

# POET TECHNOLOGIES AI DATACOM INTERCONNECT SOLUTIONS

Investor Presentation / September 2026

#POETpowersAI



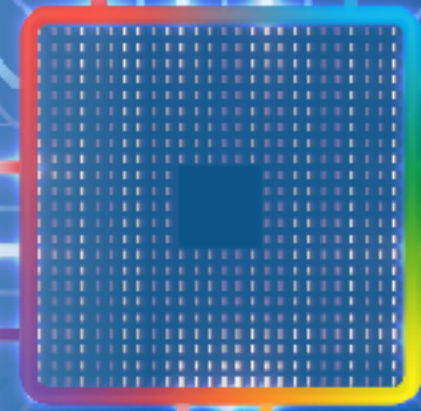
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# SAFE HARBOR STATEMENT

## Forward-Looking Statements

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Forward-looking statements and information can generally be identified by the use of forward-looking terminology or words, such as, "continues," "with a view to," "is designed to," "pending," "predict," "potential," "plans," "expects," "anticipates," "believes," "intends," "estimates," "projects," and similar expressions or variations thereon, or statements that events, conditions or results "can", "might", "will", "shall", "may", "must", "would", "could", or "should" occur or be achieved and similar expressions in connection with any discussion, expectation, or projection of future operating or financial performance, events or trends. Forward-looking statements and forward-looking information are based on management's current expectations and assumptions, which are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict.

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factors, including, without limitation, operational risks in the completion of the Company's anticipated projects, delays or changes in plans with respect to the development of the Company's products, a delay in or failure to deliver needed supplies or services from any of the Company's suppliers, risks affecting the Company's ability to execute projects, the ability of the Company to generate interest in or sales for its products, the ability to attract key personnel, and the ability to raise additional capital, and other risks, uncertainties and factors discussed in the Company's filings on Canada's System for Electronic Data Analysis and Retrieval + (or "SEDAR+") [www.sedarplus.ca](http://www.sedarplus.ca) and with the SEC at [www.sec.gov/edgar](http://www.sec.gov/edgar), including under the heading "Risk Factors" or "Key Business Risks and Uncertainties" in such filings. Although the Company believes that the expectations reflected in the forward-looking information or statements are reasonable, the prospective investors in the Company's securities should not place undue reliance on forward-looking statements because the Company can provide no assurance that such expectations will prove to be correct. Forward-looking information and statements contained in this presentation are as of the date of this presentation and the Company assumes no obligation to update or revise any forward-looking information and statements except as required by law.

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This presentation contains certain industry, customer and market data and statistics, third-party estimates and other information (including industry forecasts and projections). The Company has obtained significant portions of this information from databases and research prepared by third parties and other third-party sources. Information attributed to any such third parties has not been prepared by the Company, and the Company has not independently verified any such information.

# THE STORY: POET POWERS AI CONNECTIVITY

POET provides transceiver and chip-to-chip compute solutions to customers engaged in AI hardware and AI clusters.

## 200G/Lane moving to 400G/Lane

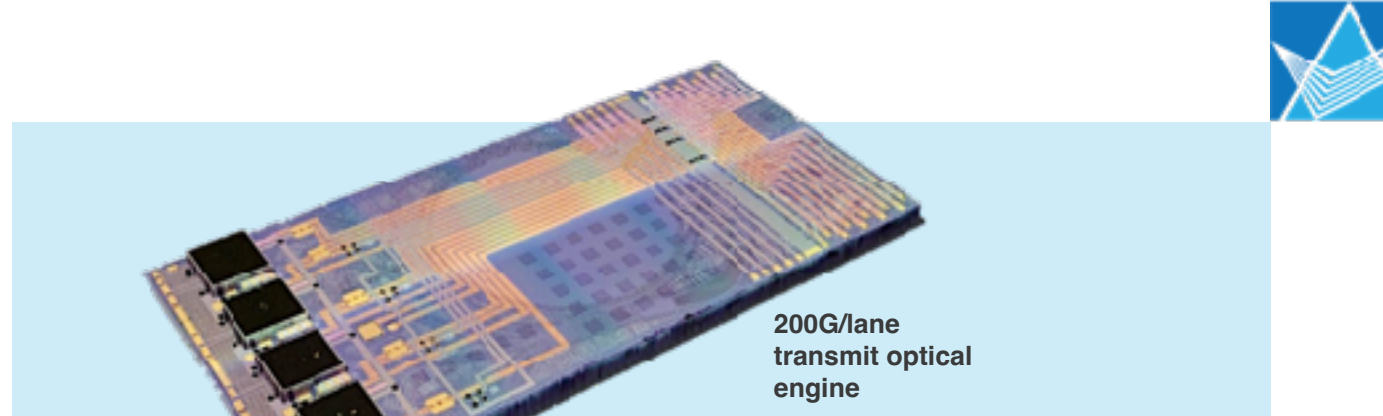
POET is significantly **ahead of the market with 200G/lane and 400G/lane** design architectures for its optical engines.

## 1.6T and 3.2T Data Speeds

POET is **one of very few companies that can reach 1.6T** right now. And it has schematics up to 6.4T!

## \$30B TAM

LightCounting forecasts the markets in which POET operates **will grow by 20% per year over the next 5 years.**



Our partners are  
the world's top  
manufacturers of  
computer  
devices...



