



Lightwave Logic Provides Third Quarter 2021 Corporate Update

ENGLEWOOD, Colo., Nov. 16, 2021 /PRNewswire/ -- Lightwave Logic, Inc. (NASDAQ: LWLG), a technology platform company leveraging its proprietary electro-optic (EO) polymers to transmit data at higher speeds with less power, today provided a corporate update in conjunction with the filing of its Quarterly Report on Form 10-Q for the third quarter ended September 30, 2021.

Third Quarter 2021 and Subsequent Company Highlights:

- As of November 15, 2021, the Company's cash and cash equivalents are approximately \$15 million, enabling it to finance operations through March 2023.
- Nasdaq Stock Market approved the listing of the Lightwave Logic common shares on the Nasdaq Capital Market. The stock began trading on the Nasdaq on September 1, 2021, followed by a closing bell ceremony at the Nasdaq Stock Market on September 10, 2021..
- Achieved world-record performance for a polymer modulator, as demonstrated in an optical transmission experiment by ETH Zurich, using the Company's proprietary, advanced Perkinamine™ chromophores and Polariton Technologies Ltd.'s newest plasmonic EO modulator, a silicon-photonics-based plasmonic racetrack modulator offering energy-efficient, low-loss, and high-speed modulation in a compact footprint.
- Received 3rd party review of the ultra-high performance of Lightwave Logic's electro-optic polymers working with a slot modulator design.
- Fortified intellectual property portfolio, growing to over 72 domestic and international patents and patent applications in advance of future commercialization initiatives - further strengthening the Company's business model and freedom of manufacturing.
- Developed breakthrough improved thermal design properties for electro-optic polymers used in its Polymer Plus™ and Polymer Slot™ modulators, enabling the speed, flexibility and stability needed for high-volume silicon foundry processes.
- Received the 2021 Industry Award for Optical Integration from the European Conference on Optical Communications (ECOC) - a premier industry exhibition.
- Presented at multiple industry specific and investor-related conferences including the European Conference on Optical Communications, the Q3 Investor Summit, the H.C. Wainwright 23rd Annual Global Investment Conference, and the LD Micro Main Event.

The full text of the Company's Quarterly Report on Form 10-Q for the third quarter ended September 30, 2021 was filed with the SEC on November 15, 2021 and can be found [here](#).

Management Commentary

"We continued to press forward development of our proprietary electro-optic polymers during the third quarter of 2021, including the achievement of world-record performance for a polymer modulator, and breakthrough improved thermal design properties for electro-optic polymers," said Dr. Michael Lebby, Chief Executive Officer of Lightwave Logic. "Through our collaboration with Polariton, we not only have achieved a new world-record for a racetrack plasmonic modulator device structure, transmitting 220 Gbit/s OOK and 408 Gbit/s 8PAM, but we received 3rd party review of the performance of our electro-optic polymer material. We believe performance achievements both at these speeds as well as material performance are demonstrating to companies the impact that high performance optical switching devices using our polymers will have on their business.

"We also successfully improved high temperature thermal performance for electro-optic polymers used in our Polymer Plus™ and Polymer Slot™ modulators, an essential measure of robustness and an important metric discussed with potential customers for fiber optic datacenter and telecommunications applications. Test results from our new modulators demonstrated a roughly tripling of the data rates possible in fiber optic communications, an advancement that we believe will have a profound impact on internet traffic flow.

"During the quarter we received a U.S. patent on an invention that enables enhanced optical routing architectures for polymer-based integrated photonics that can be scaled with partner foundries. This enhances our integrated photonics platform in general and is a powerful architectural routing patent that discloses how optical signals can be routed in two optical planes from light generation on-chip to light coupling off-chip.

"Our technological achievements were further recognized in the capital markets with our milestone achievement of uplisting to the Nasdaq, which we expect will help to continue to expand our existing shareholder base, improve liquidity and elevate our public profile within the industry. Our financing agreement with long-term investor Lincoln Park Capital Fund allows us to source capital in an opportunistic manner, in addition to our \$100 million S-3 shelf registration that provides the potential for additional financing alternatives. We are comfortable with our cash position of \$15 million at November 15th relative to our current burn rate, as this financing flexibility provides additional optionality for us as we move forward towards our end-goal of mass commercialization.

"Looking ahead to the final quarter of 2021 and into 2022, we continue to work closely with our partners under NDA - which include semiconductor foundries - to enhance our commercial positioning through ongoing innovation. I look forward to providing further updates in the near-term as we strive to create sustainable, long-term value for our shareholders," concluded Dr. Leppy.

About Lightwave Logic, Inc.

Lightwave Logic, Inc. (NASDAQ: LWLG) is developing a platform leveraging its proprietary engineered electro-optic (EO) polymers to transmit data at higher speeds with less power. The Company's high-activity and high-stability organic polymers allow Lightwave Logic to create next-generation photonic EO devices, which convert data from electrical signals into optical signals, for applications in data communications and telecommunications markets. For more information, please visit the Company's website at lightwavelogic.com.

Safe Harbor Statement

The information posted in this release may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. You can identify these statements by use of the words "may," "will," "should," "plans," "explores," "expects," "anticipates," "continue," "estimate," "project," "intend," and similar expressions. Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or anticipated. These risks and uncertainties include, but are not limited to, lack of available funding; general economic and business conditions; competition from third parties; intellectual property rights of third parties; regulatory constraints; changes in technology and methods of marketing; delays in completing various engineering and manufacturing programs; changes in customer order patterns; changes in product mix; success in technological advances and delivering technological innovations; shortages in components; production delays due to performance quality issues with outsourced components; those events and factors described by us in Item 1.A "Risk Factors" in our most recent Form 10-K; other risks to which our Company is subject; other factors beyond the Company's control.

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