



LIGHTWAVELOGIC®

Q2 2026 Financial Results & Business Update

Lightwave Logic, Inc.

NASDAQ:LWLG

August 2026

Enabling the utilization of electro-optics polymers for high speed, low power AI and Data Center applications

Forward Looking Statements

This slide presentation contains “forward-looking statements” and “forward-looking information” within the meaning of the Private Securities Litigation Reform Act of 1995. This information and these statements, which can be identified by the fact that they do not relate strictly to historical or current facts, are made as of the date of this presentation or as of the date of the effective date of information described in this presentation, as applicable. The forward-looking statements herein relate to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as “expects”, “anticipates”, “plans”, “projects”, “estimates”, “envisages”, “assumes”, “intends”, “strategy”, “goals”, “objectives” or variations thereof or stating that certain actions, events or results “may”, “can”, “could”, “would”, “might” or “will” be taken, occur or be achieved, or the negative of any of these terms and similar expressions) and include, without limitation, statements with respect to projected financial targets that the company is looking to achieve.

All forward-looking statements are based on current beliefs as well as various assumptions made by, and information currently available to the company’s management team. A more detailed description of the risks presented by those assumptions and other risks are more fully described by the company under the caption “Risk Factors” included in our SEC filings and other risks to which our company is subject, and various other factors beyond the company’s control.

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The company does not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by company or on behalf of the company except as may be required by law.

Investment Highlights

1

Large and Attractive End Markets – Data Center/AI capacity growth supercycle and Telecom present \$54B modulator TAM, \$2-4B SAM; future opportunities include Aerospace & Defense, Quantum Computing and Consumer Electronics

2

Mission Critical Technology to AI scaling – Existing internet infrastructure reaching its limits as ultra-high bandwidths (200G per lane and beyond) strain copper-based solutions; electro-optic polymers (EOP) can supercharge silicon photonics and alleviate bottlenecks for scaling AI clusters

3

Competitively Advantaged Material – Perkinamine® is compatible and easily integrated with existing silicon infrastructure; power consumption, thermal stability, speed, coating thickness, and cost all compare favorably to incumbent and competing materials

4

Semiconductors Going Optical – Optics now front and center in AI networking as cluster scale drives new demands on bandwidth, latency, and efficiency; optical technologies pulled into design cycle sooner

5

Commercial Momentum – Five Fortune (Global) 500 companies actively engaged in stage 3 (prototype to final product) with ~20 total companies in commercial pipeline; foundry ecosystem is expanding with PDKs available with Tower Semiconductor, GlobalFoundries, SilTerra, and one unnamed partner

6

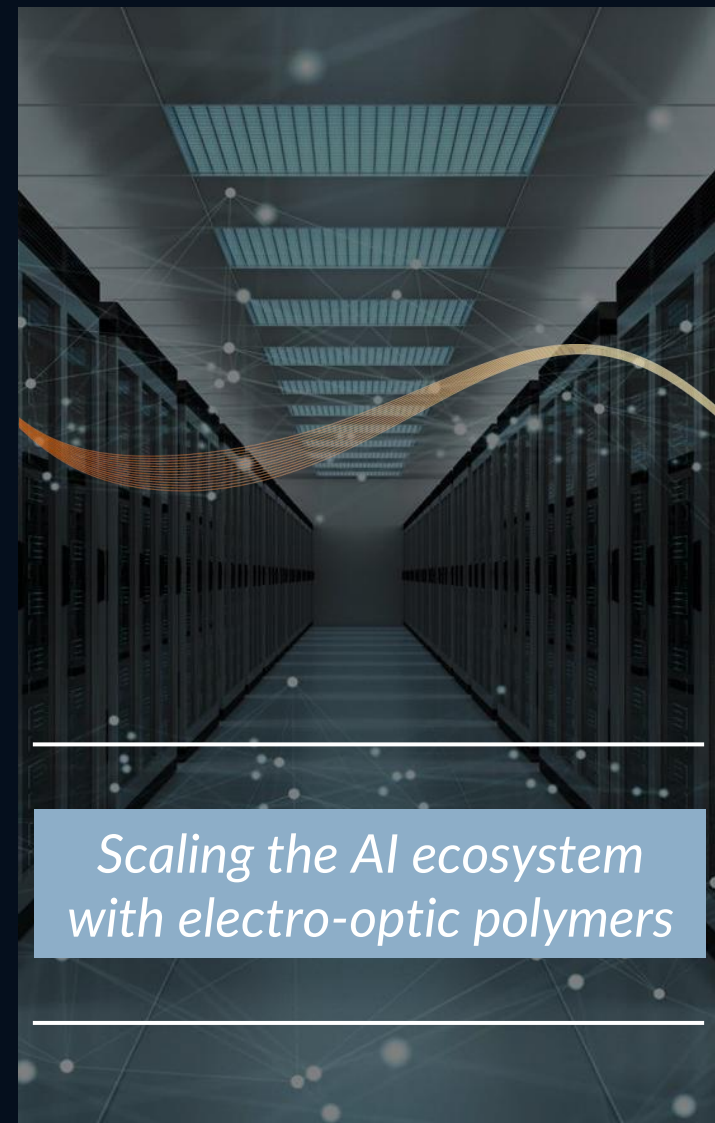
Attractive Business Model at Scale – Dual revenue model of direct materials sales and IP licensing stream expected to yield 60%+ gross margins at scale; limited capital investment required to achieve meaningful volume production

