Freeman Constructs, Inc.

Tenfold AI Accelerator

Pure-Integer Architecture | 3-5nm ASIC in 2026

Aaron Freeman, Founder
aaron@freemanconstructs.com
(316) 305-5412

Breakthrough Summary

- **8.3x better power/performance/area (PPA)** than BF16 on Nangate45 ASIC flow
- **2.25x better PPA** on AMD Versal V80 FPGA post-P&R
- **Zero detectable accuracy loss** on Pythia-1B and Pythia-12B training traces

Tenfold is the first pure-integer AI accelerator that matches floating-point accuracy while scaling far beyond it in power, area, performance, and cost.

Business Impact

(30 percent AI load, $0.075 per kWh)

AI compute demand is driving the largest infrastructure expansion in cloud history. Hyperscaler AI capex is now 300 to 400 billion dollars annually, and accelerator hardware is projected to reach 300 to 400 billion dollars by 2030. Datacenter AI power demand is expected to grow 165 percent from 2024 to 2030, with more than 60 large AI campuses planned above 500 megawatts.

Customer Value: 1 GW AI Datacenter Example

- Current annual AI energy cost: about **197 million dollars**
- With Tenfold deployed: about **20 to 40 million dollars**
- Annual savings per site: approximately **157-177 million dollars**

Industry-wide savings potential exceeds **10 billion dollars per year**.

Business Model

Freeman Constructs is commercializing Tenfold as:

- Accelerator hardware priced in the five to thirty thousand dollar range
- Rack-scale systems for datacenter deployment
- Cloud-hosted training and inference capacity for enterprise and research customers
- Target margins of 55 to 70 percent at scale

Positioned as a clear alternative to GPU-based clusters.

Seed Raise

Target: 15 to 25 million dollars to accelerate ASIC execution

- Advanced-node feasibility at 3 to 5 nm, including physical design, scaling, timing, and power analysis
- Architecture and RTL development, stack integration, and preparation for a targeted test chip
- Early engagement with hyperscalers and national labs, supported by the initial silicon team

Full technical documentation is available under NDA.