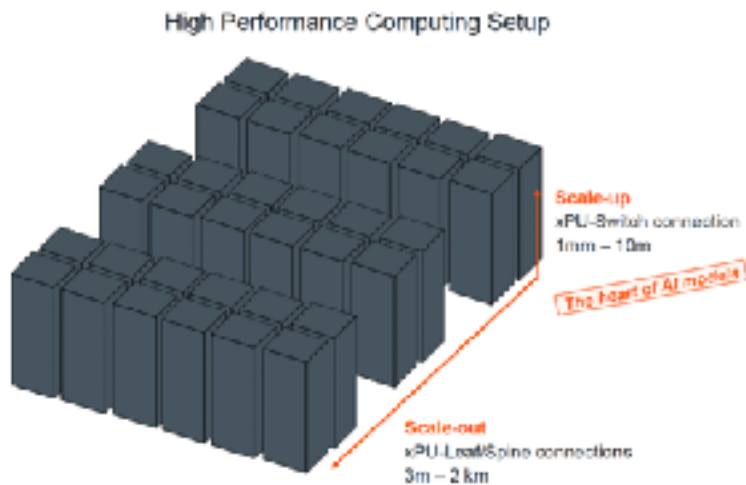
...and they supply  
AI and computing  
hardware to  
massive  
companies!



Representative end customers of POET's partners. No POET relationship is implied.



# 3 KEY AI CONNECTIVITY SEGMENTS



1

## SCALE OUT

Horizontal – multiple nodes in a distributed system

### Hyperscalers / Cloud

Inter Chip communication:  
GPU, CPU, Memory, etc.  
800G to 1.6T (DSP based,  
LRO, LPO pluggable optics)  
Future: ELS + CPO

### POET Products

1.6T Gen1 Engines with  
**Mitsubishi** collaboration  
1.6T and 3.2T engines  
with **NTT** collaboration

2

## SCALE UP

Vertical – bigger,  
faster single system

### AI System Vendors

Inter Chip communication:  
GPU, CPU, Memory etc.  
External Light Sources & Co-  
packaged Optics

### POET Products

External light source  
custom form factor  
modules  
ELSFP Engines &  
modules

3

## SCALE ACROSS

Disaggregated –  
specialized  
subsystems connected  
via high-speed fabrics

**Disaggregated Network  
Players and Compute -**  
Data Centers to Mobile  
Networks, Trading  
Operations, etc.

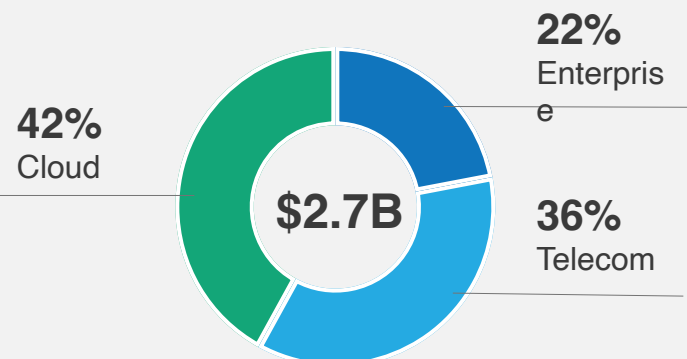
### POET Products

All Custom Products  
100G BiDi & ER with  
**NTT**  
Datacenter Edge Optics  
with **Adtran**