7

Strong Balance Sheet - \$96 million cash balance as of June 2026 and zero debt; fully funded operations well into 2028

8

Proven Leadership Team – Highly experienced management team with proven track records of scaling optical technologies at the largest silicon photonics and optical transceiver companies in the world

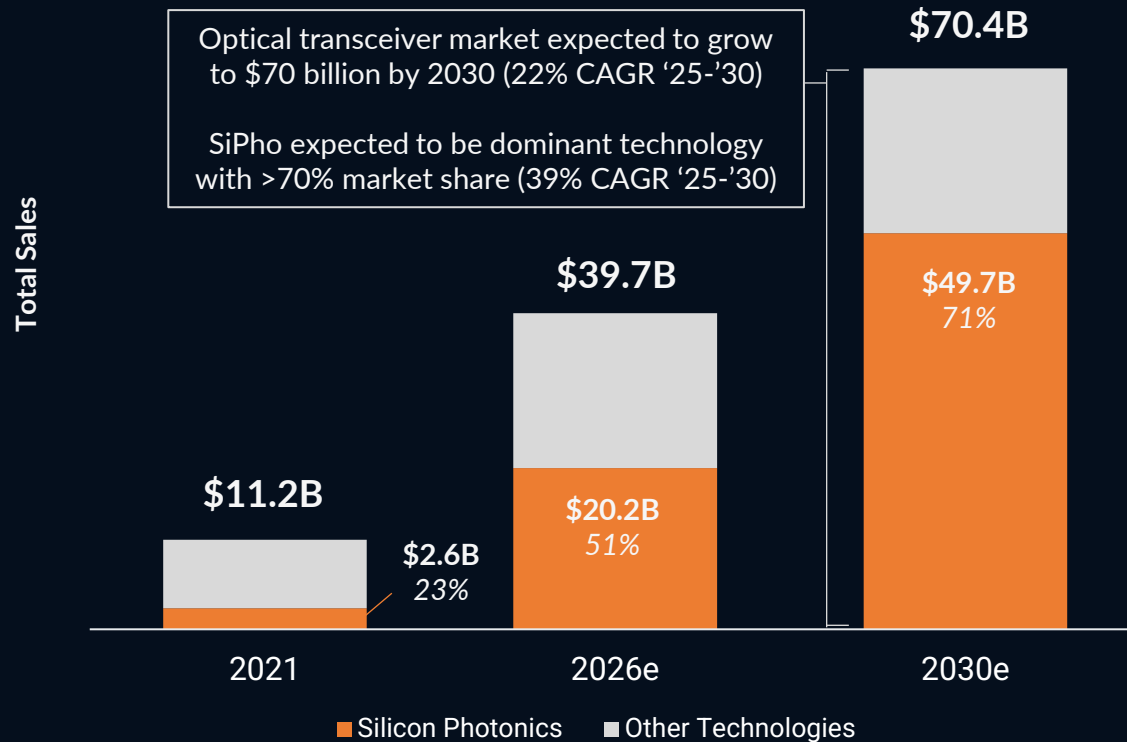


*Scaling the AI ecosystem
with electro-optic polymers*

Silicon Photonics is Winning

Silicon photonics is winning the integration platform battle for hyperscale and AI networking

Total Optical Transceiver Market¹ (by technology)



DCD Channels Media Intelligence In

Marvell acquires silicon photonics device startup Polariton Technologies to advance optical scaling

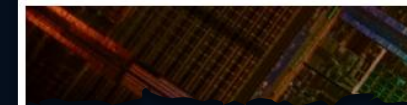
Financial terms of the deal have not been disclosed

