

Advanced Intelligent Tape™

WORM: A New Dimension to the AIT Format

Market Trends & Requirements

- **Trends:**
 - Storage capacity is increasing each year
 - Accidental deletion is the #2 cause of data loss
 - Data retention schedules are increasing
 - Secure data requirements increasing
- **Requirement:**
 - Need for Low Cost, High Capacity, Non-Editable Media

WORM Solutions & Trends

- **Optical WORM Solutions**
 - 5.25" Magneto Optical (MO)
 - 12" Magneto Optical (MO)
 - CD-ROM, CD-R, DVD-R
- **Optical WORM Trends**
 - High price per GB, low capacity, and slow transfer rates
 - Highly durable media
 - Large form-factor (5.25" & 12") market in decline
- **Tape WORM Solutions**
 - StorageTek - Redwood & 9840
- **Tape WORM Trends**
 - Traditionally high price per GB

AIT WORM - Fills The Void

- **AIT WORM is the ideal alternative**
 - Higher capacity points
 - Up to 100GB native on a single 8mm cartridge
 - Lower media price per GB
 - Lower hardware price per GB
 - Ability to compress to further reduce increase capacity and price per GB
 - Proven library integration track record
 - Established Roadmap to AIT-6



AIT-2 WORM Specifications

Capacity:	50GB Native 130GB Compressed (2.6:1)
Media:	230m AME
Sustained Transfer rate:	6MB/s Native 15.6MB/s Compressed (2.6:1)
MTBF:	300,000 hours at 100% duty cycle
Buffer size:	10MB
Power Consumption:	12 watts (typical)
Interface:	Ultra Wide SCSI LVD/SE
Firmware:	Special WORM-enabled firmware to recognize WORM media *
Media Compatibility:	AIT-2 WORM Media Standard AIT-1 and AIT-2 Media **
Compliance:	SEC Regulation 17 CFR 240.17a-4

* Drives without the WORM firmware will automatically reject WORM media.

