PROSPECTUS



1,618,122 Shares of Common Stock

The selling stockholder identified in this prospectus or their transferees or other successors-in-interest identified in a prospectus supplement (the "Selling Stockholders") may sell or otherwise dispose of up to 1,618,122 shares of our common stock, par value \$0.01 per share. We are not offering any shares of common stock under this prospectus and will not receive any proceeds from the sale or other disposition of the shares covered hereby.

The Selling Stockholders (which term includes their respective donees, pledgees, transferees or other successors-in-interest) may, from time to time, sell, transfer or otherwise dispose of the shares or interests therein on any stock exchange, market or trading facility on which the shares are traded or in private transactions at fixed prices, at market prices prevailing at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The Selling Stockholders will bear all fees, discounts, concessions or commissions of broker-dealers or agents in connection with the offering of the shares by the Selling Stockholders. See "Plan of Distribution" beginning on page 13 of this prospectus for more information about how the Selling Stockholders may sell their shares of common stock.

Our common stock is traded on The Nasdaq Global Market under the symbol "IRIX". On July 8, 2021, the last reported sale price of our common stock on The Nasdaq Global Market was \$6.85 per share.

Investing in our common stock involves a high degree of risk. You should carefully read and consider the risk factors described in, and incorporated by reference under, "Risk Factors" beginning on page 5 of this prospectus and or as updated by any subsequent filing with the Securities and Exchange Commission before investing in any securities.

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.

The date of this prospectus is July 27, 2021.

TABLE OF CONTENTS

1
2
3
5
ϵ
7
11
13
16
16
16
17

ABOUT THIS PROSPECTUS

This prospectus is part of a Registration Statement on Form S-3 (the "Registration Statement") that we filed with the United States Securities and Exchange Commission (the "SEC"). Under this Registration Statement, the Selling Stockholders may sell, at any time and from time to time, in one or more offerings, up to 1,618,122 shares of common stock. When the Selling Stockholders elect to make an offer of any common stock described in this prospectus, pursuant to this Registration Statement, a prospectus supplement, if required, may be distributed that will contain specific information about the terms of that offering. Any required prospectus supplement may also add, update or change information contained in this prospectus. It is important for you to read and consider all information contained in this prospectus, including the documents incorporated by reference therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you under the captions "Where You Can Find Additional Information" and "Information Incorporated by Reference" in this prospectus.

We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement. No person has been authorized to give any information or make any representations other than those contained or incorporated by reference in this prospectus or any accompanying prospectus supplement in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us or the Selling Stockholders. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about, and to observe, any restrictions as to the offering and the distribution of this prospectus applicable to those jurisdictions.

This prospectus incorporates by reference market data, industry statistics and other data that have been obtained from, or compiled from, information made available by third parties. We have not independently verified their data. You should read the entire prospectus and any prospectus supplement, as well as the documents incorporated by reference into this prospectus or any prospectus supplement, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement is correct as of any date subsequent to the date hereof or of such prospectus supplement, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus may be supplemented from time to time by one or more prospectus supplements. Any such prospectus supplements may include additional or different information, such as additional or different risk factors or other special considerations applicable to us or our business, financial condition or results of operations. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information contained in the prospectus supplement.

This prospectus is neither an offer to sell nor a solicitation of an offer to buy any securities other than those registered by this prospectus, nor it is an offer to sell or a solicitation of an offer to buy securities where an offer or solicitation would be unlawful.

Unless the context requires otherwise, references in this prospectus to "IRIDEX," "the company," "we," "us" and "our" refer to IRIDEX Corporation, a Delaware corporation, and our consolidated subsidiaries. This prospectus, including the documents incorporated herein by reference, contains references to a number of trademarks that are our registered trademarks or those of our affiliates, or trademarks for which we or our affiliates have pending registration applications or common law rights. This prospectus may also include trade names, trademarks and service marks of other companies and organizations.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and the negative and plural forms of these words and similar expressions are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections titled "Prospectus Summary" and "Risk Factors," and include statements regarding the intent, belief or current expectations of us and the management that are subject to known and unknown risks, uncertainties and assumptions.

