

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

PRE-EFFECTIVE AMENDMENT No. 1
FORMS-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

LIGHTWAVE LOGIC, INC.
(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction of
incorporation or organization)

82-0497368
(IRS Employer
Identification Number)

Lightwave Logic, Inc.
369 Inverness Parkway, Suite 350
Englewood, CO 80112
720-340-4949

(Address, including zip code, and Telephone Number, including area code, of Registrant's Principal Executive Offices)

Michael S. Lebby
Chief Executive Officer
369 Inverness Parkway, Suite 350
Englewood, Colorado 80112
Telephone: (720) 340-4949

(Name, Address, including zip code, and Telephone Number, including area code, of Agent for Service)

Copies to:

Clayton E. Parker, Esq.
K&L Gates LLP
200 South Biscayne Boulevard, Suite 3900
Miami, FL 33131
Telephone: (305) 539-3300
Facsimile: (305) 358-7095

Approximate Date of Proposed Sale to the Public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 ("Securities Act"), other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Lightwave Logic, Inc. (the "Company") is filing this Pre-Effective Amendment No. 1 (this "Amendment") to its Registration Statement on Form S-3, filed with the Securities and Exchange Commission on July 26, 2024 (the "Registration Statement"), to (i) amend and restate the "Incorporation of Information by Reference" section hereto to specifically incorporate by reference recent filings made by the Company, and (ii) to revise Item 16. "Exhibits" to (a) provide an updated consent by Morison & Cogen LLP, the Company's independent registered public accounting firm, and (b) hyperlinking the Filing Fee Table to the Exhibit Index. Accordingly, this Amendment consists only of the facing page, this explanatory note, Part II of the Registration Statement and the signature page to the Registration Statement. The remainder of the Registration Statement, including the prospectus, is unchanged and has been omitted.

The information in this prospectus is not complete and may be changed. We may not sell these securities or accept an offer to buy these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities in any state where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JULY 31, 2024

PROSPECTUS



Lightwave Logic, Inc.
\$100,000,000 of Common Stock

Lightwave Logic, Inc., a Nevada corporation (“us”, “we”, “our”, or the “Company”) may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, shares of our common stock, par value \$0.001 per share (“Common Stock”) described in this prospectus, up to an aggregate amount of \$100,000,000.

This prospectus provides you with a general description of the securities offered. Each time we offer and sell securities, we will file a prospectus supplement to this prospectus that contains specific information about the offering and, if applicable, the amounts, prices and terms of the securities. Such supplements may also add, update or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities. This prospectus may not be used to consummate sales of securities unless accompanied by a prospectus supplement.

We may offer and sell the securities described in this prospectus and any prospectus supplement directly to our stockholders or to other purchasers or through agents on our behalf or through underwriters or dealers as designated from time to time. If any agents or underwriters are involved in the sale of any of these securities, the applicable prospectus supplement will provide the names of the agents or underwriters and any applicable fees, commission or discounts.

Our Common Stock is currently quoted on the Nasdaq Capital Market under the symbol “LWLG”. On July 22, 2024 the last reported sale price of our Common Stock on the Nasdaq Capital Market was \$3.53 per share.

Investing in our securities involves a high degree of risk. See the section entitled “Risk Factors” on page 4 of this prospectus and in the documents we filed with the Securities and Exchange Commission that are incorporated in this prospectus by reference for certain risks and uncertainties you should consider.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

This prospectus is dated , 2024.

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	ii
PROSPECTUS SUMMARY	1
RISK FACTORS	4
CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	4
USE OF PROCEEDS	5
DESCRIPTION OF OUR COMMON STOCK	6
PLAN OF DISTRIBUTION	8
LEGAL MATTERS	10
EXPERTS	10
DISCLOSURE ON COMMISSION POSITION ON INDEMNIFICATION	10
WHERE YOU CAN FIND MORE INFORMATION	10
DOCUMENTS INCORPORATED BY REFERENCE	11

ABOUT THIS PROSPECTUS

This prospectus of Lightwave Logic, Inc., a Nevada corporation (collectively with all of its subsidiaries, the “Company”, or “we”, “us”, or “our”) is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (“SEC”) utilizing a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell the securities described in this prospectus in one or more offerings up to a total dollar amount of \$100,000,000 as described in this prospectus.

The registration statement of which this prospectus is a part provides additional information about us and the securities offered under this prospectus. The registration statement, including the exhibits and the documents incorporated herein by reference, can be read on the SEC website or at the SEC offices mentioned under the heading “Where You Can Find More Information.”

We will provide a prospectus supplement containing specific information about the amounts, prices and terms of the securities for a particular offering. The prospectus supplement may add, update or change information in this prospectus. If the information in the prospectus is inconsistent with a prospectus supplement, you should rely on the information in that prospectus supplement. You should read both this prospectus and, if applicable, any prospectus supplement. See “Prospectus Summary — [Where You Can Find More](#)

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making offers to sell or solicitations to buy the securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should not assume that the information in this prospectus or any prospectus supplement, as well as the information we file or previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate as of any date other than the date of such document. Our business, financial condition, results of operations and prospects may have changed since those dates.