April 23, 2026 By: Charlotte Trueman Have your say

GlobalFoundries Acquires Advanced Micro Foundry, Accelerating Silicon Photonics Global Leadership and Expanding AI Infrastructure Portfolio

Samsung enters SiPh foundry market

Tuesday 31st March 2026



Reuters World Business Markets Sustainability Legal Commentary Technology Investigations

AMD buys Enosemi to boost co-packaged optics offerings

By Reuters

May 28, 2025 1:10 PM CDT - Updated May 28, 2025

Marvell to acquire Celestial AI for as much as \$5.5 billion

PUBLISHED TUE, DEC 2 2025-5:12 PM EST | UPDATED TUE, DEC 2 2025-6:40 PM EST

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Credo Agrees to Acquire DustPhotonics, Accelerating Expansion into Silicon Photonics and Next Generation Optical Connectivity

April 13, 2026

(1) Lightcounting: Total Optical Transceiver Market by Technology; April 2026
News sources: CNBC, Data Center Dynamics, Credo, GlobalFoundries, PIC Magazine, Reuters

Foundry Ecosystem is Broadening

Foundries are key enablers to integration and scaled production as well as IP licensing strategy

4 Foundry PDK Integrations



+ One unnamed partner

Lightwave Logic and Tower Semiconductor Announce Development Agreement to Enable High-Speed, Low-Power Modulators on Tower's PH18 Silicon Photonics Platform

Lightwave Logic High-Speed Modulator Platform Now Available in GDS Factory PDK for GlobalFoundries Silicon Photonics Platform

SilTerra Silicon Photonics Platform Enables Integration of Lightwave Logic High-Speed Polymer Modulators Through Luceda Photonics PDK

March 3, 2026

Polymer platform integrated in foundry ecosystem; processes and designs are ready for 400Gb/s device deployments



Four wafer tape outs planned throughout 2026



Multiple wafers Expected from Two Foundries in August 2026

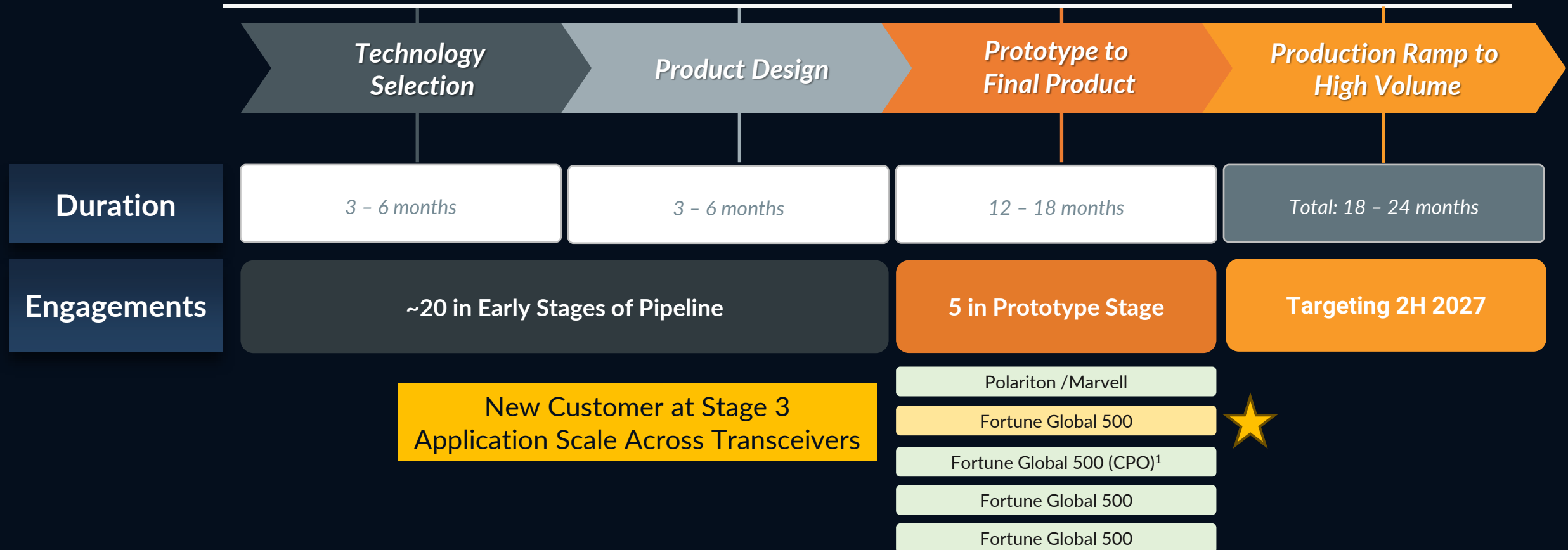
Additional Projects



Lightwave Logic, Inc. and QPICS Announce Partnership to Advance the Use of Electro-Optic Polymers in Quantum Processors