Forward-looking statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail in our reports filed from time to time under the Securities Act and/or the Exchange Act, including the risks identified under the heading "Risk Factors" in our most recent Annual Report on Form 10-K and our most recent Quarterly Report on Form 10-Q which are incorporated by reference into this prospectus in their entirety. We encourage you to read these filings as they are made. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement also contain statements that are based on the current expectations of our company and management. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

PROSPECTUS SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated in this prospectus by reference. This summary does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus and any applicable prospectus supplement, including each of the documents incorporated herein or therein by reference, before making an investment decision.

Overview

IRIDEX Corporation is a leading worldwide provider of therapeutic-based laser consoles, delivery devices and consumable instrumentation used to treat sight-threatening eye diseases in ophthalmology. Certain of our products are powered by our differentiated MicroPulse technology, which is a method of delivering laser energy using a mode which chops the continuous wave laser beam into short, microsecond-long laser pulses. Our products are sold in the United States predominantly through a direct sales force and internationally through independent distributors.

Our products consist of laser consoles, delivery devices and consumable instrumentation, including laser probes, and are used in the treatment of serious eve diseases, including glaucoma and retinal diseases. Our laser consoles consist of the following product lines:

- Glaucoma This product line includes our Cyclo G6 laser system used for the treatment of glaucoma;
- **Medical Retina** Our medical retina product line includes our IQ 532 and IQ 577 laser photocoagulation systems, which are used for the treatment of diabetic macular edema and other retinal diseases; and
- Surgical Retina Our surgical retina line of products includes our OcuLight TX, OcuLight SL, OcuLight SLx, OcuLight GL and OcuLight GLx laser photocoagulation systems. These systems are often used in vitrectomy procedures, which can be used to treat retinal diseases such as proliferative diabetic retinopathy, macular holes, retinal tears and retinal detachments.

Our business generates recurring revenues through sales of consumable products, predominantly single-use laser probe devices and other instrumentation, as well as repair, servicing and extended service contracts for our laser systems. Our laser probes consist of the following product lines:

- Glaucoma Probes used in our glaucoma product line include our patented MicroPulse P3 ("MP3") probe and G-Probe; and
- Surgical Retina Our surgical retina probes include our EndoProbe family of products used in vitrectomy procedures.

Ophthalmologists typically use our laser systems in hospital operating rooms ("ORs") and ambulatory surgical centers ("ASCs"), as well as their offices and clinics. In the ORs and ASCs, ophthalmologists use our laser systems with either an indirect laser ophthalmoscope or a consumable, single use MP3 probe, G-Probe or EndoProbe.

Market Opportunity

We estimate that:

• there are 100 million people worldwide with diabetes-related eve disease;

- the G6 has a target installed base opportunity of 5,000 systems in the United States and approximately the same number outside the United States for a total global installed based opportunity of 10,000 systems;
- there are 5 million patients globally using multiple eye drop medications for the treatment of glaucoma;
- there is an opportunity to treat glaucoma patients 4-6 times with G6 probes during their lifetime; and
- the G6 probe target market opportunity is over \$1 billion.

Clinical Study Data

The following clinical results were observed in a study called "Long-term Efficacy of Micropulse Diode Transscleral Cyclophotocoagulation in the Treatment of Refractory Glaucoma" by investigators at the National University Health System, or NUHS, which involved data from 14 patients treated using the MP3 probe over 78 months:

- 39% mean intraocular pressure reduction from 43.3 to 24.8 millimeters of Mercury, or mmHg;
- reduction in eyedrops from a mean of 1.8 to 1.1; and
- average number of treatments was 3.6.

Corporate Information

IRIDEX Corporation was incorporated in California in February 1989 as IRIS Medical Instruments, Inc. In January 1996, we changed our name to IRIDEX Corporation and reincorporated in Delaware. Our executive offices are located at 1212 Terra Bella Avenue, Mountain View, California 94043-1824, and our telephone number is (650) 940-4700. We can also be reached at our website at www.iridex.com. Any information on, or that can be accessed through, our website and social media channels is not part of this prospectus.

IRIDEX, the IRIDEX logo, IRIS Medical, MicroPulse, OcuLight, SmartKey, and EndoProbe are our registered trademarks. G-Probe, DioPexy, DioVet, TruFocus, TrueCW, IQ 577, IQ 532, Cyclo G6, TxCell, OtoProbe, Symphony, EasyFit, Endoview, MoistAir and GreenTip product names are our trademarks. All other trademarks or trade names appearing in this prospectus or incorporated by reference herein are the property of their respective owners.