PROSPECTUS SUMMARY

The items in the following summary are described in more detail later in this prospectus. This summary does not contain all of the information you should consider. Before investing in our securities, you should read the entire prospectus carefully, including the “Risk Factors” beginning on page 4 and the financial statements incorporated by reference.

Overview

Lightwave Logic, Inc. (the “Company”) is a technology company focused on the development of next generation electro-optic photonic devices made on its P²IC™ technology platform which we have detailed as: 1) Polymer Stack™, 2) Polymer Plus™, and 3) Polymer Slot™. Our unique polymer technology platform uses in-house proprietary high-activity and high-stability organic polymers. Electro-optical devices called modulators convert data from electric signals into optical signals for multiple applications.

Our differentiation at the modulator device level is in higher speed, lower power consumption, simplicity of manufacturing, small footprint (size), and reliability. We have demonstrated higher speed and lower power consumption in packaged devices, and during 2023, we continued to make advances in techniques to translate our world class material properties to efficient, reliable modulator devices with commercial foundries. We are currently focused on testing and demonstrating the simplicity of manufacturability and reliability of our devices, including in conjunction with the silicon photonics manufacturing ecosystem. In 2023, we worked with silicon-based foundry partners to help scale in volume our polymer modulator devices and we received working modulator chips from these foundries. We have advanced and matured our interactions with our foundry partners and we continue to receive working modulator chips for prototyping. Silicon-based foundries are large semiconductor fabrication plants developed for the electronics IC business, that are now engaging with silicon photonics to increase their wafer throughput. Partnering with silicon-based foundries not only demonstrates that our polymer technology can be transferred into standard production lines using standard equipment, it also allows us to efficiently utilize our capital. The foundry partnerships will allow us to scale our high-performance polymer optical engines quickly and efficiently. We have now received silicon wafers that range up to 200mm in diameter, which aligns well with foundry manufacturing. Using 200mm silicon wafers, we showed packaged polymer modulators operating with open (clean) eye diagrams at 100GBaud PAM4 (or 200Gbps PAM4) at voltage drive levels at 1V at the 2024 Optical Fiber Conference in San Diego, California in March 2024 (“OFC 2024”). OFC is a leading international conference bringing together the complete value chain of fiber communications, datacentric, and telecommunications industrial players. We also showed polymer modulators with voltage drive levels that were below 1V. Driving voltage levels of around 1V is important as it allows our polymer modulators to be driven directly from CMOS ICs (as opposed to dedicated driver integrated circuit chips). This performance is ideal to enable 4 lanes at 200Gbps per lane pluggable transceivers that can operate at an aggregate data rate of 800Gbps. Since the invited talk at OFC 2024, a number of Tier 1 pluggable transceiver companies have both reviewed our technical results and viewed operating packaged polymer slot modulators at 200Gbps PAM4 with drive voltages at 1V.

Our extremely strong and broad patent portfolio allows us to optimize our business model in three areas: 1) Traditional focus on product development, 2) Patent licensing and 3) Technology transfer to foundries. We are continually looking to strengthen our patent portfolio both by internal inventions and acquisition of intellectual property.

We are initially targeting applications in fiber optic data communications and telecommunications markets and are exploring other applications that include automotive/LIDAR, sensing, displays etc., for our polymer technology platform. Our goal is to have our unique polymer technology platform become ubiquitous across many market verticals over and above the optical fiber optic communications markets.

Generative Artificial Intelligence (G-AI) has been integrating deeper within our daily activities with applications to make us more efficient and possibly smarter. The impact on the internet is huge, and the internet is based on an optical network that utilizes data centers to route and switch traffic or information to and from destinations. Data centers are being upgraded today in a fashion that the industry has not seen before with significant investments of capital. The expected demands of increased traffic, information, and data driven by G-AI is changing the way the internet is being operated. G-AI is now creating new and interesting market opportunities to upgrade the internet. Three of these opportunities are important today: density, speed, and low power and these are very well aligned with our high performance electro-optic polymers modulator platform. We are designing high performance polymer modulator optical engines to support the rise and growth of G-AI as it generates more information that will travel through the internet and optical network. While we are not directly a G-AI company designing electronic processors, we do see immediate benefits of enabling higher levels of information to cross the internet using our optical polymer modulator platform.

Commencement of Commercial Operations

We commenced commercial operations in May 2023. Presently, our commercial operations consist of a material supply license agreement to provide Perkinamine® chromophore materials for polymer based photonic devices and photonic integrated circuits (PICs). The license agreement represents tangible commercial progress for electro-optic polymers as part of our Company's business plan. Our Company is also in various stages of photonic device and materials development and evaluation with potential customers and strategic partners. We expect to continue to obtain a revenue stream from technology licensing agreements, and to obtain additional revenue streams from technology transfer agreements and direct sale of our electro-optic device components. We have seen increased interest in our materials during 2023 and we are in discussions on future license agreements.

