GST Delivers 1.3TB SAIT-1 Drives

Highlights:

- Capacity: SAIT-1 is 500GB native (1.3TB compressed)
- Speed: SAIT-1 is 108GB/hour native (281GB/hour compressed)
- Tamperproof WORM technology for storage compliance
- Roadmap to SAIT-2, SAIT-3, and SAIT-4
- LCD display panel improves backup efficiency
- Mirrored Backup Protection: strengthens disaster recovery
- Backup Consolidation: supports many servers
- Single and dual drives and midrange libraries
- Supports LVD, HVD, and FC connections
- Reliability: 500,000 hour MTBF

January 13, 2004 (Lake Forest, California) — GST, Inc., manufacturer of innovative storage solutions, launched tape backup solutions with first generation Super-AIT (SAIT-1) tape technology that offers the highest tape cartridge speeds and capacities to fulfill large backup/archive requirements in the smallest backup window. Blinding speed (108GB/hour native, 281GB/hour compressed) backs up a terabyte in 3.6 hours. SAIT is the newest and most robust tape technology, from Sony Electronics, storing 1.3TB per cartridge, with a roadmap out to 2010, including for the first time WORM (write once read many) tamperproof technology, and a reliability rating of 500,000 MTBF (mean time between failure).

"These single drive, dual drive and midrange library backup solutions bring real high-powered performance to installations straining to get their backups completed in time, yet we price at levels that make them highly affordable," reported David Breisacher, CEO/Chairman of GST. "Our single-drive solution scales to our dual-drive mirrored subsystem, while our midrange library targets larger-capacity shops."

PRODUCT FAMILIES
GST's SAIT-1 product for three of its families is shown below. Single-drive external tape subsystems backup 1.3TB, starting at $11,950 (USD). Dual drive units with double the capacity start at $28,400. GST's GrowthDR™ family of Midrange Libraries with SAIT-1 can backup 57TB, starting at $26,050. Each drive has the option to include WORM technology to ensure against data alterations or deletions to help meet new records-storage compliance regulations coming in 2004. The Adaptive Lossless Data Compression (ALDC) algorithm permits a superior compression ratio of 2.6 to 1 (normal is 2 to 1).

sAIT Family Overview					
Family	**Drives**	**Slots**	**Capacity**	**Speed**	**Price Range**
EntryDR™ Single Drive	1	1	1.3 TB	280 GB/hr	$11,950 - $16,500
SafeDR™ Dual Drive	2	2	1.3 - 2.6 TB	280 GB/hr	$28,400 - $31,300
GrowthDR™ Midrange Library	1-2	44	29 - 57 TB	280 GB/hr	$26,050 - $52,950

Superior compression results in a sustained transfer rate of 280GB/hour (78MB/sec), the fastest tape transfer rate available -- the result of a 72MB buffer, a linear recording density of 155,000 BPI, and a 5,000 RPM recording drum rotation speed.

TECHNOLOGY

Sony developed the SAIT-1 technology as part of a far-reaching roadmap that extends out four generations to SAIT-4 in 2010 with a 10.4TB cartridge capacity and 2.2TB/hour backup rate. SAIT is a newer technology just beginning its useful life. It utilizes many of the developments in Sony's AIT (Advanced Intelligent Tape) family, but takes advantage of larger data capacities inherent in half-inch cartridges with helical scan technology for data recording.

The new SAIT-1 tape drives and backup media provide users with a sophisticated and space-conscious storage solution in a compact 5.25-inch form factor. The SAIT-1 cartridge uses a single reel, half-inch cartridge and Sony's Advanced Metal Evaporated (AME) media which combines high capacity with high durability.

SAIT-1 cartridges incorporate a chip with Sony's Remote-sensing Memory-in-Cassette (R-MIC) media interface system. The new SAIT-1 media with R-MIC enables the drive to access key parameters quickly, improving media management and enabling WORM technology.

GST VALUE-ADDED FEATURES

GST has incorporated several unique features that extend the value of its new SAIT-1 tape solutions:

- **iSeries Connectivity** – Connection to the IBM iSeries server family is direct, enabled by the connectivity furnished in the GST Commander tape controller within all its tape solutions.

