DNA Data Storage Product Update

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Atlas Data Storage

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- Spun out of Twist Bioscience May 2025 with 25 engineers and $155M in funding
- Located in South San Francisco
- Currently, 50 employees
- Developing large-scale DNA synthesis and sequencing tech for data storage apps

Workflow utilizes available technologies

How long does it take?

How does it work in practice?

- Send encrypted data to Atlas
- Receive one or more capsules of your data stored as DNA along with boot record and meta data stored as DNA

How do you recover your data?

1. **Send capsule back to Atlas** for processing with the option to produce one or more copies in addition to the digital data

2. **Process it yourself** with a desktop sequencer to produce the sequencing data and then run an open-source script to process the data and return the digital data

3. **Send the capsule to a certified sequencing center** to produce the sequencing data and then run an open-source script to process the data and return the digital data

Developing a specification that will lead to a standard

- DNA Data Storage Alliance formed in 2020
- Joined SNIA (Storage Network Industry Association) in 2022
- SNIA Is a not-for-profit organization that develops international standards and specifications for the storage industry
- Current documents
  - Presentations
  - White papers
  - Specifications
    - DNA Stability Evaluation Method for DNA Data Storage Containment Systems v1.0
    - DNA Data Storage Sector Zero (storing basic vendor and CODEC information)
    - DNA Data Storage Sector One (storing archive metadata)

Where are we at with development?

- Starting to define applications with customers
- Working on small end-to-end POCs
- Expect to scale to TB data sets of the end of the year

Summary

- Long lifetime
- Easily copied and stored
- Its universal format makes it easy to read with DNA sequencers

LTO form factor

Thank you!