Materials Development

Our Company designs and synthesizes organic chromophores for use in its own proprietary electro-optic polymer systems and photonic device designs. A polymer system is not solely a material, but also encompasses various technical enhancements necessary for its implementation. These include host polymers, poling methodologies, and molecular spacer systems that are customized to achieve specific optical properties. Our organic electro-optic polymer systems compounds are mixed into solution form that allows for thin film application. Our proprietary electro-optic polymers are designed at the molecular level for potentially superior performance, stability, and cost-efficiency. We believe our proprietary and unique polymers have the potential to replace more expensive, higher power consuming, slower-performance materials such as semiconductor-based modulator devices that are used in fiber-optic communication networks today.

Our patented and patent pending molecular architectures are based on a well-understood chemical and quantum mechanical occurrence known as *aromaticity*. Aromaticity provides a high degree of molecular stability that enables our core molecular structures to maintain stability under a broad range of operating conditions.

We expect our patented and patent-pending optical materials along with trade secrets and licensed materials, to be the core of and the enabling technology for future generations of optical devices, modules, sub-systems, and systems that we will develop or enable our partners to fully commercialize. Examples of our partners include electro-optic

device manufacturers, contract manufacturers, original equipment manufacturers, foundries, packaging and assembly manufacturers etc. Our Company contemplates future applications in market verticals that may address the needs of semiconductor companies, optical network companies, Web 2.0/3.0 media companies, high performance computing companies, telecommunications companies, aerospace companies, automotive companies, as well as for example, government agencies and defense entities.

Device Design and Development

Electro-optic Modulators

Our Company designs its own proprietary electro-optical modulation devices. Electro-optical modulators convert data from electric signals into optical signals that can then be transmitted over high-speed fiber-optic cables. Our modulators are electro-optic, meaning they work because the optical properties of the polymers are affected by electric fields applied by means of electrodes. Modulators are key components that are used in fiber optic telecommunications, data communications, and data centers networks etc., to convey the high data flows that have been driven by applications such as pictures, video streaming, movies etc., that are being transmitted through the Internet. Electro-optical modulators are expected to continue to be an essential element as the appetite and hunger for data increases every year as well as the drive towards lower power consumption, and smaller footprint (size).

2

Polymer Photonic Integrated Circuits (P²IC™)

Our Company also designs its own proprietary Photonic Integrated Circuits (otherwise termed a polymer PIC). A polymer PIC is a photonic device that integrates several photonic functions on a single chip. We believe that our technology can enable an ultra-miniaturization footprint that is needed to increase the number of photonic functions residing on a semiconductor chip. We see this creating a progression like what was seen in the computer integrated circuits, commonly referred to as Moore's Law. One type of integration is to combine several instances of the same photonic functions such as a plurality of modulators to create a multi-lane polymer PIC. The number of lanes can be varied depending on application. For example, the number of photonic components could increase by a factor of 4, 8, or 16. Another type of integration is to combine different types of devices including from different technology bases such as the combination of a semiconductor laser with a polymer modulator. Our P²IC™ platform encompasses both these types of architecture.

Current semiconductor photonic technology today is both struggling to reach faster device speeds as well as seamless integration with commercial silicon foundries. Our modulator devices, enabled by our electro-optic polymer material systems, work at extremely high frequencies (wide bandwidths) and possess inherent advantages over current crystalline electro-optic material contained in most modulator devices such as bulk lithium niobate (LiNbO₃), indium phosphide (InP), silicon (Si), and gallium arsenide (GaAs). Our advanced electro-optic polymer platform is creating a new class of modulators such as the Polymer Stack™, Polymer Plus™, Polymer Slot™, and associated PIC platforms that can address higher data rates in a lower cost, lower power consuming manner, smaller footprint (size) with much simpler data encoding techniques. Our electro-optic polymer material will boost the performance of standard PIC platforms such as silicon photonics and indium phosphide. Further, with our recent demonstration of packaged polymer slot modulator devices fabricated onto commercial silicon 200mm wafers using a commercial silicon foundry, our electro-optic polymer material is much easier to integrate with silicon foundries compared to competitive crystalline electro-optic materials.

Our electro-optic polymers can be integrated with other materials platforms because they can be applied as a thin film coating in a fabrication clean room such as may be found in semiconductor foundries using standard clean room tooling. These approaches enable our Polymer Plus™ and Polymer Slot™ device platforms to not only be competitive but fully integrated with foundries. Our polymers are unique in that they are stable enough to seamlessly integrate into existing CMOS, Indium Phosphide (InP), Gallium Arsenide (GaAs), and other semiconductor manufacturing lines. Of relevance are the integrated silicon photonics platforms that combine optical and electronic functions. These include a miniaturized modulator for ultra-small footprint applications in which we term the Polymer Slot™. This design is based on a slot modulator fabricated into semiconductor wafers that can include either silicon or indium phosphide.