** Write Once Read Many functionality only applicable when using WORM media.

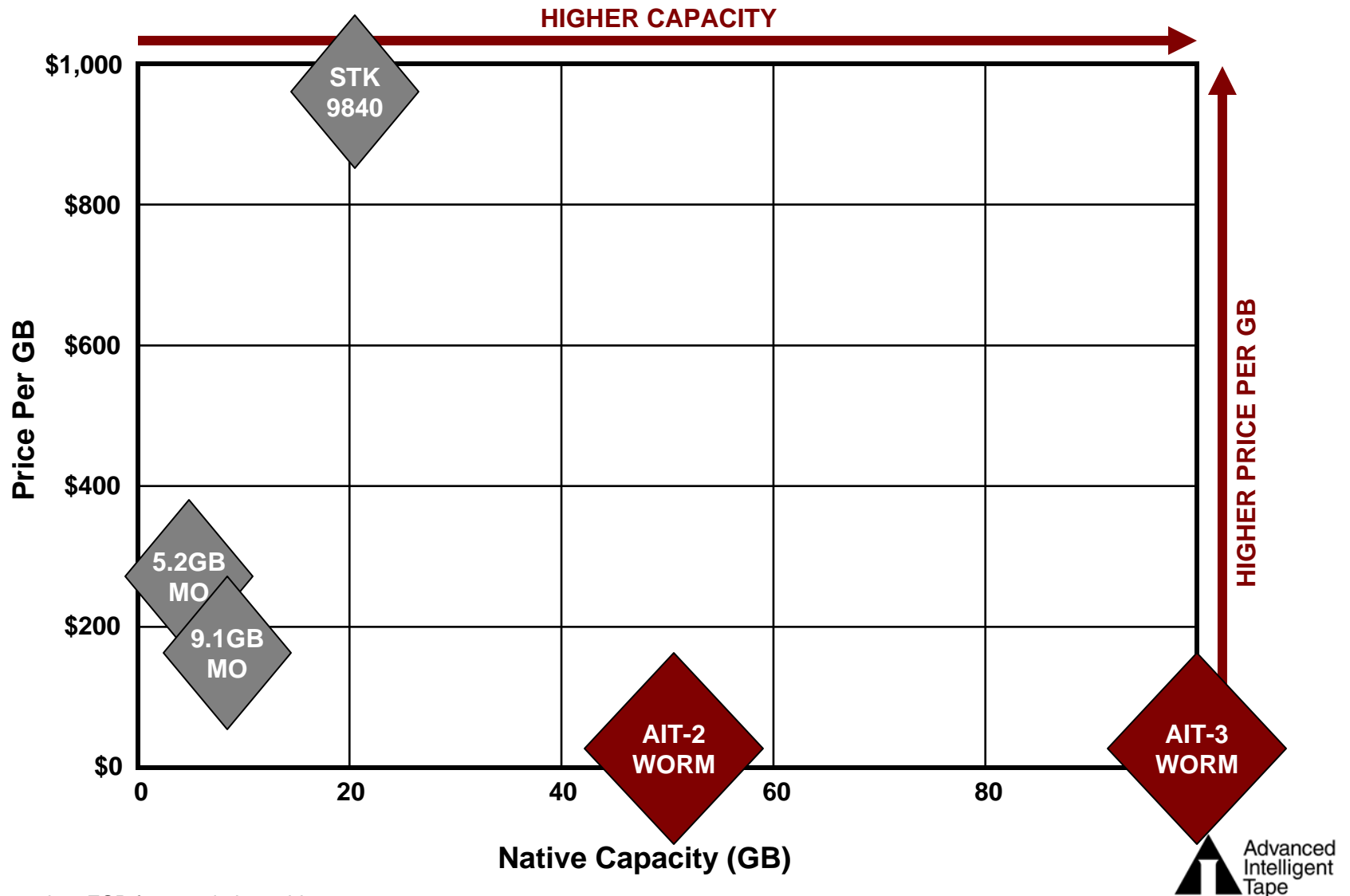
AIT-3 WORM Specifications

Capacity:	100GB Native 260GB Compressed (2.6:1)
Media:	230m AME
Sustained Transfer rate:	12MB/s Native 32.2MB/s Compressed (2.6:1)
MTBF:	400,000 hours at 100% duty cycle
Buffer size:	18MB
Power Consumption:	18 watts (typical)
Interface:	Ultra160 Wide SCSI LVD/SE
Firmware:	Special WORM-enabled firmware to recognize WORM media *
Media Compatibility:	AIT-2 and AIT-3 WORM Media Standard AIT-1, AIT-2, and AIT-3 Media **
Compliance:	SEC Regulation 17 CFR 240.17a-4

* Drives without the WORM firmware will automatically reject WORM media.

