

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

Amendment No. 4
TO

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Actelis Networks, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	3669	52-2160309
<i>(State or Other Jurisdiction of Incorporation or Organization)</i>	<i>(Primary Standard Industrial Classification Code Number)</i>	<i>(I.R.S. Employer Identification Number)</i>

Actelis Networks, Inc.
47800 Westinghouse Drive
Fremont, CA 94539
(510) 545-1045

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Tuvia Barlev
Chief Executive Officer and Chairman of the Board of Directors
Actelis Networks, Inc.
47800 Westinghouse Drive
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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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 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, please 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 post-effective amendment filed pursuant to Rule 462(d) 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.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 type="checkbox"/>	Accelerated filer <input type="checkbox"/>
Non-accelerated filer <input checked="" type="checkbox"/>	Smaller reporting company <input checked="" type="checkbox"/>
	Emerging growth company <input checked="" 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 the 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, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION DATED MAY 10, 2022



Actelis Networks, Inc.

3,000,000 Shares of Common Stock

This is a firm commitment initial public offering of shares of common stock of Actelis Networks, Inc. We are offering shares of our common stock. We anticipate that the initial public offering price of our shares will be between \$4 and \$6 per share. For purposes of this prospectus, the assumed initial public offering price per share is \$5.00, the mid-point of the anticipated price range. The actual number of shares we will offer will be determined based on the actual public offering price.

Prior to this offering, there has been no public market for our common stock. We have applied to list our shares of common stock on the Nasdaq Capital Market under the symbol "ASNS." No assurance can be given that our application will be approved and if our application is not approved, this offering cannot be completed. The obligation of the underwriter to purchase the shares of common stock is conditioned upon our receiving approval to list the shares of common stock on Nasdaq.

We are an "emerging growth company" and a "smaller reporting company," each as defined under the federal securities laws and, as such, have elected to comply with certain reduced reporting requirements for this prospectus and may elect to do so in future filings. See the section titled "Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Upon the closing of this offering, all of our non-voting common stock will be redeemed for their par value. The term "common stock" in this prospectus does not include non-voting common stock.

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page 12 of this prospectus for a discussion of factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total ⁽⁴⁾
Initial public offering price ⁽¹⁾	\$	\$
Underwriting discounts and commissions ⁽²⁾	\$	\$
Proceeds, before expenses, to us ⁽³⁾	\$	\$

- (1) Initial public offering price per share is assumed as \$5 per share, which is the midpoint of the range set forth on the cover page of this prospectus.
- (2) We have agreed to pay Boustead Securities, LLC, the underwriter named in this prospectus, or the Underwriter, a discount equal to (i) 7% of the gross proceeds of the offering. We have agreed to sell to the Underwriter, on the applicable closing date of this offering, warrants in an amount equal to 7% of the aggregate number of shares of common stock sold by us in this offering, or the Underwriter's Warrants. For a description of other terms of the Underwriter's Warrants and a description of the other compensation to be received by the Underwriter, see "Underwriting" beginning on page 96.
- (3) Excludes fees and expenses payable to the Underwriter. The total amount of Underwriter's expenses related to this offering is set forth in the section entitled "Underwriting."
- (4) Assumes that the Underwriter does not exercise any portion of their over-allotment option.

We expect our total cash expenses for this offering (including cash expenses payable to the Underwriter for its out-of-pocket expenses) to be approximately \$805,052, exclusive of the above discounts. In addition, we will pay additional items of value in connection with this offering that are viewed by the Financial Industry Regulatory Authority, or FINRA, as underwriting compensation. These payments will further reduce proceeds available to us before expenses. See "Underwriting" beginning on page 96.

This offering is being conducted on a firm commitment basis. The Underwriter is obligated to take and pay for all of the shares of common stock if any such shares of common stock are taken. We have granted the Underwriter an option for a period of 45 days after the closing of this offering to purchase up to 15% of the total number of our shares of common stock to be offered by us pursuant to this offering, solely for the purpose of covering over-allotments, at the initial public offering price less the underwriting discounts and commissions. If the Underwriter exercises its option in full, the total underwriting discounts and commissions payable will be \$1,207,500 based on an assumed offering price of \$5 per share, and the total gross proceeds to us, before underwriting discounts and commissions expenses, will be \$17,250,000. If we complete this offering, net proceeds will be delivered to us on the applicable closing date.

The Underwriter expects to deliver the shares of our common stock against payment therefor on or about _____, 2022, subject to customary closing conditions.

Boustead Securities, LLC

The date of this prospectus is _____, 2022

TABLE OF CONTENTS

	Page
Prospectus Summary	1
The Offering	9
Summary Consolidated Financial Data	11
Risk Factors	12
Cautionary Note Regarding Forward-Looking Statements	34
Use of Proceeds	36
Dividend Policy	37
Capitalization	38
Dilution	40
Management's Discussion and Analysis of Financial Condition	42
Business	53
Management	68
Executive Compensation	75
Certain Relationships and Related Party Transactions	80
Principal Stockholders	82
Description of Securities	84
Shares Eligible for Future Sale	89
Material U.S. Federal Income Tax Considerations for Non-U.S. Holders	91
Underwriting	96
Legal Matters	100
Experts	100
Where You Can Find More Information	100
Index to Financial Statements	F-1

This prospectus constitutes a part of a registration statement on Form S-1 (or, together with all amendments and exhibits thereto, the Registration Statement) filed by us with the Securities and Exchange Commission, or the SEC, under the Securities Act of 1933, as amended, or the Securities Act. As permitted by the rules and regulations of the SEC, this prospectus omits certain information contained in the Registration Statement, and reference is made to the Registration Statement and related exhibits for further information with respect to Actelis Networks Inc. and the securities offered hereby. With regard to any statements contained herein concerning the provisions of any document filed as an exhibit to the Registration Statement or otherwise filed with the SEC, in each instance reference is made to the copy of such document so filed. Each such statement is qualified in its entirety by such reference.

You should rely only on the information contained in this prospectus or in any related free-writing prospectus. We and the underwriter have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by us or on our behalf or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any information that others may give you.

This prospectus is an offer to sell only the common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. We are not making an offer to sell these shares of common stock in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. The information contained in this prospectus is current only as of the date of the front cover of the prospectus. Our business, financial condition, operating results and prospects may have changed since that date.

Persons who come into possession of this prospectus and any applicable free writing prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any such free writing prospectus applicable to that jurisdiction. See "Underwriting" for additional information on these restrictions.

[Table of Contents](#)

Until and including _____, 2022 (the 25th day after the date of this prospectus), all dealers effecting transactions in our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside of the United States: Neither we nor the underwriter have taken any action to permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

For purposes of this Registration Statement, "Company", "we" or "our" refers to Actelis Networks, Inc. and its subsidiary, Actelis Networks Israel, Ltd., or Actelis Israel, unless otherwise required by the context.

EXPLANATORY NOTE

Our charter authorizes us to issue up to 42,803,774 shares consisting of 30,000,000 shares of common stock with a par value of US\$0.0001 per share, 2,803,774 shares of non-voting common stock with a par value of US\$0.0001 per share and 10,000,000 shares of preferred stock with a par value of US\$0.0001 per share.

Upon the closing of this offering, all of our non-voting common stock will be redeemed for their par value.

The term "common stock" in this prospectus does not include non-voting common stock.

INDUSTRY AND MARKET DATA

This prospectus includes statistical, market and industry data and forecasts which we obtained from publicly available information and independent industry publications and reports that we believe to be reliable sources. These publicly available industry publications and reports generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy or completeness of the information. Although we are responsible for all of the disclosures contained in this prospectus, including such statistical, market and industry data, we have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein. In addition, while we believe the market opportunity information included in this prospectus is generally reliable and is based on reasonable assumptions, such data involves risks and uncertainties, including those discussed under the heading "Risk Factors."

PRESENTATION OF FINANCIAL INFORMATION

Our financial statements were prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. We present our consolidated financial statements in U.S. dollars.

Our fiscal year ends on December 31 of each year. Our most recent fiscal year ended on December 31, 2021.

Certain figures included in this prospectus have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that precede them.

TRADEMARKS AND TRADENAMES

We own or have rights to trademarks, service marks and trade names that we use in connection with the operation of our business, including our corporate name, logos and website names. Other trademarks, service marks and trade names appearing in this prospectus are the property of their respective owners. Solely for convenience, some of the trademarks, service marks and trade names referred to in this prospectus are listed without the® and ™ symbols, but we will assert, to the fullest extent under applicable law, our rights to our trademarks, service marks and trade names.

This prospectus includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this prospectus are the property of their respective owners.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. Because this is only a summary, it does not contain all of the information that may be important to you. You should read this entire prospectus and should consider, among other things, the matters set forth under “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes thereto appearing elsewhere in this prospectus before making your investment decision. This prospectus contains forward-looking statements and information relating to Actelis Networks. See “Cautionary Note Regarding Forward-Looking Statements” on page 34.

Company Overview

Actelis is a networking solutions company with a mission to enable fast, secure, cost-effective and easily implemented communication for Internet of Things, or IoT, projects, deployed over wide areas such as cities, campuses, airports, military bases, roads and rail.

Our networking solutions use a combination of newly deployed fiber infrastructure and existing copper and coaxial lines to create a highly cost-effective, secure and quick-to-deploy network.

Our patent protected hybrid fiber-copper networking solutions deliver excellent communication over fiber to locations that may be easy to reach with new fiber. However, for locations that are difficult to reach with fiber, we can upgrade existing copper lines, to deliver cyber-hardened, high-speed connectivity without needing to replace the existing copper infrastructure with new fiber. We believe that such hybrid fiber-copper networking solution has distinct advantages in most real-life installations, providing significant budget savings and accelerating deployment of modern IoT networks. We believe that our solutions can provide connectivity over fiber or copper up to multi-Gigabit communication, while supporting Gigabit-Grade reliability and quality.

When high-speed, long reach, high reliability and secure connectivity is required, network operators usually resort to using wireline communication over physical communication lines rather than wireless communication that is more limited in performance, reliability and security. However, wireline communication infrastructure is costly, and often accounts for more than 50% of total cost of ownership (ToC) and time to deploy wide-area IoT projects.

Typically, providing new fiber connectivity to hard-to-reach locations is costly and time-consuming, often requiring permits for boring, trenching, and right-of-way. Connecting such hard-to-reach locations, may cause significant delays and budget overruns in IoT projects. Our solutions aim to solve these challenges.

By alleviating difficult challenges in connectivity, we believe that Actelis’ solutions are making a significant difference: effectively accelerating deployment of IoT projects, and making IoT projects more affordable and predictable to plan and budget.

Our solutions also offer end-to-end network security to protect critical IoT data, utilizing a powerful combination of coding and encryption technologies, applied as required on both new and existing infrastructure within the hybrid-fiber-copper network. Our solutions have been tested for performance and security by the U.S. Department of Defense, or the U.S. DoD, laboratories, and approved for deployment with U.S. Federal Government and U.S. defense forces, as part of APL (Approved Product List) in 2019.

As of December 31, 2021, we had more than 300 customers. We experienced an average annual sales growth in our IoT business of more than 20% each year from 2018 through 2021 in booking of orders from customers in the IoT market.

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, providing connectivity for enterprises and residential customers. Our products and solutions have been deployed with more than 100 telecommunication service providers worldwide, in enterprise, residential and mobile base station connectivity applications. In recent years, as we have further developed our technology and rolled out additional products, we turned our focus on serving the wide-area IoT markets. Our operations are focused on our fast-growing IoT business, while maintaining our commitment to our existing Telco customers.

We currently derive a significant portion of our revenue from our existing Telco customers. For the years ended December 31, 2021 and December 31, 2020, our Telco customers in the aggregate accounted for approximately 48% and 55% of our revenues, respectively.

We currently derive a significant portion of our revenue from a limited number of our customers. For the years ended December 31, 2021 and December 31, 2020, our top ten customers in the aggregate accounted for approximately 78% and 70% of our revenues.

Our auditors' opinion in each of our audited financial statements for the years ended December 31, 2021, and December 31, 2020, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. As of December 31, 2021, and 2020, we had an accumulated deficit of \$22.4 and \$17.2 million, respectively. In recent years, we have suffered recurring losses from operations, have negative working capital and cash outflows from operating activities, and therefore we are dependent upon external sources for financing our operations.

We currently have one outstanding loan with Migdalor Business Investments Fund, or Migdalor, in the original principal amount of approximately \$6 million which is secured by all our assets, which remains outstanding as of December 31, 2021. If we cannot generate sufficient cash flow from operations to service our debt, we may need to further refinance our debt, dispose of assets or issue equity to obtain necessary funds. We expect to continue repaying the principal and interest of the Migdalor Loan from our operating cash flow.

Our Technology

To address many of the most difficult wide-area IoT and Telecom connectivity challenges, we utilize the hidden potential in existing legacy copper/coax wires that already connect billions of locations and devices globally (often at low speed, suffering from interruptions and presenting poor information security) — delivering mostly voice, or low speed control signals). However, these lines are readily available at no additional deployment cost and can reach, as we believe, most locations. Using our patented signal-processing technology and system architecture, we can “upgrade” these lines, by deriving Gigabit Grade performance from them, and integrate them with new fiber installations, where available, to create a complete hybrid-fiber-copper network, enabling fast, reliable, and safe Gigabit-Grade connectivity.

Our technology is both powerful and compact, and is built as a relatively small set of feature-rich network elements, that serve as building block in many IoT verticals. These elements include switches, concentrators, reach extenders, data encryption elements, power sources and a smart networking software that allows for remote management and monitoring down to the single element and line performance, configuration management making complex network topologies easy to deploy, analyze, debug and remote SW download to help with remote handling of large and small networks.

Our solutions can also provide remote power over the same existing copper lines to power up network elements and IoT components connected to them (like cameras and meters). Connecting power lines to millions of IoT locations can be costly and very time consuming (similar to data connectivity). By offering the ability to combine power delivery over the same copper lines used for high-speed data, we believe our solutions are solving yet another important challenge in connecting hard-to-reach locations. We believe that combining communication and power over the same existing lines is particularly important to help connect many fifth generation, or 5G, small cells and Wifi base stations, as high cost of connectivity and power is often slowing their deployment.

Rapid Deployment and Lower Cost of Critical Connectivity for IoT

We aim to become the global leading provider of cyber-secure, cost-effective and quick-to-deploy hybrid networking for all wide-area IoT applications. Our products work over all types of wireline media on the global data network, whether owned or operated by telecom service providers or a private network operated by enterprises or government organizations. Our products are structured as building blocks for many IoT applications, and are feature-rich: This allows for one Actelis box to often replace multiple other platforms available in the market, allowing for space-saving installation, energy conservation (which we believe results in a greener network), and making network planning easier for our customers. We aim at having our products installed and help accelerate deployment of wire-area IoT projects and applications everywhere.

For example, in one of the projects where our solutions are deployed, we found that 70% of locations are easy to-reach with new fiber optic installation. Connectivity for these locations may, as we believe, average \$26,000 per mile for new fiber laid on poles, and can take between days to weeks to connect. However, the remaining 30% of locations may be hard-to-reach with new fiber optics, may require boring or trenching to reach IoT sensors or camera locations, possibly connecting over obstacles, roads, long distances, and may also require obtaining the right of way for extensive civil works. This part of the deployment, as we believe, may cost up to \$400,000 per mile, may sometimes go distances of many miles, and may take many months to complete. Connecting such locations can dramatically increase project budget and cause major delays. Our hybrid networking technology includes fiber-based network elements connecting the easy-to-reach locations over new fiber, as well as copper or hybrid fiber-copper network elements that are capable of upgrading the existing copper infrastructure, such that Gigabit-Grade connectivity may be provided over this existing

copper infrastructure, immediately utilizing such readily available lines at no additional cost or time to deploy. Both parts of the network are then combined into a seamless fabric of a hybrid fiber-copper network, under one management software that provides smooth, largely automated operation and end-to-end security.

In another project, we provided hybrid networking connectivity with remote powering to 3G and 4G base stations. Looking forward, we believe that a dense grid of 5G small cells would be required to enable global 5G coverage, which, may be key to IoT deployment in many smart city projects and other dense areas. We believe that connecting these 5G small cells to the network cost effectively and rapidly, in both hard-to-reach and easy-to-reach locations, as well as powering them cost-effectively is key to successful and timely deployment for such network.

We expect to release in 2023 a high-speed, cyber-hardened, multi-Gigabit, hybrid fiber-copper solution with optional remote powering aimed to help with 5G small cell deployment, especially in smart city IoT applications, where 5G is most critical. We expect that such solution will add a large sub-vertical market to our growth.

Cyber Security

IoT networks are vulnerable to cyber-attacks. They often carry data related to critical processes and applications, such as provision of energy, water, gas and transportation services to large populations; we believe that this data requires enhanced security within the network.

Our products include cyber safety features that we are constantly developing and particularly include network traffic encryption and coding. We have developed and implemented a multi-layered “Triple Shield” technology that includes (i) information coding for resilience and security (over copper); (ii) multi-line information scrambling for increased resilience and added security (over copper); and (iii) an additional 256-bit hardware-based real-time encryption of data running over fiber or copper — creating end-to-end protection for the entire hybrid network. Our network management software is also cyber-hardened and helps protect the system. Our systems have been selected for deployment in sensitive applications with U.S. DoD and other governments and military organizations, airports, utility companies, oil and gas companies, smart cities, rail and traffic applications globally.

Market Verticals We Address

We execute our vision through a multi-channel, global approach that combines our expertise, with the expertise of our trusted business partners, system integrators, distributors, and consultants.

We run a vertical based marketing plan where we dedicate efforts and resources to each vertical. The IoT verticals that we have focused on include: (1) intelligent transportation systems (ITS); (2) rail; (3) federal and military; (4) airports; (5) energy and water; (6) smart city; (7) education campuses; (8) industrial campuses; and (9) airports. Our products are utilized within networks that have been deployed, for example by The City of Los Angeles, Highways England, Federal Aviation Administration, the US military, including Air Force and Navy, Stanford University, and many others. Our customers benefit from rapidly and cost-effectively enabling their critical IoT functions such as traffic cameras and smart signaling, security cameras, smart parking meters and ticketing, rail signaling and control, electrical substation management and protection, military operations, and many more.