Our Company has a fabrication facility in Colorado to apply standard fabrication processes to our electro-optic polymers which create modulator devices. While our internal fabrication facility is capable of manufacturing modulator devices, we have partnered with commercial silicon-based fabrication companies that are called foundries who can scale our technology with volume quickly and efficiently. The process recipe for fabrication plants or foundries is called a 'process development kit' or PDK. We are currently working with commercial foundries to implement our electro-optic polymers into accepted PDKs by the foundries. One of the metrics for successful implementation of PDK is to receive working modulator chips. Our work with the foundries is being focused with the Polymer Plus™ and the Polymer Slot™ polymer modulators.

Our Company

We were incorporated under the laws of the State of Nevada on June 24, 1997. In 2004, we acquired PSI-TEC Corp., and in 2006 we merged with PSI-TEC Corp. PSI-TEC Corp. was incorporated under the laws of the State of Delaware on September 12, 1995. In 2008, we changed our name to Lightwave Logic, Inc. Unless the context otherwise requires, all references to the "Company," "we," "our" or "us" and other similar terms means Lightwave Logic, Inc., a Nevada corporation. Our trademarks in the United States include P²IC™ and Perkinamine®. All other trademarks, service marks and trade names included or incorporated by reference in this prospectus are the property of their respective owners.

Our principal executive office is located at 369 Inverness Parkway, Suite 350, Englewood, CO 80112, and our telephone number is (720) 340-4949. Our website address is www.lightwavelogic.com. No information found on our website is part of this prospectus.

3

RISK FACTORS

An investment in our Common Stock involves significant risks. You should carefully consider the risk factors contained in our filings with the SEC, as well as all of the information contained in any prospectus supplement, free writing prospectus and amendments thereto, before you decide to invest in our Common Stock. Our business, prospects, financial condition and results of operations may be materially and adversely affected as a result of any of such risks. The value of our Common Stock could decline as a result of any of these risks. You could lose all or part of your investment in our Common Stock. Some of our statements in sections entitled "Risk Factors" are forward-looking statements. You should also consider the risks, uncertainties and assumptions discussed under "Part I—Item 1A—Risk Factors" of our most recent Annual Report on Form 10-K and in "Part II—Item 1A—Risk Factors" in our most recent Quarterly Report on Form 10-Q filed subsequent to such Form 10-K that are incorporated herein by reference, as may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, prospects, financial condition and results of operations.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as: "anticipate," "intend," "plan," "goal," "seek," "believe," "project," "estimate," "expect," "continuing," "ongoing," "strategy," "future," "likely," "may," "should," "could," "will" and similar references to future periods. Examples of forward-looking statements include, among others, statements we make regarding expected operating results, such as anticipated revenue; anticipated levels of capital expenditures for our current fiscal year; our belief that we have, or will

have, sufficient liquidity to fund our business operations during the next 12 months; strategy for gaining customers, growth, product development, market position, financial results and reserves.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the following: lack of available funding; general economic and business conditions; deterioration in global economic and financial market conditions generally; 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; and other factors beyond the Company's control.

The ultimate correctness of these forward-looking statements depends upon a number of known and unknown risks and events. We discuss our known material risks under Part I Item 1.A "Risk Factors" contained in our Company's Annual Report on Form 10-K for the year ended December 31, 2023, and under Part II Item 1.A "Risk Factors" contained in our Company's Quarterly Report on Form 10-Q for the three months ended March 31, 2024. Many factors could cause our actual results to differ materially from the forward-looking statements. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Any forward-looking statement made by us in this prospectus is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

4

USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds to us from the sale of our securities under this prospectus. Unless otherwise provided in the applicable prospectus supplement, we currently expect to use the net proceeds that we receive from this offering for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license or invest in complementary technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. The expected use of net proceeds of this offering represents our current intentions based on our present plans and business conditions. We cannot specify with certainty all of the particular uses for the net proceeds to be received upon the closing of this offering.

5

DESCRIPTION OF OUR COMMON STOCK

The following description of our common stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Articles of Incorporation, as amended (the "articles of incorporation") and our Restated Bylaws (the "bylaws"), each of which are incorporated by reference to this prospectus. We encourage you to read our articles of incorporation, our bylaws and the applicable provisions of the Nevada Revised Statutes for additional information.

Authorized Share Capital. The Company's authorized capital stock consists of 250,000,000 shares of common stock, par value \$0.001 per share and 1,000,000 shares of preferred stock, par value \$0.001 per share.

Voting. Each outstanding share of common stock is entitled to one vote on all matters to be submitted to a vote of the shareholders. Holders do not have preemptive rights, so we may issue additional shares that may reduce each holder's voting and financial interest in our Company. Cumulative voting does not apply to the election of directors, so holders of more than 50% of the shares voted for the election of directors can elect all of the directors. All elections for directors shall be decided by a plurality vote; all other questions shall be decided by majority vote except as otherwise provided by Nevada Revised Statutes. Our bylaws permit the holders of the same percentage of all shareholders entitled to vote at a meeting to take action by written consent without a meeting.