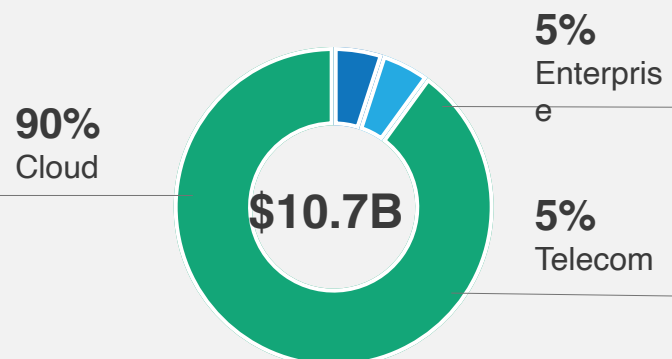
# UNPRECEDENTED MARKET OPPORTUNITY



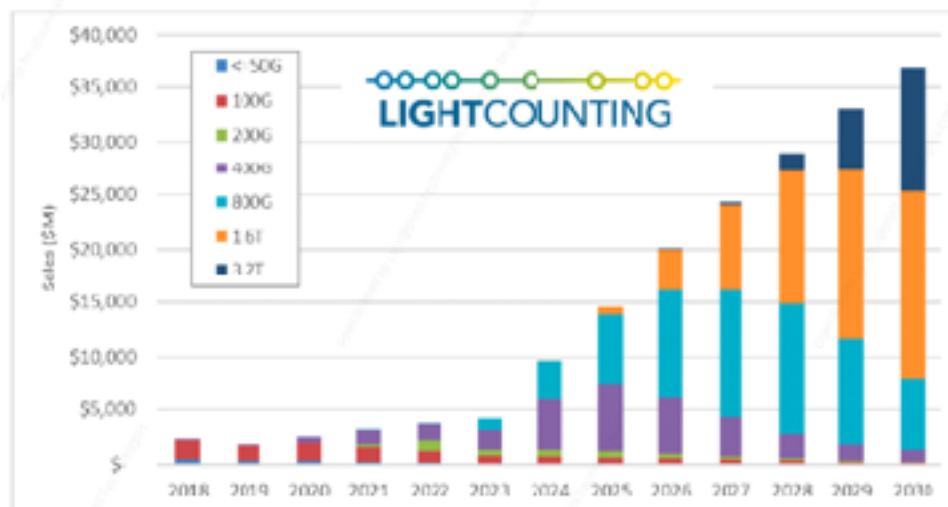
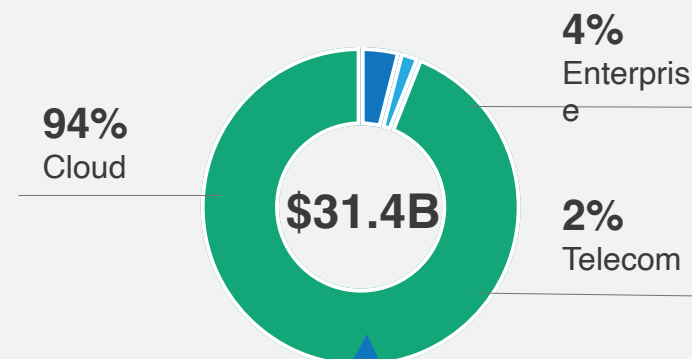
2016 Ethernet Transceiver Sales by Segment



2024 Ethernet Transceiver Sales by Segment



2030 Ethernet Transceiver Sales by Segment



~\$30B market - driven by 800G, 1.6T & 3.2T (Pluggables + CPO)

Optics for Scale-Out + Scale-Up

2024: \$9.6B

2030: \$29.5B

Source: LightCounting

# THE INVISIBLE BUT CRITICAL LINK

AI processors, AI software, AI service providers and AI end-users are linked through “optical modules” - yet few outside the industry know what they are.

## Optical Modules

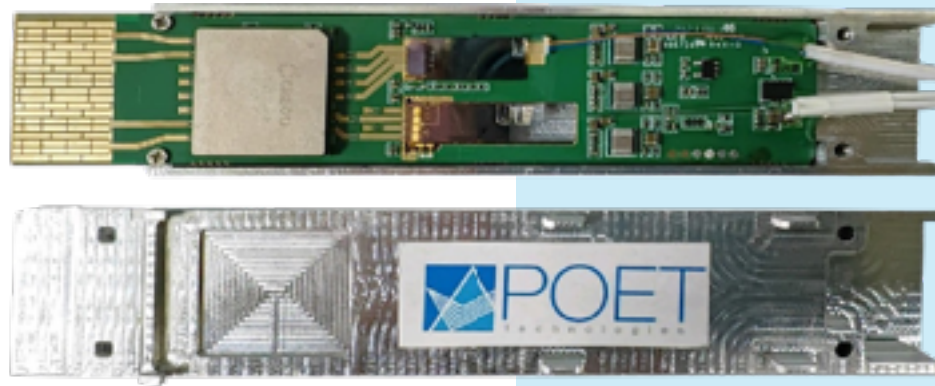
are transmit and receive devices (“transceivers”) for data transmission using light. Light carries more data, at a faster speed, lower power and with far less heat compared to electrons through copper.

## External Light Sources

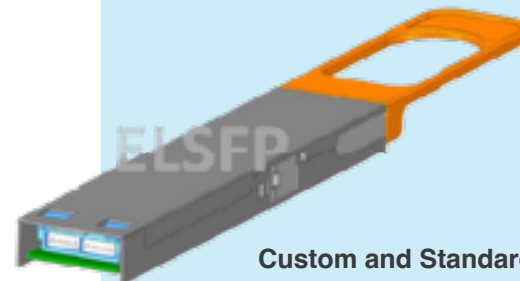
are for use in Co-Packaged Optics where the modulators are placed close to the GPUs but the lasers are remote to avoid overheating and to facilitate easy replacement. High Bandwidth and multiple frequencies are required to facilitate data communications.

## Point-To-Point Ethernet

is used for communications among AI processors inside the data center and from the data center to other data centers and to trunk networks, i.e., 50m to 10km.



POET 800G+ Reference Module Solutions for Global Markets



Custom and Standard



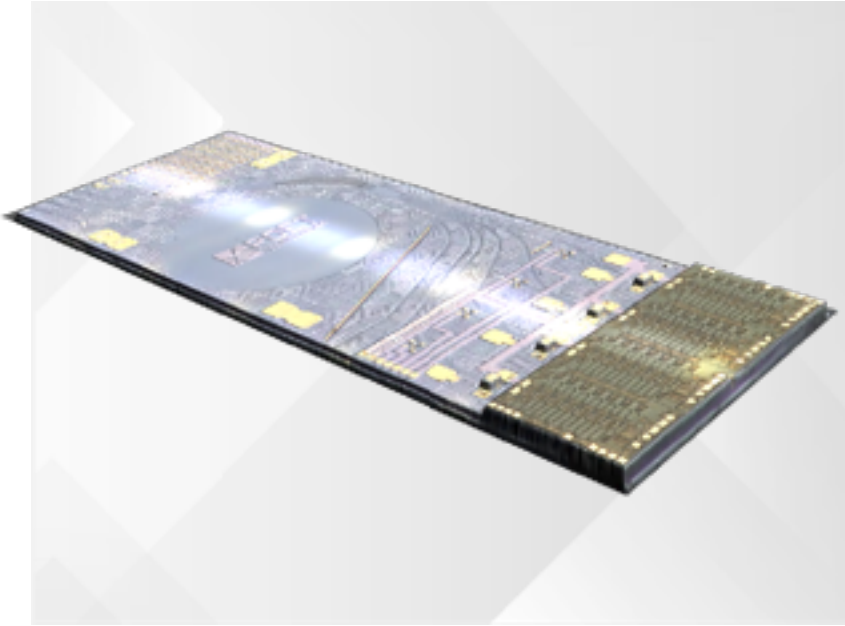
Migration to higher speeds constantly accelerating:

|             |          |
|-------------|----------|
| 10G – 100G  | ~8 years |
| 100G – 400G | ~5 years |
| 400G – 800G | ~2 years |
| 800G – 1.6T | ~1 year  |



# WHAT MAKES POET DIFFERENT

POET automates production by replacing job-shop assembly techniques in photonics, used since the 1990s, with semiconductor technology.

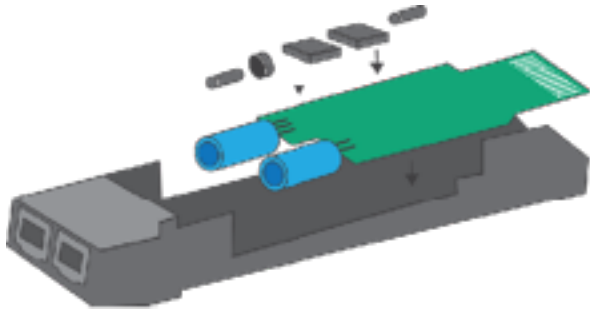


## Conventional Discrete Job Shop Assembly

Engines and Modules built one-at-a-time with high Capex and high Labor Costs.

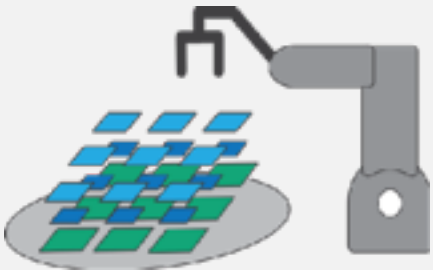


Multiple components and sub-systems requiring active alignment.

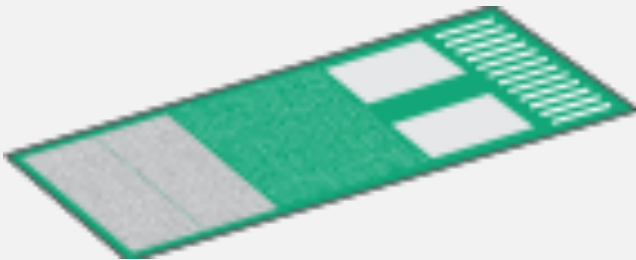


## POET's Fully-Automated Semiconductor Assembly

Optical Engine chips built hundreds at a time using wafer-level assembly.



All components integrated onto a single chip with no active alignments.





# POET'S FUNDAMENTAL TECH

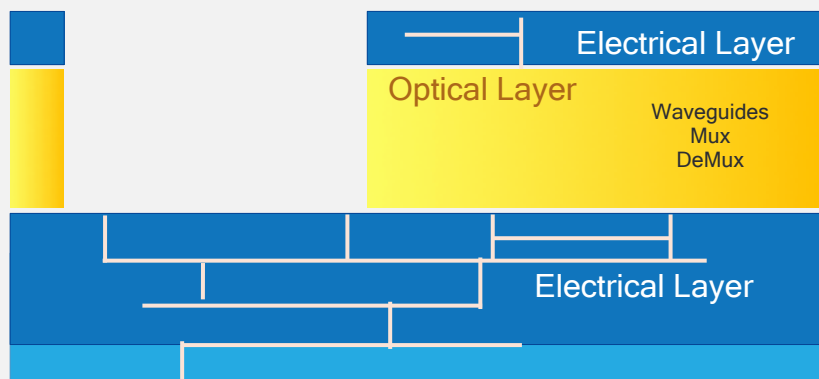
High throughput, visually assisted, passive “pick and place” assembly of electronics and photonics ICs and components at wafer scale – the “semiconductorization of photonics”

## Improves Performance

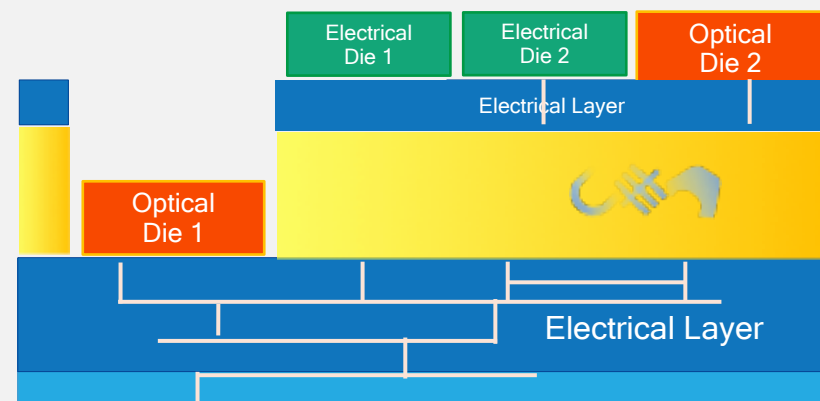
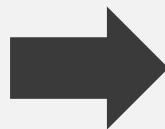
- Chip-scale integration combines photonics and electronic devices in the same package
- Eliminates wire bonds - reducing interference and signal loss
- Compatible with multiple high performance devices, such as InP, TFLN, SiPh and more

## Geometric Scaling

- Wafer-scale manufacturing, assembly and test allows rapid increase in scale and volume of devices produced.



