

POET Technologies

AI Datacom Hardware • NASDAQ: POET

Prepared By: Mr.SPY

Latest Info

POET secures record \$75M deal to boost AI photonics and optical tech.
\$75M investment propels POET's AI hardware and photonics expansion.
POET's biggest funding fuels R&D, AI optics, and global market growth.
Historic \$75M boost powers POET's AI optical interconnect ambitions.
Investor confidence surges as POET raises \$75M for AI-driven growth.

Executive Snapshot

AI-Ready Patents Manufacturing **Partners**

POET builds optical interposers and optical engines that replace legacy photonics assembly with wafer-level, high-volume semiconductor-style manufacturing. Target markets: AI clusters, data centers, telecom.

Technology (Layman's Terms)

Short explainer for non-technical readers: POET makes tiny chips that use light instead of copper to move huge amounts of data much faster and with less heat.

- **Optical Interposer** — combines lasers, waveguides and electronics on one chip.
- **Wafer-level assembly** — builds hundreds of units at once, lowering cost and improving yield.
- **Speeds** — modules at 800G, 1.6T and designs up to 3.2T per module.

Products & Customers

POET Product	Module Maker	End User	Application
800G / 1.6T Optical Engines	Foxconn	China Mobile	AI Systems
800G Engines	Luxshare	Google, Tencent	AI Systems
Starlight™ Light Source	Celestial AI	NVIDIA, Samsung	AI Systems
Wavelight™ Optical Module	Direct	Cisco, China Telecom	AI Clusters

POET Product	Module Maker	End User	Application
400G LR4 Module	ADVA	Meta, China Telecom	Datacom

Visual Timeline

2022	2023	2024	2H 2024	2025
CWDM4 demo	15 engines released	800G modules & 200G/lane	1.6T engine planned	Malaysia production ramp

Awards & Recognition

- Breakthrough Award 2024 — Best Optical AI Solution
- Merit Awards — AI Innovator of the Year (Gold)
- Global Tech Awards — Best in Artificial Intelligence

Competitor Landscape (simple)

POET competes in a fragmented market where integration and new manufacturing approaches win share rapidly.

- **POET** — Full chip-scale integration (wafer-level)
- **Intel, Cisco, Coherent** — Partial integration, large incumbents
- **HGTECH, Huawei, Accelink** — Conventional multi-chip board designs

Financial Snapshot

Dec 5, 2024

Total Cash	Working Capital
\$58M	\$39M
Quarterly Burn	\$4.4M
Capital Raised (2024)	\$81M (33M shares)
Market Cap	\$368M
Share Price Range	\$0.77 – \$5.83
Fully Diluted	105.33M shares

Market Opportunity

Segment

TAM (est)

AI Software & Services

\$150B → \$1.3T (2030)

Datacom Links

\$4.8B → \$10.9B (2028)

AI Processors

\$15B → \$384B (2032)

Manufacturing Map

Xiamen (SPX JV) • Penang (assembly, 2025 ramp) • Kulim (foundry) • Toronto HQ • Shenzhen • Singapore • Allentown R&D

Risks

Zero revenue YTD (2024)

Execution and scaling risk

Customer concentration

Potential dilution if additional capital needed

Switch: Beginner Mode

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Note: figures and relationships taken from POET Q4 2024 presentation.

Glossary (click a term to expand)

Optical Interposer

Chip-level platform that integrates lasers, photonics waveguides and electronic ICs to move data using light rather than copper traces.

Transceiver

Device that both transmits and receives data; in POET's case it sends/receives data over optical fiber using light.

800G / 1.6T / 3.2T

Data rates: 800 gigabits, 1.6 terabits, 3.2 terabits per second — higher numbers mean more throughput per connection.

Wafer-Level Assembly

Manufacturing method building many chips across an entire wafer simultaneously; reduces cost and improves consistency compared with hand-assembling individual modules.

EML (Electro-absorption Modulated Laser)

A laser type used for stable, high-speed optical signaling, favored in datacom and AI cluster interconnects.

DR4 / FR4

Industry module form factors and lane/channel specifications for optical transceivers (defines how lanes are arranged and what standards are used).

SPX

Super Photonics Xiamen — POET's JV manufacturing partner in Xiamen, China, focused on engine manufacturing and volume production.

TAM (Total Addressable Market)

The full revenue opportunity available for a product or service assuming 100% market share.

CAGR (Compound Annual Growth Rate)

The annual growth rate of a market over a period, averaged as a consistent yearly rate.

Leadership Highlights

- **Dr. Suresh Venkatesan** — CEO & Chairman. Inventor; ex-GlobalFoundries.
- **Thomas Mika** — EVP & CFO. Led IPO and capital raises.
- **Raju Kankipati** — CRO. Ex-MACOM, Arista, Cisco.
- **Dr. Mo Jinyu** — SVP & GM Asia. Long photonics career in APAC.

Partners / Customers

Foxconn

Luxshare

Celestial AI

ADVA

Mitsubishi

NVIDIA

Quick Take (one-line)

POET is a high-upside, execution-sensitive micro-cap with differentiated photonics integration and strong partner validation; watch production scale, cash runway and design wins.

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