

9840 Tape Technology

The Standard in
High Performance
Tape Technology





StorageTek T9840 Tape Drive Family

Performance to Match the Demands of Data

In today's online environment, every second counts and every bit of data matters. Issues of speed, reliability, versatility, and cost are extremely important when managing access-critical applications. StorageTek 9840 Tape Drives are the proven drives to keep critical information in your control and at your fingertips.

Fast Access Design is Ideal for HSM Applications

Optical connectivity and dual-port design allow for all switch and hub topologies. Not only does this design make device sharing and high availability applications easy to implement, there's no need for extra hardware to do it.

Extreme Reliability

StorageTek 9840 tape drives can easily support numerous applications and platforms, while simplifying storage management. Duty cycle performance and optimum data integrity mean less downtime, fewer mechanical constraints, and reduced tape handling.

Controlling Data—Leveraging Investments

With today's tightening IT budgets, it's never been more important to protect your equipment. StorageTek is all about protecting the investments needed to be successful. Our broad compatibility and advanced Adaptive Media Technology (AMT) allow for convenient mixing of media and drives within libraries to improve control, balance performance, save space, reduce costs and manage the ever-growing amounts of information.

T9840B Technology

- Achieves 19 MB/s, the fastest transfer rates of any enterprise tape technology for optimum performance and time savings.
- 20 GB native (40–80 GB compressed) 9840 tape cartridge is designed for both the 9840 and T9840B drives.
- Unprecedented power allows it to do the work of multiple mid-range systems.
- World's first native 2 Gbit fibre channel interface. Directly attaches to SANs and hosts without the cost of additional adapters.
- Unprecedented durability and enterprise-strength reliability to perform more than 16 hours a day.
- Choice of Fibre, SCSI or ESCON interfaces provides attachment across all environments from mainframe to Unix and NT.

Timeline

1998



9840 technology introduced
10 MB/s native transfer rate
20 GB native capacity,
up to 80 GB compressed

2001



T9840B drive introduced
Increased native transfer rate to 19 MB/s while using the existing 9840 cartridge

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Fast,
Hardworking,
Reliable

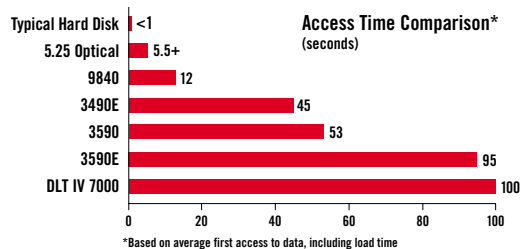
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Combining expertise in drive and media technologies

The collaborative efforts of StorageTek and Imation in the development of 9840 technology represent the integration of world-leading drive and media design. The combination of StorageTek drive and library expertise with proven Imation media and cartridge solutions have allowed 9840 technology to successfully deliver faster access to data and optimized throughput.

Speed

- Access times are decreased to 12 seconds due to the dual hub, mid-point load design. As soon as the cartridge is loaded into the drive and locked into position, the drive immediately engages into search mode eliminating any thread-up time.



- The tape rides on a cushion of air that virtually eliminates friction between the tape and guides, enabling the fastest search speeds of any tape storage system. Less friction also reduces the amount of debris generated, therefore minimizing data errors.

Performance

- 9840 is the only half-inch tape cartridge to contain a baseplate. This aluminum baseplate enhances cartridge stability and enables precise alignment between head and tape to ensure reliable data reading/writing.
- 9840 cartridges are designed to protect against damage due to impact such as when a cartridge is dropped. The dual reel is center parked, dividing the weight of the tape between the two reels. This means that each hub absorbs half of the force of impact—twice that of a single hub design. The cartridge shell also contains tiny plastic “crush pads” to absorb some of the impact if the tape is dropped.
- Common form factor fits most existing half-inch tape and automated libraries providing added protection for drive investments.

Reliability

- Advanced servo writing techniques enable 288 data tracks to be written across the half-inch wide tape. If the data track of 3480 tape was a forty-foot-wide highway, the 9840 data track would be a mere three-foot-wide sidewalk. The tape coating on the 9840 cartridge is so advanced that it allows greater amounts of information to be stored on smaller areas of tape, with increased reliability and data accuracy.

Reliable
Performance

High capacity plus

T9940 Technology

Designed for data-intensive storage applications such as archiving, backup and disaster recover, the 9940 system includes SCSI, ESCON and Fibre Channel connectivity. With the ability to coexist with other families of StorageTek drives, the 9940 system means optimum flexibility in managing multiple and existing applications. The proven performance of the 9840

access-centric platform led to the development of the 9940 capacity-centric system. The 9940 tape cartridge packs 60 GB (up to 240 GB compressed) capacity into a single-reel, familiar 3480 form factor. For those who value capacity plus performance, multiple connectivity options and a low cost of ownership, 9940 capacity-centric technology is the solution.



Imation 9840 Half-Inch Tape Cartridge

The future of enterprise data management is here

With today's ever increasing volumes of data, organizations large and small are facing the challenge of how to successfully manage the data that is so critical to success.

Revolutionary Technology Plus Manufacturing Expertise

The Imation 9840 tape cartridge features a completely internal tape path design, based on the proven 3480-based form factor and featuring cutting-edge technological developments. Drawing on nearly 50 years of Imation's expertise in half-inch tape manufacturing, the 9840 cartridge is in the enviable position of combining 'the best of the best' in leading edge innovations, including:

- Servo Writing Expertise – enables precise read/write performance for improved reliability. Imation developed the world's first servo written cartridge and continues to lead servo writing developments.
- Internal Tape Path – improves data integrity and access time by managing the tape movements completely within the cartridge. Precise tape gliding adjusts tape motion

without edge damage. Internal 18" tape path allows tape instabilities to be adjusted prior to reaching the drive head for read/write accuracy.

- Proprietary Backcoating – dissipates static and minimizes tape compression caused by wound-in debris.
- Unique Aluminum Baseplate – enhances cartridge stability and enables precision alignment between head and tape for precise data reading/writing.
- World Class Tooling and Manufacturing Processes – Imation's leading-edge injection molding group at our Wahpeton, North Dakota, manufacturing facility—an *Industry Week* 2001 "Best Plants" Award Winner—utilizes state-of-the-art molding software and systems to produce cartridge components, such as the ultra-flat surface precision tape spools found within the 9840 cartridge.



Fast Access

Hardworking

High capacity, fast access, added security

The 9840 VolSafe™ 20 GB Cartridge

Some companies need technology that delivers reliable, secure Write-Once-Read-Many (WORM) storage capabilities in a more robust way than optical. Imation delivers just such a solution. The 9840 VolSafe 20 GB Cartridge provides non-erasable, non-rewritable, cost-effective media for secure archival of critical data.

The 9840 VolSafe 20 GB Cartridge is compatible with existing tape libraries, providing the necessary flexibility for managing archived data. Designed to be used with 9840 drives, the 9840 VolSafe cartridge provides the high performance and rapid access times of 9840 technology with the added security of VolSafe.



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