POET OPTICAL INTERPOSER



POET OPTICAL ENGINE



# COMPETITIVE ADVANTAGES

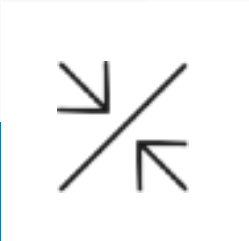
POET's Optical Interposer revolutionizes optical engine and module assembly through *Hybrid Integration, Passive Assembly* and *Platform Scalability*.

## Key Advantages for Module Makers

- Simplified BOM
- Lower Complexity of Assembly
- One Module Design for Multiple Products



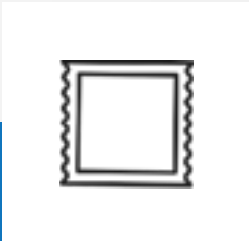
**Module Cost**  
10 - 30% Lower



**Form Factor/Size**  
75%+ Smaller



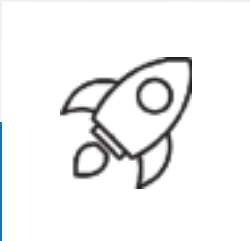
**Wafer-Level Assembly & Test**  
>100X More Scale



**Chip-Scale Package**  
20% - 30% Lower Power



**CAPEX for Assembly & Test**  
10X Lower



**Platform Technology**  
Versatility for Multiple Applications

Notes: Based on Internal Estimates and Projections. Comparisons are made to current implementations of conventional Chip-on-Board and Silicon Photonics-based transceivers and laser-array-based light sources.



# CURRENT COMPANY LOCATIONS



**153**  
TOTAL  
HEADCOUNT

**6**  
COUNTRIES

**143**  
FULL-TIME  
EMPLOYEES

**10**  
CONTRACTOR  
S



POET Technologies Inc. trades on the  
NASDAQ Capital Market under the  
symbol: POET

ADDED 60 HEADCOUNT SINCE JANUARY 2026

# ASSEMBLY AND TEST CAPACITY

## LOCATION

Penang, Malaysia

## CONTRACT MANUFACTURERS

Established partners in key jurisdiction

> 8K sq ft of clean room space going to 20K sq ft

> 25 semiconductor assembly and test tools installed:

- Optical die bonders
- Electrical die bonders
- Reflow oven
- Wire-bonders
- Burn-in and testers

Wafer-level assembly and test



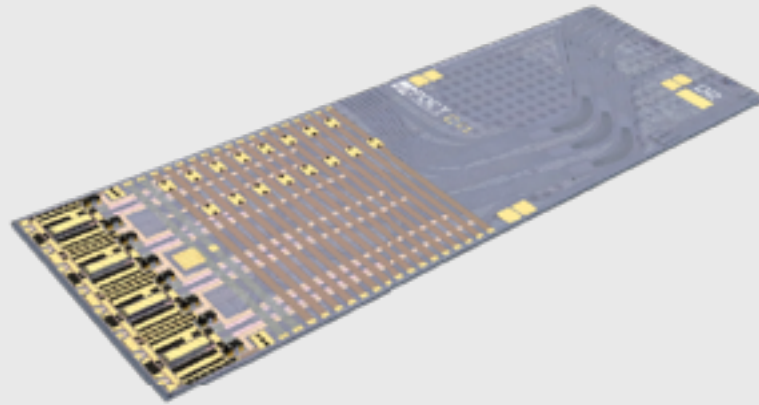
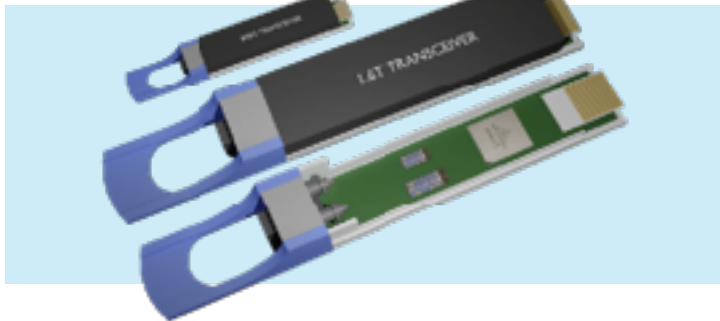
**GROWING FROM 1M/yr UNITS TO 10M/yr**