To date, we have been most successful in selling to customers in the intelligent transportation systems, rail, federal and military, and airports markets, primarily in the US, Canada, Europe, and Japan. While we have not yet sold to industrial campuses, we have sold to energy and water, smart city and education campuses. We intend to grow our IoT sales by growing all verticals and our pipeline of sales opportunities includes customers in each of the eight verticals listed above.

State of IoT Connectivity Market

IoT infrastructure connectivity demand is growing rapidly. We believe there is an urgent need to connect tens of millions of locations, with a fast and secure connection. A huge challenge for IoT projects is that implementing connectivity between different IoT points in a network can consume the majority of a project's cost and time to implement, and that unpredictable challenges in deploying connectivity may compromise IoT project plans.

According to a report by Facts and Factors (January 2022) Global Internet of Things (IoT) market is expected to grow to \$ 1.8 billion by 2028, at a Compounded Average Growth Rate (CAGR) of 24.5%.

According to a report by Grand View Research (May 2021), the smart city market alone is expected to grow to \$696 billion by 2028 at a Compounded Average Growth Rate (CAGR) of 29.3%. We believe that the number of IoT applications requiring our fast, smart, and secure connectivity is immense and provides us with a great market opportunity to grow our business. From smart transportation systems (smart cameras, smart lights and signals, V2V — Vehicle to Vehicle communication) and smart security (cameras and radars), to smart parking, smart rail, power station monitoring, and industrial and warehouse automation, we believe that we are uniquely positioned to address all of these applications in a versatile and flexible manner.

We believe that 5G mobile technology will play a major role in the implementation and scaling of IoT networks. According to research published by ABI Research in January 2021, 5G technology is expected to grow at a CAGR of 41.2% between 2021 and 2027 with a major part of that growth coming from servicing IoT networks.

According to Key Market Insights, the global small cell 5G network market size was valued at \$740.8million in 2020. The market is expected to grow from \$859.4 million in 2021 to approximately \$1.8 billion in 2028, reflecting a CAGR of 54.4% between 2021-2028.

5G base stations and small cells need to be deployed in a dense grid of millions of locations and need to be connected to gigabit speed communication and power. We are addressing these needs for the rapid connectivity and power, aiming at enabling faster and more cost-effective deployment of 5G in IoT applications.

Our Solutions

Actelis has invested nearly \$100 million over the years to develop its patented, multilayered “Triple Shield” technology, which can serve all connectivity markets. Our technology includes signal processing SW that is implementing optimization of multi-line signal coordination; the elimination of interference to boost connectivity performance; the optimization of coding for resilience and security; multi-line data scrambling for low latency, increased resilience, and added security; our solutions also offer implementation of 256-bit encryption of transmission for data running over fiber or copper for network-wide protection of data. Our technology is packaged into a small set of compact, hardened, feature-rich network elements (such as switches, concentrators and reach extenders) — the MetaLIGHT product family — that are used as building blocks addressing the needs of most wide-area IoT verticals and applications, in a space-and energy-saving fashion. The ability to drive remote powering and synchronization signals to network ends over the same (copper) transmission lines provides additional significant cost-and-time benefits to network operators. We estimate that, as of December 31, 2021, we achieved over \$24million in our IoT installed base. We define our IoT installed base based on the shipments to our customers in the IoT market from January 1, 2012 through December 31, 2021.

Our offering includes our network management software, providing built-in automation to help configure, manage, monitor, safeguard, install and maintain complex, hybrid networks of thousands of elements remotely.

We aim to continue developing our technology to include more system-wide security and further hybridity across all types of infrastructure and further include cutting-edge computing capabilities to serve all connectivity needs for our IoT customers, in an effective and easily deployable way, while maintaining our commitment to serve our existing Telco customers.

We believe that our strong reputation as a provider of high-quality solutions, and the trust we gain from being recognized as a solid solution provider by prominent customers (such as the U.S. DoD) help us execute our strategy.

Competitive Advantage

We believe our solutions are advantageous in enabling IoT and telecom hybrid networks that optimize the usage of infrastructure across new fiber as well as existing copper lines, both at Gigabit-Grade connectivity. Our security portfolio is growing, and our plan is to make our solution the leading cyber-secure hybrid networking system. We believe that the following are some specific competitive advantages that jointly make our solutions very competitive:

- High performance hybrid-fiber-copper communication system
 - Speeds from 10Mbps to 10Gbps
 - Reach up to 100Km
- Cyber-protection capabilities at data level, physical medium level, and system level

- Robust design for gigabit-grade, resilient communication over fiber or copper
- Dense, feature-rich design to replace multiple alternative elements in the market, and allow for installation that is compact, cost-effective, and energy efficient
- Ability to drive power to remote locations over same infrastructure (copper only)
- Automated software tools for installation and remote management to reduce cost of installation and ongoing operations of complex networks

We believe that the combination of these advantages provide our customers with a highly cost-effective solution to quickly obtain IoT connectivity anywhere in their network.

Growth Strategy

The key elements of our growth strategy include:

- Utilizing our existing customers and partners globally, as well as our brand name and product differentiation to expand deployment into virtually all IoT verticals globally.
- Growing our network of partners in three continents, aiming to become the vendor of choice for cyber-hardened networking, enabling IoT connectivity globally.
- Introducing broader cyber-protection capabilities at IoT network level, offering protection software and services for IoT devices and users.
- Introducing hybrid fiber-copper-power solutions for effective connectivity and power to enable 5G growth in IoT.
- Adding wireless MMwave technology to fiber-copper connectivity, to be able to offer all three options of IoT connectivity.
- Introducing edge computing capabilities into the MetaLIGHT building blocks, enabling smart applications and recurring SW business models for our customers.

JOBS Act and the Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an “emerging growth company,” we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include, but are not limited to:

- requiring only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced “Management’s discussion and analysis of financial condition and results of operations” in our Securities Act of 1933, as amended, or the Securities Act, filings;
- reduced disclosure about our executive compensation arrangements;
- no non-binding advisory votes on executive compensation or golden parachute arrangements; and
- exemption from compliance with the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes Oxley Act of 2002, or SOX.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an “emerging growth company.” We will continue to remain an “emerging growth company” until the earliest of the following: (i) the last day of the fiscal year following the fifth anniversary of the date of the completion of this offering; (ii) the last day of the fiscal year in which our total annual gross revenue is equal to or more than \$1.07 billion; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or the SEC.

We are also a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended, or the Exchange Act, and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. To the extent that we continue to qualify as a “smaller reporting company” as such term is defined in Rule 12b-2

under the Exchange Act, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an “emerging growth company” may continue to be available to us as a “smaller reporting company,” including exemption from compliance with the auditor attestation requirements pursuant to SOX and reduced disclosure about our executive compensation arrangements. We will continue to be a “smaller reporting company” until we have \$250 million or more in public float (based on our common stock) measured as of the last business day of our most recently completed second fiscal quarter or, in the event we have no public float (based on our common stock) or a public float (based on our common stock) that is less than \$700 million, annual revenues of \$100 million or more during the most recently completed fiscal year.

We may choose to take advantage of some, but not all, of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. In addition, the JOBS Act provides that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to avail ourselves of the extended transition period for complying with new or revised financial accounting standards. As a result of this accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies which may make comparison of our financials to those of other public companies more difficult.

Summary Risk Factors

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company. You should carefully consider all of the risks described more fully in the section titled “Risk Factors” in this prospectus beginning on page 12, before deciding to invest in our common stock. If any of these risks actually occurs, our business, financial condition and results of operations would likely be materially adversely affected. These key risks, include, but are not limited to, the following:

Risks Related to Our Business

- We have a history of net losses, may incur substantial net losses in the future, and may not achieve or sustain profitability or growth in future periods. If we cannot achieve and sustain profitability, our business, financial condition, and operating results will be adversely affected.
- We have had negative cash flow and, given our projected funding needs, our ability to generate positive cash flow is uncertain.
- Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.
- Even after consummation of the offering as contemplated, we may need to raise additional capital to meet our business requirements in the future, and such capital raising may be costly or difficult to obtain and could dilute our stockholders’ ownership interests.
- Our indebtedness could adversely affect our ability to raise additional capital to fund operations, limit our ability to react to changes in the economy or our industry and prevent us from meeting our financial obligations.
- To support our business growth, in the past years we increased our focus on serving certain IoT verticals, while continuing to serve our existing Telco customers. This change in our strategy may make it more difficult to evaluate our business growth and future prospects, and may increase the risk that we will not be successful in our plans.
- We may have ineffective sales and marketing efforts.
- We are dependent on the supply of electronic and mechanical components and our business would be harmed if we do not receive sufficient supply of such components in number and performance to meet our production requirements and product specifications in a timely and cost-effective manner.
- We are dependent on key suppliers.
- Demand for our products and solutions may not grow or may decline.

- Our gross margins may not increase or may deteriorate.
- Changes in the price and availability of our raw materials and shipping could be detrimental to our profitability.
- Expanding our operations and marketing efforts to meet expected growth may impact profitability if actual growth is less than expected.
- If our internal Company cyber-security measures are breached or fail and unauthorized access is obtained to our IT environment, we may incur significant losses of data, which we may not be able to recover and may experience a delay in our ability to conduct our day-to-day business.
- We provide cyber security features as part of our products that may not completely prevent information security breaches, and our products are installed in live customer environments and may be compromised by cyber-attacks and damage customer assets.
- We depend on key information systems and third-party service providers.
- We depend on our management team and other key employees, and the loss of one or more of these employees or an inability to attract and retain highly skilled employees could adversely affect our business.
- We may face the effects of increased competition and rapid technological changes.
- Our results of operations are likely to fluctuate from quarter to quarter and year to year, which could adversely affect the trading price of our common stock.
- The loss of one or more of our significant customers, or any other reduction in the amount of revenue we derive from any such customer, would adversely affect our business, financial condition, results of operations and growth prospects.
- The effects of health pandemics, such as the ongoing global COVID-19 pandemic, have had, and could in the future have, an adverse impact on our business, financial condition and results of operations.

Risks Related to Protecting Our Technology and Intellectual Property

- Claims by others that we infringe their intellectual property could force us to incur significant costs or revise the way we conduct our business.
- Our patents and proprietary technology may be challenged or disputed.
- Any failure to protect our intellectual property rights could impair our ability to protect our proprietary technology and our brand.

Risks Related to Managing Our Business Operations in Israel

- We may be adversely affected by fluctuations in the currency exchange rate of the Israeli Shekel.
- Unanticipated changes in our effective tax rate and additional tax liabilities, including those resulting from our international operations or the implementation of new tax rules, could harm our future results.

Risks Related to this Offering and Ownership of our Common Stock

- The requirements of being a public company may strain our resources, divert management's attention, and affect our ability to attract and retain executive management and qualified board members.
- We have identified a material weakness in our internal control over financial reporting. If we experience material weaknesses in the future or otherwise fail to implement and maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations which may adversely affect investor confidence in us, and as a result, the value of our common stock.
- If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Corporate Information

We were incorporated in Delaware on November 12, 1998. Actelis Israel, our wholly-owned subsidiary, was incorporated in Israel in 1998.

We maintain our principal executive offices at 47800 Westinghouse Drive, Fremont, CA 94539. We also maintain an office in Tel Aviv, Israel where our research and development facilities are located. Our telephone number is (510) 545-1045. Our website address is www.actelis.com. The information contained on our website and available through our website is not incorporated by reference into and should not be considered a part of this prospectus, and the reference to our website in this prospectus is an inactive textual reference only.

The Offering	
Common stock offered by us	3,000,000 shares of common stock (or 3,450,000 shares of common stock if the Underwriter exercises its over-allotment option in full). Upon the closing of this offering, all of our non-voting common stock will be redeemed for their par value. The term “common stock” in this prospectus does not include non-voting common stock.
Public Offering Price	We expect the initial public offering price to be between \$4 and \$6 per share. For purposes of this prospectus, the assumed initial public offering price per share is \$5, the mid-point of the anticipated price range. The actual offering price per share will be as determined between the Underwriter and us based on market conditions at the time of pricing and the actual number of shares we will offer will be determined based on the actual public offering price. Therefore, the assumed public offering price used throughout this prospectus may not be indicative of the final offering price.
Common stock outstanding immediately before this offering	12,601,721 shares of common stock
Common stock outstanding immediately after this offering	15,601,721 shares of common stock (or 16,051,721 shares of common stock if the Underwriter exercises its over-allotment option in full)
Underwriting; Over-Allotment Option	This offering is being conducted on a firm commitment basis. The Underwriter is obligated to take and pay for all of the shares of common stock if any such shares are taken. We have granted to the Underwriter an option for a period of 45 days from the date of this prospectus to purchase up to 450,000 additional shares (constituting 15% of the total number of shares of common stock to be offered in this offering) of common stock from us at the initial public offering price, less the underwriting discounts and commissions, to cover over-allotments, if any.
Underwriter’s Warrants	We have agreed to issue to the Underwriter (or its permitted assignees) a warrant to purchase up to a total of 210,000 shares of common stock equal to 7% of the aggregate number of the shares sold in this offering at an exercise price equal to 125% of the public offering price of the Stock sold in this offering (or 241,500 shares if the Representative exercises the over-allotment option in full). The Underwriter’s Warrant will be exercisable at any time, and from time to time, in whole or in part, commencing from the closing of the offering and expiring five (5) years from commencement of sales in the offering, will have a cashless exercise provision and will terminate on the fifth anniversary of the effective date of the registration statement of which this prospectus is a part.
Use of proceeds	We estimate that the net proceeds from this offering will be approximately \$13.0 million, or approximately \$15.1 million if the Underwriter exercises its option to purchase additional shares to cover over-allotments, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the proceeds from this offering for research and development, sales and marketing, general and administrative, capital investments and working capital. See “Use of Proceeds.”
Risk factors	See “Risk Factors” and other information appearing elsewhere in this prospectus for a discussion of factors you should carefully consider before deciding whether to invest in our securities.

Lock-up	Our executive officers, directors and our security holder(s) of five percent (5%) or more have agreed not to offer, sell, agree to sell, directly or indirectly, or otherwise dispose of any shares of our common stock for a Lock-up period of twelve months following the closing of this offering, subject to certain exceptions. For substantially all of our other security holders, the period of Lock-up will be six months. See “Underwriting” for more information.
Listing	We have applied to list our common stock on the Nasdaq Capital Market under the symbol “ASNS.” No assurance can be given that our shares of common stock will be approved for listing on Nasdaq. The approval of our listing on Nasdaq is a condition to the closing of this offering.

The number of shares of common stock that will be outstanding after this offering is based on 2,050,404 shares of common stock outstanding as of December 31, 2021, after giving effect to (i) a reverse share split effected on May 2, 2022 at a ratio of 1-for-46, (ii) the exercise immediately prior to the closing of this offering of 1,300,248 shares of common stock issuable upon conversion of \$1.5 million of the aggregate principal amount of the convertible loan agreement that we entered into with our existing investors and certain employees, or the CLA, by the holders thereof (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus); (iii) the conversion immediately prior to the closing of this offering of 7,731,043 shares of convertible preferred stock on a one (1) for one (1) basis into 7,731,043 shares of common stock, (iv) the exercise immediately prior to the closing of this offering of 181,192 shares of common stock issuable pursuant to an option to purchase shares of common stock granted to Migdalor as part of the a loan agreement with Migdalor, or the Migdalor Loan, (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus); (v) the exercise immediately prior to the closing of this offering of (x) 601,708 shares of common stock issuable upon the exercise of warrants issued to Mizrahi-Tefahot Bank, or Mizrahi Bank, at an aggregate value of \$750,000 (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus), and (y) 1,666 shares of common stock issuable upon the exercise of a warrant issued to Lauderdale GmbH & Co. KG, or the Lauderdale Warrant; (vi) the exercise immediately prior to the closing of this offering of 720,001 shares of common stock, resulting from a 6% convertible note issued by us in a private placement from December 2021 through April 2022, or the Private Placement Note (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus), and (vii) the exercise of 15,459 stock options by employees after January 1, 2022, and excludes as of such date:

- 870,002 shares of common stock issuable upon the exercise of outstanding stock options under our 2015 Equity Incentive Plan, at a weighted average exercise price of \$0.147 per share;
- 79,348 shares of common stock issuable upon the exercise of options that we intend to award to certain of our employees and officers under our 2015 Equity Incentive Plan following the completion of this offering, with an exercise price equal the offering price in this offering;
- 1,901,314 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan;
- 73,048 shares of common stock issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$1.02 per share; and
- 210,000 shares of common stock issuable upon the exercise of the Underwriter’s Warrants in connection with this offering.

Unless otherwise indicated, all information in this prospectus assumes or gives effect to:

- an assumed initial public offering price of \$5 per share of common stock, which is the midpoint of the price range set forth on the cover page of this prospectus;
- no exercise by the Underwriter of its option to purchase up to 450,000 additional shares of common stock from us to cover over-allotments, if any; and
- a reverse share split effected on May 2, 2022 at a ratio of 1-for-46.

SUMMARY CONSOLIDATED FINANCIAL DATA

You should read the following summary consolidated financial data together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the “Cash and Capitalization,” “Selected Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of this prospectus. We have derived these summary consolidated statements of operations data for the years ended December 31, 2021, and December 31, 2020, from our audited consolidated financial statements appearing at the end of this prospectus. Our historical results are not necessarily indicative of results that should be expected in any future period.