Dividend Rights. Holders of common stock are entitled to receive dividends when, as and if declared by the board of directors out of funds legally available therefor.

Liquidation Preferences. In the event of liquidation, dissolution or winding up of our Company, holders of common stock are entitled to share ratably in all assets remaining available for distribution to them after payment of liabilities and after provision has been made for each class of stock, if any, having preference over the common stock.

Other Terms. Holders of common stock do not have any conversion, redemption provisions or other subscription rights. All of the outstanding shares of common stock are fully paid and non-assessable.

Anti-Takeover Provisions

Certain of our charter, statutory and contractual provisions could make the removal of our management and directors more difficult and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our common stock. Furthermore, the existence of the foregoing provisions could lower the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Charter and Bylaw Provisions

Our articles of incorporation and bylaws contain the following provisions that may have the effect of discouraging unsolicited acquisition proposals:

- authorize our board of directors to create and issue, without stockholder approval, preferred stock, thereby increasing the number of outstanding shares, which can deter or prevent a takeover attempt;
- prohibit cumulative voting in the election of directors, which would otherwise allow less than a majority of stockholders to elect director candidates;
- empower our board of directors to fill any vacancy on our board of directors, whether such vacancy occurs as a result of an increase in the number of directors or otherwise;
- provide that our board of directors be divided into three classes, with approximately one-third of the directors to be elected each year;

6

- provide that special meetings of our stockholders may only be called by the chairperson, president or chief executive officer, or by resolution of the board of directors or at the request in writing of stockholders owning 66 2/3% in amount of the entire capital stock of the Company issued and outstanding and entitled to vote;
- establish advance notice procedures with regard to stockholder proposals relating to stockholder nominees for director and other stockholder proposals;
- provide that our board of directors is expressly authorized to adopt, amend or repeal our bylaws; and
- provide that our directors will be elected by a plurality of the votes cast in the election of directors.

These provisions could lower the price that future investors might be willing to pay for shares of our common stock.

Nevada Law

Nevada Revised Statutes sections 78.378 to 78.3793 provide state regulation over the acquisition of a controlling interest in certain Nevada corporations unless the articles of incorporation or bylaws of the corporation provide that the provisions of these sections do not apply. Our articles of incorporation and bylaws do not state that these provisions do not apply. The statute creates a number of restrictions on the ability of a person or entity to acquire control of a Nevada company by setting down certain rules of conduct and voting restrictions in any acquisition attempt, among other things. The statute contains certain limitations and it may not apply to our Company. These provisions may have the effect of deterring hostile takeovers or delaying changes in control, which could depress the market price of our common stock and deprive shareholders of opportunities to realize a premium on shares of common stock held by them.

Contractual Provisions

Our employee stock option agreements include change-in-control provisions that allow us to grant options or stock purchase rights that may become vested immediately upon a change in control. The terms of change of control provisions contained in certain of our senior executive employee agreements may also discourage a change in control of our Company.

Our board of directors also has the power to adopt a shareholder rights plan that could delay or prevent a change in control of our Company even if the change in control is generally beneficial to our shareholders. These plans, sometimes called “poison pills,” are oftentimes criticized by institutional investors or their advisors and could affect our rating by such investors or advisors. If our board of directors adopts such a plan, it might have the effect of reducing the price that new investors are willing to pay for shares of our common stock.

Together, these charter, statutory and contractual provisions could make the removal of our management and directors more difficult and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our common stock. Furthermore, the existence of the foregoing provisions, could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol “LWLG.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.

PLAN OF DISTRIBUTION

We may sell securities:

- through underwriters;
- through dealers;
- through agents;
- directly to purchasers; or
- through a combination of any of these methods of sale.

In addition, we may issue the securities as a dividend or distribution to our existing securityholders.

We may directly solicit offers to purchase securities or agents may be designated to solicit such offers. We will, in the prospectus supplement relating to such offering, name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay. Any such agent will be acting on a best-efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be affected from time to time in one or more transactions:

- at a fixed price or prices that may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;

- the public offering or purchase price;
- any discounts and commissions to be allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are utilized in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

If a dealer is utilized in the sale of the securities in respect of which the prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

Agents, underwriters, dealers and other persons may be entitled under agreements that they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act.

Certain agents, underwriters and dealers, and their associates and affiliates may be customers of, have borrowing relationships with, engage in other transactions with, and/or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may over-allot in connection with the offering, creating a short position for their own accounts. In addition, to cover over-allotments or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

Any underwriters that are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in the common stock on the Nasdaq Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the securities offered by this prospectus has been passed upon for us by Snell & Wilmer L.L.P. If legal matters in connection with offerings made pursuant to this prospectus are passed upon by counsel for the underwriters, dealers or agents, if any, such counsel will be named in the prospectus supplement relating to such offering.

