by a consortium of three world-class

storage producers. Open means availability from multiple vendors. IBM means a new technology from a time-proven and innovative tape technology leader.

IBM Ultrium** drives share best-of-breed technology with advanced multi-track recording capabilities, magneto-resistive (MR) head and servo technologies, and high recording densities. Error correction code (ECC) function helps provide data integrity.

IBM also provides worldwide service and technical support when you invest in an IBM Ultrium solution—including a complete array of servers, software, printers, and storage devices.

Media

You can order media for the 3584 UltraScalable Tape Library via IBM Machine Type 3589 or from IBM Media, Supplies Distribution, and authorized

dealers. Call 1-888-IBM-Media (1-888-426-6334) toll-free in the United States and Canada.

For more information

For more information, contact your IBM representative or your IBM Business Partner. For updated attachment, supported operating system, media product, and storage management software information, visit www.ibm.com/storage/ltc.

IBM 3584 UltraScalable Tape Library at a glance

Model number	L32—base frame; D32—expansion frame
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Characteristics

Tape drive type	Ultrium
Number of frames	One base frame and up to five expansion frames
Number of drives	Up to 72: L32—1 to 12; D32—0 to 12
Number of tape cartridges	Up to 2481: L32—87 to 281; D32—396 to 440
Number of logical libraries	Up to 72: 1 per drive, 12 per frame; L32—1 to 12; D32—0 to 12
Capacity ^{1,2}	L32 (1-4 drives)—Up to 56.2 TB/frame compressed; 28.1 TB native D32 (0 drives)—Up to 88.0 TB/frame compressed; 44.0 TB native (496.2 TB compressed maximum, six-frame configuration)
Sustained drive data transfer rate ²	Up to 30 MB/sec compressed with LTO Ultrium tape drives; 15 MB/sec native
Aggregate sustained data rate ²	Up to 2.6 TB/hour with 24 drives (compressed)
Media type	IBM Ultrium
Data Cartridge	Part number 08L9120
Cleaning Cartridge	Part number 08L9124
Dimensions (L32 or D32)	70.9" H x 28.5" W x 59.8" D (1800 mm x 725 mm x 1520 mm)
Max. weight	L32—1236.0 lb (539.4 kg); D32—1161.9 lb (527.0 kg)
Warranty	One year; IBM Onsite Repair (IOR)

Operating environment

Temperature	16 to 32° C (60.8 to 89.6° F)
Relative humidity	20% to 80% (non-condensing)
Wet bulb maximum	23.0° C (73.4° F)
Electrical power	6 amps at 200-240 V AC; 1.2 kVA, 1.0 kilowatt nominal
Noise level	6.8 bels; 48 dBA operating

Attachment and systems support

The IBM 3584 features Ultra2/Wide SCSI LVD and Ultra/Wide SCSI HVD interfaces, attaching to IBM RS/6000*, IBM RS/6000 SP, IBM AS/400*, and IBM Netfinity* systems, and non-IBM servers, workstations, and personal computers.

Operating systems support

Native device driver support is available for AIX* V4.3.2 or 4.3.3; OS/400* V4R3 or V4R4; Windows NT** Version 4.0 with Service Pack 6.0; and Windows** 2000. Future support plans include Sun Solaris 2.6 or Solaris 7 and HP-UX Version 11.0.

¹ Capacity depends on the number of drives installed versus the number of tape cartridges used.
² Based on 2:1 compression.



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IBM Storage Subsystems Division
Removable Media Storage Solutions
9000 S. Rita Road
Tucson, AZ 85744

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