STATEMENTS OF OPERATIONS DATA:

	For the Year Ended December 31, 2021	For the Year Ended December 31, 2020
<i>(U.S. dollars in thousands, except share and per share data)</i>		
Revenues	\$ 8,545	\$ 8,532
Cost of revenues	4,575	3,550
Research and development, net	2,443	2,147
Sales and marketing, net	2,204	1,848
General and administrative, net	1,183	1,118
Financial expenses, net	3,391	1,374
Loss from operations	(5,251)	(1,505)
Income tax provision	—	—
Net loss	<u>\$ (5,251)</u>	<u>\$ (1,505)</u>
Loss per share of common stock attributable to the Company		
Basic and diluted	\$ (2.56)	\$ (0.74)
Weighted average common stock outstanding		
Basic and diluted	2,048,788	2,047,313

BALANCE SHEET DATA:

	As of December 31,	
<i>(U.S. dollars in thousands)</i>	2021	2020
Current assets	\$ 4,135	\$ 3,224
Total assets	4,684	3,766
Current liabilities	5,951	4,624
Long term liabilities	12,744	7,955
Redeemable convertible Preferred Shares	5,585	5,585
Total capital deficiency	<u>\$ (19,596)</u>	<u>\$ (14,398)</u>

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, before deciding to invest in our common stock. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, results of operations, financial condition and prospects could be harmed. In that event, the trading price of our common stock could decline, and you could lose part or all of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

Risks Related to Our Business

We have a history of net losses, may incur substantial net losses in the future, and may not achieve or sustain profitability or growth in future periods. If we cannot achieve and sustain profitability, our business, financial condition, and operating results will be adversely affected.

We have incurred net losses in recent years, and we may not achieve or maintain profitability in the future. We experienced a net loss of \$5.2 million and \$1.5 million in the years ended December 31, 2021 and 2020, respectively. As a result, we had an accumulated deficit of \$22.4 million and \$17.2 million as of December 31, 2021 and 2020, respectively. We cannot predict when or whether we will reach or maintain profitability.

We also expect our operating expenses to increase in the future as we continue to invest for our future growth, including expanding our research and development function to drive further development of our platform, expanding our sales and marketing activities, developing the functionality to expand into adjacent markets, and reaching customers in new geographic locations, which will negatively affect our operating results if our total revenues do not increase. In addition to the anticipated costs to grow our business, we also expect to incur significant additional legal, accounting, and other expenses as a newly public company. These efforts and additional expenses may be more costly than we expect, and we cannot guarantee that we will be able to increase our revenues to offset our operating expenses. Any failure to increase our revenues or to manage our costs as we invest in our business would prevent us from achieving or maintaining profitability.

We have had negative cash flow in the past and, given our projected funding needs, our ability to generate positive cash flow is uncertain.

We have had negative cash flow from operating activities of \$2.7 million and \$0.3 million in the year ended December 31, 2021 and 2020, respectively. We expect to have negative cash flow from operating and investing activities through the foreseeable future as we expect to incur research and development, sales and marketing, and general and administrative expenses and make capital expenditures in our efforts to increase our sales. Our business also will at times require significant amounts of working capital to support our growth of additional platforms. An inability to generate positive cash flow for the near term may adversely affect our ability to raise needed capital for our business on reasonable terms, diminish supplier or customer willingness to enter into transactions with us, and have other adverse effects that may decrease our long-term viability. There can be no assurance that we will achieve positive cash flow in the near future or at all.

Our financial statements contain an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern, which could prevent us from obtaining new financing on reasonable terms or at all.

The auditors' opinion included in each of our audited financial statements for the years ended December 31, 2021 and December 31 2020, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. As of December 31, 2021 and 2020, we had an accumulated deficit of \$22.4 and \$17.2 million, respectively. In recent years, we have incurred recurring losses from operations, have negative working capital and cash outflows from operating activities, and therefore we are dependent upon external sources for financing our operations. We have had negative cash flow from operating activities of \$2.7 million and \$0.3 million in the year ended December 31, 2021, and 2020. These events and conditions, along with other matters, indicate that a material uncertainty exists that may cast significant doubt on our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty. This going concern opinion could materially limit our ability to raise additional funds through the issuance of equity or debt securities or otherwise. Further financial statements may include an explanatory paragraph with respect to our ability to continue as a going

concern. We expect to fund our operations using cash on hand and through operational cash flows. There can be no assurance that we will succeed in generating sufficient revenues from our product sales to continue our operations as a going concern. If funds are not available to us, we may be required to delay, reduce the scope of, or eliminate research or development plans for, or commercialization efforts with respect to our products. This may raise substantial doubts about our ability to continue as a going concern.

Even after consummation of the offering as contemplated, we may need to raise additional capital to meet our business requirements in the future, and such capital raising may be costly or difficult to obtain and could dilute our stockholders' ownership interests.

In order for us to pursue our business objectives, even after consummation of the offering as contemplated, we may need to raise additional capital, which additional capital may not be available on reasonable terms or at all. Any additional capital raised through the sale of equity or equity-backed securities may dilute our shareholders' ownership percentages and could also result in a decrease in the market value of our equity securities. The terms of any securities issued by us in future capital transactions may be more favorable to new investors, and may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have a further dilutive effect on the holders of any of our securities then outstanding. In addition, we may incur substantial costs in pursuing future capital financing, including investment banking fees, legal fees, accounting fees, securities law compliance fees, printing and distribution expenses and other costs. We may also be required to recognize non-cash expenses in connection with certain securities we issue, such as convertible notes and warrants, which may adversely impact our financial condition.

Our indebtedness could adversely affect our ability to raise additional capital to fund operations, limit our ability to react to changes in the economy or our industry and prevent us from meeting our financial obligations.

We currently have one outstanding loan with Migdalor Business Investments Fund, or Migdalor, in the original principal amount of approximately \$6 million which is secured by all our assets which remains outstanding as of December 31, 2021. If we cannot generate sufficient cash flow from operations to service our debt, we may need to further refinance our debt, dispose of assets or issue equity to obtain necessary funds. We do not know whether we will be able to do any of this on a timely basis, on terms satisfactory to us, or at all. Our indebtedness could have important consequences, including:

- our ability to obtain additional debt or equity financing for working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes may be limited;
- a portion of our cash flows from operations will be dedicated to the payment of principal and interest on the indebtedness and will not be available for other purposes, including operations, capital expenditures and future business opportunities;
- our ability to adjust to changing market conditions may be limited and may place us at a competitive disadvantage compared to less-leveraged competitors, if such exist; and
- we may be vulnerable during a downturn in general economic conditions or in our business, or may be unable to carry on capital spending that is important to our growth.

To support our business growth, in the past years we increased our focus on serving certain IoT verticals, while continuing to serve our existing Telco customers. This change in our strategy may make it more difficult to evaluate our business growth and future prospects, and may increase the risk that we will not be successful in our plans.

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, for enterprises and residential customers. Our products and solutions have been deployed with more than 100 telecommunication service providers worldwide, in enterprise, residential and mobile base station connectivity applications. In recent years, as we have further developed our technology and rolled out additional products, we turned our focus on serving the IoT markets. Our operations are focused on our fast-growing IoT business, while maintaining our commitment to our existing Telco customers.

[Table of Contents](#)

We currently derive a significant portion of our revenue from our existing Telco customers. For the years ended December 31, 2021 and December 31, 2020, our Telco customers in the aggregate accounted for approximately 48% and 55% of our revenues, respectively.

Our change in strategy and our efforts to serve the IoT verticals that we have focused on may prove more expensive than we currently anticipate, or may require longer development and deployment times, and we may not succeed in fully penetrating such IoT verticals, or at all.

We may have ineffective sales and marketing efforts.

Our sales and marketing efforts to drive growth may be ineffective as we try to win new deals either directly with end-user customers, or indirectly through business partners, distributors, system integrators or value-add resellers. These ineffective efforts may cause us to miss our planned growth and harm our financial results.

We are dependent on the supply of electronic and mechanical components and our business would be harmed if we do not receive sufficient supply of such components in number and performance to meet our production requirements and product specifications in a timely and cost-effective manner.

We rely on a supply of electronic and mechanical components of our final products to be able to fulfill and deliver customer orders. Such supply has been interrupted from time to time and if such interruption continues, it may cause us to be unable to fulfill and deliver such customer orders on expected delivery lead times. Such long lead times may cause customers to avoid placing orders or reduce future orders. As a result, such interruptions, if they continue, will reduce our ability to grow our business at the pace we expect and may cause us to miss our operating business plans.

In most cases, we do not have guaranteed supply arrangements with our suppliers, and our business relies on placing orders to our suppliers as we receive forecasts or orders from our customers. Because of the variability and uniqueness of customers' orders, we do not maintain an extensive inventory of materials for manufacturing. Through our procurement and production planning, we seek to minimize the risk of production and service interruptions and/or shortages of key parts by, among other things, monitoring the financial stability of key suppliers, identifying (and often qualifying) possible alternative suppliers, placing longer term orders for components and maintaining appropriate inventories of key components. Although we make reasonable efforts to ensure that components are available from multiple suppliers, certain key components are available only from a single supplier or a limited group of suppliers. Also, key components we obtain from some of our suppliers incorporate the suppliers' proprietary intellectual property; in those cases, we are more reliant on third parties for high-performance, high-technology components, which reduces the amount of control we have over the availability and protection of the technology and intellectual property that is used in our products. In addition, if certain of our key suppliers experience liquidity issues and are forced to discontinue operations, it could affect their ability to deliver parts and could result in delays for our products. Similarly, our suppliers themselves have increasingly complex supply chains, and delays or disruptions at any stage of their supply chains may prevent us, and have prevented us, from obtaining components in a timely manner and result in delays for our products. Our operating results and business may be adversely impacted if we are unable to obtain components to meet our production requirements and product specifications, or if we are able to do so only on unfavorable terms.

We outsource our product manufacturing and are dependent on our key manufacturers, and on our component and OEM suppliers. We are susceptible to problems, and have encountered problems in the past, in connection with procurement, decreasing quality, reliability, and protectability.

Our devices are assembled by using fully manufactured parts, the manufacturing of which has been fully outsourced, and we have no direct control over the manufacturing processes of our products. We outsource procurement and manufacturing activities to certain key manufacturers and certain component and OEM suppliers.

We also purchase unique components and products from suppliers who are exclusively able to fulfill such supply. We may lose some or all of these relationships, or have a material weakness in negotiating favorable terms, or such unique components have or may be declared end-of-life which may require product design changes. Such circumstances have hurt our profitability in the past, and may hurt our profitability in the future, and negatively affect our ability to deliver our product on time to customers.

[Table of Contents](#)

Our lack of control in our manufacturing process due to the fact that we outsource our product manufacturing may increase quality or reliability risks and could limit our ability to quickly increase or decrease production rates. If necessary, switching production to other or additional subcontractors will entail a material cost and a temporary decrease in our productivity. Our manufacturing process has been disrupted in the past, and may be disrupted in the future, by various factors, including but not limited to shipping delays, bottlenecks resulting from raw materials specific shortages, quality problems or a decrease in quality, manpower shortages by the manufacturers or political unease that would trigger the closure of a facility or financial insolvency.

Furthermore, a supplier may discontinue production of a particular part for any number of reasons, which may require us to purchase a large inventory of such discontinued parts in order to ensure that a continuous supply of such parts remains available to our customers. Such “end-of-life” parts purchases could result in significant expenditures by us in a particular period, and ultimately any unused parts may result in a significant inventory write-off, either of which could have an adverse impact on our financial condition and results of operations for the applicable periods. Refer to “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” for additional information on supply constraints related to the COVID-19 pandemic.

Demand for our products and solutions may not grow or may decline.

We may experience a reduction in customer demand as a result of either of competition from other companies, technological changes required by our target markets, or disruptions of existing and new customer relationships. Such demand reduction will prevent us from realizing our planned growth.

Our gross margins may not increase or may deteriorate.

If our gross margins do not increase as planned or deteriorate, it will be harder for us to achieve profitability, which could substantially impact our business and ability to carry on operations if other financing sources are not secured on satisfactory terms. Our gross margins may deteriorate as a result of either reductions of customers price points, increases in product component and manufacturing costs, or unfavorable changes in the mix between more and less profitable customers and/or products.

Changes in the price and availability of our raw materials and shipping could be detrimental to our profitability.

Chipsets, electronic and mechanical components are significant components of our products. Over the past two years, the prices and availability of electronic and mechanical components have been constantly increasing.

Furthermore, our products are assembled with various contract manufacturers located in Israel and in Taiwan. As a result of the of COVID-19 pandemic, the world is experiencing shortages of electronic components. We have already experienced instances of limited supply of certain raw materials and shipping delays, which resulted in extended lead times, increased shipping costs and higher-than-usual backlogs. If the prices of such components and shipping were to continue to increase, or if shipping delays continue to occur, such price changes and shipping delays could have a negative effect on our gross margin and have a negative effect on revenues and earnings.

We may have previously agreed to set prices with our customers and any changes in supply costs may decrease our margin and directly affect profitability. If prices increase, supply interruptions, shipping delays, or shortages of materials continue to occur, it could have a negative effect on revenues and earnings.

Expanding our operations and marketing efforts to meet expected growth may impact profitability if actual growth is less than expected.

To meet expected growth, we plan to expand operations, including additional hiring, advertising, and promotion. If actual growth is less than expected, it would negatively impact our ability to become profitable, which would require we raise additional capital if required, which may not be available on favorable terms, or at all, which would impact our ability to carry on operations.

If our internal Company cyber-security measures are breached or fail and unauthorized access is obtained to our IT environment, we may incur significant losses of data, which we may not be able to recover and may experience a delay in our ability to conduct our day-to-day business.

As cybersecurity attacks continue to evolve and increase, our cyber-security measures and our IT environment could be penetrated or compromised by internal and external parties' intent on extracting confidential information, disrupting business processes, corrupting information, or looking to force the Company to pay a ransom. These risks could arise from external parties or from acts or omissions of internal or service provider personnel. Such unauthorized access could disrupt our business and could result in the loss of assets, litigation, remediation costs, damage to our reputation and failure to retain or attract customers following such an event, which could adversely affect our business.

Cyber attackers update their methods frequently. Sometimes cyberattacks are unrecognizable at the time of their occurrence and even long after. In addition, cyber incidents can occur as a result of non-technological failures, like human error or malicious acts. In some cases, information security incidents at our customers or suppliers can also lead to information security incidents in the Company's information systems. For these reasons, we cannot guarantee that the safeguards taken by us and the safeguards we will take in the future will completely prevent information security incidents or damages that may result from them as detailed above.

We provide cyber security features as part of our products that may not completely prevent information security breaches, and our products are installed in live customer environments and may be compromised by cyber-attacks and damage customer assets.

Our products include cyber-security features such as data-traffic encryption that are engineered to protect our customers' data and environment. Cyber-attacks become more sophisticated and evolve quickly, and these features may fail to protect our customers as intended and fail at preventing information security breaches. We plan to offer new cyber security products and features which we will either develop internally, obtain from partnerships with third-parties, or through acquisitions in the future. These planned new cybersecurity products and features may fail to protect our customers as intended and not prevent information security breaches.

Our products are installed in live customer network environments, and may be subject to cyberattacks seeking access to our customers networks through our products. Those cyber-attack attempts may take advantage of vulnerabilities of our products within the networks, vulnerabilities that may be known or unknown to us.

Our products and services include information systems and digital data of various types, including data kept by our employees, suppliers, and customers (and their own customers). In recent years there has been an increase in the frequency and severity of cyber incidents (including cybercrime). This trend is expected to continue in the future and even worsen, despite all the defense mechanisms employed against it. Cyber events can lead to unauthorized access, unauthorized disclosure, misuse, disruption, deletion, or modification of the Company and its customer assets, data, and processing, as well as disrupting day-to-day operations, computing services, and significantly slowing them down and even disabling information systems.

In the event of damage caused by such cyber-attacks, we may suffer negative consequences, such as disruption of the Company's and/or our customers' activities, disruption of or disabling information systems, theft of our and/or our customers' data, or damage to its reputation thus affecting clients' trust in the Company, and potentially exposing it to lawsuits. In such cases, our business results may be severely harmed.

We depend on key information systems and third-party service providers.

We depend on key information systems to transact our business accurately and efficiently. These systems and services are vulnerable to interruptions or other failures resulting from, among other things, natural disasters, terrorist attacks, software, equipment or teleDigital failures, processing errors, computer viruses, other security issues or supplier defaults. Security, backup, and disaster recovery measures may not be adequate or implemented properly to avoid such disruptions or failures. Any disruption or failure of these systems or services could cause substantial errors, processing inefficiencies, security breaches, inability to use the systems or process transactions, loss of customers or other business disruptions, all of which could negatively affect our business and financial performance.

We depend on our management team and other key employees, and the loss of one or more of these employees or an inability to attract and retain highly skilled employees could adversely affect our business.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel. The loss of the services of any of our key personnel, the inability to attract or retain qualified personnel, or delays in hiring required personnel, particularly in engineering and sales, may seriously and adversely affect our business, financial condition and results of operations. Although we have entered into employment or consulting agreements with our personnel, their employment is generally for no specific duration.

Our future performance also depends on the continued services and continuing contributions of our senior management team, which includes Tuvia Barlev, our Chief Executive Officer, to execute on our business plan and to identify and pursue new opportunities and product innovations. The loss of services of our senior management team, particularly our Chief Executive Officer, could significantly delay or prevent the achievement of our development and strategic objectives, which could adversely affect our business, financial condition and results of operations.

We may face the effects of increased competition and rapid technological changes.

The industry in which we are engaged is subject to rapid and significant technological change. There can be no assurance that our systems can be upgraded to meet future innovations which will be required to meet our customer's requirements, or that new technologies will be adopted successfully by us, or existing technologies will not be improved, which would render the offerings obsolete or non-competitive. Companies we compete with enjoy significant competitive advantages, including greater name recognition; greater financial, technical, and service resources; established networks; additional product offerings; and greater resources for product development and sales and marketing.

There can be no assurance that other established networking technology companies, any of which would likely have greater resources than us, will not enter the market. In addition, new competitors may enter the marketplace and/or begin offering networking technology products and solutions and in channels similar to or competing with ours. Such competition may reduce demand for our products and impact the growth prospects and ability to achieve profitability, which may require us to raise new capital, which may not be available on favorable terms, or at all, and that would impair our ability to carry on operations.

We cannot assure you that we will be able to compete successfully against any of these competitors. Our failure to compete successfully with our competitors could harm our business.

We are dependent on skilled human capital.

Our ability to innovate and execute its business plans is dependent on the ability to hire, replace, and train skilled personnel. The employment market suffers from shortages of candidates, and such shortages may continue in future years, causing delays and preventing us from executing our plans.