EXPERTS

Morison Cogen LLP, our independent registered public accounting firm, has audited our balance sheets as of December 31, 2023 and 2022, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (herein referred to as "financial statements"), as set forth in their report, which is incorporated by reference in the prospectus and elsewhere in this registration statement. We have included our financial statements in this prospectus and elsewhere in the registration statement. Our consolidated financial statements are incorporated by reference in reliance on Morison Cogen LLP's report, given on their authority as experts in accounting and auditing.

DISCLOSURE ON COMMISSION POSITION ON INDEMNIFICATION

Insofar as indemnification for liabilities arising under the Securities Act, as amended, may be permitted to directors, officers, and controlling persons of the registrant pursuant to the Company's constituent documents, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person connected with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934 (the "Exchange Act"). Accordingly, we file annual, quarterly and current reports, proxy statements as may be required and other information with the SEC and filed a registration statement on Form S-3 under the Securities Act relating to the securities offered by this prospectus. This prospectus, which forms part of the registration statement, does not contain all of the information included in the registration statement. For further information, you should refer to the registration statement and its exhibits.

You can review our filings by accessing the website maintained by the SEC at <http://www.sec.gov>. The site contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. In addition to the foregoing, we maintain a website at www.LightwaveLogic.com. Our website content is made available for informational purposes only. It should neither be relied upon for investment purposes nor is it incorporated by reference into this prospectus. We make available at <https://www.lightwavelogic.com/investors/> copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and any amendments to such document as soon as practicable after we electronically file such material with or furnish such documents to the SEC.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus certain information that we file with the SEC, which means that we can disclose important information to you by referring you to other documents separately filed by us with the SEC that contain such information. The information we incorporate by reference is considered to be part of this prospectus and information we later file with the SEC will automatically update and supersede the information in this prospectus. The following documents filed by us with the SEC pursuant to Section 13(a) of the Exchange Act and any of our future filings under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except for information furnished under Item 2.02 or 7.01 of Current Report on Form 8-K or other information “furnished” to the SEC, or any exhibits related thereto, made before the termination of the offering are incorporated by reference herein:

- (1) our [Annual Report on Form 10-K](#) for the fiscal year ended December 31, 2023 filed with the SEC on February 29, 2024;
- (2) our [Quarterly Report on Form 10-Q](#) for the quarterly period ended March 31, 2024 filed with the SEC on May 10, 2024; and
- (3) our Current Reports on Form 8-K filed with the SEC on [March 25, 2024](#), [May 24, 2024](#), [June 25, 2024](#) and [July 22, 2024](#).

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent that a statement contained in this prospectus or any subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than any such documents or portions thereof that are furnished under Item 2.02 or Item 7.01 of Form 8-K, unless otherwise indicated therein, including any exhibits included with such Items) before the date the offering of securities hereunder is terminated or complete are deemed to be incorporated by reference into, and to be a part of, this prospectus.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered with the prospectus, other than an exhibit to these filings unless we have specifically incorporated that exhibit by reference into the filing, upon written or oral request and at no cost to the requester. Requests should be made by writing or telephoning us at the following address:

Lightwave Logic, Inc.
369 Inverness Parkway, Suite 350
Englewood, CO 80112
720-340-4949

11

LIGHTWAVELOGIC, INC.

\$100,000,000 of Common Stock

PROSPECTUS

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses (other than underwriting discounts and commissions) in connection with the issuance and distribution of the securities registered hereby. The Company will bear all of these expenses. All amounts are estimated except for the SEC registration fee:

SEC registration fee	\$	14,760
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Legal fees and expenses	50,000
Accounting fees and expenses	13,500
Printing and Engraving Expenses	2,000
Miscellaneous fees and expenses	—
Total expenses	\$ 80,260

(1) This number excludes the registration fee offset pursuant to Rule 457(p). We previously registered \$100,000,000 in aggregate offering price of securities pursuant to the Registration Statement on Form S-3 (File No. 333-257670), originally filed on July 2, 2021, and declared effective on July 9, 2021 (the “Prior Registration Statement”), of which (i) \$32,921,834 of our Common Stock remains unsold (the “Unsold Sales Agreement Securities”) that may be issued and sold from time to time under the sales agreement (the “Sales Agreement”), dated December 9, 2022, with Roth Capital Partners, LLC as agent and (ii) \$6,358,348 of our Common Stock remains unsold that may be issued from time to time under the purchase agreement (the “Purchase Agreement”), dated February 28, 2023, with Lincoln Park Capital Fund, LLC in addition to the resale of such shares by Lincoln Park Capital Fund, LLC to the public (the “Unsold Purchase Agreement Securities” and, together with the Unsold Sales Agreement Securities, the “Unsold Securities”). Pursuant to Rule 457(p) under the Securities Act, we are offsetting the registration fee due under this registration statement by \$4,285.47, which represents the registration fee relating to the Unsold Securities previously paid in connection with the Prior Registration Statement.

