

LOTIS LLM

Sustainable Computing Infrastructure for the Future of Information

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***Creating a world where universal intelligence is weightless, instantaneous,
and accessible on any device, anywhere- decoupled from environmental
collapse***



The True Cost of AI: Energy, Infrastructure, and Environmental Burden

Unless a new computing platform is developed, **current AI will consume the world's resources at a staggering rate.**

Sovereign Data Crunch

- Data / cloud **storage costs increasing 25%+ YoY** due to AI expansion
- Pain-point for State, Federal and International Governments
- **Crippling for developing nations digitizing their infrastructure**

AI's Energy Crisis & Environmental Fallout

- **By 2030, AI will consume 21% of global energy**
- **Power demand is doubling every 100 days**
- **Data Centers are overloading the electric grid causing consumer prices to skyrocket**
- **Noise, heat, and pollution becoming political flashpoints**

LOTIS Compression System

→ Key Benchmarks

- **99.4% compression** ratio
- **100% lossless data** on decompression
- A **28MB** English dictionary **compressed to 156KB** with **'bit for bit' accurate** decompression

→ Current Bottlenecks

- **vRAM, GPUs, & storage drives** - limiting hardware for data infrastructure scaling creating a **worldwide shortage**
- **90%** of the **energy spent training a large AI** model is consumed by the **movement of data**

→ Pivotal Gains

- **Data centers shrink**
FOOTBALL FIELDS → small rooms
- Major **increase in data transfer speeds & bandwidth (166x faster)**-internet, telecoms, streaming services, etc
- **Devices hold terabytes** of information **on existing drives**

LOTIS LM: A Paradigm Shift in Scalable, Sustainable Compute

Comparison: Hyper vs. Hypo

Feature	Hyperscaler (e.g., AWS)	Hyposcaler (e.g., LOTIS LM)
Scaling Mechanism	Horizontal (More Servers)	Vertical (Better Density)
Primary Cost	Electricity & Real Estate	Intellectual Property & R&D
Hardware	Custom GPUs/TPUs	Consumer-grade CPUs
Data Strategy	Centralized / Global	Decentralized / Sovereign
Indexing	"Searchable Bloat" (Elastic)	Instant / Zero-Bloat



LOTIS Compression IP

Embedded within the LOTIS IP is the **LOTIS Compression System**, our stand alone proprietary algorithmic general compression software, that achieves record breaking results.

LOTIS vs. Industry

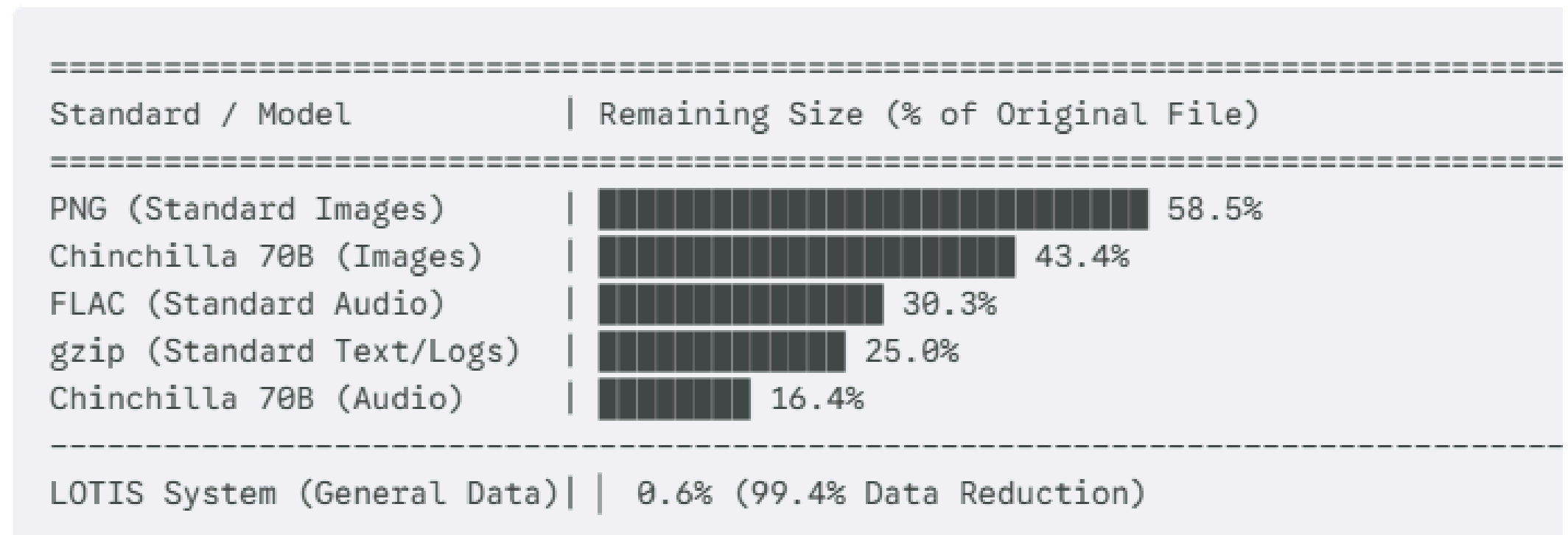
- **Current Standard for lossless general data compression is ~60%.**
- Our **99.4% compression (166:1 ratio) beats all current methods**

Hutter Prize

- **Data compression → AGI**
- **Marcus Hutter, (Sr. Google DeepMind Researcher), initiated Prize for lossless data compression record**
- Our **initial results confirm we have shattered all records.**

Data Compression Efficiency Comparison

Remaining File Size After Lossless Compression (Lower is Better)





LOTIS Compression System (CaaS): Use cases and theoretical applications

Compression as a Service (CaaS) software generates **over \$3B / year in revenue ~8% annually growth**. However, data compression at our rate leads to **numerous vertical and horizontal applications...**

Data Centers & RAM

- **90-99% reduction in data centers'** physical footprint and energy consumption
- **99.4% increase in vRAM efficiency** eliminating RAM shortage
- **Travelers** data / cloud storage spend **~\$450 million per year → \$3m**

Quantum R&D

- **Post-Quantum Integration (PQI):** secures cold archives against future decryptors.
- **Absolute Zero-Entropy Loss:** ensures **zero-integrity trade-offs** in critical repositories.