Our results of operations are likely to fluctuate from quarter to quarter and year to year, which could adversely affect the trading price of our common stock.

Our results of operations, including our revenue, cost of revenue, gross margin, operating expenses, cash flow, and deferred revenue, have fluctuated from quarter to quarter and year to year in the past and may continue to vary significantly in the future so that period-to-period comparisons of our results of operations may not be meaningful. Accordingly, our financial results in any one quarter should not be relied upon as indicative of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors, many of which are outside of our control, may be difficult to predict, and may not fully reflect the underlying performance of our business. Factors that may cause fluctuations in our quarterly financial results include:

- our ability to attract new customers and increase revenue from our existing customers;
- the loss of existing customers;
- customer satisfaction with our products, solutions, platform capabilities and customer support;
- mergers and acquisitions or other factors resulting in the consolidation of our customer base;
- mix of our revenue;

[Table of Contents](#)

- our ability to gain new partners and retain existing partners;
- fluctuations in share-based compensation expense;
- decisions by potential customers to purchase competing offerings or develop in-house technologies and solutions as alternatives to our offerings;
- changes in the spending patterns of our customers;
- the amount and timing of operating expenses related to the maintenance and expansion of our business and operations, including investments in research and development, sales and marketing, and general and administrative resources;
- network outages;
- developments or disputes concerning our intellectual property or proprietary rights, our products and services, or third-party intellectual property or proprietary rights;
- negative publicity about our company, our offerings or our partners, including as a result of actual or perceived breaches of, or failures relating to, privacy, data protection or data security;
- the timing of expenses related to the development or acquisition of technologies or businesses and potential future charges for impairment of goodwill from acquired companies;
- general economic, industry, and market conditions;
- the impact of the ongoing COVID-19 pandemic, or any other pandemic, epidemic, outbreak of infectious disease or other global health crises on our business, the businesses of our customers and partners and general economic conditions;
- the impact of political uncertainty or unrest;
- changes in our pricing policies or those of our competitors;
- fluctuations in the growth rate of the markets that our offerings address;
- seasonality in the underlying businesses of our customers, including budgeting cycles, purchasing practices and usage patterns;
- the business strengths or weakness of our customers;
- our ability to collect timely on invoices or receivables;
- the cost and potential outcomes of future litigation or other disputes;
- future accounting pronouncements or changes in our accounting policies;
- our overall effective tax rate, including impacts caused by any reorganization in our corporate tax structure and any new legislation or regulatory developments;
- our ability to successfully expand our business in the United States and internationally;
- fluctuations in foreign currency exchange rates; and
- the timing and success of new products and solutions introduced by us or our competitors, or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers or partners.

The impact of one or more of the foregoing or other factors may cause our results of operations to vary significantly. Such fluctuations make forecasting more difficult and could cause us to fail to meet the expectations of investors and securities analysts, which could cause the trading price of our common stock to fall substantially, resulting in the loss of all or part of your investment, and subject us to costly lawsuits, including securities class action suits.

The loss of one or more of our significant customers, or any other reduction in the amount of revenue we derive from any such customer, would adversely affect our business, financial condition, results of operations and growth prospects.

Our future success is dependent on our ability to establish and maintain successful relationships with a diverse set of customers.

We currently derive a significant portion of our revenue from a limited number of our customers. For the years ended December 31, 2021 and December 31, 2020, our top ten customers in the aggregate accounted for approximately 78% and 70% of our revenues.

We expect to continue to derive a significant portion of our revenue from a limited number of customers in the future and, in some cases, the portion of our revenue attributable to individual customers may increase. The loss of one or more significant customers or a reduction in the amount of revenue we derive from any such customer could significantly and adversely affect our business, financial condition and results of operations. Customers may choose not to renew their contracts or may otherwise reduce the breadth of the offerings which they purchase for any number of reasons. We are also subject to the risk that any such customer will experience financial difficulties that prevent them from making payments to us on a timely basis or at all.

We are currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability due to the ongoing military conflict between Russia and Ukraine. Our business, financial condition and results of operations may be materially adversely affected by any negative impact on the global economy and capital markets resulting from the conflict in Ukraine or any other geopolitical tensions.

U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the start of the military conflict between Russia and Ukraine. On February 24, 2022, a full-scale military invasion of Ukraine by Russian troops was reported. Although the length and impact of the ongoing military conflict is highly unpredictable, and although we currently have no operations or sales in either Russia or Ukraine, the conflict in Ukraine could lead to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions for some of our components. Our operations would be particularly vulnerable to potential interruptions in the supply of certain critical materials and metals, such as neon gas and palladium, which are used in semiconductor manufacturing. Any interruption to semiconductor chip supply could significantly impact our ability to receive the components and timely roll-out of our operations. Furthermore, any potential increase in geopolitical tensions in Asia, particularly in the Taiwan Strait, could also significantly disrupt existing semiconductor chip manufacturing and increase the prospect of an interruption to the semiconductor chip supply across the world. A significant portion of the world's semiconductor manufacturing is in Taiwan, and similar geopolitical tensions there could create further supply chain disruptions, which could result in further delays for our products' components.

The world's largest semiconductor chip manufacturer is located in Taiwan and a large part of equipment and materials, is manufactured in, and imported from, Taiwan. A setback to the current state of relative peace and stability in the region could compromise existing semiconductor chip production and have downstream implications for our company. We are continuing to monitor the situation in Ukraine and globally and assessing its potential impact on our business.

Governments in the United States and many other countries, or the Sanctioning Bodies, have imposed economic sanctions on certain Russian individuals, including politicians, and Russian corporate and banking entities. The Sanctioning Bodies, or others, could also institute broader sanctions on Russia, including banning Russia from global payments systems that facilitate cross-border payments. These sanctions, or even the threat of further sanctions, may result in the decline of the value and liquidity of Russian securities, a weakening of the ruble or other adverse consequences to the global economy.

The current war in Ukraine, and geopolitical events stemming from such conflicts, could cause consumer confidence and spending to decrease or result in increased volatility in the United States and worldwide financial markets and economy. The extent and duration of the military action, resulting sanctions and resulting future market disruptions in the region are impossible to predict, but could be significant and have a severe adverse effect worldwide financial markets and economy.

The effects of health pandemics, such as the ongoing global COVID-19 pandemic, have had, and could in the future have, an adverse impact on our business, financial condition and results of operations.

In December 2019, a novel coronavirus disease, or COVID-19, was first reported and on March 11, 2020, the World Health Organization characterized COVID-19 as a pandemic. The widespread health crisis is adversely affecting the broader economies, financial markets and overall demand environment for many of our products.

Our operations and the operations of our suppliers, channel partners and customers were disrupted to varying degrees by a range of external factors related to the COVID-19 pandemic, some of which are not within our control. Many governments imposed, and may yet impose, a wide range of restrictions on the physical movement of people in order to limit the spread of COVID-19. The COVID-19 pandemic has had, and likely will continue to have, an impact on the attendance and productivity of our employees, and those of our channel partners or customers, resulting in negative impacts to our results of operations and overall financial performance. We suffered delays in realization of certain new orders from our customers, delay in testing of some of our new technologies in customer premises and difficulty conducting business development activities in an effective way (face-to-face). In addition, we had to increase our credit lines by \$2.0 million to support the loss of revenue and profit. Additionally, COVID-19 has resulted, and likely will continue to result, in delays in non-residential construction, non-crisis-related IT purchases and project completion schedules in general, all of which can negatively impact our results in both current and future periods.

The duration and extent of the impact from the COVID-19 pandemic or any future epidemic or pandemic depends on future developments that cannot be accurately predicted at this time, such as the severity and transmission rate of the virus, the extent and effectiveness of containment actions, the effects of measures enacted by policy makers and central banks around the globe, and the impact of these and other factors on our employees, customers, channel partners and suppliers. If we are not able to respond to and manage the impact of such events effectively, our business will be affected.

Our performance is affected by general economic and political conditions and taxation policies

The success of our activities may be affected by general economic and market conditions, like interest rates, currency exchange rate fluctuations, availability of credit, inflation rates, economic uncertainty, changes in laws, and United States and international political circumstances. Unexpected volatility or illiquidity could impair profitability or result in losses.

We may be adversely affected by the political and economic situation in the U.S., Europe and a number of countries in Asia.

The U.S. communications market is directly affected by economic developments in the U.S. economy. The European and Asian communications market is similarly reliant on political and economic stability in those regions. Changing trends in these markets may lead to a decrease in investments and a delay in projects, which could harm the Company's business. To reduce our sensitivity to market changes, we operate in a large number of different vertical markets and territories.

Our business could be adversely impacted by changes in laws and regulations related to government contracts.

Federal or state government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting the use of the Internet as a commercial medium. Legislators, regulators, or government bodies or agencies may also make legal or regulatory changes or interpret or apply existing laws or regulations that relate to government contracts. Changes in these laws, regulations or interpretations could require us to modify our platform in order to comply with these changes, to incur substantial additional costs or divert resources that could otherwise be deployed to grow our business, or expose us to unanticipated civil or criminal liability, among other things.

We are subject to laws and regulations worldwide, changes to which could increase our costs and individually or in the aggregate adversely affect our business.

We are subject to laws and regulations affecting our domestic and international operations in a number of areas. These U.S. and foreign laws and regulations affect our activities including, but not limited to, in areas of labor, health and safety, tax, import and export requirements, foreign exchange controls and cash repatriation restrictions, data privacy requirements, anti-competition, and environmental.

Compliance with these laws, regulations and similar requirements may be onerous and expensive, and they may be inconsistent from jurisdiction to jurisdiction, further increasing the cost of compliance and doing business. Any such costs, which may rise in the future as a result of changes in these laws and regulations or in their interpretation, could individually or in the aggregate make our products and services less attractive to our customers, delay the introduction of new products in one or more regions, or cause us to change or limit our business practices. We have implemented policies and procedures designed to ensure compliance with applicable laws and regulations, but there can be no assurance that our employees, contractors, or agents will not violate such laws and regulations or our policies and procedures.

Risks Related to Protecting Our Technology and Intellectual Property

Claims by others that we infringe their intellectual property could force us to incur significant costs or revise the way we conduct our business.

Our competitors protect their proprietary rights by means of patents, trade secrets, copyrights, trademarks and other intellectual property. We have not conducted an independent review of patents and other intellectual property issued to third parties, who may have patents or patent applications relating to our proprietary technology. We may receive letters from third parties alleging, or inquiring about, possible infringement, misappropriation, or violation of their intellectual property rights. Any party asserting that we infringe, misappropriate, or violate proprietary rights may force us to defend ourselves, and potentially our customers, against the alleged claim. These claims and any resulting lawsuit, if successful, could subject us to significant liability for damages or interruption or cessation of our operations. Any such claims or lawsuit could:

- be time-consuming and expensive to defend, whether meritorious or not;
- require us to stop providing products or services that use the technology that infringes the other party's intellectual property;
- divert the attention of our technical and managerial resources;
- require us to enter into royalty or licensing agreements with third-parties, which may not be available on terms that we deem acceptable;
- prevent us from operating all or a portion of our business or force us to redesign our products, services or technology, which could be difficult and expensive and may make the performance or value of our product or service offerings less attractive;
- subject us to significant liability for damages or result in significant settlement payments; or
- require us to indemnify our customers.

Furthermore, during the course of litigation, confidential information may be disclosed in the form of documents or testimony in connection with discovery requests, depositions or trial testimony. Disclosure of our confidential information and our involvement in intellectual property litigation could materially adversely affect our business. Some of our competitors may be able to sustain the costs of intellectual property litigation more effectively than we can because they have substantially greater resources. In addition, any litigation could significantly harm our relationships with current and prospective customers. Any of the foregoing could disrupt our business and have a material adverse effect on our business, operating results and financial condition.

Our patents and proprietary technology may be challenged or disputed.

We hold certain patent and trade secret rights relating to various aspects of our technologies, which are of material importance to the Company and its future prospects. Any patents we have obtained or do obtain may be challenged by re-examination or otherwise invalidated or eventually found unenforceable. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Competitors may attempt to challenge or invalidate our patents or may be able to design alternative techniques or devices that avoid infringement of our patents or develop products with functionalities that are comparable to ours. In the event a competitor infringes upon

our patent or other intellectual property rights, litigation to enforce our intellectual property rights or to defend our patents against challenge, even if successful, could be expensive and time consuming and could require significant time and attention from our management. We may not have sufficient resources to enforce our intellectual property rights or to defend our patents against challenges from others.

Any failure to protect our intellectual property rights could impair our ability to protect our proprietary technology and our brand.

Our success and ability to compete depend largely upon our intellectual property. To date, we have 27 registered patents and one patent application pending in the United States; five registered patents in Europe, one registered patent in Mexico, one registered patent in Indonesia and one patent application pending in Europe, all of which in the general area of high-speed carrier class Ethernet service and transport over bonded VDSL2, G.SHDSL as well as Fiber. We take reasonable steps to protect our intellectual property, especially when working with third parties. However, the steps we take to protect our intellectual property rights may be inadequate. For example, other parties, including our competitors, may independently develop similar technology, duplicate our services, or design around our intellectual property and, in such cases, we may not be able to assert our intellectual property rights against such parties. Further, our contractual arrangements may not effectively prevent disclosure of our confidential information or provide an adequate remedy in the event of unauthorized disclosure of our confidential information, and we may be unable to detect the unauthorized use of, or take appropriate steps to enforce, our intellectual property rights.

We make business decisions about when to seek patent protection for a particular technology and when to rely upon trade secret protection, and the approach we select may ultimately prove to be inadequate. Even in cases where we seek patent protection, there is no assurance that the resulting patents will effectively protect every significant feature of our technology or provide us with any competitive advantages. Moreover, we cannot guarantee that any of our pending patent application will issue or be approved. The United States Patent and Trademark Office and various foreign governmental patent agencies also require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process and after a patent has issued. There are situations in which noncompliance can result in abandonment or lapse of the patent, or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If this occurs, our competitors might be able to enter the market, which would have a material adverse effect on our business. Effective trademark, copyright, patent, and trade secret protection may not be available in every country in which we conduct business. Further, intellectual property law, including statutory and case law, in the United States and other countries, is constantly developing, and any changes in the law could make it harder for us to enforce our rights.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect these rights. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming, and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. An adverse determination of any litigation proceedings could put our intellectual property at risk of being invalidated or interpreted narrowly and could put our related pending patent applications at risk of not issuing. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation particularly in the US, there is a risk that some of our confidential or sensitive information could be compromised by disclosure in the event of litigation. In addition, during the course of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Negative publicity related to a decision by us to initiate such enforcement actions against a client or former client, regardless of its accuracy, may adversely impact our other client relationships or prospective client relationships, harm our brand and business, and could cause the market price of our common stock to decline. Our failure to secure, protect, and enforce our intellectual property rights could adversely affect our brand and our business.

We may not be able to adequately defend against piracy of intellectual property in foreign jurisdictions.

Considerable research is being performed in countries outside of the United States, and a number of potential competitors are located in these countries. The laws protecting intellectual property in some of those countries may not provide adequate protection to prevent our competitors from misappropriating our intellectual property. Several of these potential competitors may be further along in the process of product development and also operate large,

company-funded research and development programs. As a result, our competitors may develop more competitive or affordable products, or achieve earlier patent protection or product commercialization than we are able to achieve. Competitive products may render any products that we develop obsolete.

Risks Related to Managing Our Business Operations in Israel

Potential political, economic, and military instability in the State of Israel, where our research and development facilities are located, may adversely affect our results of operations.

Our office where we conduct our research and development, operations, sales outside the Americas, and administration activities, is located in Israel. Many of our employees are residents of Israel.

Accordingly, political, economic and military conditions in Israel and the surrounding region may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its neighboring Arab countries, the Hamas militant group and the Hezbollah. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its trading partners could adversely affect our operations and results of operations. Ongoing and revived hostilities or other Israeli political or economic factors, such as, an interruption of operations at the Tel Aviv airport, could prevent or delay our regular operation, product development and delivery of products. If continued or resumed, these hostilities may negatively affect business conditions in Israel in general and our business in particular. In the event that hostilities disrupt the ongoing operation of our facilities and our operations may be materially adversely affected.

In addition, since 2010 political uprisings and conflicts in various countries in the Middle East, including Egypt and Syria, are affecting the political stability of those countries. It is not clear how this instability will develop and how it will affect the political and security situation in the Middle East. This instability has raised concerns regarding security in the region and the potential for armed conflict. In Syria, a country bordering Israel, a civil war is taking place. In addition, it is widely believed that Iran, which has previously threatened to attack Israel, has been stepping up its efforts to achieve nuclear capability. Iran is also believed to have a strong influence among extremist groups in the region, such as Hamas in Gaza and Hezbollah in Lebanon. Additionally, the Islamic State of Iraq and Levant, a violent jihadist group, is involved in hostilities in Iraq and Syria. The tension between Israel and Iran and/or these groups may escalate in the future and turn violent, which could affect the Israeli economy in general and us in particular. Any potential future conflict could also include missile strikes against parts of Israel, including our offices and facilities. Such instability may lead to deterioration in the political and trade relationships that exist between the State of Israel and certain other countries. Any armed conflicts, terrorist activities or political instability in the region could adversely affect business conditions, could harm our results of operations and could make it more difficult for us to raise capital. Parties with whom we do business may sometimes decline to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements when necessary in order to meet our business partners face to face. Several countries, principally in the Middle East, still restrict doing business with Israel and Israeli companies, and additional countries may impose restrictions on doing business with Israel and Israeli companies if hostilities in Israel or political instability in the region continues or increases. Similarly, Israeli companies are limited in conducting business with entities from several countries. For instance, the Israeli legislature passed a law forbidding any investments in entities that transact business with Iran. In addition, the political and security situation in Israel may result in parties with whom we have agreements involving performance in Israel claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions in such agreements.