Item 15. Indemnification of Directors and Officers.

Under the Nevada Revised Statutes, director immunity from liability to a company or its shareholders for monetary liabilities applies automatically unless it is specifically limited by a company’s articles of incorporation.

Nevada Revised Statutes 78.751 and 78.7502 have provisions that provide for discretionary and mandatory indemnification of officers, directors, employees, and agents of a corporation. Under these provisions, such persons may be indemnified by a corporation against expenses, including attorney’s fees, judgment, fines and amounts paid in settlement, actually and reasonably incurred by him in connection with the action, suit or proceeding, if he acted in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the corporation and with respect to any criminal action or proceeding had no reasonable cause to believe his conduct was unlawful.

To the extent that a director, officer, employee or agent has been successful on the merits or otherwise in defense of any action, suit or proceeding, or in defense of any claim, issue or matter, the Nevada Revised Statutes provide that he must be indemnified by the Company against expenses, including attorney’s fees, actually and reasonably incurred by him in connection with the defense.

Section 78.7502 of the Nevada Revised Statutes also provides that any discretionary indemnification, unless ordered by a court or advanced by the Company, may be made only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances.

II-1

The Company’s articles of incorporation state that no director or officer shall be personally liable to the Company or its stockholders for monetary damages for any breach of fiduciary duty by such person as a director or officer. Notwithstanding the foregoing sentence, a director or officer shall be liable to the extent provided by applicable law (i) for acts or omissions which involve intentional misconduct, fraud or a knowing violation of the law or (ii) for the payment of dividends in violation of Nevada Revised Statutes Section 78.300.

The Company’s bylaws state that Company shall, to the fullest extent permitted by Nevada law, indemnify any person who is or was a director or officer of the Company or is or was a director or officer of the Company serving at the Company’s request as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust, or other entity (each such person, an “Indemnitee”) against Expenses (as defined below), including without limitation attorneys’ fees, costs, expenses, judgments, fines, and amounts paid in settlement (collectively, “Expenses”), actually and reasonably incurred by the Indemnitee in connection with any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative, whether or not an action, suit or proceeding by or in the right of the Corporation, to which the Indemnitee is, was, or is threatened to be made a party by reason of being an Indemnitee

Section 2 of Article VI of the Company’s bylaws state that Expenses of Indemnitees must be paid or reimbursed by the Company or through insurance purchased and maintained by the Company or through other financial arrangements made by the Company, as they are incurred and in advance of the final disposition of the action, suit, proceeding or claim described in Section 1 of this Article VI, to the fullest extent permitted by Nevada law. Section 3 states that the Company may, by action of its Board of Directors and to the extent provided in such action, indemnify employees and other persons as though they were Indemnitees.

Section 4 of Article VI states that the Company may purchase and maintain insurance or make other financial arrangements on behalf of any Indemnitee for any liability asserted against him or her and liability and expenses incurred by him or her in his or her capacity as a director, officer, employee, member, managing member or agent, or arising out of his or her status as such, whether or not the Corporation has the authority to indemnify him or her against such liability and expenses. Section 5 further states that the rights of indemnification set out in Article VI shall be in addition to and not exclusive of any other rights to which any Indemnitee may be entitled under the articles of incorporation, bylaws, any other agreement with the Company, any action taken by the stockholders or disinterested directors of the Corporation, or otherwise. Further, the termination of any proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of this Corporation, or, with respect to any criminal proceeding, that the person had reasonable cause to believe that the conduct was unlawful.

Section 10 of Article VI states that if the bylaws or any portion thereof shall be invalidated on any ground by any court of competent jurisdiction, the Company shall indemnify each director, officer or other agent to the fullest extent permitted by any applicable portion of such bylaws that shall not have been invalidated, or by any other applicable law.

II-2

Item 16. Exhibits.

(a) Exhibits

Exhibit No.	Description of Exhibit
1.1*	Form of Underwriting Agreement
3.1	Articles of Incorporation (incorporated by reference to Company’s Form 10-SB as filed with the SEC on April 13, 2007)
3.2	Certificate of Amendment of Articles of Incorporation (incorporated by reference to Company’s Definitive Schedule 14C Information Statement as filed with the SEC on February 19, 2008)
3.3	Certificate of Amendment of Articles of Incorporation (incorporated by reference to Company’s Form S-1 Registration Statement as filed with the SEC on August 3, 2015)

3.4 [Second Amended and Restated Bylaws – June 18, 2024](#) (incorporated by reference to Company’s Form 8-K as filed with the SEC on June 25, 2024)

5.1** [Opinion of Snell & Wilmer LLP.](#)

23.1** [Consent of Morison Cogen LLP, Independent Registered Public Accounting Firm](#)

23.2 [Consent of Snell & Wilmer LLP.](#) (included in the opinion filed as Exhibit 5.1)

24.1 [Powers of Attorney](#) (included on signature page to this Registration Statement)

107 [Filing Fee Table](#) (incorporated by reference to Company’s Form S-3 as filed with the SEC on July 26, 2024)

* To be filed by amendment or incorporated herein by reference in connection with the offering of securities.