- **Mirrored Backup Protection** – The dual-drive tape subsystem with SAIT-1 provides what GST calls **Server-Transparent Media Duplication** (STMD)™ that delivers identical sets of backup tapes with no server penalty. These provide one set for off-site storage for disaster recovery and another on-site set for faster restores. Mirrored backup strengthens backup, restore and DR readiness.

- **Backup Consolidation** – GST's midrange tape libraries in its GrowthDR™ Family with capacity of up to 57TB and speeds of 280GB/hour can be partitioned using GST's **Virtual Library Partitioning** to allow backing up multiple servers with one 44-cartridge library.

- **Investment Protection Features** – Scalability from initial investment is achieved by adding drives, doubling cartridge capacity, adding functionality and upgrading tape technologies. This protects user investments in originally-installed GST units.

- **Real-time Operator Interface** – GST's patented LCD Module display includes: backup rates, capacity saved, ready status, load and unload operations, read and write activity, and drive diagnostics. An RS232 interface permits downloading

diagnostics to IT support organizations; designed for a distributed computing environment with untrained operators.

- **Broad Connectivity** – Attach to a wide variety of servers and support LVD (low voltage differential) and HVD (high voltage differential) SCSI connections, as well as Fibre Channel. Operating system support includes OS/400, IBM's AIX, Sun Solaris, HP-UX, Linux, Windows, NT.

RELIABILITY

The SAIT-1 drive's reliability specifications are unsurpassed, with a Mean Time Between Failure (MTBF) of a record-breaking 500,000 hours measured at a continuous (100%) duty-cycle. SAIT-1 delivers 50,000 head-to-tape contact hours and 30,000 end-to-end tape passes. Rated shelf life of cartridges stored under manufacturer's conditions is 30 years. ECC error correction results in an error rate of less than 10^{-17} bits (one in ten quadrillion bits).

SUPPORT/WARRANTY

A variety of support programs provide installation and onsite service. GST's Accelerated Ship Program (GASP) permits rapid cross-shipment of replacement units. GASP is included at no extra cost for GST's manufacturer warranty period of three years. Extended coverage is available. Full service and support plans are available for all products from day one.

AVAILABILITY

All GST SAIT-1 tape products announced are available immediately.

MORE INFORMATION

For more information about GST's SAIT-1 products, see the company's web site: http://www.gstinc.com, send inquiry to info@gstinc.com, call 1-949-900-1090 or fax 1-949-900-1097.

OFFICES

GST maintains corporate offices in the Spectrum Centre Business Park, one of Southern California's premier high-tech business centers with excellent access to the Santa Ana (I-5), San Diego (I-405) Freeways, Amtrak and John Wayne Airport. Lake Forest is adjacent to Irvine in the Greater Los Angeles Area.

About GST, Inc.

GST Inc. engineers, manufactures, markets and sells a line of innovative storage products to meet the need for high-performance, continuous reliability and cost-effective data storage for a wide variety of servers. GST's products range from single and dual tape subsystems, autoloaders and midrange tape libraries, to modular enterprise-wide libraries. Technologies supported include AIT, DAT72, LTO, SAIT, SDLT and SLR. Complete information about the company, its products and support can be found at the company's web site: http://www.gstinc.com.

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Editor Links

Microsoft Word Format

√   Press release in MS-Word - http://www.gstinc.com/news/press/files/sAIT.doc

Family pictures:

√   EntryDR^{TM} Single sAIT tape subsystem - http://www.gstinc.com/images/200.jpg

√   SafeDR^{TM} Dual sAIT tape subsystem - http://www.gstinc.com/images/202.jpg

√   GrowthDR^{TM} Midrange sAIT tape library - http://www.gstinc.com/images/97.jpg

Technology Links

√   sAIT Presentation - http://www.gstinc.com/resources/file/sAIT_Presentation.pdf

√   sAIT Roadmap - http://www.gstinc.com/resources/file/sAIT_Roadmap.pdf

√   sAIT vs. LTO and sDLT - http://www.gstinc.com/resources/file/sait-1-comparison-2003.pdf