Healthcare

- **30% of all data** globally
- Whole genome sequence **(WGS) shrinks to ~1 GBe**
- **YNHH** data storage spend **\$20 - \$40 million / year → \$250k**

Telecoms

- **5G networks** increase capacity by **5,000%**.
- Existing hardware / infrastructure handles growth for decades
- Consumer data **1 GB <\$.01**



LOTIS IP Defense Strategy

Open-source our **patent-pending software-** best balance of altruism, notoriety, and profit

- **AGPLv3 (Open Source Copyleft)**
 - Ensures software remains free and open
 - Any derivative work must also be licensed under the AGPLv3 and made public.
- **Commercial License**
 - License fee includes an SLA.
 - Allows licensee to build proprietary (closed-source) products

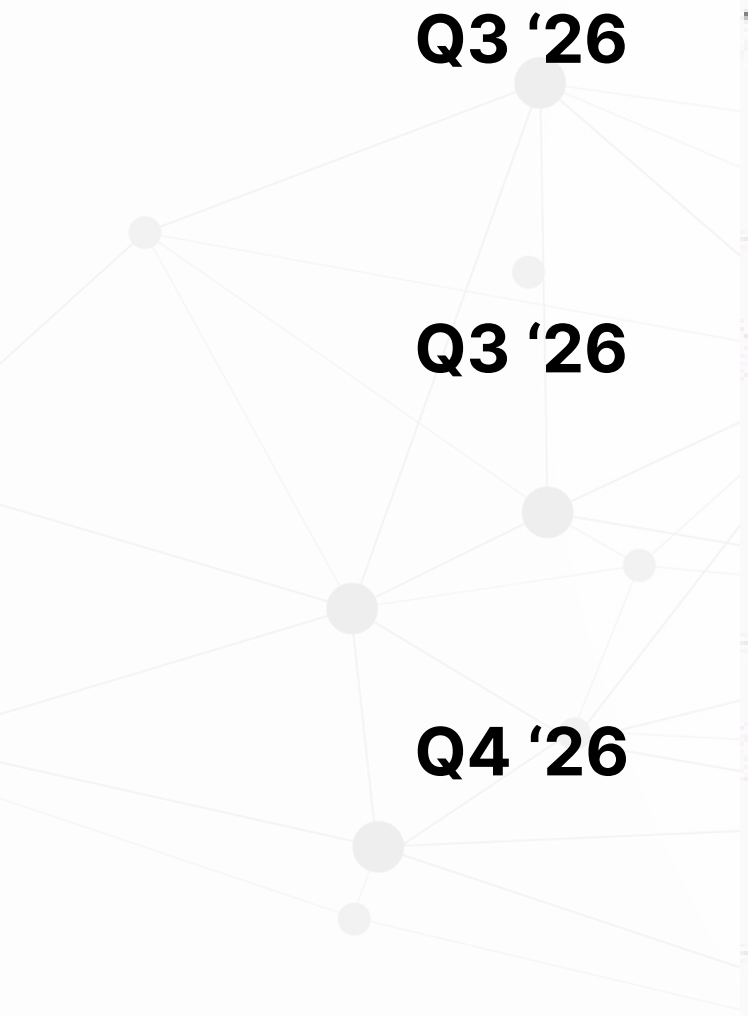
2024 Top 5 IP Awards & Storage Relation

Case	Award	Storage Technology?
General Access Solutions v. Verizon	\$847M	No (Wireless/5G Connectivity)
Kove IO v. Amazon (AWS)	\$525M	Yes (Cloud/Distributed Storage)
Netlist v. Micron Technology	\$445M	Yes (High-Bandwidth Memory/DRAM)
SPEX Technologies v. Western Digital	\$316M	Yes (Data Encryption for Storage)
MR Technologies v. Western Digital	\$262M	Yes (Hard Disk Drive Density)

Validation & Milestones

Strategic Roadmap for the "Sovereign Hyposcale" PoC

Phase	Milestone	Strategic Objective	
Q3 '26	Validation	Hutter Prize Win	Establish the "Hyposcale Efficiency Standard" as a world record.
Q3 '26	Deployment	Oracle SPARC Pilot	Prove that "Hyposcale" outperforms "Hyperscale" on existing high-end hardware.
Q4 '26	Expansion	Ghana/Namibia Nodes	Launch the first "Sovereign Data Regions" powered by hyposcale density.
Q1 '27+	Standardization	SBIR Phase II	Codify "Hyposcale" as the official procurement category for low-bandwidth federal data.



‘What is the impact on humanity with the achievement of a 99.4% lossless compression ratio of general data?’

***‘What is
the
impact on
your
industry?’***



***Pilot
with us
TODAY!***



VIDEO DEMO