** Filed herewith

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

II-3

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(a) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act, as amended;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act, as amended, to any purchaser:

(i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

II-4

(5) That, for the purpose of determining liability of the registrant under the Securities Act, as amended, to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

- (b) That, for purposes of determining any liability under the Securities Act, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended), that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act, as amended, may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described in Item 15 above, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, that the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act, as amended, and will be governed by the final adjudication of such issue.

II-5

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Longmont, State of Colorado, on July 31, 2024.

LIGHTWAVE LOGIC, INC.

By: /s/ James S. Marcelli
James S. Marcelli
President

POWER OF ATTORNEY

We, the undersigned officers and directors of Lightwave Logic, Inc., do hereby constitute and appoint James S. Marcelli, our true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution in each of them, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent, and full power and authority to do and perform each and every act and thing requisite are necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, and any of his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated below:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael Lebby</u> Michael Lebby	Chief Executive Officer, Principal Executive Officer, Chair of the Board of Directors	July 31, 2024
<u>/s/ James S. Marcelli</u> James S. Marcelli	President, Chief Operating Officer, Principal Financial Officer, Principal Accounting Officer, Secretary, Director	July 31, 2024
<u>/s/ Laila Partridge</u> Laila Partridge	Director	July 31, 2024
<u>/s/ Craig Ciesla</u> Craig Ciesla	Director	July 31, 2024
<u>/s/ Ronald A. Bucchi</u> Ronald A. Bucchi	Director	July 31, 2024
<u>/s/ Siraj Nour El-Ahmadi</u> Siraj Nour El-Ahmadi	Director	July 31, 2024
<u>/s/ Frederick J. Leonberger</u> Frederick J. Leonberger	Director	July 31, 2024

II-6

Snell & Wilmer
L.L.P.
LAW OFFICES

50 West Liberty Street
Suite 510
Reno, NV 89501
775.785.5440
775.785.5441 (Fax)
www.swlaw.com

July 31, 2024

Lightwave Logic, Inc.
369 Inverness Parkway, Suite 350
Englewood, Colorado 80112

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as your counsel in connection with the registration statement on Form S-3 filed on July 26, 2024, by Lightwave Logic, Inc., a Nevada corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933 (the "Securities Act") and the Pre-Effective Amendment No. 1 filed on the date of this letter (collectively, the "Registration Statement") related to the registration of up to \$100,000,000 in aggregate price, of shares of the Company's common stock ("Common Stock"), par value \$0.001 per share, which may be offered and sold from time to time in one or more series of issuances. The shares of Common Stock being registered pursuant to the Registration Statement are referred to in this letter as the "Shares". Capitalized terms used in this letter and not otherwise defined shall have the meanings given to such terms in the Registration Statement.

You have requested our opinion as to the matters set forth below in connection with the Registration Statement. For purposes of rendering this opinion, we have examined the Registration Statement, the Company's articles of incorporation, as amended, and bylaws, as amended, and the corporate action of the Company that provides for the issuance of the Shares, and we have made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and, as to certain matters of fact that are material to our opinion, we have also relied on certificates made by officers of the Company. In rendering our opinion, in addition to the assumptions that are customary in opinion letters of this kind, we have assumed the genuineness of signatures on the documents we have examined, the conformity to authentic original documents of all documents submitted to us as copies, and that the Company will have sufficient authorized and unissued shares of common stock available with respect to any of the Shares issued after the date of this letter. We have not verified any of these assumptions.

This opinion is rendered as of the date of this letter and is limited to matters of Nevada corporate law, including applicable provisions of the Nevada Constitution and reported judicial decisions interpreting those laws. We express no opinion as to the laws of any other state, the federal law of the United States, or the effect of any applicable federal or state securities laws.

Based upon and subject to the foregoing, it is our opinion that, when an issuance of the Shares has been duly authorized by all necessary action of the Company, and, when such Shares have been issued and paid for as described in the Registration Statement, the Shares will be validly issued, fully paid, and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to this firm in the related preliminary prospectus under the caption "Legal Matters". In giving our consent we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations under such act.

Very truly yours,

/s/ Snell & Wilmer L.L.P.

Snell & Wilmer L.L.P.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
Lightwave Logic, Inc.

We hereby consent to the incorporation by reference in this Registration Statement of Lightwave Logic, Inc. on Form S-3 to be filed on July 31, 2024 of our reports dated February 29, 2024, relating to the financial statements of Lightwave Logic, Inc. and the effectiveness of internal control over financial reporting, which reports were included in the Annual Report on Form 10-K filed February 29, 2024, and the reference to us under the caption "Experts" in the Registration Statement on Form S-3 to be filed on July 31, 2024.

/s/ Morison Cogen LLP
Blue Bell, Pennsylvania
Date: July 31, 2024