Market Reception & Customer Momentum Growing

Now Five customers in Prototype Stage 3



(1) Formal product launch decision is contingent upon the successful execution of technical milestones related to Perkinamine® performance as well as achieving various other modulator design and integration results

Path to Commercialization & How We Scale

Two Go-to-Market Channels

1 Chip Designers / Module Companies



Design and build optical transceivers and networking hardware

- Integrate LWLG EO polymer materials into product designs
- Drive performance, size, power and cost advantages



Tailored Engagement

Engagement with Chip Designers



Material Evaluation
Performance testing & validation



Co-design & integration
Work with design teams to optimize performance



Design win progression
From prototype to qualified design



Iterative Processes

Qualification

~20 Programs in Process

Design Wins

5 Programs in Process

Production

Volume Ramp



Commercial Revenue Model

1 Material Sales Revenue



- EO polymer materials supplied for production
- Revenue scaled with production volume

2 Licensing Revenue



- Enables silicon photonics manufacturing
- IP / PDK licensing and royalties from foundries and / or end customers
- Revenue scales as customer programs move to production

Scalable, Asset-Light Model



Embedded in customer production flows



Leverages existing customer infrastructure



Expands across multiple customers & platforms



Attractive gross margin profile at scale (60%+)

2 Foundry Partners



Manufacture silicon photonics for a broad ecosystem

- Integrate LWLG IP / PDK into process flows
- Enable high-performance silicon photonics at scale



Engagement with Foundry Partners



PDK Integration
Integrate LWLG IP/PDK into design kits



Process enablement
Enable & optimize in manufacturing flows



Platform qualification
Complete foundry & ecosystem qualification



PDK Qualification

4 Foundry Partners

Production

Volume Ramp

Path to Scaled Revenue



Today

Non-Recurring Engineering Fees
Pre-production revenue



2H 2027+

Begin Volume Production + Licensing Revenue
Long-term, scalable revenue streams

Dual strategy with multiple touchpoints and complementary economics. One platform delivering sustainable, high-margin growth.

Strong Management Team

Broad Operational and Research Expertise Across Photonics Ecosystem



Yves LeMaitre
CEO & President



Fred Graffam
Chief Financial Officer



Dr. Aref Chowdhury
Chief Technology Officer &
Head of Strategy



Dr. Robert Blum
SVP, Sales & Marketing



Dr. Lance Thompson
VP of Engineering



Q2 2026 Financials

Q2 2026

FINANCIAL RESULTS

Added a Fifth Fortune Global 500 company to Prototype Stage 3 of Design Win Cycle

Advanced Three Dedicated Foundry Runs, With Two Sets of Wafers Expected in August and a Third in Q4

Advanced Commercialization with a Second Material Supply and Licensing Agreement Under Negotiation

Expanded Manufacturing Readiness Through Increased Headcount, Equipment and Perkinamine Production Capacity

Raised \$34 Million in Public Offering of Common Stock Through June 30, 2026

TOTAL REVENUE
(\$ thousands)

\$33

+28% YoY

vs. \$26 prior year

NET LOSS
(\$ millions)

\$6.6

+33% YoY

vs. a loss of \$5.0M prior year

NET LOSS PER SHARE
(\$)

\$0.04

FLAT

vs. a loss of \$0.04 prior year

R&D INVESTMENT
(\$ millions)

\$3.9

+48YoY

vs. \$2.6M prior year

G&A EXPENSE
(\$ millions)

\$3.4

+49% YoY

vs. \$2.3M prior year

CASH & EQUIVALENTS⁽¹⁾
(\$ millions)

\$95.9

+39%

vs. \$69M as of 12/31/25

Outlook and Priorities for 2026

1

Advance Stage 3 programs toward qualification milestones and Stage 4

2

Convert technical engagements into structured commercial agreements

3

Broaden and strengthen the EO polymer-ready silicon foundry ecosystem

4

Continue performance optimization at 200G, 400G per lane and beyond

5

Prepare operationally for a 2027 production ramp transition

Thank you

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