Lightwave Logic Inc.

Q1 2026 Financial Results and Business Update Conference Call

May 13, 2026

CORPORATE PARTICIPANTS

Ryan Coleman, *Investor Relations*

Yves LeMaitre, *Chief Executive Officer & President*

PRESENTATION

Operator

Ladies and gentlemen, greetings and welcome to the Lightwave Logic Q1 2026 Financial Results and Business Update Conference Call.

At this time, all participants are in the listen-only mode. A brief question-and-answer session will follow the formal presentation. If anyone requires Operator assistance during the conference call, please signal the Operator by pressing star and zero on your telephone keypad.

As a reminder, this conference is being recorded.

It is now my pleasure to introduce your host for today, Ryan Coleman, Investor Relations. Please go ahead.

Ryan Coleman

Thank you, Operator, and good afternoon, everyone.

Thanks for joining us today for Lightwave Logic's first quarter 2026 financial results and business update call.

I'm joined on today's call by Lightwave Logic's President and Chief Executive Officer, Yves LeMaitre.

Please note that this call is in listen-only mode for the duration of the call, and that a replay will be posted to the Company's website shortly after the call concludes. Some of the matters we'll discuss on this call, including statements and our business outlook, are forward-looking, and as such, this call speaks only as of today, May 13, 2026. Such statements may be considered forward-looking statements within the meeting of the Private Securities Litigation Reform Act of 1995.

The matters discussed on this call are subject to known and unknown risks and uncertainties, and these risks and uncertainties could cause actual operating results to differ materially from those expressed in the call. A more detailed description of the risks our Company faces is more fully described by the Company under the caption Risk Factors included in our most recent Form 10-K and Form 10-Q. As always, Lightwave Logic assumes no obligation to update the information presented on this conference call.

Lastly, you are a caution that any time-sensitive information may no longer be accurate at the time of replay listening or transcript reading.

With that, I'll turn the call over to Yves.

Yves LeMaitre

Good afternoon, and thank you for joining us today.

We appreciate the continued support of our shareholders, partners, employees, and everyone following Lightwave Logic as we advance our mission during one of the most transformative periods in technology history.

The world is currently experiencing a profound AI revolution. Artificial intelligence is no longer an emerging concept. It is becoming the foundational driver of innovation, productivity, and global economic growth. From hyperscale datacenters to edge computing and next-generation AI factories, AI is reshaping how information is created, processed, transmitted, and consumed.

At the center of this transformation is a growing challenge, the need for dramatically faster, more efficient, and scalable data movement. AI connectivity is becoming just as critical as computing power itself. As AI models grow exponentially in size and complexity, traditional electronic interconnects are approaching their physical limits and need to be replaced by photonics solutions.

This is where the convergence of semiconductors and photonics becomes essential. The future of AI infrastructure will depend on technologies that can deliver higher bandwidth, lower power consumption, increased density, and scalable manufacturing solutions.

As demonstrated by major financial investments in several optical and semiconductor companies and the high M&A activity in the sector, photonics is recognized as a critical technology for the next generation of AI networking architectures. We believe that Lightwave Logic is uniquely positioned at the intersection of these two worlds.

Our Perkinamine electro-optic polymer platform was designed precisely for this evolution by combining the scalability of semiconductor manufacturing with the performance advantages of advanced photonics. We believe that Lightwave Logic is positioned to help address some of the most important challenges facing AI infrastructure over the coming decade.

Over the past year, we have remained focused not only on advancing our technology but also on strengthening execution across the Company. We recognize the importance of credibility, transparency, and disciplined operational progress. We have worked hard to restore confidence through measurable execution, technical advancement, stronger ecosystem engagement, and a continued focus on commercial readiness.

While we are satisfied with the meaningful progress we've made, we also recognize that our work continues. Our commitment remains clear to demonstrate steady and sustainable progress across the technical, commercial, and operational dimensions of the business. First, let's take a look at our progress towards commercialization and revenue generation.

Our primary target market keeps expanding rapidly. If we compare the updated market opportunity to what we presented about a year ago, the evolution is quite significant, and we believe it reflects the extraordinary acceleration taking place across AI infrastructure and optical networking markets.

A year ago, our TAM for 2028 analysis highlighted approximately $24 billion in combined addressable markets across AI, datacenter, and telecom applications with a serviceable addressable market or SAM estimated at approximately $1 billion to $2.5 billion for electro-optic polymer modulators depending on the level of integration.