** Write Once Read Many functionality only applicable when using WORM media.

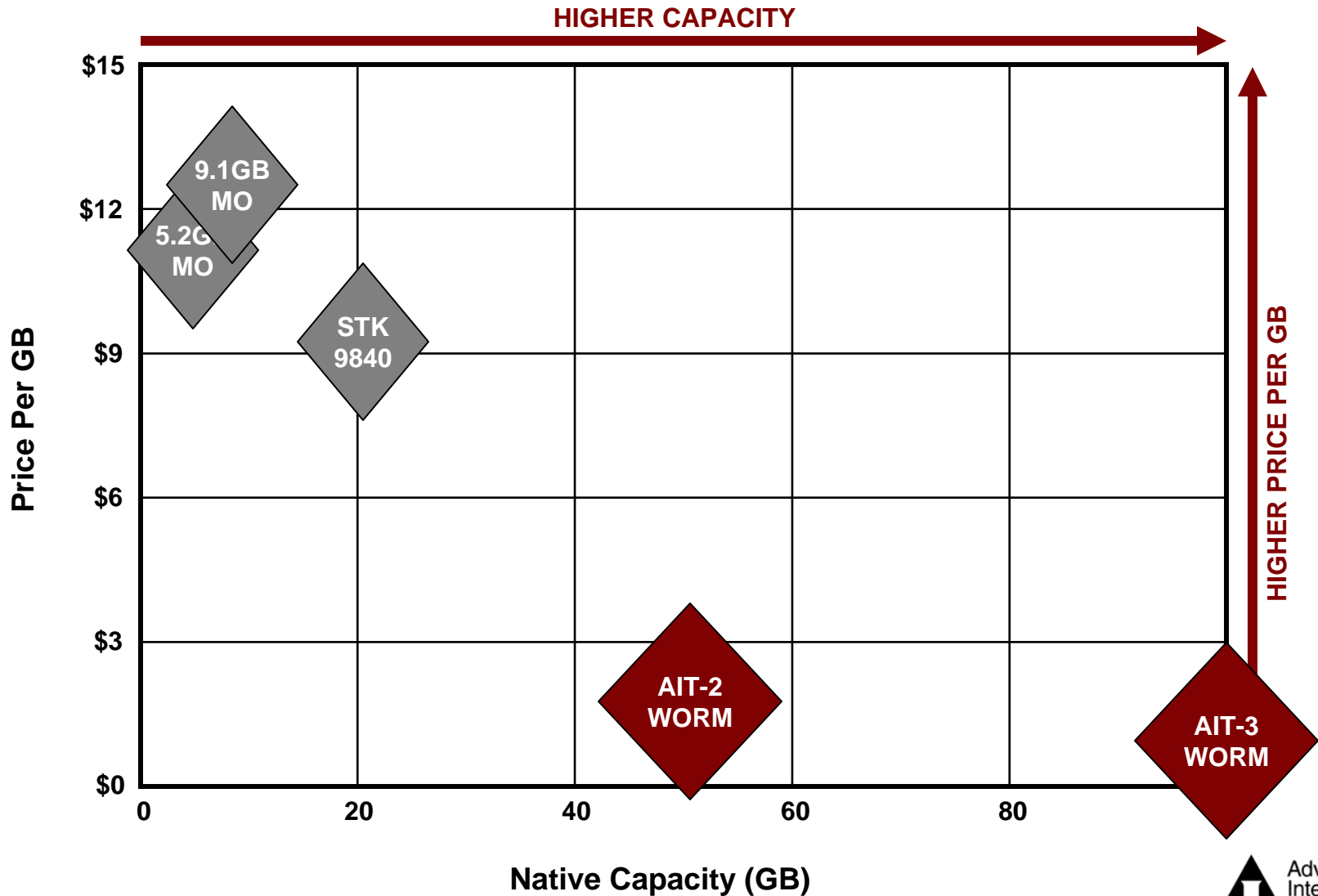
Cost Per GB: Drives



Pricing based on ESP for stand alone drives.



Cost Per GB: Media



Long-Term Storage Market

- **Data Retention Rates**
 - Getting longer and longer
 - Imposed by corporate policies
 - Some government regulations now being imposed
 - May 30, 2002, the European Parliament voted on a Directive allowing Member States to adopt laws authorizing data retention
 - United States Federal Laws

U.S. Records Retention Schedule

Accounting Ledgers and Schedules	7 years
Canceled Checks	7 years
Correspondence, General	3 years
Correspondence, Legal	Permanently
Deeds, Mortgages, and Bills of Sale	Permanently
Employee Personnel Records (after termination)	3 years
Employee Federal Tax Records	4 years
Employee Injury and Illness Records	5 years
Financial Statements (end-of-year)	Permanently
Insurance Policies (expired)	3 years
Inventories (products, materials, supplies, etc.)	7 years
Invoices (to customers and from vendors)	7 years
Payroll Records	7 years
Property Appraisals (by outside appraisers)	Permanently
Tax Returns	Permanently

Source: VSCPA

Summary

- **AIT WORM represents a large opportunity due to increasing data storage needs & increasing retention schedules**
- **AIT is poised to lead the way in the secure data storage market**
 - Low cost per GB
 - Small form factor
 - Low power consumption
 - Successful library integration history
 - Established channel support

Quote

“We expect a 10 times higher capacity per footprint compared to optical disk technology with less than half the cost.”

...Herbert Grau, CEO of GRAU Data Storage.

Thank You

Questions?