LTO® Program Announces Price Per Gigabyte Now Less Than One Penny

March 9, 2015

Cost Now at 0.8 Cents Per Gigabyte, $9 Per Terabyte When Using LTO-6 media

**LTO® Program Further Extends Product Roadmap Through Generation 10**

**THE LTO PROGRAM ANNOUNCES UPCOMING GENERATION 7 SPECIFICATIONS FOR LICENSING**

**THE LTO PROGRAM ANNOUNCES UPCOMING GENERATION 8 SPECIFICATIONS FOR LICENSING**

**THE LTO PROGRAM ANNOUNCES UPCOMING GENERATION 9 SPECIFICATIONS FOR LICENSING**

**THE LTO PROGRAM ANNOUNCES UPCOMING GENERATION 10 SPECIFICATIONS FOR LICENSING**

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About Linear Tape-Open (LTO)

The LTO Ultrium format is a powerful, scalable, adaptable open tape format developed and continuously enhanced by technology providers HP, IBM Corporation and Quantum Corporation (and their predecessors) to help address 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 and is subject to change or withdrawal. There is no guarantee that these goals will be achieved. The roadmap is intended to outline a general direction of technology and should not be relied upon in making a purchasing decision. Format compliance verification is vital to meet the free-interchange objectives that are at the core of the LTO Program. LTO tape mechanism and tape cartridge interchange specifications are available on a licensed basis. For additional information on the LTO Program, visit www.lto.org/trustlto and the LTO Program Web site at www.lto.org.

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**How to License LTO Ultrium Technology**

The LTO Program has historically offered several different license packages – from enhanced packages that provide the specifications and licenses to manufacture LTO Ultrium products, to basic packages providing LTO format specifications. Buyers seeking LTO Ultrium format-compliant products should look for the LTO Ultrium format compliance verification trademarks on both tape drives and data cartridges. Storage and media manufacturers interested in licensing LTO formats may obtain information by contacting the LTO Program at www.lto.org/contact-us/.

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**LTO-6 drives**

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**Note:** Linear Tape-Open, LTO, the LTO logo, Ultrium, and the Ultrium logo are trademarks of HP, IBM and Quantum in the US and other countries.

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**Linear Tape-Open (LTO)**

LTO Valley, CALIF. (March 9, 2015) — The LTO Program announced today that LTO Generation 6 tape has reached another cost-per-gigabyte milestone of below a cent. Today, LTO Ultrium tape can be as low as 0.8 cents per gigabyte and $9 per terabyte based on the current market price of tape media.

"As the price per gigabyte for tape storage continues to drop, LTO plays an increasingly vital role in the datacenter for a range of unique datasets and stages in the data lifecycle," said Rob Clark, Senior Vice President, Quantum Corporation. "LTO allows organizations to keep more data for longer periods of time by storing the right data at the right time on the most cost-effective storage tier."

When factors such as equipment, media, maintenance, energy costs and floor space are taken into account, LTO tape storage technology continues to be the most cost-effective and energy-efficient solution for data storage management worldwide. The Clipper Group found that the average disk-based solution costs 26 times the total cost of ownership for an average tape-based solution.

"The cost of energy alone for the average disk-based solution excels the entire total cost of ownership for the average tape-based solution," said David Reine, senior analyst with The Clipper Group. "Tape, with a more than 60-year history of success in the data center, has evolved to a point where it can be the solution of choice for the preservation of data in every data center. Tape is an obvious solution, so why not use it?"

The current generation of LTO technology – LTO generation 6 – supports tape cartridge storage compressed capacity of up to 6.25TB** – more than twice the compressed capacity over the previous generation, and tape drive data transfer rates of up to 400MB** per second for over 1.4 terabytes of storage performance an hour per drive. As with previous generations, LTO-6 drives provide backward compatibility with the ability to read and write LTO generation 5 cartridges and read LTO generation 4 cartridges, helping to preserve media investments and ease implementation.

Last fall, the LTO Program announced the extension of the LTO product roadmap through generation 10. The extended roadmap now includes generations 9 and 10. The new generation guidelines call for compressed capacities of 62.5 TB for generation 9 and 120 TB for generation 10**.

The LTO Program will be providing further insight into LTO technology and roadmap plans for a broad range of data management attendees at NAS (Las Vegas) in April, BIC (Amsterdam) and AIP (Amsterdam) in September, Storage Decisions (New York) and Supercomputing (Austin) in November, and-Ox Expo (Washington, D.C.) in December. Find conference dates and other information at www.lto.org. Learn more about LTO technology, LTFS, exciting user stories and a variety of compelling storage white papers at www.tbo.org/trustlto.

Follow The LTO Program on Twitter (@TheLTOProgram) and follow us on LinkedIn at https://www.linkedin.com/company/theltoprogram. You can also visit The LTO Program Blogbytes blog page at https://www.staging10.lto.org/2015/03/welcome-to-the-lto-programs-blogbytes/.

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**Assuming LTO-6 cartridge price of $50.50 based on a pricing survey of more than two dozen websites offering LTO-6 cartridges and assuming compressed capacity of a single cartridge. Actual prices may vary. Survey is extended roadmap.**

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**Assuming a 2.5:1 compression achieved with larger compression history buffer available beginning with LTO generation 6 drives.**

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