At that time, the industry was already recognizing the importance of photonics and high-speed interconnects, but the scale and urgency of AI-driven infrastructure demands had not yet fully emerged. Over the last 12 months, however, the market environment has evolved dramatically.

Today, AI has clearly become the primary driver of networking infrastructure. The rapid scaling of large-language models, AI clusters, XPU-to-XPU communications, and co-packaged optics architectures has materially increased projected bandwidth requirements across the industry. That acceleration is reflected directly in our updated TAM analysis.

Our AI and datacenter combined optical transceiver TAM alone in 2028 has expanded from approximately $17 billion to approximately $47 billion, driven by a substantial increase in projected deployments of 1.6 terabit and 3.2 terabit transceivers and co-packaged optics operating at 200 gigabits per second and beyond per lane.

In addition, the demand for high-speed coherent or coherent light pluggable transceivers is now fast-growing with DCI or scale across inter-campus connections. As a result of this industry dynamics, our estimated serviceable, addressable market has also expanded meaningfully, from approximately $1 billion to $2.5 billion previously to an estimated range of approximately $2 billion to $4 billion today.

Let's look in more detail at our progress on the customer front. We continue to see encouraging growth in customer engagement and market traction as industry participants increasingly evaluate novel materials to address the performance and power challenges associated with AI networking. In particular, the performance, size, and manufacturing challenges of indium phosphide-based EML transceivers for scale out and thin-film lithium niobate modulators for scale across continue to open new doors for electro-optic polymers.

Following the recently announced acquisition of Polariton by Marvell, we now have four major customers, all Fortune 500 or Fortune Global 500 companies at Stage 3 or prototyping of our design-win pipeline. We expect one or two additional Tier 1 customers to reach Stage 3 before the end of the third quarter of 2026.

Today, one of the primary factors affecting the pace of new customer engagement and our progression to Stage 4 or manufacturing is the exceptionally strong demand for silicon photonic wafers and devices. The rapid expansion of AI infrastructure has placed significant pressure on the limited number of foundries capable of supporting advanced silicon photonics manufacturing at scale.

As a result, wafer tape-out and fabrication cycle times are longer than normal. This is particularly true for emerging technologies such as electro-optic polymers where foundries must allocate specialized tools and engineering resources while balancing existing production commitments and capacity expansion.

Despite these industry-wide supply constraints, we continue to make steady progress with our customers. We expect to receive multiple devices from our foundry partners during the third and fourth quarter of 2026. In parallel, we are negotiating a new material supply and licensing agreement with one of our lead customers to support high-volume production, which is anticipated to be in 2027.

As a background to our increased success with customers, let me highlight a structural technology shift taking place in our industry today. The rapid emergence of silicon photonics as the preferred integration platform for optical interconnects. Over the past several years, the optical transceiver market has evolved from a specialized communication market into a foundational enabling technology for hyperscale cloud and AI. What we are seeing now is that silicon photonics is clearly winning the integration platform transition.

Industry forecasts project that the optical transceiver market could grow to more than $70 billion by 2030. We present a very significant growth trajectory over the next several years. More importantly, silicon photonics is expected to become the dominant technology platform within that market, growing from approximately 23% share in 2021 to an estimated greater than 70% market share by 2030.

There are several reasons driving this transition. First, silicon photonics enables higher levels of integration and scalability that align very well with the semiconductor manufacturing ecosystem. As AI clusters continue to scale, bandwidth requirements increase exponentially. The industry needs technology that can support very high-volume manufacturing, tighter integration with electronic ICs, and improve power efficiency.

Second, silicon photonics provides a pathway towards co-packaged optics and advanced optical interconnect architectures, which are becoming increasingly important as conventional electrical interconnect solutions based on copper encounter power density and bandwidth limitations. The level of strategic investment and acquisition activity we are seeing across the industry strongly validates this transition.

Companies including AMD, Marvell, Samsung, GlobalFoundries, Credo, and others are making significant investment in silicon photonics capabilities, optical integration technologies, and co-packaged optics

platforms. These are not isolated developments. They reflect a broad industry consensus that optical integration with silicon will be critical for the future.

This trend is highly relevant to Lightwave Logic. Our electro-optic polymer platform is not competing against silicon photonics; it is designed to enhance and enable silicon photonics. We believe our materials can provide meaningful performance advantage in areas such as speed, power efficiency, footprint reduction, manufacturability, while remaining compatible with silicon photonics and semiconductor ecosystems. In many ways, the increasing adoption of silicon photonics strengthens the strategic relevance of our technology because it expands the overall market opportunity for high-performance modulators.

