For Immediate Release

For more information:
Corey Olfert
Fleishman-Hillard, Inc.
213-489-8253
olfertc@fleishman.com

LTO TECHNOLOGY PROGRAM REACHES SIGNIFICANT MILESTONES IN 2004

- *Over 900,000 drive shipments*
- *LTO Ultrium Generation 3 and LTO WORM Specifications now available*
- *Updated LTO Ultrium Roadmap through Generation 6*

SILICON VALLEY, CALIF. — (Feb. 2, 2005) — For the LTO Ultrium format, 2004 was one of the most notable years since Certance (now part of Quantum), HP and IBM – the three technology provider companies (TPCs) for the LTO (Linear Tape-Open) Program – released the first LTO format specification in 1998.

In 2004, the LTO Program released specifications for both the LTO Ultrium format generation 3 and LTO Write Once, Read Many (WORM) technology. Additionally, the LTO Program announced an updated technology roadmap for the LTO Ultrium format through generation 5 and 6.

Since September 2000, when LTO based products became commercially available, over 30 million tape cartridges and nearly 900,000 tape drives have shipped.

"The LTO Program established ambitious objectives in 2004 in releasing the LTO Ultrium 3 format, the LTO WORM specifications, and an updated LTO Ultrium roadmap through to generation 6," said Bob Wilson, vice president, Nearline Storage Division, HP. "As always, the customer is the big winner – a full line of compatible LTO generations from which to choose, multiple vendors and features available, LTO WORM, and a technology roadmap vision far into the future."

LTO Ultrium format generation 3

The LTO Ultrium format generation 3 doubles physical storage capacity over generation 2, increasing to 800 GB from 400 GB (assuming a 2:1 compression). Transfer rates in generation 3 improve to up to 160 MB per second (MB/s) from 80 MB/s in generation 2 (assuming a 2:1 compression). The LTO Ultrium format generation 3 drives also offer backwards-compatible read-and-write capability with the Ultrium format generation 2 cartridges and backward read capability with generation 1 cartridges, helping to protect the investment customers have made in LTO technology.

LTO WORM

The LTO Ultrium format generation 3 specification includes the ability for WORM enabled and non-WORM enabled drives to co-exist. The LTO Program implementation is designed to provide users with a very cost effective means of storing data in a non-rewriteable format.

Robust algorithms using the Cartridge Memory (CM), in conjunction with low level encoding that is mastered on the tape media at the time of manufacture, are designed to prevent tampering. In addition, appending data at the end of a WORM cartridge which was previously written to is supported, thus allowing customers to take full advantage of the high capacity tape media.

Updated LTO Ultrium Roadmap

LTO Ultrium Generation 5

The LTO Ultrium format generation 5 is planned to double physical storage capacity over generation 4, increasing to 3.2 TB compressed (assuming a 2:1 compression). Transfer rates in generation 5 are planned to improve up to 360 MB per second (MB/s) (assuming a 2:1 compression).

LTO Ultrium Generation 6

The LTO Ultrium format generation 6 is planned to double physical storage capacity over generation 5, increasing to 6.4 TB (assuming a 2:1 compression). Transfer rates in generation 6 are planned to improve up to 540 MB/s (assuming a 2:1 compression).

The complete roadmap can be found at

http://www.ultrium.com/newsite/html/format_roadmap.html.

How to License LTO Ultrium Technology

The LTO program offers several different license packages – from enhanced packages that provide the specifications and licenses to manufacture Ultrium products, to basic packages, providing Ultrium format specifications and guidelines for interchangeability.

Buyers seeking Ultrium format-compliant products should look for the Ultrium format compliance verification trademarks on both tape drives and data cartridges. Storage and media manufacturers interested in licensing LTO technology may obtain information by contacting the Law Offices of Ladas & Parry at (323) 934-2300, or by e-mail at LTO_INFO@ladasparry.com.

About Linear Tape-Open (LTO) Technology

LTO technology is a powerful, scaleable, adaptable open tape format created by technology providers Certance (now part of Quantum), HP, and IBM Corporation to help meet the growing demands of data protection in the midrange to enterprise-class server environments. This ultra-high capacity generation of

tape storage products is designed to deliver outstanding performance, capacity and reliability combining the advantages of linear multi-channel, bi-directional formats with enhancements in servo technology, data compression, track layout, and error correction.

The LTO Ultrium format has a well-defined roadmap for growth and scalability. The roadmap represents intentions and goals only. There is no guarantee that these goals will be achieved. Independent compliance verification is vital to meet the free-interchange objectives that are at the core of the LTO Program. Ultrium tape mechanism and tape cartridge interchange specifications are available on a licensee basis. For additional information on LTO technology, visit the LTO Program Web site at www.ultrium.com.

Note: Linear Tape-Open, LTO, the LTO logo, Ultrium, and the Ultrium logo are trademarks of Certance (now part of Quantum), HP and IBM in the US and other countries.

###