The Offering

The Selling Stockholders named in this prospectus may offer and sell up to 1,618,122 shares of our common stock, par value \$0.01 per share. Our common stock is currently listed on The Nasdaq Global Market under the symbol "IRIX." Shares of our common stock that may be offered under this prospectus will be fully paid and non-assessable. We will not receive any of the proceeds of sales by the Selling Stockholders of any of the common stock covered by this prospectus. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the Selling Stockholders for offer and sale, we are referring to the shares that are being registered pursuant to the terms of the (1) Investment Agreement, dated as of March 2, 2021, by and among us and Topcon America Corporation, to which we issued and sold common stock in a private placement (the "Investment Agreement"), and (2) Registration Rights Agreement, dated March 2, 2021, by and among us and Topcon America Corporation (the "Registration Rights Agreement"; together with the Investment Agreement and the Registration Rights Agreement, the "Agreements"). When we refer to the Selling Stockholders in this prospectus, we are referring to the holders of registration rights under the Agreements and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the Registration Statement of which this prospectus is a part. See "Selling Stockholders" beginning on page 11 of this prospectus.

RISK FACTORS

Investing in our common stock involves risks. Before deciding to invest in our common stock, please read carefully the risks and uncertainties described below and incorporated by reference in this prospectus or any prospectus supplement. These risks and uncertainties include those discussed in our Annual Report on Form 10-K for the fiscal year ended January 2, 2021 and our Quarterly Report on Form 10-Q for the fiscal quarter ended April 3, 2021, all of which are incorporated by reference and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. See "Information Incorporation by Reference" and "Where You Can Find More Information." These risks are not the only risks that we may face. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, may also become important factors that affect us. If any of the risks or uncertainties described in this prospectus or our SEC filings or any such additional risks and uncertainties actually occur, our business, financial condition or results of operations could be materially and adversely affected which could cause our actual operating results to differ materially from those indicated or suggested by forward-looking statements made in this prospectus or our SEC filings or presented elsewhere by management from time to time you could lose part or all of your investment. In that case, the trading price of our common stock could decline and you could lose all or part of your investment. Please also see "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 2.

The number of shares being registered for sale is significant in relation to the number of our outstanding shares of common stock.

We have filed a Registration Statement of which this prospectus is a part to register the shares offered hereunder for sale into the public market by the Selling Stockholders. These shares represent a large number of shares of our common stock, and if sold in the market all at once or at about the same time, could depress the market price of our common stock during the period the Registration Statement remains effective and could also affect our ability to raise equity capital.

USE OF PROCEEDS

We are registering these shares pursuant to registration rights granted to the Selling Stockholders. We are not selling any securities under this prospectus and we will not receive any of the proceeds from the sale or other disposition by the Selling Stockholders or their transferees of the shares of common stock covered hereby.

We have agreed to pay all costs, expenses and fees relating to registering the shares of our common stock referenced in this prospectus. The Selling Stockholders will pay any brokerage commissions and/or similar charges incurred in connection with the sale or other disposition by them of the shares covered hereby.

See "Selling Stockholders" and "Plan of Distribution" described below.

DESCRIPTION OF CAPITAL STOCK

The following description of the capital stock is a summary. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description of the matters set forth, you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and amended and restated investors' rights agreement, each previously filed with the Securities and Exchange Commission and incorporated by reference as an exhibit to the Annual Report on Form 10-K, and to the applicable provisions of Delaware law.

General

Our authorized capital stock consists of 30,000,000 shares of common stock, \$0.01 par value per share, and 2,000,000 shares of undesignated preferred stock, \$0.01 par value per share. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of June 30, 2021, there were 15,761,996 shares of common stock issued and outstanding.

In August 2007, we filed a Certificate of Designation (the "Certificate of Designation") authorizing us to issue up to 500,000 of preferred stock as shares of Series A Preferred Stock, par value \$0.01 per share ("Series A Preferred Stock"), and we issued 500,000 shares of Series A Preferred Stock, convertible into 1,000,000 shares of common stock, and warrants to purchase an aggregate of 600,000 shares of common stock at an exercise price of \$0.01 per share.