One of the most important developments for light wave logic over the past several years has been the growing adoption and integration of our electro-optic polymer technology within the broader silicon photonics foundry ecosystem. The industry recognizes that scalable deployment of optical interconnect technologies requires compatibility with established semiconductor manufacturing platforms, standardized process design kits, and mature foundry workflows.

As a result, our strategy has focused on embedding our polymer modulator technology directly into leading silicon photonics ecosystem through partnerships and PDK integrations with organizations such as Tower Semiconductor, GlobalFoundries through the GDS Factory ecosystem, and SiTerra with Luceda Photonics.

These integrations are important because they enable designers and customers to access our technology at the foundry of their choice, accelerate development cycles, and support future high-volume manufacturing pathways. We believe this represents a significant validation of the compatibility and manufacturing of our platform within commercial silicon photonics infrastructure.

In addition, our recent announcement regarding the advancement of PDK 1.1 further demonstrates continued progress towards expanding functionality, improving design, and supporting ultra-high-speed device architectures. Collectively, these developments reinforce our view that foundries will play a central role not only in scalable manufacturing but also in enabling our long-term IP licensing and commercialization strategy.

We believe that the current capacity, equipment, and process constraints experienced at various silicon foundries will gradually disappear over the next 12 months as major investments and entry of new players will balance supply and demand both for new design as well as for production requirements.

One quick update on our progress in demonstrating the reliability of electro-optic polymers not just as a novel material but also when integrated into full devices. Over the past year, Lightwave Logic has continued to make significant technical progress in demonstrating the long-term reliability and stability of our electro-optic polymer platform, an important milestone for commercial deployment within demanding datacenter, telecom, and AI networking environments.

Historically, reliability has been viewed as one of the primary technical challenges associated with organic materials, and we believe our recent results demonstrate meaningful progress in addressing those industry concerns. As highlighted in our recent technical updates and press releases, our latest generation materials have successfully passed key Telcordia-related stress testing when combined with our proprietary encapsulation approaches validating projected long-term thermal stability and environmental robustness.

Our data indicates excellent resistance to critical degradation mechanisms such as loss of poling efficiency, chromophore decomposition, and photo-oxidation under accelerated stress conditions, including high temperature and high humidity environments such as 85 degrees Celsius, 85% relative humidity testing. In parallel, we continue advancing both chip-level and device-level reliability studies to validate long-term operational stability under real-world integration conditions. We believe our recent reliability results at the device level represent another important step towards commercial readiness.

Now let's talk about intellectual property for a minute, as we expect this topic to be highly relevant in the future. Electro-optic polymers offer what we believe is a highly compelling alternative to traditional modulator materials such as indium phosphide, or INP, and thin-film lithium niobate, or TFLN. Electro-optic polymers combine several important advantages. Very high electro-optic efficiency, ultra-high bandwidth, lower drive voltage, compact device footprints, and the potential for significantly reduced power consumption. In addition, polymer materials can be processed using scalable semiconductor manufacturing techniques and integrating with existing silicon photonics platforms.

Lightwave Logic's intellectual property strategy is designed to build broad and defensible protection across the entire electro-optic polymer technology stack, extending well beyond individual materials to encompass device architectures, fabrication processes, integration methodologies, and advanced packaging approaches. Our objective has been to create a comprehensive patent portfolio that supports long-term commercialization, reinforces our strategic position within the silicon photonics ecosystem, and enables multiple options for monetization, including licensing and technology partnerships.

Today our portfolio includes both granted and pending U.S. and international patents covering critical aspects of high-performance electro-optic materials, modulators, and device engineering, semiconductor integration techniques, manufacturing scalability, and packaging solutions. We believe this broad IP foundation is particularly important as the industry moves towards more complex photonic electronic integration architectures, where system-level know-how and manufacturability become increasingly valuable competitive differentiators.

In addition, our recent announcement regarding our engagement with Michael Best further reinforces our commitment to strengthening and expanding our intellectual property position as we continue advancing our commercialization and licensing initiatives.

Finally, let me summarize our financial results. For the first quarter of 2026, Lightwave Logic continued to maintain a strong financial position while increasing investments aligned with our technical development, commercialization activities, and strategic growth initiatives. Revenue for the quarter was approximately $29,000, representing a 27% year-over-year increase. Net loss for the quarter was $6.3 million or $0.04 per share compared to a net loss of $4.7 million in the prior year period while loss per share remained flat year-over-year.

