



# Future Trends in SSD Data Recovery

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- Current and projected global production
  - HDD
  
- SSD & NAND flash market growth
  - Smart Phones & Tablets
  - Solid State Drives
    - Pro notebooks Ultra books, Apple Mac Books
    - mSATA and other form factors
  - SSD Cache
  - Hybrid
  - Enterprise Applications
    - PCIe and Tiered Storage Environments



- Any and all storage devices can fail
  - It's not a question of if, but when
    - The reality of reliability
- What to do if you experience a device failure
  - Stop and evaluate
  - Manufacturer provided tools
- What are your options for data recovery?
  - Consumer software
  - Professional data recovery service



- Proprietary Technologies
  - SSD Controllers and “special sauce”
    - Security, reliability and performance IP
  
- Encryption
  - Controller based
  - Enterprise software deployments
    - Issues surrounding data recovery of software encrypted volumes on failed SSDs
  
- TRIM & Garbage collection
  - Is deleted or stale data recoverable?



- R&D
  - Continuous challenges with new devices
  - Increasing cost per solution in the lab
    - More device specific tools required
- Data Security and IP protections
  - Required for compliance and security partners
  - Retain trust in an ever compromised data world
- Strategic Industry Alliances
  - Trusted partnerships with leading OEMs
  - F/A and dev engineering teams



- Backup your SSD and all storage devices
  - Data loss is preventable!
    - Reliability better than ever, but when you least expect it...
- Data can be recovered from SSD!
  - Consumer software options may be limited!
    - As market grows so will the tools available
  - If it is critical, contact a professional DR lab
- Data Recovery Providers
  - More engineering, security and R&D costs
  - But need to keep costs affordable for customers



Thank You!