Our employees and consultants in Israel, including members of our senior management, may be obligated to perform one month, and in some cases longer periods, of military reserve duty until they reach the age of 40 (or older, for citizens who hold certain positions in the Israeli armed forces reserves) and, in the event of a military conflict or emergency circumstances, may be called to immediate and unlimited active duty. In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to increases in terrorist activity, there have been periods of significant call-ups of military reservists. It is possible that there will be similar large-scale military reserve duty call-ups in the future. Our operations could be disrupted by the absence of a significant number of our officers, directors, employees and consultants related to military service. Such disruption could materially adversely affect our business and operations. Additionally, the absence of a significant number of the employees of our Israeli suppliers and contractors related to military service or the absence for extended periods of one or more of their key employees for military service may disrupt their operations.

[Table of Contents](#)

Our insurance does not cover losses that may occur as a result of an event associated with the security situation in the Middle East or for any resulting disruption in our operations. Although the Israeli government has in the past covered the reinstatement value of direct damages that were caused by terrorist attacks or acts of war, we cannot assure you that this government coverage will be maintained or, if maintained, will be sufficient to compensate us fully for damages incurred and the government may cease providing such coverage or the coverage might not suffice to cover potential damages. Any losses or damages incurred by us could have a material adverse effect on our business. Any armed conflicts or political instability in the region would likely negatively affect business conditions generally and could harm our results of operations and product development.

Further, in the past, the State of Israel and Israeli companies have been subjected to economic boycotts. Several countries still restrict business with the State of Israel and with Israeli companies. These restrictive laws and policies may have an adverse impact on our operating results, financial conditions or the expansion of our business. Similarly, Israeli corporations are limited in conducting business with entities from several countries.

Actelis Israel received Israeli government grants for certain of our research and development activities, the terms of which require us to pay royalties and satisfy specified conditions in order to manufacture products and transfer technologies outside of Israel. If we fail to satisfy these conditions, we may be required to pay penalties and refund grants previously received.

Our wholly owned subsidiary, Actelis Israel, which manages our research and development efforts, has been financed in part through royalty-bearing grants in an aggregate amount of approximately \$14 million (plus accrued interest), received from the Israeli Innovation Authority (formerly known as the Office of the Chief Scientist of the Israeli Ministry of Economy, or the IIA, as of December 31, 2021). We are committed to pay royalties at a rate of 3.0% on revenues up to the total amount of grants received, linked to the U.S. dollar and bearing interest at an annual rate of LIBOR applicable to U.S. dollar deposits.

We are further required to comply with the requirements of the Israeli Encouragement of Industrial Research, Development and Technological Innovation Law, 5744-1984 (formerly known as the Law for Encouragement of Research and Development in the Industry, 1984), as amended, and related regulations, or the Research Law, with respect to those past grants. When a grantee company develops know-how, technology or products using IIA grants, the terms of these grants and the Research Law restrict the transfer or license of such know-how, and the transfer of manufacturing or manufacturing rights of such products, technologies or know-how outside of Israel, without the prior approval of the IIA. Therefore, the discretionary approval of an IIA committee would be required for any transfer or license to third parties inside or outside of Israel of Actelis Israel's know how or for the transfer outside of Israel of manufacturing or manufacturing rights related to those aspects of such technologies. We may not receive those approvals. Furthermore, the IIA may impose certain conditions on any arrangement under which it permits us to transfer technology or development outside of Israel.

The transfer or license of IIA-supported technology or know-how outside of Israel and the transfer of manufacturing of IIA-supported products, technology or know-how outside of Israel may involve the payment of significant amounts, depending upon the value of the transferred or licensed technology or know-how, our research and development expenses, the amount of IIA support, the time of completion of the IIA-supported research project and other factors. These restrictions and requirements for payment may impair our ability to sell, license or otherwise transfer our technology assets outside of Israel or to outsource or transfer development or manufacturing activities with respect to any product or technology outside of Israel. Furthermore, the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know-how developed with IIA funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay to the IIA.

There are costs and difficulties inherent in managing cross-border business operations.

Managing a business, operations, personnel or assets in another country is challenging and costly. Any management that we may have (whether based abroad or in the United States) may be inexperienced in cross-border business practices and unaware of significant differences in accounting rules, legal regimes, and labor practices. Even with a seasoned and experienced management team, the costs and difficulties inherent in managing cross-border business operations, personnel, and assets can be significant (and much higher than in a purely domestic business) and may negatively impact our financial and operational performance.

Employment and other material contracts we have with our Israeli employees are governed by Israeli laws. Our inability to enforce or obtain a remedy under these agreements could adversely affect our business and financial condition.

All employees were asked to sign employment agreements that contain confidentiality, non-compete and assignment of intellectual property provisions. The employment agreements with our employees in Israel are governed by Israeli laws. The system of laws and the enforcement of existing laws and contracts in Israel may not be as certain in implementation and interpretation as in the United States, leading to a higher than usual degree of uncertainty as to the outcome of any litigation. Our inability to enforce or obtain a remedy under any of these or future agreements could adversely affect our business and financial condition. Delay with respect to the enforcement of particular rules and regulations, including those relating to intellectual property, customs, tax, and labor, could also cause serious disruption to operations abroad and negatively impact our results.

Israeli courts have required employers seeking to enforce non-compete undertakings of a former employee to demonstrate that the competitive activities of the former employee will harm one of a limited number of material interests of the employer which have been recognized by the courts, such as the secrecy of a company's confidential commercial information or the protection of its intellectual property. If we cannot demonstrate that such interests will be harmed, we may be unable to prevent our competitors from benefiting from the expertise of our former employees or consultants and our ability to remain competitive may be diminished.

In addition, Chapter 8 of the Israeli Patents Law, 5727-1967, or the Patents Law, deals with inventions made in the course of an employee's service and during his or her term of employment, whether or not the invention is patentable, or service inventions. Section 134 of the Patents Law sets forth that if there is no agreement which explicitly determines whether the employee is entitled to compensation for the service inventions and the extent and terms of such compensation, such determination will be made by the Compensation and Rewards Committee, a statutory committee of the Israeli Patents Office. As a result, it is unclear if, and to what extent, our research and development employees may be able to claim compensation with respect to our future revenues. Such claims, if successfully asserted, could adversely affect our results of operations and profitability.

We may be adversely affected by fluctuations in the currency exchange rate of the Israeli Shekel.

We compute a significant number of expenses in Israeli Shekels, both expenses from employees and suppliers. Our customers buy our products priced in US dollars or Euros. The strengthening of the shekel against the dollar and the euro could erode our profitability.

Unanticipated changes in our effective tax rate and additional tax liabilities, including those resulting from our international operations or the implementation of new tax rules, could harm our future results.

We are subject to income taxes in the United States and Israel. Our domestic and international tax liabilities are subject to the allocation of expenses in differing jurisdictions and complex transfer pricing regulations administered by taxing authorities in various jurisdictions. Tax rates in the jurisdictions in which we operate may change as a result of factors outside of our control or relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. In addition, changes in tax and trade laws, treaties or regulations, or their interpretation or enforcement, have become more unpredictable and may become more stringent, which could materially adversely affect our tax position.

Forecasting our estimated annual effective tax rate is complex and subject to uncertainty, and there may be material differences between our forecasted and actual effective tax rate. Our effective tax rate could be adversely affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses, the valuation of deferred tax assets and liabilities, adjustments to income taxes upon finalization of tax returns, changes in available tax attributes, decision to repatriate non-U.S. earnings for which we have not previously provided for U.S. taxes, and changes in federal, state, or international tax laws and accounting principles.

Finally, we may be subject to income tax audits throughout the world. An adverse resolution of one or more uncertain tax positions in any period could have a material impact on our results of operations or financial condition for that period.

Risks Related to this Offering and Ownership of our Common Stock

The requirements of being a public company may strain our resources, divert management's attention, and affect our ability to attract and retain executive management and qualified board members.

As a public company, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, or the Exchange Act, the listing standards of Nasdaq and other applicable securities rules and regulations. We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming, and costly, and place significant strain on our personnel, systems, and resources. For example, the Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and results of operations. As a result of the complexity involved in complying with the rules and regulations applicable to public companies, our management's attention may be diverted from other business concerns, which could harm our business, results of operations, and financial condition.

We also expect that being a public company and these new rules and regulations will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

As a result of disclosure of information in filings required of a public company, our business and financial condition is more visible, which may result in an increased risk of threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business and results of operations could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and harm our business, results of operations, and financial condition.

The individuals who now constitute our senior management team have limited experience managing a publicly traded company and limited experience complying with the increasingly complex laws pertaining to public companies. Our senior management team may not successfully or efficiently manage our transition to a public company that is subject to significant regulatory oversight and reporting obligations.

We are an "emerging growth company," and our compliance with the reduced reporting and disclosure requirements applicable to "emerging growth companies" may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we have elected to take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not "emerging growth companies." These provisions include, but are not limited to: requiring only two years of audited financial statements and only two years of related selected financial data and management's discussion and analysis of financial condition and results of operations disclosures; being exempt from compliance with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act; being exempt from any rules that could be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor's report on financial statements; being subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and not being required to hold nonbinding advisory votes on executive compensation or on any golden parachute payments not previously approved.

In addition, while we are an "emerging growth company," we will not be required to comply with any new financial accounting standard until such standard is generally applicable to private companies. As a result, our financial statements may not be comparable to companies that are not "emerging growth companies" or elect not to avail themselves of this provision.

We may remain an "emerging growth company" until as late as December 31, 2027, the fiscal yearend following the fifth anniversary of the completion of this initial public offering, though we may cease to be an "emerging growth company" earlier under certain circumstances, including if (1) we have more than \$1.07 billion in annual net revenues

[Table of Contents](#)

in any fiscal year, (2) we become a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates as of the end of the second quarter of that fiscal year or (3) we issue more than \$1.0 billion of non-convertible debt over a three-year period.

The exact implications of the JOBS Act are still subject to interpretations and guidance by the SEC and other regulatory agencies, and we cannot assure you that we will be able to take advantage of all of the benefits of the JOBS Act. In addition, investors may find our common stock less attractive to the extent we rely on the exemptions and relief granted by the JOBS Act. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may decline or become more volatile.

We have identified a material weakness in our internal control over financial reporting. If we experience material weaknesses in the future or otherwise fail to implement and maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations which may adversely affect investor confidence in us, and as a result, the value of our common stock.

As a privately-held company, we were not required to evaluate our internal control over financial reporting in a manner that meets the standards of publicly traded companies required by Section 404(a) of the Sarbanes-Oxley Act, or Section 404. As a public company, we will be subject to significant requirements for enhanced financial reporting and internal controls. The process of designing and implementing effective internal controls is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. In addition, we will be required, pursuant to Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting in the second annual report following the completion of this offering. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company’s annual and interim financial statements will not be detected or prevented on a timely basis.

The rules governing the standards that must be met for our management to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation. Testing and maintaining internal controls may divert our management’s attention from other matters that are important to our business. Once we are no longer an “emerging growth company,” or a “smaller reporting company”, our auditors will be required to issue an attestation report on the effectiveness of our internal controls on an annual basis.

In the course of preparing the financial statements that are included in this prospectus, management has determined that a material weakness exists within the internal controls over financial reporting. The material weakness identified relates to lack of a sufficient number of finance personnel to allow for adequate segregation of duties. We concluded that the material weakness in our internal control over financial reporting occurred because, prior to this offering, we were a private company and did not have the necessary business processes, systems, personnel, and related internal controls necessary to satisfy the accounting and financial reporting requirements of a public company.

In order to remediate the material weakness, we expect to hire additional accounting and finance resources with public company experience and to nominate board members with the required financial literacy.

We may not be able to fully remediate the identified material weakness until the steps described above have been completed and our internal controls have been operating effectively for a sufficient period of time. We believe we will make significant progress in our remediation plan within fiscal year 2022, but cannot assure you that we will be able to fully remediate the material weakness by such time. We also may incur significant costs to execute various aspects of our remediation plan but cannot provide a reasonable estimate of such costs at this time.

In accordance with the provisions of the JOBS Act, we and our independent registered public accounting firm were not required to, and did not, perform an evaluation of our internal control over financial reporting as of December 31, 2021 nor any period subsequent in accordance with the provisions of the Sarbanes-Oxley Act. Accordingly, we cannot assure you that we have identified all material weaknesses. Material weaknesses may still exist when we report on the effectiveness of our internal control over financial reporting as required under Section 404 of the Sarbanes-Oxley Act after the completion of this offering.

[Table of Contents](#)

In the future, it is possible that additional material weaknesses or significant deficiencies may be identified that we may be unable to remedy before the requisite deadline for these reports. Our ability to comply with the annual internal control reporting requirements will depend on the effectiveness of our financial reporting and data systems and controls across our company. Any weaknesses or deficiencies or any failure to implement new or improved controls, or difficulties encountered in the implementation or operation of these controls, could harm our operating results and cause us to fail to meet our financial reporting obligations, or result in material misstatements in our consolidated financial statements, which could adversely affect our business and reduce our stock price.

If we are unable to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404, our independent registered public accounting firm may not issue an unqualified opinion. If we are unable to conclude that we have effective internal control over financial reporting, investors could lose confidence in our reported financial information, which could have a material adverse effect on the trading price of our common stock. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We will be required to disclose changes made in our internal controls and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually, beginning with our second annual report on Form 10-K. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404, however they will not be required to do so for so long as we are an emerging growth company. We could be an emerging growth company for up to five years (i.e., until December 31, 2027). An independent assessment of the effectiveness of our internal controls over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls over financial reporting could lead to restatements of our financial statements and require us to incur the expense of remediation.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon completion of this offering, we will become subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

An active trading market may not develop for our securities, and you may not be able to sell your common stock at or above the offering price per share.

This is the initial public offering of our securities and there is currently no public market for our common stock.

We intend to apply to list our common stock on the Nasdaq Capital Market. However, we cannot predict the extent to which investor interest in our Company will lead to the development of an active trading market in our common stock or how liquid that market might become. If such a market does not develop or is not sustained, it may be difficult for you to sell your shares of common stock at the time you wish to sell them, at a price that is attractive to you, or at all.

The trading market for our common stock in the future could be subject to wide fluctuations in response to several factors, including, but not limited to:

- actual or anticipated variations in our results of operations;
- our ability or inability to generate revenues or profit;
- the number of shares in our public float; and
- increased competition.

Furthermore, our stock price may be impacted by factors that are unrelated or disproportionate to our operating performance. These market fluctuations, as well as general economic, political, and market conditions, such as recessions, interest rates or international currency fluctuations may adversely affect the market price of our common stock. Additionally, moving forward we anticipate having a limited number of shares in our public float, and as a result, there could be extreme fluctuations in the price of our common stock. The offering price per share has been determined through negotiation between us and the Underwriter and may not be indicative of the market prices that prevail after this offering. You may not be able to sell your common stock at or above the offering price per share.

Our management has broad discretion in the use of proceeds from our offering and our use may not produce a positive rate of return.

The principal purposes of our offering are to increase our capitalization and financial flexibility, create a public market for our stock and thereby enable access to the public equity markets by our employees and stockholders, obtain additional capital, and strengthen our position in the market. We plan to use the net proceeds of this offering for sales and marketing, research and development, general and administrative and for working capital and other general corporate purposes without any action or approval of our stockholders. Our management has broad discretion over the specific use of the net proceeds we received in our offering and might not be able to obtain a significant return, if any, on investment of these net proceeds. Investors will need to rely upon the judgment of our management with respect to the use of proceeds. If we do not use the net proceeds that we received in our offering effectively, our business, results of operations, and financial condition could be harmed.

Our issuance of additional capital stock in connection with financings, acquisitions, investments, our 2015 Equity Incentive Plan, or otherwise will dilute all other stockholders.

Even after consummation of the offering as contemplated, we may need to raise additional capital through equity and debt financings in order to fund our operations. If we raise capital through equity financings in the future, that will result in dilution to all other stockholders. We also expect to grant equity awards to employees, directors, and consultants under our 2015 Equity Incentive Plan. As part of our business strategy, we may acquire or make investments in complementary companies, products, or technologies and issue equity securities to pay for any such acquisition or investment. Any such issuances of additional capital stock may cause stockholders to experience significant dilution of their ownership interests and the per-share value of our common stock to decline.

We do not intend to pay dividends on our common stock and, consequently, the ability of common Stockholders to achieve a return on investment will depend on appreciation, if any, in the price of our common stock.

You should not rely on an investment in our common stock to provide dividend income. We do not plan to declare or pay any dividends on our capital stock in the foreseeable future. Instead, we intend to retain any earnings to finance the operation and expansion of our business. Any credit agreements, which we may enter into with institutional lenders, may restrict our ability to pay dividends. Whether we pay cash dividends in the future will be at the discretion of our board of directors and will be dependent upon our financial condition, results of operations, capital requirements and any other factors that the board of directors decides is relevant. Therefore, any return on your investment in our capital stock must come from increases in the fair market value and trading price of the capital stock.

You will experience immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering and may experience further dilution in the future.

The initial public offering price of our common stock is substantially higher than the pro forma as adjusted net tangible book value per share of our common stock. If you purchase common stock in this offering, you will suffer immediate dilution of \$5.41 per share, representing the difference between our pro forma as adjusted net tangible book value per share as of December 31, 2021 and the assumed initial public offering price of \$5 per share, the mid-point of the anticipated price range. We also have a significant number of outstanding options to purchase shares of our common stock with exercise prices that are below the assumed initial public offering price of our common stock. To the extent these options are exercised, you will experience further dilution. See the section of this prospectus titled “Dilution” for additional information.

We might not be able to maintain the listing of our common stock on the Nasdaq Capital Market.

We intend to apply to list our common stock on the Nasdaq Capital Market in connection with this offering. The obligation of the Underwriter to purchase the shares of common stock is conditioned upon our receiving approval to list the shares of common stock on Nasdaq. We will not consummate this offering if our application is not approved. However, there can be no assurance that we will be able to maintain the listing standards of that exchange, which includes requirements that we maintain our stockholders’ equity, total value of shares held by unaffiliated stockholders, and market capitalization above certain specified levels. If we fail to conform to the Nasdaq listing requirements on an ongoing basis, our common stock might cease to trade on the Nasdaq Capital Market exchange, and may move to the OTCQB or OTC Pink Markets operated by OTC Markets Group, Inc. These quotation services are generally considered to be markets that are less efficient, and to provide less liquidity in the shares, than the Nasdaq Capital Market.