Importantly, our increased operating expenses reflect continued investment in research and development, customer engagement activities, foundry ecosystem integration, intellectual property expansion, and organizational capabilities necessary to support future commercialization efforts.

R&D investments increased to $3.5 million as we continued advancing device performance, reliability validation, and integration activities while G&A expenses increased primarily due to strategic operational initiatives.

We ended the quarter with a very strong cash position of approximately $75 million in cash and equivalents, providing substantial financial flexibility to support the execution of our strategic roadmap and long-term growth objectives. Since the end of the first quarter of 2026, we have used up the shelf put in place in August of 2024. As a result, our cash on hand as of May 11, 2026, is approximately $100 million.

In summary, we believe the opportunity in front of us is significant, and we remain focused on building long-term value for our shareholders while positioning Lightwave Logic to play an important role in the future of AI networking and photonic integration.

Now, let me turn the call over to Ryan for our Q&A session. Ryan?

Ryan Coleman

Thanks, Yves.

When we announced this call, we invited investors to submit questions ahead of time. We'd like to thank the investors who continue to take the time to do so, and we appreciate your continued engagement on these calls.

Our first question, size is important for CPO, and TFLN may struggle because it is too big. Does this change the competitive landscape, and does TFLN remain a major competitor today?

Yves LeMaitre

First, each one of the AI connectivity sub-segments, scale up, scale out, and scale across, can benefit from the characteristics of our Perkinamine materials. For scale up and CPO in particular, size is becoming a fundamental constraint due to the limited real estate available at the edge of the XPU or the switch ASIC.

For scale out, power, speed, and size are all critical. Finally, scale across is pushing the limits of modulator bandwidth. Electro-optic polymers is one platform that can address all of these applications, unlike other technologies such as indium phosphide or TFLN, both having to deal with power, size, and high-volume manufacturing challenges.

Ryan Coleman

Polariton was a partner on several projects. Did the Marvell acquisition of Polariton interrupt any of these projects, and do you expect that they'll all be pursued?

Yves LeMaitre

As you know, this acquisition just closed, and we make it a rule of not commenting on the specifics of potential or existing customers under NDA. Let me say, though, congratulations to Marvell for picking a leader in plasmonics solution. We envision plasmonics to become a critical technology beyond 400G.

What I can tell you about Marvell is just like any other customers, we will work very hard to deserve their business going forward, and we are looking forward in engaging with them.

Ryan Coleman

Could you confirm that polymers are compatible with each segment of the AI, scale up, scale out, and scale across?

Yves LeMaitre

Yes, yes. As we discussed earlier, this is one of our main advantages due to the flexibility of the Perkinamine electro-optic platform. As a matter of fact, recently the scale across market has been very active, and we are following closely the roadmap for this coherent light, coherent, and DCI pluggable solution that are pushing the modulator bandwidth requirements.

Ryan Coleman

What is the status of the in-house polymer manufacturing equipment personnel and the readiness of a redundant manufacturing source?

Yves LeMaitre

This is a very active program here in Denver. We are setting up a new Perkinamine production line, commissioning new equipment, and hiring process and production personnel to be ready to run production

here in Denver. At this point in time, we have not engaged in developing a redundant manufacturing infrastructure.

Ryan Coleman

The last question, what's the status and progress of the back-end-of-line PDKs, including ALD encapsulation and testing readiness at foundry partners?

Yves LeMaitre

Excellent question. We have not talked publicly about plans for expanding our capacity. Today we are performing in-house back-end-of-line, which is a deposition and encapsulation of the polymers in Denver. We might go to high-volume manufacturing partners in the future. This is a topic we will address in future updates. What I can share at this point in time is that we are talking to multiple partners about this topic.

Ryan Coleman

Thanks, Yves.

A brief marketing note before we conclude today's call. The Company will be virtually attending the Needham Technology Media and Consumer Conference tomorrow, May 14. Investors that are interested in meeting with the Company should contact their Needham representative.

Also, a reminder that the Annual Shareholder Meeting will be held virtually next Thursday, May 21, at 10:00 A.M. Mountain Time.

Thank you all again for joining us today. We look forward to sharing our progress and discussing the exciting developments at the Company that are underway.

Operator

Ladies and gentlemen, the conference call of Lightwave Logic has now concluded. Thank you for your participation and you may now disconnect.