# MAJOR ACHIEVEMENTS

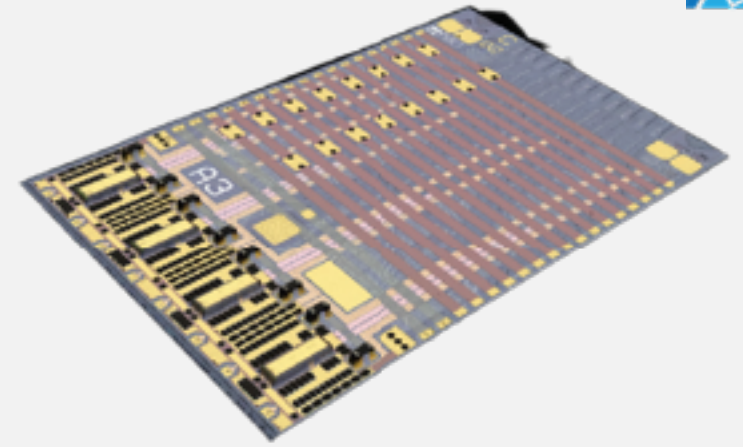


# ADVANCED OPTICAL ENGINES FOR MODULE MAKERS

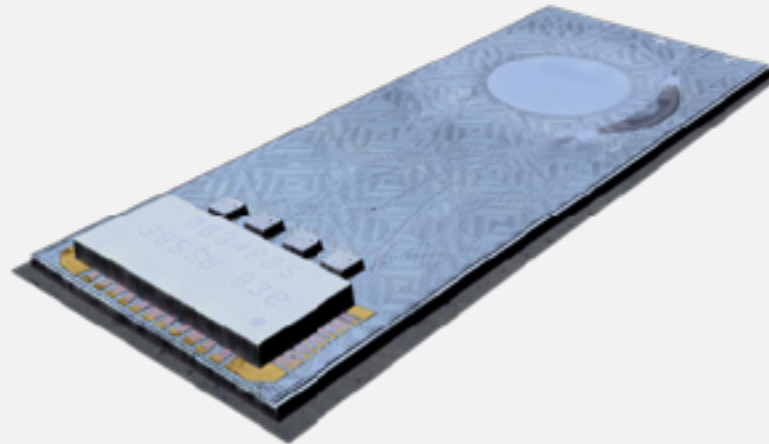
Serving Data Center Operators  
and Hyperscalers



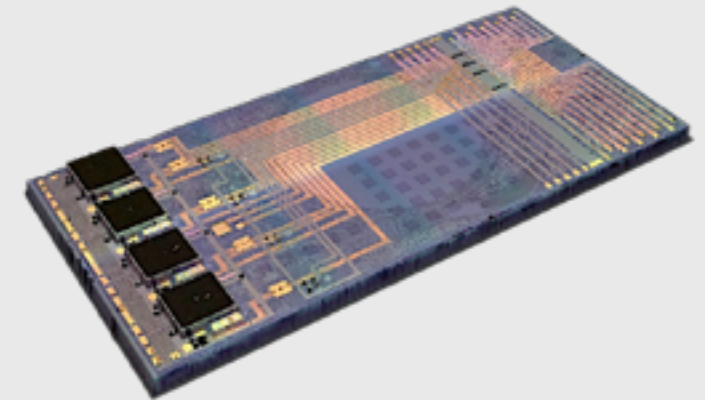
1.6T 2XFR4 TX



1.6T DR8 TX



800G 2XFR4 RX + TIA + PD

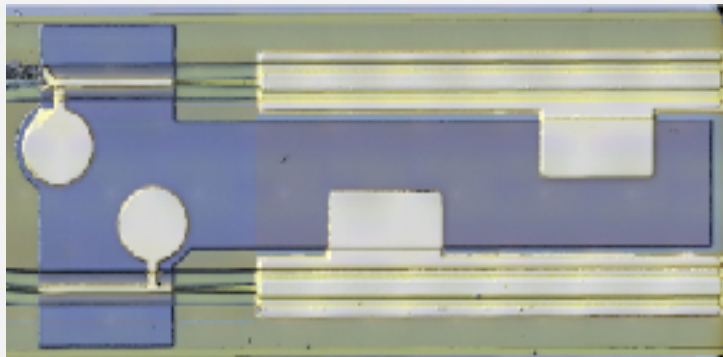


INFINITY™ 1.6T TX

# CUSTOMER FOCUS



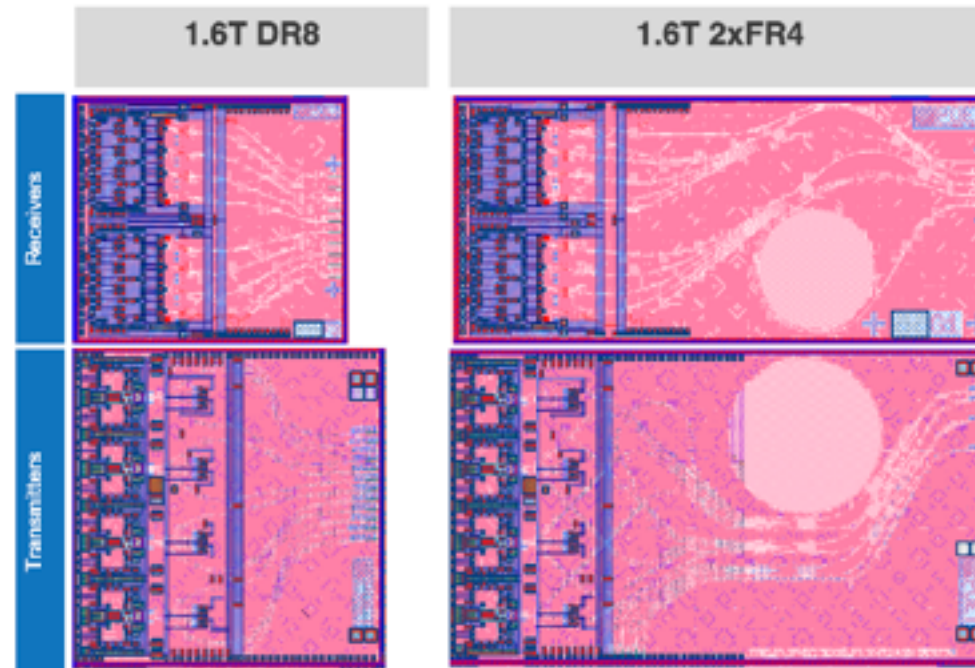
A collaboration to build 1.6T and 3.2T pluggable transceiver modules using Mitsubishi's 200G and 400G EMLs on the POET Optical Interposer.