Future sales of our common stock, or the perception that future sales may occur, may cause the market price of our common stock to decline, even if our business is doing well.

Sales of substantial amounts of our common stock in the public market after this offering, or the perception that these sales may occur, could materially and adversely affect the price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. The shares of common stock sold in this offering will be freely tradable, without restriction, in the public market, except for any shares sold to our affiliates.

Approximately, 5,596,817 shares of common stock may be sold in the public market by existing stockholders on or about 181 days after the date of this prospectus, subject to volume and other limitations imposed under the federal securities laws. Sales of substantial amounts of our common stock in the public market after the completion of this offering, or the perception that such sales could occur, could adversely affect the market price of our common stock and could materially impair our ability to raise capital through offerings of our common stock. See the section entitled “Shares Eligible for Future Trading” for a more detailed description of the restrictions on selling shares of our common stock after this offering.

The market price of our common stock may be volatile and may decline regardless of our operating performance, and you may lose all or part of your investments.

The market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- overall performance of the equity markets and/or publicly listed technology companies;
- actual or anticipated fluctuations in our net revenues or other operating metrics;
- changes in the financial projections we provide to the public or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of us, changes in financial estimates by any securities analysts who follow our company, or our failure to meet the estimates or the expectations of investors;
- the economy as a whole and market conditions in our industry;
- political and economic stability in Israel;
- exchange rate fluctuations between U.S. dollars and Israeli New Shekel;
- rumors and market speculation involving us or other companies in our industry;
- announcements by us or our competitors of significant innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- lawsuits threatened or filed against us;
- recruitment or departure of key personnel;
- other events or factors, including those resulting from war, incidents of terrorism, or responses to these events; and
- the expiration of contractual lock-up or market standoff agreements.

In addition, extreme price and volume fluctuations in the stock markets have affected and continue to affect many technology companies' stock prices. Often, their stock prices have fluctuated in ways unrelated or disproportionate to the companies' operating performance. In the past, securities action litigation has often been brought against a Company following a decline in the market price of its securities. This risk is especially relevant for us because technology companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

A possible "short squeeze" due to a sudden increase in demand of our common stock that largely exceeds supply may lead to price volatility in our common stock.

Following this offering, investors may purchase our common stock to hedge existing exposure in our common stock or to speculate on the price of our common stock. Speculation on the price of our common stock may involve long and short exposures. To the extent aggregate short exposure exceeds the number of shares of our common stock available for purchase in the open market, investors with short exposure may have to pay a premium to repurchase our common stock for delivery to lenders of our common stock. Those repurchases may in turn, dramatically increase the price of our common stock until investors with short exposure are able to purchase additional common stock to cover their short position. This is often referred to as a "short squeeze." A short squeeze could lead to volatile price movements in our common stock that are not directly correlated to the performance or prospects of our common stock and once investors purchase the shares of common stock necessary to cover their short position the price of our common stock may decline.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our common stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. In addition, if our operating results fail to meet the forecast of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price and trading volume to decline.

Provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current board of directors and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation, or the Charter, and bylaws, or the Bylaws, may have the effect of delaying or preventing a change of control or changes in our management. Our Charter and Bylaws, include provisions that:

- permit the board of directors to establish the number of directors and fill any vacancies and newly created directorships;
- classify our board of directors is classified into three classes of directors with staggered three-year terms and stockholders will only be able to remove directors from office for cause; and
- provide that the board of directors is expressly authorized to make, alter, or repeal our Bylaws.

Moreover, Section 203 of the Delaware General Corporation Law, or the DGCL, may discourage, delay, or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations, and other transactions between us and holders of 15% or more of our common stock.

Our Charter provides that derivative actions brought on our behalf, actions against our directors, officers, employees or agent for breach of fiduciary duty and certain other actions may be brought only in the Court of Chancery in the State of Delaware and the stockholders shall be deemed to have consented to this choice of forum provision, which may have the effect of discouraging lawsuits against our directors, officers, other employees or agents.

Our Charter to be effective upon the consummation of this offering provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any current or former director, officer, stockholder, employee or agent of the Company to the Company or the Company's stockholders, (c) any action asserting a claim against us or any current or former director, officer, stockholder, employee or agent of the Corporation arising pursuant to any provision of the DGCL, or our Company's Certificate of Incorporation or Bylaws, (d) any action to interpret, apply, enforce or determine the validity of the Company's Certificate of Incorporation or Bylaws, (e) any action asserting a claim governed by the internal affairs doctrine or (f) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the General Corporation Law. The federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint, claim or proceeding asserting a cause of action arising under the Exchange Act or the Securities Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

Stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provision in our Charter.

The choice-of-forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with the Company or its directors, officers or other employees, and may result in increased costs to a stockholder who has to bring a claim in a forum that is not convenient to the stockholder, which may discourage such lawsuits. Although under Section 115 of the DGCL, exclusive forum provisions may be included in a company's certificate of incorporation, the enforceability of similar forum provisions in other companies' certificates of incorporation or bylaws has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. If a court were to find the exclusive forum provision of our Charter inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors.

After this offering, our principal stockholders will continue to have significant influence over us.

After the consummation of this offering, our principal stockholders each holding more than 5% of our outstanding common stock will collectively beneficially own approximately 22% of our outstanding common stock (or approximately 21% of our outstanding common stock if the Underwriter's options to purchase additional shares is exercised in full). See "Principal Stockholders." These stockholders or their affiliates will be able to exert significant influence over us and, if acting together, will be able to control matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, including a merger, consolidation or sale of all or substantially all of our assets and the issuance or redemption of equity interests in certain circumstances. The interests of these stockholders may not always coincide with, and in some cases may conflict with, our interests and the interests of our other stockholders. For instance, these stockholders could attempt to delay or prevent a change in control of our company, even if such change in control would benefit our other stockholders, which could deprive our stockholders of an opportunity to receive a premium for their common stock. This concentration of ownership may also affect the prevailing market price of our common stock due to investors' perceptions that conflicts of interest may exist or arise. As a result, this concentration of ownership may not be in your best interests.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. The forward-looking statements are contained principally in the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations of Actelis”, Management’s Discussion and Analysis of Financial Condition” and “Business.” These forward-looking statements involve a number of risks and uncertainties. Many of the following risks are, and will be, exacerbated by the COVID-19 pandemic and any continued limitations of the global business and economic environment as a result. We caution readers that any forward-looking statement is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statement. These statements are based on current expectations of future events. Such statements include, but are not limited to, statements about future financial and operating results, plans, objectives, expectations and intentions, costs and expenses, interest rates, outcome of contingencies, financial condition, results of operations, liquidity, cost savings, objectives of management, business strategies, success of competing drugs, financing, potential growth and market opportunities, product candidates, clinical trial timing and plans, clinical and regulatory pathways for our development programs, the achievement of clinical and commercial milestones, the advancement of our technologies and our proprietary, co-developed and partnered products and product candidates, and other statements that are not historical facts.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “anticipate” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential” “possible” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- our ability to protect our intellectual property and continue to innovate;
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors following our offering;
- the potential insufficiency of our disclosure controls and procedures to detect errors or acts of fraud;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the success of competing products or technologies that are or may become available;
- our potential ability to obtain additional financing;
- our ability to grow the business due to the uncertainty resulting from the recent COVID19 pandemic or any future pandemic;
- our ability to comply with complex and increasing regulations by governmental authorities;
- our ability to have our securities listed on Nasdaq;
- our public securities’ potential liquidity and trading;
- the lack of an established market for our securities;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our anticipated use of the proceeds from this offering; and
- our financial performance following this offering.

Forward-looking statements are based on our management’s current expectations, estimates, forecasts and projections about our business and the industry in which we operate and our management’s beliefs and assumptions, and are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Important factors that may cause actual results to differ materially from current expectations include, among other things, those listed under “Prospectus Summary,” “Risk Factors,” Use of

[Table of Contents](#)

Proceeds,” Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Business” and elsewhere in this prospectus. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. You should read thoroughly this prospectus and the documents that we refer to with the understanding that our actual future results may be materially different from and worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements.

The forward-looking statements included in this prospectus speak only as of the date of this prospectus. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that future results, levels of activity, performance and events and circumstances reflected in the forward-looking statements will be achieved or will occur. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See “Where You Can Find More Information.”

USE OF PROCEEDS

We estimate that the net proceeds from the sale of common stock in this offering will be approximately \$13.0 million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, based on an assumed initial public offering price of \$5 per share of common stock, which is the midpoint of the price range set forth on the cover page of this prospectus. If the Underwriter exercises its option in full to purchase up to an additional 450,000 shares of common stock, we estimate that the net proceeds to us from this offering will be approximately \$15.1 million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$5 per share of common stock would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by \$2.8 million, assuming that the number of common stock offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of common stock we are offering. An increase (decrease) of 1.0 million in the number of common stock we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by \$4.6 million, assuming the assumed initial public offering price stays the same.

We currently expect to use the net proceeds from this offering for the following purposes:

- approximately \$3 million for our research and development efforts;
- approximately \$6 million for sales and marketing activities; and
- approximately \$4 million for general and administrative corporate purposes, including working capital and capital expenditures.

Although we currently anticipate that we will use the net proceeds from this offering as described above, there may be circumstances where a reallocation of funds is necessary. Amounts and timing of our actual expenditures will depend upon a number of factors, including our sales, marketing and commercialization efforts, demand for our products, operating costs and other factors described under “Risk Factors” in this prospectus. Accordingly, our management will have flexibility in applying the net proceeds from this offering. An investor will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use the proceeds.

Based on our current plans, we believe that our existing cash, cash equivalents and short-term deposits, together with the net proceeds of this offering, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements through at least the next 12 months. We have based this estimate on assumptions that may prove to be incorrect, and we could use our available capital resources sooner than we currently expect.

Pending our application of the net proceeds from this offering, we plan to invest such proceeds in short-term, investment-grade, interest-bearing securities and depository institutions.

We may also use a portion of the net proceeds to make acquisitions or investments in complementary companies or technologies, although we do not have any agreements or understanding with respect to any such acquisition or investment at this time.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Accordingly, our management will have broad discretion in the application of these proceeds. While we expect to use the net proceeds for the purposes described above, the timing and amount of our actual expenditures will be based on many factors, including cash flows from operations, the anticipated growth of our business and the general economic conditions. Net offering proceeds not immediately applied to the uses summarized above may be invested in short-term investments such as money market funds, commercial paper, U.S. treasury bills and similar securities investments pending their use.

DIVIDEND POLICY

We have never declared or paid dividends on our common stock and we do not anticipate paying any cash dividends on our common stock in the foreseeable future. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on applicable law and then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2021:

- on an actual basis;
- on a pro forma basis to give effect to (i) the private placement of \$2,160,200 of convertible notes from December 2021 through April 2022 net of expenses, or the Private Placement (ii) the conversion of all of our shares of preferred stock into 9,031,291 shares of common stock, and (iii) the conversion of convertible notes and warrants into equity and (iv) the redemption of all of our non-voting common stock for their par value; and
- on a pro forma as adjusted to give further effect to the issuance and sale of shares of our common stock in this offering at an assumed public offering price of \$5 per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, as if the sale of the common stock had occurred on December 31, 2021.

Information below on a pro forma as adjusted basis is illustrative only, and our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information in conjunction with our financial statements and the related notes included elsewhere in this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section and other financial information contained in this prospectus.

You should read this capitalization table together with “Use of Proceeds,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

As of December 31, 2021			
<i>(U.S. dollars in thousands)</i>	Actual	Pro Forma (Unaudited)	Pro Forma As Adjusted ⁽¹⁾ (Unaudited)
Cash and cash equivalents	\$ 693	\$ 2,718	\$ 15,494
Total long-term debt	\$ 12,744	5,867	5,867
Redeemable convertible Preferred Shares	\$ 5,585	0	0
Capital Deficiency:			
Common stock, \$0.0001 par value; 11,009,315 shares authorized; 2,050,404 shares issued and outstanding, actual; 30,000,000 shares authorized and 12,601,721 issued and outstanding, pro forma; and 30,000,000 authorized and 15,601,721 shares issued and outstanding, pro forma as adjusted authorized shares ⁽²⁾	\$ 0	0	0
Additional paid-in capital	\$ 2,824	17,311	30,087
Accumulated deficit	\$ (22,420)	(22,420)	(22,420)
Total Capital Deficiency	\$ (19,596)	(5,019)	7,667
Total capitalization	\$ (1,267)	\$ 758	\$ 13,534

- (1) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$5 per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted cash, additional paid-in capital, total stockholders’ equity (deficit) and total capitalization by approximately \$2.8 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.
- (2) The term “common stock” does not include non-voting common stock.

[Table of Contents](#)

The number of shares of our common stock shown above is based on 2,050,404 shares of common stock outstanding as of December 31, 2021, after giving effect to (i) a reverse share split effected on May 2, 2022 at a ratio of 1-for-46, (ii) the conversion immediately prior to the closing of this offering of 1,300,248 shares of common stock issuable upon conversion of \$1.5 million of the aggregate principal amount of the CLA by the holders thereof; (iii) the conversion immediately prior to the closing of this offering of 7,731,043 shares of convertible preferred stock on a one (1) for one (1) basis into 7,731,043 shares of common stock, (iv) the exercise immediately prior to the closing of this offering of 181,192 shares of common stock issuable pursuant to an option to purchase shares of common stock granted to Migdalor as part of the a loan agreement with Migdalor, or the Migdalor Loan, or the Migdalor Loan (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus); (v) the exercise immediately prior to the closing of this offering of (xi) 601,708 shares of common stock issuable upon the exercise of warrants issued to Mizrahi Bank at an aggregate value of \$750,000, and (y) 1,666 shares of common stock issuable upon the exercise of the Lauderdale Warrant; (v) the exercise immediately prior to the closing of this offering of 720,001 shares of common stock from the convertible note, and (vii) the exercise of 15,459 stock options by employees after January 1, 2022, and excludes as of such date:

- 870,002 shares of common stock issuable upon the exercise of outstanding stock options under our 2015 Equity Incentive Plan, at a weighted average exercise price of \$0.147 per share;
- 79,348 shares of common stock issuable upon the exercise of options that we intend to award to certain of our employees and officers under our 2015 Equity Incentive Plan following the completion of this offering, with an exercise price equal the offering price in this offering;
- 1,901,314 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan;
- 73,048 shares of common stock issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$1.02 per share;
- 210,000 shares of common stock issuable upon the exercise of the Underwriter's Warrants in connection with this offering.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit) as of December 31, 2021 was (\$19.6) million, or (9.56) per share of our common stock. Our historical net tangible book value (deficit) is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share represents historical net tangible book value (deficit) divided by the number of shares of our common stock outstanding as of December 31, 2021.

Our pro forma net tangible book value as of December 31, 2021 was (\$5.0) million, or (\$0.41) per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the pro forma adjustments described in “Capitalization”.

After giving further effect to our issuance and sale of 3,000,000 shares of common stock in this offering at an assumed initial public offering price of \$5 per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions, estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2021 would have been approximately \$7.7 million, or approximately \$0.49 per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of \$0.90 to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value per share of approximately \$4.51 to new investors purchasing common stock in this offering. Dilution per share to new investors purchasing common stock in this offering is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share	\$	5
Historical net tangible book value per share as of December 31, 2021	\$	(9.56)
Increase per share attributable to the pro forma adjustments described above	\$	9.15
Pro forma net tangible book value per share as of December 31, 2021	\$	(0.41)
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	\$	0.90
Pro forma as adjusted net tangible book value per share after giving effect to this offering	\$	0.49
Dilution in pro forma as adjusted net tangible book value per share to new investors participating in this offering	\$	4.51

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$5 per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share after this offering by \$0.18 per share and the dilution to new investors purchasing common stock in this offering by \$0.82 per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

If the Underwriter exercises its option in full to purchase an additional 450,000 shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be \$0.61 per share, the increase in the net tangible book value per share to existing stockholders would be \$0.12 per share and the dilution to new investors purchasing our common stock in this offering would be \$4.39 per share.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital by issuing equity securities or convertible debt, your ownership will be further diluted.

[Table of Contents](#)

The following table sets forth the total number of shares of common stock previously issued and sold to existing investors, the total consideration paid for the foregoing and the average price per share of common stock paid, or to be paid, by existing owners and by the new investors. The calculation below is based on the assumed initial public offering price of \$5 per share, which is the midpoint of the estimated offering range set forth on the cover page of this prospectus, before deducting estimated underwriter commissions and offering expenses, in each case payable by us.

	Share Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders	12,601,721	80.77%	\$ 9,256,098	38.16%	\$ 0.73
New investors	3,000,000	19.23%	\$ 15,000,000	61.84%	\$ 5.00
Total	15,601,721	100%	\$ 24,256,098	100%	\$ 1.55

The number of shares of our common stock shown above is based on 2,050,404 shares of common stock outstanding as of December 31, 2021, after giving effect to (i) a reverse share split effected on May 2, 2022 at a ratio of 1-for-46, (ii) the conversion immediately prior to the closing of this offering of 1,300,248 shares of common stock issuable upon conversion of \$1.5 million of the aggregate principal amount of the CLA by the holders thereof; (iii) the conversion immediately prior to the closing of this offering of 7,731,043 shares of convertible preferred stock on a one (1) for one (1) basis into 7,731,043 shares of common stock, (iv) the exercise immediately prior to the closing of this offering of 181,192 shares of common stock issuable pursuant to an option to purchase shares of common stock granted to Migdalor as part of the a loan agreement with Migdalor, or the Migdalor Loan, or the Migdalor Loan (based on an assumed conversion price equal to \$5.00, the midpoint of the price range set forth on the cover page of this prospectus); (v) the exercise immediately prior to the closing of this offering of (x) 601,708 shares of common stock issuable upon the exercise of warrants issued to Mizrahi Bank at an aggregate value of \$750,000, and (y) 1,666 shares of common stock issuable upon the exercise of an additional previously issued warrant; (vi) the exercise immediately prior to the closing of this offering of 720,001 shares of common stock from the convertible note, and (vii) the exercise of 15,459 stock options by employees after January 1, 2022 and excludes as of such date:

- 870,002 shares of common stock issuable upon the exercise of outstanding stock options under our 2015 Equity Incentive Plan, at a weighted average exercise price of \$0.147 per share;
- 79,348 shares of common stock issuable upon the exercise of options that we intend to award to certain of our employees and officers under our 2015 Equity Incentive Plan following the completion of this offering, with an exercise price equal the offering price in this offering;
- 1,901,314 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan; and
- 73,048 shares of common stock issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$1.02 per share;
- 210,000 shares of common stock issuable upon the exercise of the Underwriter's Warrants in connection with this offering.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with our audited consolidated financial statements including the related notes thereto as of and for the financial years ended December 31, 2021 and 2020 contained elsewhere in this prospectus. In addition to historical information, this discussion contains forward-looking statements that involve risks and uncertainties. You should read the sections of this prospectus titled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" for a discussion of the factors that could cause our actual results to differ materially from our expectations.