On June 11, 2013, all outstanding shares of our Series A Preferred Stock automatically converted into 1,000,000 shares of common stock. Pursuant to the Certificate of Designation, upon conversion into shares of common stock, the 500,000 shares of Series A Preferred Stock were cancelled and shall not be reissuable. The warrants were to expire on December 31, 2007 but were exercised prior to that date.

Common Stock

We are authorized to issue up to 30,000,000 shares with a par value of \$0.01 per share. There are no agreements or outstanding options, warrants or similar rights that entitle their holder to acquire from us any of our equity securities.

Holders of shares of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders generally. Stockholders are entitled to receive such dividends as may be declared from time to time by the board of directors out of funds legally available therefore.

Dividend Rights

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Voting Rights

There are 30,000,000 shares of common stock authorized for issuance. Pursuant to our amended and restated certificate of incorporation, each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of stockholders; provided, however, that, except as otherwise required by law, holders of our common stock, as such, shall not be entitled to vote on any amendment to our amended and restated certificate of incorporation that relates solely to the terms of one or more outstanding series of preferred stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to our amended and restated certificate of incorporation.

Pursuant to our amended and restated certificate of incorporation and amended and restated bylaws, corporate actions can generally be taken by a majority of our board of directors and/or stockholders holding a majority of our outstanding shares, except as otherwise indicated in the section entitled "Anti-takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws." Additionally, our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a plurality of the votes cast at a meeting of stockholders will be able to elect all of the directors then standing for election.

Right to Receive Liquidation Distributions

In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Our common stock is listed on The Nasdaq Global Market under the symbol "IRIX". The transfer agent and registrar for the common stock is Computershare Trust Company, N.A. Its address is 250 Royall Street, Canton, MA 02021.

Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 1,500,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock by us could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control of our company or other corporate action. No shares of preferred stock are outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights under our Amended and Restated Investors' Rights Agreement, as Amended

Investment funds affiliated with BlueLine Partners, L.L.C., which are collectively referred to as "BlueLine," hold shares of our common stock. BlueLine, or its permitted transferees, is entitled to rights with respect to the registration of such shares under the Securities Act. We refer to these shares as "registrable securities." These rights are provided under the terms of our amended and restated investors' rights agreement between us and the holders of registrable securities, and include demand registration rights, "piggyback" registration rights and Form S-3 registration rights.

These registration rights will terminate as to a given holder of registrable securities when such holder's securities have been sold in a public securities transaction or when such securities may be sold without any restriction pursuant to Rule 144(k).

Generally, we are required to pay the registration expenses (other than underwriters' and brokers' discounts and commissions) in connection with the registrations described below, including up to \$10,000 of reasonable

fees and disbursements of one counsel for the selling holder or holders of registrable securities. In an underwritten offering, the underwriters have the right to limit the number of shares registered by the holders of registrable securities for marketing reasons, subject to certain limitations.

Demand Registration Rights

Upon the written request of holders of 60% or more of the then outstanding registrable securities that we file a Registration Statement under the Securities Act, we will be obligated to notify all holders of registrable securities of such request and to use our reasonable best efforts to register the sale of all registrable securities that holders may request to be registered. We are only obligated to file up to two Registration Statements in connection with underwritten offerings of the registrable securities in connection with the exercise of these demand registration rights. These demand registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances.

Piggyback Registration Rights

If we propose to register any of our securities under the Securities Act in connection with the public offering of such securities, the holders of registrable securities will be entitled to certain "piggyback" registration rights allowing such holders to include their shares in such registration, subject to certain limitations. As a result, whenever we propose to file a Registration Statement under the Securities Act, other than with respect to a registration related to either to the sale of securities to our employees pursuant to a stock plan, stock purchase or similar plan or a registration related to a corporate reorganization or transaction under Rule 145 of the Securities Act, the holders of registrable securities are entitled to notice of the registration and have the right to include their shares in the registration. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such Registration Statement under certain circumstances.

Form S-3 Registration Rights

Upon the written request from the holders of at least 60% of the then outstanding shares of registrable securities, holders of registrable securities have the right to demand that we file a Registration Statement on Form S-3. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such Registration Statement under certain circumstances.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

The provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company. These provisions, which are summarized below, may have the effect of discouraging takeover bids. They are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us because negotiation of these proposals could result in an improvement of their terms.