**2 X 200G – Single Chip 400G EML**

## EXTENDING EMLs INTO NEXT GENERATION TRANSCEIVERS

- Mitsubishi's 400G lasers cannot be used in conventional assembly with wire bonds – too much cross-talk
- Requires an integration platform
- Reliable, inexpensive, field-proven EMLs are preferred laser solution for end-users at 800G and 1.6T



ONE set of lasers – THREE different form factors – ONE module design



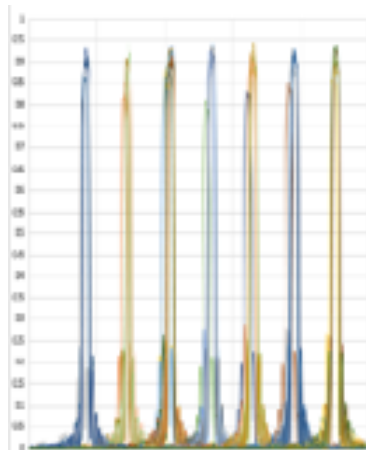
# POET BLAZAR™ - HYBRID LASER

- Extreme control and precision across wafer utilizing conventional CMOS technology
- Ultra narrow bandwidth supporting channel spacing frequency down to 50GHz
- Center Wavelength control across wafer of  $< \pm 2\text{nm}$
- Channel spacing control of  $< 10\text{GHz}$
- Ability to generate  $>50\text{mW}$  of power per channel into a waveguide for applications requiring downstream multiplexing
- Ability to generate  $>80\text{mW}$  of power per channel when emitting into free space
- Potential to further increase power through optimization

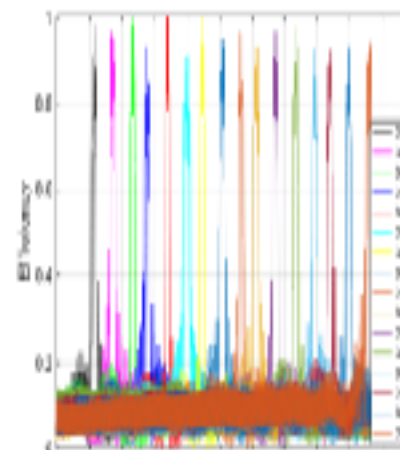
## CHANNELS ARE SELECTED IN THE OPTICAL INTERPOSER

### High Channel Count / Multi-frequency Solutions

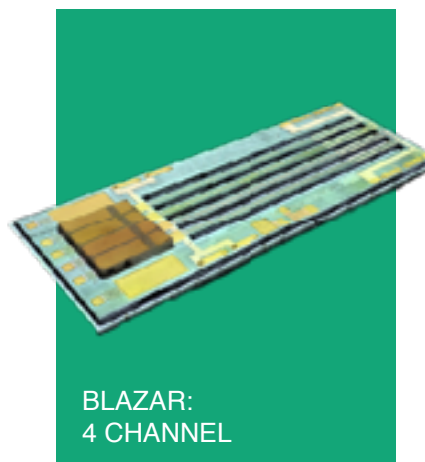
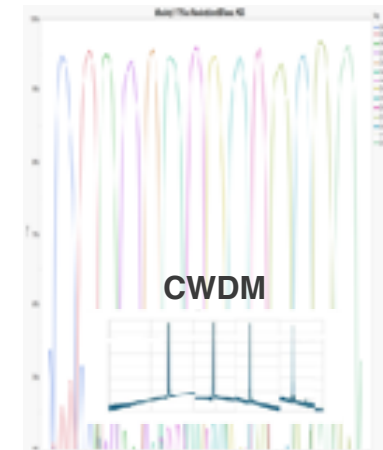
400GHZ SPACING