Overview

Actelis is a networking solutions company with a mission to enable fast, secure, cost-effective and easily implemented communication for IoT projects, deployed over wide areas such as cities, campuses, airports, military bases, roads and rail.

Our networking solutions use a combination of newly deployed fiber infrastructure and existing copper and coaxial lines to create a highly cost-effective, secure and quick-to-deploy network.

Our patent protected hybrid fiber-copper networking solutions deliver excellent communication over fiber to locations that may be easy to reach with new fiber. However, for locations that are difficult to reach with fiber, we can upgrade existing copper lines, to deliver cyber-hardened, high-speed connectivity without needing to replace the existing copper infrastructure with new fiber. We believe that such hybrid fiber-copper networking solution has distinct advantages in most real-life installations, providing significant budget savings and accelerating deployment of modern IoT networks. We believe that our solutions can provide connectivity over fiber or copper up to multi-Gigabit communication, while supporting Gigabit-Grade reliability and quality.

When high-speed, long reach, high reliability and secure connectivity is required, network operators usually resort to using wireline communication over physical communication lines rather than wireless communication that is more limited in performance, reliability and security. However, wireline communication infrastructure is costly, and often accounts for more than 50% of total cost of ownership (ToC) and time to deploy wide-area IoT projects.

Typically, providing new fiber connectivity to hard-to-reach locations is costly and time-consuming, often requiring permits for boring, trenching, and right-of-way. Connecting such hard-to-reach locations, may cause significant delays and budget overruns in IoT projects. Our solutions aim to solve these challenges.

By alleviating difficult challenges in connectivity, we believe that Actelis' solutions are making a significant difference: effectively accelerating deployment of IoT projects, and making IoT projects more affordable and predictable to plan and budget.

Our solutions also offer end-to-end network security to protect critical IoT data, utilizing a powerful combination of coding and encryption technologies, applied as required on both new and existing infrastructure within the hybrid-fiber-copper network. Our solutions have been tested for performance and security by the U.S. DoD laboratories, and approved for deployment with U.S. Federal Government and U.S. defense forces as part of APL (Approved Product List) in 2019.

As of December 31, 2021, we had more than 300 customers. We experienced an average annual sales growth in our IoT business of more than 20% each year from 2018 through 2021 in booking of orders from customers in the IoT market.

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, providing connectivity for enterprises and residential customers. Our products and solutions have been deployed with more than 100 telecommunication service providers worldwide, in enterprise, residential and mobile base station connectivity applications. In recent years, as we have further developed our technology and rolled out additional products, we turned our focus on serving the wide-area IoT markets. Our operations are focused on our fast-growing IoT business, while maintaining our commitment to our existing Telco customers.

We currently derive a significant portion of our revenue from our existing Telco customers. For the years ended December 31, 2021 and December 31, 2020, our Telco customers in the aggregate accounted for approximately 48% and 55% of our revenues, respectively.

[Table of Contents](#)

We currently derive a significant portion of our revenue from a limited number of our customers. For the years ended December 31, 2021 and December 31, 2020, our top ten customers in the aggregate accounted for approximately 78% and 70% of our revenues.

Our auditors' opinion in each of our audited financial statements for the years ended December 31, 2021, and December 31, 2020, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. As of December 31, 2021, and 2020, we had an accumulated deficit of \$22.4 and \$17.2 million, respectively. In recent years, we have suffered recurring losses from operations, have negative working capital and cash outflows from operating activities, and therefore we are dependent upon external sources for financing our operations.

We currently have one outstanding loan with Migdalor Business Investments Fund, or Migdalor, in the original principal amount of approximately \$6 million which is secured by all our assets, which remains outstanding as of December 31, 2021. If we cannot generate sufficient cash flow from operations to service our debt, we may need to further refinance our debt, dispose of assets or issue equity to obtain necessary funds. We expect to continue repaying the principal and interest of the Migdalor Loan from our operating cash flow.

Recent Developments

Impact of COVID-19 Pandemic

Following the outbreak of COVID-19 in China and after its spread into a large number of other countries, economic activity has suffered in many regions of the world, including in all of our markets (Americas, Europe and Asia as well as specifically Israel). Among other things, the epidemic disrupted supply chains, suppressed the volume of global transportation activity, prompted the Israeli and other governments worldwide to put in place restrictions on movement and employment, and resulted in a drop in the values of financial assets and commodities on global markets. Factors such as the extent of continued spread or containment of the virus may impact our results. We suffered delays in realization of certain new orders from our customers, delay in testing of some of our new technologies in customer premises and difficulty conducting business development activities in an effective way (face-to-face). In addition, we had to increase our credit lines by \$2.0 million to support the loss of revenue and profit.

Below are some of the specific ways we have responded to the current pandemic.

- Adhered to all governmental social distancing requirements while prioritizing health and safety for our employees. We allow team members to work remotely, allowing us to continue providing uninterrupted sales and service to our customers throughout the year.
- Emphasized and established cost savings initiatives, cost control processes, and cash conservation to preserve liquidity.
- Retained key employees by continuing to provide them with competitive compensation and the tools required to be successful in their jobs.
- Successfully applied for and received various financial aid and government assistance.
- Helped our customers respond to the changes in the market, improve their return on investment, or ROI, and expand their service coverage, by providing them quick-to-deploy, cost effective networking solutions to accommodate trends such as transition to remote learning and work, emphasis on outdoor projects and activities, and government funded infrastructure initiatives.
- Worked closely with our contract manufacturing partners to help them navigate challenges in supply chain and deliveries.
- Helped customers manage their plans subject to the change in supply availability.

As a result of the pandemic, the U.S. and Israeli governments offered different programs of financial aid. We participated in the following programs:

- During 2020 and 2021, we received \$430,000 in Paycheck Protection Program loan, which was fully forgiven.

[Table of Contents](#)

- During 2020, we received \$350,000 through an Israeli government COVID-19 assistance program for businesses, which was fully repaid.
- During 2020, we received a loan of \$150,000 from an American Bank under the COVID EIDL Program.

Principal Factors Affecting Our Financial Performance

Our operating results are primarily affected by the following factors:

- the effectiveness sales and marketing efforts.
- our dependence on the supply and cost of electronic and mechanical components.
- our ability to offer competitive product pricing;
- our ability to broaden product offerings;
- industry demand and competition;
- our ability to leverage technology and use and develop efficient manufacturing processes;
- our ability to attract and retain talented employees and sales personnel and distributors; and
- market conditions and our market position.

JOBS Act and the Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an “emerging growth company,” we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include, but are not limited to:

- requiring only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced “Management’s discussion and analysis of financial condition and results of operations” in our Securities Act of 1933, as amended, or the Securities Act, filings;
- reduced disclosure about our executive compensation arrangements;
- no non-binding advisory votes on executive compensation or golden parachute arrangements; and
- exemption from compliance with the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes Oxley Act of 2002, or SOX.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an “emerging growth company.” We will continue to remain an “emerging growth company” until the earliest of the following: (i) the last day of the fiscal year following the fifth anniversary of the date of the completion of this offering; (ii) the last day of the fiscal year in which our total annual gross revenues is equal to or more than \$1.07 billion; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or the SEC.

We are also a “smaller reporting company” as defined in the Securities Exchange Act of 1934, as amended, or the Exchange Act, and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. To the extent that we continue to qualify as a “smaller reporting company” as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an “emerging growth company” may continue to be available to us as a “smaller reporting company,” including exemption from compliance with the auditor attestation requirements pursuant to SOX and reduced disclosure about our executive compensation arrangements. We will continue to be a “smaller reporting company” until we have \$250 million or more in public float (based on our common stock) measured as of the last business day of our most recently completed second fiscal quarter or, in the event we have no public float (based on our common stock) or a public float (based on our common stock) that is less than \$700 million, annual revenues of \$100 million or more during the most recently completed fiscal year.

We may choose to take advantage of some, but not all, of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock. In addition, the JOBS Act provides

[Table of Contents](#)

that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to avail ourselves of the extended transition period for complying with new or revised financial accounting standards. As a result of this accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies which may make comparison of our financials to those of other public companies more difficult.

Results of Operations**For the year ended December 31, 2021, compared to the year ended December 31, 2020:***Revenues, Cost of Sales, Gross Profit*

Our consolidated revenues for the years ended December 31, 2021 and 2020 were \$8.5 and \$8.5 million, respectively. Gross profit of amounted to \$4.0 and \$5.0 million for the years ended December 31, 2021 and 2020, respectively. The decrease in the gross margin is attributed mostly to increase in electronic components prices, due to shortage in electronic components, which is related to the COVID-19 pandemic.

Operating Costs and Expenses

The major components of our operating expenses for the years ended December 31, 2021 and 2020 are outlined in the table below:

<i>(U.S. dollars in thousands)</i>	For the year ended December 31, 2021	For the year ended December 31, 2020	Increase (Decrease)
Research and development	2,443	2,147	12.9%
Sales and marketing expenses	2,204	1,848	19.2%
General and administrative	1,183	1,118	5.5%
Total Operating Expense	5,830	5,113	12%
Financial expenses	(3,391)	(1,374)	100%
Taxes on income	—	—	—
Net loss	(5,251)	(1,505)	202%
Non-GAAP Adjusted EBITDA ⁽¹⁾	(1,097)	50	—

- (1) We report our financial results in accordance with the accounting principles generally accepted in the United States of America, or GAAP, however, management believes the evaluation of our ongoing operating results may be enhanced by a presentation of non-GAAP Adjusted EBITDA, which is a Non-GAAP financial measure. We consider Non-GAAP Adjusted EBITDA to be an important measure because it helps illustrate underlying trends in our business and our historical operating performance on a more consistent basis.

Research and development costs were \$2.4 million and \$2.2 million for the years ended December 31, 2021, and 2020, respectively. The increase was mainly due to an increase of \$0.1 million in payroll and related expenses.

Sales and marketing expense for the year ended December 31, 2021, were \$2.2 million, compared to \$1.8 million for the year ended December 31, 2020. Sales and marketing expenses incurred mainly consisted of sales and support team members' compensation and investment in sales and marketing programs. The increase in sales and marketing expenses is attributed to increase in payroll in the amount of \$188,000, increase in commission expenses in the amount of \$31,000 and other professional services in the amount of \$146,000.

General and administrative expenses of \$1.2 million incurred during the year ended December 31, 2021, primarily consisted of salaries and related taxes of \$0.6 million, rent expense of \$0.1 million and professional services expense of \$0.24 million. General and administrative expenses of \$1.1 million incurred during the year ended December 31, 2020, primarily consisted of salaries and related taxes of \$0.6 million, rent expense of \$0.1 million and professional services expense of \$0.2 million.

Financial expense for the year ended December 31, 2021, was \$3.4 million, compared to \$1.4 million for the year ended December 31, 2020. The increase was due to fair value changes of the warrants to lenders in the amount of million \$1.1 million. In addition, the interest expenses due to the long-term loan increased by \$1.4 million.

We have no taxes on income expense for the years ended December 31, 2021 and 2020, due to loss for tax purposes.

Net Losses

During the years ended December 31, 2021, and 2020 we incurred net losses of \$5.2 million and \$1.5 million, respectively, due to the factors discussed above. The Company is generating net losses due to its operating expenses on research and development and sales and marketing expense as well as general and administrative expenses. The increase in net losses from 2021 to 2020 mostly resulted from an increase in cost of revenues in the amount of \$1 million, due to increased prices of electronic components, increase in operating expenses of \$0.7 million and an increase of \$2.0 million in financial expenses.

Net loss reconciliation

The following table presents the reconciliation (i) from net loss per share attributable to common stockholders to pro forma net loss per share attributable to common stockholders, and (ii) from weighted average shares of common stock outstanding to pro forma weighted average shares of common stock outstanding.

For the years 2021 and 2020, (in thousands, except for shares and per share data)		
	For the year ended December 31, 2021	For the year ended December 31, 2020
Numerator		
Net loss attributable to common stockholders	\$ (5,251)	\$ (1,505)
Pro forma adjustment for conversion of convertible loan	\$ 1,342	\$ 755
Pro forma adjustment for conversion of warrants	\$ 1,031	\$ 333
Numerator for pro forma basic and diluted loss per share	\$ (2,878)	\$ (417)
Denominator		
Weighted average number of shares of common stock used in computing net loss per share	2,048,788	2,047,313
Pro forma effect of conversion of preferred shares	7,731,043	7,731,043
Pro forma effect of conversion of convertible loan	1,300,248	1,224,983
Pro forma effect of conversion of warrants	784,566	601,708
Denominator for pro forma basic and diluted loss per share	11,864,645	11,605,047
Pro forma net loss per share, basic and diluted	\$ (0.24)	\$ (0.04)

Liquidity and Capital Resources

Since our inception, we have financed our operations primarily through the sale of equity securities, debt financing, convertible loans and royalty-bearing grants that we received from the IIA. Our primary requirements for liquidity and capital are to finance working capital, capital expenditures and general corporate purposes. Our principal sources of liquidity following this offering are expected to be the net proceeds from this offering and cash generated from our operations.

Our future capital requirements will be affected by many factors, including our revenues growth, the timing and extent of investments to support such growth, the expansion of sales and marketing activities, increases in general and administrative costs, repayment of principal of our existing credit line, working capital to support securing raw material supply and many other factors as described under "Risk Factors."

To the extent additional funds are necessary to meet our long-term liquidity needs as we continue to execute our business strategy, we anticipate that they will be obtained through the incurrence of additional indebtedness, additional equity financings or a combination of these potential sources of funds; however, such financing may not be available on favorable terms, or at all. In particular, the widespread COVID-19 pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, reducing our ability to access capital. If we are unable to raise additional funds when desired, our business, financial condition and results of operations could be adversely affected.

We intend to meet our cash needs, including our debt obligations, over the next 12 months, from our operating cash flow.

Going Concern

In recent years, we have suffered recurring losses from operations, have negative working capital and cash outflows from operating activities, and therefore we are dependent upon external sources for financing our operations. Our auditors' opinion in each of our audited financial statements for the years ended December 31, 2021, and December 31, 2020, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern.

[Table of Contents](#)

Our transition to profitable operations is dependent on generating a level of revenue adequate to support our cost structure. We must (i) continue to generate excess cash to repay debt principal; (ii) exchange some or all debt for an equity-related instrument and/or (iii) refinance the existing debt. Our management has evaluated the significance of these conditions as well as the time in which it has to complete these tasks and has determined that we can meet our operating obligations for the foreseeable future. We plan to finance our operations using cash on hand and through operational cash flows. There can be no assurance that we will succeed in generating sufficient revenues from our product sales to continue our operations as a going concern.

Our management expects to have the required funds in order to continue to operate as a going concern in the coming year from this offering. Nonetheless, there can be no assurance that necessary financing will be available on satisfactory terms, if at all. If we are unable to secure needed financing, management may be forced to take additional restructuring actions, which may include significantly reducing our anticipated level of expenditures. The consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

Convertible Notes, Loans, and Warrants

Convertible Loan

On March 28, 2017, we entered into the CLA, in a total amount of up to \$2.0million, out of which \$1.5 million was received as of December 31, 2021. The loan bears an interest of 10% per annum. Following an amendment in March 2022, which has been approved by the required majority of the CLA holders, the maturity date of the CLA will be the earlier of (i) January 1, 2023, (ii) event of default (as defined in the CLA) or (iii) a deemed liquidation event (as defined in our Charter that was in effect prior to this Offering), in which the lenders are entitled to receive an amount equal to 300% of the principal amount of the loan. The lenders are entitled to convert the principal amount of the loan as follows:

- Upon consummation of an IPO, including the closing of this offering, the principal amount of the loan will be mandatorily converted into shares of common stock, at a conversion price per share reflecting a variable discount which increases by 1% every two months, capped at no more than 65%, of the lowest price per share paid by any investor in the offering or the Private Placement. Based on the note issued upon the Private Placement, the maximum discount to the CLA holders as a percentage of the initial public offering price is 79%.
- Upon consummation of a reverse merger with a public shell company, or upon merger between us and any other entity in which our current stockholders hold less than 50% of the surviving entity, the lenders have the right to convert the loan amount to shares of the surviving entity representing 25% of the aggregate number of shares, options and warrants allocated in such transaction to our shareholders, directors and employees, or receive a payment of 300% of the principal amount of the loan.

Pursuant to the CLA, we will issue 1,300,248 shares of common stock upon conversion of \$1.5 million of the aggregate principal amount of the CLA at a conversion price per share reflecting a variable discount which increases by 1% every two months, which is capped at no more than 65% of the lowest price per share paid by any investor in the offering, by the holders thereto. As of April 30, 2022, the conversion discount based upon the lowest price per share paid by any investor was 61%.

For further information regarding the CLA, please see Note 8 to the attached consolidated financial statements.

Loans

As a result of the COVID pandemic, the US and Israeli governments offered different programs of financial aid. The Company participated in the following programs:

- On May 5, 2020, we entered into a loan agreement with an Israeli bank, or the COVID19 Israeli Loan, in the total of \$0.3 million. On December 31, 2020, we fully repaid the COVID19 Israeli Loan.
- On April 30, 2020, we entered into a loan agreement with the American Bank under the Small Business Administration Payroll Protection Program, or the PPP Loan, in the total of \$0.2 million. The PPP Loan may be eligible for forgiveness, and if not eligible bears an interest of 1% per annum. The principal and interest, if not forgiven, is payable within two years. We filed a request for a forgiveness of the loan and received full forgiveness as of December 31, 2020.