Delaware Law

We are governed by the provisions of Section 203 of the Delaware General Corporation Law (the "DGCL"). In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A

"business combination" includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, alone or together with affiliates and associates, owns, or within three years of the date on which it is sought to be determined whether such person is an "interested stockholder," did own, 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in our control.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaw Provisions

Our amended and restated certificate of incorporation and our amended and restated bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our management team, including the following:

- Board of directors vacancies. Our amended and restated bylaws authorize only our board of directors to fill vacant directorships, including newly created seats. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by our board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and then gaining control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.
- Special meeting of stockholders. Our amended and restated bylaws provide that special meetings of our stockholders may be called
 only by our board of directors or by a committee of our board of directors, thus prohibiting a stockholder from calling a special
 meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders
 controlling a majority of our capital stock to take any action, including the removal of directors.
- Advance notice requirements for stockholder proposals and director nominations. Our amended and restated bylaws provide advance
 notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for
 election as directors at our annual meeting of stockholders. Our amended and restated bylaws also specify certain requirements
 regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters
 before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the
 proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from
 conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our
 company.
- *No cumulative voting*. The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not provide for cumulative voting.
- Issuance of undesignated preferred stock. Our board of directors has the authority, without further action by the stockholders, to issue up to 1,500,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or other means.

SELLING STOCKHOLDERS

Pursuant to the Agreements, we agreed to file the Registration Statement of which this prospectus forms a part to cover the resale of the shares issued to the Selling Stockholders and to keep such Registration Statement effective for the periods set forth in the Registration Rights Agreement as follows:

- *Investment Agreement*. On March 2, 2021, we entered into an Investment Agreement with the Selling Stockholders listed in the table below pursuant to which we issued and sold in a private placement a total of 1,618,122 shares of common stock (the "Shares"), for a total purchase price of approximately \$10 million. In connection with this agreement we also agreed to execute the Registration Rights Agreement described below.
- **Registration Rights Agreement.** In connection with the private placement of shares of our common stock described above, we entered into a Registration Rights Agreement with Topcon America Corporation, pursuant to which we agreed to file a Registration Statement of which this prospectus forms a part to cover the resale of the Shares. We also agreed to keep such Registration Statement effective until the date on which all of the Shares registered for sale or resale under this Registration Statement are either sold pursuant to the Registration Statement or can be sold publicly without restriction or limitation under Rule 144 under the Securities Act of 1933 (the "Securities Act").

Registration of Shares under the Agreements

We are registering the Shares in accordance with the terms of the corresponding Agreements to permit each of the Selling Stockholders identified below, or their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the Registration Statement of which this prospectus is a part, to sell, resell or otherwise dispose of the Shares in a manner contemplated under "Plan of Distribution" in this prospectus (as may be supplemented and amended). Throughout this prospectus, when we refer to the Selling Stockholders in this prospectus we are referring to the holders of registration rights under the Agreements and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the Registration Statement of which this prospectus is a part.

The Selling Stockholders may sell some, all or none of their Shares. We do not know how long the Selling Stockholders will hold the Shares before selling them, and we currently have no agreements, arrangements or understandings with the Selling Stockholders regarding the sale or other disposition of any of the Shares. The Shares covered hereby may be offered from time to time by the Selling Stockholders.

The following table sets forth the names of the Selling Stockholders, the number and percentage of our common stock beneficially owned by the Selling Stockholders as of June 30, 2021, the number of Shares that may be offered under this prospectus, and the number and percentage of our common stock beneficially owned by the Selling Stockholders assuming all of the Shares covered hereby are sold. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock.

All information contained in the table below and the footnotes thereto is based upon information provided to us by the Selling Stockholders under this prospectus. The percentage of our shares owned after the offering is based on 15,761,996 shares of common stock outstanding as of June 30, 2021. Unless otherwise indicated in the footnotes to this table, we believe that the Selling Stockholders named in this table has sole voting power with respect to the shares of common stock indicated as beneficially owned.

The address for the Selling Stockholders listed on the table below is 111 Bauer Drive, Oakland, NJ 07436.