200GHZ SPACING



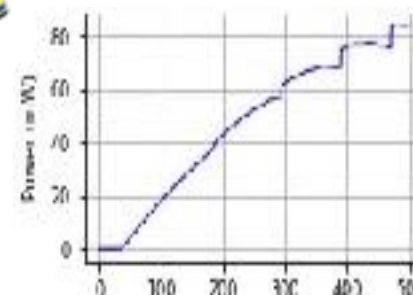
50GHZ SPACING



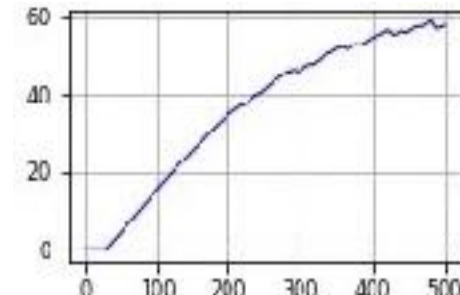
BLAZAR:  
4 CHANNEL

### High Power output per channel

Free Space Emission



Waveguide Coupled Power  
*No mode hop control enabled*





# DEEP SEMICONDUCTOR AND PHOTONICS HARDWARE EXPERTISE



**Dr. Suresh Venkatesan**  
**CEO & Chairman**

- Inventor of the POET Optical Interposer
- Principal Inventor for 30 issued patents and 19 patent applications for POET
- Former SVP Technology at GlobalFoundries
- Former senior roles at Motorola & Freescale Semiconductors
- PhD in Electrical Engineering – Purdue University



**Dr. Sandeep Kumar**  
**Chief Operating Officer**

- Former SFP Worldwide Operations at Silicon Labs
- Former global product and test engineering for the storage business at Agere Systems, Lucent Technologies and AT&T Bell Labs
- BS in Electrical Engineering from the Indian Institute of Technology in Bombay, India
- M.S. degree in Electrical Engineering from the University of Evansville in Indiana
- Ph.D. in Electrical Engineering from Lehigh University in Pennsylvania
- Completed Wharton's Leadership Development Program at the University of Pennsylvania



**Thomas Mika**  
**Executive Vice President & CFO**

- Overall responsibility for Finance & Administration
- Raised \$1 Billion in equity capital for POET
- Listed POET on NASDAQ in 2022
- Former Chairman, CEO & CFO of Tegal Corp. (Nasdaq) – semi capital equipment
- BSc Microbiology – University of Illinois; MBA – Harvard University



**Raju Kankipati**  
**Chief Revenue Officer**

- CRO includes sales management, supply chain, marketing, customer service, pricing strategies, and revenue management
- Former Sr. Director, Product Management at MACOM
- Former senior roles at Arista, Cisco, OpNext (Lumentum)
- MBA- UC Berkeley, Haas School of Business

# INVESTMENT HIGHLIGHTS

“

POET's hybrid-integration platform technology will enable us to use best-of-breed components and ramp to high volume at a much faster pace and in a cost-efficient manner.

— Foxconn Interconnect Technology

## Pure-Play in AI Datacom Interconnect Hardware

Leading-edge high-speed data transmission (800G, 1.6T - plus 3.2T on the way).

## Industry-Disruptive Technology Platform

Validated with several leading customers and qualified for production.

## Financial Stability

Working capital of more than \$800M USD (as of June 30, 2026).

## Large, High-Growth Multibillion Dollar Markets

Extreme demand from hyperscalers and data center network system providers.

## Deep Tech Protected by Patents & Trade Secrets

49 patents and 37 applications - all related to the POET Optical Interposer.

## Well Positioned to Grow with AI Capex Spend

Listed on NASDAQ: POET



# KEY METRICS

## BALANCE SHEET SNAPSHOT

US\$ in Millions

|                             |         |
|-----------------------------|---------|
| Total Cash                  | ~\$800M |
| Working capital (Operating) | ~\$800M |

## REVENUE AND CASH BURN

|                                     |        |
|-------------------------------------|--------|
| Sales (Jan 1, 2026 to Jun 30, 2026) | \$1.1M |
| Projected Quarterly Cash Burn       | ~\$15M |
| Projected CAPEX Spending for 2026   | ~\$60M |

## CAPITAL RAISED FROM MAY 2025 TO MAY 2026

|                    |            |        |
|--------------------|------------|--------|
| Private Placements | 66M Shares | \$830M |
|--------------------|------------|--------|

## CAPITALIZATION SNAPSHOT (June 30, 2026)

Ave. Exercise Price

|                                |             |        |
|--------------------------------|-------------|--------|
| Common Shares Outstanding      | 173,035,169 |        |
| Warrants Outstanding           | 78,734,968  | \$4.39 |
| Management Options Outstanding | 5,369,393   | \$2.10 |
| Restricted Stock Units (RSU)   | 7,035,953   |        |
| Fully Diluted Shares           | 264,175,483 |        |

## SHARE PRICE SUMMARY

|                                     |                  |
|-------------------------------------|------------------|
| Closing Price as of August 31, 2026 | \$7.46           |
| Market Cap                          | \$1.3B           |
| 52-Week Range                       | \$3.81 - \$20.81 |
| 50d Ave Volume                      | 25M              |



NASDAQ:POET

 @POETTechnologies  @POETtech  @POETtechnologies

# CONTACT

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## Investor Contact

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Executive Vice President  
& Chief Financial Officer  
tm@poet.tech

#POETpowersAI

  
LIGHTWAVE + BTR  
INNOVATION REVIEWS

2026 Elite Honoree  
POET TERALIGHT



2025 Best AI  
Hardware Innovation



2025 Most Innovative  
Chip-Scale Packaging & Optical  
Sub Assembly Product



2025 Platinum Award  
for Next-Gen Chip / Processor

  
LIGHTWAVE + BTR  
INNOVATION REVIEWS

2025 Elite Honoree  
FOET OPTICAL INTERFOSER



2025 Best Persistent Innovation