	Beneficial Own to the O		Shares Benefi After O		
	Number of Shares Beneficially Owned Prior to the	Percentage of Outstanding Common	Number of Shares Being Registered	Number of Shares Beneficially Owned After the	Percentage of Outstanding Common
Name of Selling Stockholder(1)	Offering(2)	Stock(3)	Hereby(4)	Offering(2)	Stock(3)
Topcon America Corporation	1,618,122	10.3%	1,618,122	0	0.00%
Total	1,618,122	10.3%	1,618,122	0	0.00%

⁽¹⁾ Information concerning named Selling Stockholders or future transferees, pledgees, assignees, distributees, donees or successors of or from any such stockholder or others who later hold any Selling Stockholders' interests will be set forth in supplements to this prospectus, absent circumstances indicating that the change is material. In addition, post-effective amendments to the Registration Statement of which this prospectus forms a part will be filed to disclose any material changes to the plan of distribution from the description in the final prospectus.

⁽²⁾ Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, securities that are currently convertible or exercisable into shares of our common stock, or convertible or exercisable into shares of our common stock within 60 days of June 30, 2021 are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person.

⁽³⁾ Based on 15,761,996 shares of common stock outstanding as of June 30, 2021.

⁽⁴⁾ Assumes the sale of all shares being offered pursuant to this prospectus.

PLAN OF DISTRIBUTION

We are registering the shares of common stock issued to the Selling Stockholders to permit the sale and resale of these shares of common stock by the Selling Stockholders from time to time from after the date of this prospectus.

Each Selling Stockholder of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on The Nasdaq Global Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. Sales of the common stock to be registered hereunder could be made at prevailing market prices at the time of the sale, at fixed prices, at negotiated prices, or at varying prices determined at the time of sale. As a result, we cannot know the price at which any of our common stock to be registered hereunder may ultimately be sold by the holders thereof. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales, to the extent permitted by law;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of Selling Stockholders to include the pledgee, transferee or other successors in interest as Selling Stockholders under this prospectus. The Selling Stockholders may also sell securities under Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

The aggregate proceeds to the Selling Stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the Selling Stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from the sale by the Selling Stockholders of the shares of common stock.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Selling Stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act. Each of the Selling Stockholders has informed us that it is not a registered broker-dealer or an affiliate of a registered broker-dealer, and it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

We are required to pay certain fees and expenses incurred by us incident to the registration of the securities. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act, and the Selling Stockholders may be entitled to contribution. We may be indemnified by the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the Selling Stockholders specifically for use in this prospectus, or we may be entitled to contribution.

Because Selling Stockholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The Selling Stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the Selling Stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for us to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

There can be no assurance that any Selling Stockholder will sell any or all of the shares of common stock we registered on behalf of the Selling Stockholders pursuant to the Registration Statement of which this prospectus forms a part.

Once sold under the Registration Statement of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California.

EXPERTS

The consolidated financial statements of IRIDEX Corporation as of January 2, 2021 and December 28, 2019 and for each of the two years in the period ended January 2, 2021 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended January 2, 2021, have been so incorporated in reliance on the report of BPM LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a Registration Statement under the Securities Act relating to the offering of these securities. The Registration Statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the Registration Statement. You can obtain a copy of the Registration Statement, at prescribed rates, from the SEC at the address listed above. The Registration Statement and the documents referred to below under "Information Incorporated by Reference" are also available on our website, www.iridex.com. We have not incorporated by reference into this prospectus the information on, or that can be accessed through, our website, and it is not a part of this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on <u>Form 10-K</u> for the fiscal year ended January 2, 2021, filed on March 23, 2021, including the information specifically incorporated by reference into the Annual Report on <u>Form 10-K</u> from our definitive proxy statement on <u>Schedule 14A</u>, filed on April 30, 2021;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended April 3, 2021, filed with the SEC on May 12, 2021;
- our Current Reports on Form 8-K filed with the SEC on <u>March 2, 2021</u> as amended on Form 8-K/A on <u>March 4, 2021</u>, <u>March 10, 2021</u>,
 March 22, 2021, June 21, 2021, and June 29, 2021; and
- the description of our common stock contained in the Registration Statement on Form 8-A relating thereto, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of the initial Registration Statement and prior to the effectiveness of the Registration Statement, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

IRIDEX Corporation
1212 Terra Bella Avenue,
Mountain View, California 94043
Attention: Interim Chief Financial Officer

You may also access certain of the documents incorporated by reference in this prospectus through our website at www.iridex.com. Except for the specific incorporated documents listed above, no information available on, or that can be accessed through, our website shall be deemed to be incorporated by reference into this prospectus or the Registration Statement of which it forms a part.