[Table of Contents](#)

- On July 1, 2020, we received a loan of \$150,000 from an American Bank under the COVID EIDL Program. The loan bears interest of 3.75% per annum, the principal shall be repaid in 360 equal monthly payments starting October 31, 2022, unless forgiven per program regulations.

Migdalor Loan and Option

On December 2, 2020, we entered into a loan agreement with Migdalor, or the Migdalor Loan, for a loan of up to approximately \$6.0 million. The loan bears interest at a rate of 9.6% per annum. We began paying interest under the Migdalor Loan as required by its terms commencing on February 1, 2021. The Migdalor Loan also provides that beginning on February 1, 2022, we must repay principal and accrued, but unpaid interest under the Migdalor Loan in 72 equal payments, plus an interest bonus of approximately \$587,000 after the 36th month. As part of the Migdalor Loan, as amended in November 2021, we granted Migdalor an option to purchase common stock in the amount of \$1.8 million at a price per share based on a company valuation of the lower of (i) \$36 million and (ii) 75% of the Company's valuation in an initial public offering. As of December 31, 2020, the balance outstanding under the Migdalor Loan was \$3.0 million. In January 2021 and November 2021, we received additional funding from Migdalor of \$2.0 million and \$1.0 million, respectively, bearing similar terms, as described above.

As of December 31, 2021, the balance outstanding under Migdalor Loan was \$6.0 million. As noted above, we began to repay interest in February 2021 and principal in February 2022. We expect to continue repaying the principal and interest of the Migdalor Loan from our operating cash flow.

Upon consummation of the offering, the option may, at the discretion of the lender, convert into shares of common stock at a formula to be calculated based on the initial offering price on a cashless basis. The lender has the right to forego the option and receive \$1.5 million in cash over time, subject to the terms detailed in the Migdalor Loan, subject to a cap of 2.4% of the Company's revenue over the 12-months period immediately prior to the exercise.

We anticipate that the initial public offering price of our shares will be between \$4 and \$6 per share, with a midpoint of \$5 per share. Based on that midpoint price per share, if exercised, the Migdalor option will result in an issuance of, on a cashless basis, 181,192 shares of common stock.

For further information regarding the Migdalor Loan and Option, please see Note 7b and Note 11b to the attached consolidated financial statements.

Mizrahi Warrants

On February 28, 2018, February 13, 2019, and November 4, 2020, we issued to Mizrahi Bank three warrants to purchase stock at an aggregate value of \$750,000, at an exercise price at the lower of \$0.02172 per share, if exercised into Series B Preferred Stock or at the qualified financing price if exercised at a financing round, including the consummation of this offering. The warrants were issued contemporaneously with obtaining a loan and a credit facility. The loan and credit facility were terminated on December 31, 2020.

For further information regarding the Mizrahi Warrants, please see Note 11a to the attached consolidated financial statements.

Convertible Notes

From December 2021 through April 2022, we offered up to \$3.0 million of our 6% convertible notes due three years from the date of execution, or the Private Placement Note, in the Private Placement. The Notes were subject to optional and mandatory conversion into shares of our common stock. To date, we sold \$2,160,200 of Private Placement Note. The Private Placement Note will automatically convert at the time of this offering at a 40% discount of the offering price, which shall not be less than \$2.40 per share.

Private Placement Warrants

The Underwriter acted as placement agent in the Private Placement and received commissions of \$151,214, plus expenses. The Company also issued warrants to the Underwriter on January 28, 2022, or the January Warrant, and April 13, 2022, or the April Warrant. Under the January Warrant, the Company issued warrants to purchase a number of shares of common stock equal to 7% of the number of shares of common stock into which the Notes dated January 28, 2022, or the January Notes, convert into. The exercise price of each warrant is 125% of the conversion price of the

[Table of Contents](#)

January Notes. The warrants are immediately exercisable and expire five years from the issuance date. The April Warrant is substantially on the same terms as the January Warrant, except under the April Warrant, the Company issued warrants to purchase a number of shares of common stock equal to 7% of the number of shares of common stock into which the Notes dated April 13, 2022, or the April Notes, convert into. The warrants are immediately exercisable and expire five years from the issuance date. Under the April Warrant, the exercise price of each warrant is 125% of the conversion price of the April Notes. On April 29, 2022, the Underwriter and the Company cancelled the April Warrant and the January Warrant prior to any exercise of either warrant.

Working Capital

<i>(U.S. dollars in thousands)</i>	Year Ended December 31, 2021	Year Ended December 31, 2020
Current Assets	\$ 4,135	\$ 3,224
Current Liabilities	5,951	4,624
Working Capital	\$ (1,816)	\$ (1,400)

Cash Flows

The table below, for the periods indicated, provides selected cash flow information:

<i>(U.S. dollars in thousands)</i>	Year Ended December 31, 2021	Year Ended December 31, 2020
Net cash used in operating activities	\$ (2,726)	\$ (343)
Net cash used in investing activities	(54)	(21)
Net cash provided by financing activities	2,904	356
Net change in cash	\$ 124	\$ (8)

Cash Flows from Operating Activities

Our net cash flows from operating activities of \$2.7 million for the year ended December 31, 2021, was primarily the result of our net loss of \$5.2 million and changes in our operating assets and liabilities offset by the add-back of non-cash expenses. The change in operating assets and liabilities includes an increase in accounts receivable of \$0.7 million, increase in inventories write-downs of \$0.1 million, increase in prepaid expenses of \$0.2 million, decrease in deposits of \$27,000, decrease in accounts payable and accrued liabilities of \$14,000, decrease in other current liabilities of \$0.4 million and increase in long-term liabilities of \$2.4 million.

Our net cash flows from operating activities of \$0.3 million for the year ended December 31, 2020, was primarily the result of our net loss of \$1.5 million and changes in our operating assets and liabilities offset by the add-back of non-cash expenses. The change in operating assets and liabilities includes a decrease in accounts receivable of \$3,000, an increase in inventory of \$0.8 million, increase in inventories write-downs of \$0.5 million, decrease in prepaid expenses of \$48,000, an increase in deposits of \$10,000, increase in accounts payable and accrued liabilities of \$0.9 million, increase in other current liabilities of \$0.2 million and increase in long-term liabilities of \$0.2 million.

We expect that cash flows from operating activities may fluctuate in future periods as a result of a number of factors, including fluctuations in our net revenues and operating results, utilization of new revenue streams, collection of accounts receivable, and timing of billings and payments.

Cash Flows from Investing Activities

For the year ended December 31, 2021, we had negative cash flow from investing activities of \$54,000, related to the Company's investment in property and equipment.

For the year ended December 31, 2020, we had negative cash flow from investing activities of \$21,000 related to the Company's investment in property and equipment.

Cash Flows from Financing Activities

For the year ended December 31, 2021, we had a net cash flow from financing activities of \$2.9 million, resulting from proceeds of long-term loan. For further details, please see Note 6 to the attached financial statements.

For the year ended December 31, 2020, we had a net cash flow from financing activities of \$0.4 million, resulting mainly from proceeds from a convertible loan from our stockholders in the amount of \$0.3 million.

Off-Balance Sheet Arrangements

As of December 31, 2021 and 2020, we did not have any off-balance-sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K.

Non-GAAP Adjusted EBITDA

<i>(U.S. dollars in thousands)</i>	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenues	\$ 8,545	\$ 8,532
GAAP net loss	(5,251)	(1,505)
Interest Expense	\$ 3,391	\$ 1,374
Tax Expense	87	92
Fixed asset depreciation expense	37	46
Stock based compensation	53	43
Research and development, capitalization	586	—
Other one time costs and expenses	—	—
Non-GAAP Adjusted EBITDA	<u>(1,097)</u>	<u>\$ 50</u>
GAAP net loss margin	(54.1)%	(17.64)%
Adjusted EBITDA margin	(12.84)%	0.59%

Use of Non-GAAP Financial Information

Non-GAAP Adjusted EBITDA, and backlog of open orders are Non-GAAP financial measures. In addition to reporting financial results in accordance with GAAP, we provide Non-GAAP operating results adjusted for certain items, including: financial expenses, which are interest, financial instrument fair value adjustments, exchange rate differences of assets and liabilities, stock based compensation expenses, depreciation and amortization expense, tax expense, and impact of development expenses ahead of product launch. We adjust for the items listed above and show Non-GAAP financial measures in all periods presented, unless the impact is clearly immaterial to our financial statements. When we calculate the tax effect of the adjustments, we include all current and deferred income tax expense commensurate with the adjusted measure of pre-tax profitability.

We utilize the adjusted results to review our ongoing operations without the effect of these adjustments but not for comparison to budgeted operating results. We reference measures of performance that cannot yet be reflected in our financial results such as backlog of open orders. We believe the adjusted results are useful to investors because they help them compare our results to previous periods and provide important insights into underlying trends in the business and how management oversees and optimizes our business operations on a day-to-day basis. We exclude the costs in calculating adjusted results to allow us and investors to evaluate the performance of the business based upon its expected ongoing operating structure. We believe the adjusted measures, accompanied by the disclosure of the costs of these programs, provides valuable insight. Adjusted results should be considered only in conjunction with results reported according to GAAP.

<i>(U.S. dollars in thousands)</i>	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenues	\$ 8,545	\$ 8,532
Non-GAAP Adjusted EBITDA	(1,097)	50
as a percentage of revenues	(12.84)%	0.59%

Backlog of Open Orders

Our business is characterized generally by short-term order and shipment schedules (except for the impact of the current shortage of electronic components). Our backlog consists of product orders for which we have received a customer purchase order or purchase commitment, and which have not yet been shipped. Orders are generally not subject to cancellation or rescheduling by the customer. We believe the review of backlog of open orders together with revenues is useful to investors because it provides important insights into underlying trends in the business and how management oversees and optimizes our business operations on a day-to-day basis. As of December 31, 2021, our firm backlog of orders was \$4.6 million and as of December 31, 2020, our firm backlog of orders was \$1.7 million. In almost all cases, the backlog has been caused by the current global delays in supply in electronic components. The majority of the backlog as of December 31, 2021 will be shipped during 2022.

<i>(U.S. dollars in thousands)</i>	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenues	\$ 8,545	\$ 8,532
Backlog of Open Orders ⁽¹⁾	\$ 4,602	\$ 1,735

(1) Presented as of December 31 for each year.

Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Securities Exchange Act of 1934. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. GAAP.

A material weakness is a deficiency or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. An effective internal control system, no matter how well designed, has inherent limitations, including the possibility of human error or overriding of controls, and therefore can provide only reasonable assurance with respect to reliable financial reporting. Because of its inherent limitations, our internal control over financial reporting may not prevent or detect all misstatements, including the possibility of human error, the circumvention or overriding of controls or fraud. Effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements.

In connection with the preparation of our financial statements as of and for the years ended December 31, 2021 and 2020, we identified a material weakness in our internal control over financial reporting in the lack of sufficient finance personnel in the segregation of duties. As such, there is a reasonable possibility that a misstatement of our financial statements will not be prevented or detected on a timely basis.

As we have thus far not needed to comply with Section 404 of the Sarbanes-Oxley Act, neither we nor our independent registered public accounting firm has performed an evaluation of our internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. In light of this deficiency, we believe that it is possible that certain control deficiencies and material weaknesses may have been identified if such an evaluation had been performed.

We are working to remediate the deficiencies and the material weakness. Our remediation efforts are ongoing, and we will continue our initiatives to implement and document policies, procedures, and internal controls. We have taken steps to enhance our internal control environment and plan to take additional steps to remediate the deficiencies and address material weaknesses. Specifically:

- We will hire qualified personnel in our accounting department. We will continue to evaluate the structure of the finance organization and add resources as needed;
- We are implementing additional internal reporting procedures, including those designed to add depth to our review processes and improve our segregation of duties; and

[Table of Contents](#)

- We are redesigning and implementing common internal control activities; and we will continue to establish policies and procedures and enhance corporate oversight over process-level controls and structures to ensure that there is appropriate assignment of authority, responsibility and accountability to enable remediating our material weaknesses.

In addition to the items noted above, as we continue to evaluate, remediate and improve our internal control over financial reporting, executive management may elect to implement additional measures to address control deficiencies or may determine that the remediation efforts described above require modification. Executive management, in consultation with and at the direction of our Audit Committee, will continue to assess the control environment and the above-mentioned efforts to remediate the underlying causes of the identified material weaknesses.

Although we plan to complete this remediation process as quickly as possible, we are unable, at this time to estimate how long it will take; and our efforts may not be successful in remediating the deficiencies or material weaknesses.

Critical Accounting Policies and Estimates

Management's discussion and analysis of our financial condition and results of operations is based on the audited consolidated financial statements of which are included elsewhere in this prospectus. The preparation of these consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, the disclosure of assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actelis bases its estimates on historical and anticipated results, trends and various other assumptions that it believes are reasonable under the circumstances, including assumptions as to future events. Actual results could differ from those estimates.

Management considers accounting estimates to be critical if both (i) the nature of the estimate or assumption is material due to the levels of subjectivity and judgment involved, and (ii) the impact within a reasonable range of outcomes of the estimate and assumption is material to the Actelis financial condition.

Management believes the following addresses the most critical accounting policies and estimates, which are those that are most important to the portrayal of our financial condition and results of operations and require management's most difficult, subjective and complex judgments:

Critical judgement and estimates

Critical judgement and estimates have been used primarily in estimating the fair value of our financial instruments (for example, warrants, notes and stock options), as well as the estimate of future usage of existing inventory to determine the net value of our inventory (see notes in financial statements).

Estimating the fair value of financial instruments such as warrants, notes and stock options are influenced by assessments of our future financial performance. Such assessments are forward-looking in nature and therefore, subject to significant uncertainty. Estimating the value of net inventory is also influenced by assessments of future usage of such inventory which is also forward looking in nature and therefore subject to significant uncertainty.

Accounting standards updates not yet adopted

Please see Note 2(ee) to our consolidated financial statements included elsewhere in this prospectus for information regarding accounting standards updates not yet adopted.

Our Business

Company Overview

Actelis is a networking solutions company with a mission to enable fast, secure, cost-effective and easily implemented communication for IoT projects, deployed over wide areas such as cities, campuses, airports, military bases, roads and rail.

Our networking solutions use a combination of newly deployed fiber infrastructure and existing copper and coaxial lines to create a highly cost-effective, secure and quick-to-deploy network.

Our patent protected hybrid fiber-copper networking solutions deliver excellent communication over fiber to locations that may be easy to reach with new fiber. However, for locations that are difficult to reach with fiber, we can upgrade existing copper lines, to deliver cyber-hardened, high-speed connectivity without needing to replace the existing copper infrastructure with new fiber. We believe that such hybrid fiber-copper networking solution has distinct advantages in most real-life installations, providing significant budget savings and accelerating deployment of modern IoT networks. We believe that our solutions can provide connectivity over fiber or copper up to multi-Gigabit communication, while supporting Gigabit-Grade reliability and quality.

When-high speed, long reach, high reliability and secure connectivity is required, network operators usually resort to using wireline communication over physical communication lines rather than wireless communication that is more limited in performance, reliability and security. However, wireline communication infrastructure is costly, and often accounts for more than 50% of total cost of ownership (ToC) and time to deploy wide-area IoT projects.

Typically, providing new fiber connectivity to hard-to-reach locations is costly and time-consuming, often requiring permits for boring, trenching, and right-of-way. Connecting such hard-to-reach locations, may cause significant delays and budget overruns in IoT projects. Our solutions aim to solve these challenges.

By alleviating difficult challenges in connectivity, we believe that Actelis' solutions are making a significant difference: effectively accelerating deployment of IoT projects, and making IoT projects more affordable and predictable to plan and budget.

Our solutions also offer end-to-end network security to protect critical IoT data, utilizing a powerful combination of coding and encryption technologies, applied as required on both new and existing infrastructure within the hybrid-fiber-copper network. Our solutions have been tested for performance and security by the U.S. DoD laboratories, and approved for deployment with U.S. Federal Government and U.S. defense forces as part of APL (Approved Product List) in 2019.

As of December 31, 2021, we had more than 300 customers. We experienced an average annual sales growth in our IoT business of more than 20% each year from 2018 through 2021 in booking of orders from customers in the IoT market.

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, providing connectivity for enterprises and residential customers. Our products and solutions have been deployed with more than 100 telecommunication service providers worldwide, in enterprise, residential and mobile base station connectivity applications. In recent years, as we have further developed our technology and rolled out additional products, we turned our focus on serving the wide-area IoT markets. Our operations are focused on our fast-growing IoT business, while maintaining our commitment to our existing Telco customers.

We currently derive a significant portion of our revenue from our existing Telco customers. For the years ended December 31, 2021 and December 31, 2020, our Telco customers in the aggregate accounted for approximately 48% and 55% of our revenues, respectively.

We currently derive a significant portion of our revenue from a limited number of our customers. For the years ended December 31, 2021 and December 31, 2020, our top ten customers in the aggregate accounted for approximately 78% and 70% of our revenues.

Our auditors' opinion in each of our audited financial statements for the years ended December 31, 2021, and December 31, 2020, contains an explanatory paragraph regarding substantial doubt about our ability to continue as a going concern. As of December 31, 2021, and 2020, we had an accumulated deficit of \$22.4 and \$17.2 million, respectively. In recent years, we have suffered recurring losses from operations, have negative working capital and cash outflows from operating activities, and therefore we are dependent upon external sources for financing our operations.

We currently have one outstanding loan with Migdalor Business Investments Fund, or Migdalor, in the original principal amount of approximately \$6 million which is secured by all our assets, which remains outstanding as of December 31, 2021. If we cannot generate sufficient cash flow from operations to service our debt, we may need to further refinance our debt, dispose of assets or issue equity to obtain necessary funds. We expect to continue repaying the principal and interest of the Migdalor Loan from our operating cash flow.

Our Technology

To address many of the most difficult wide-area IoT and Telecom connectivity challenges, we utilize the hidden potential in existing legacy copper/coax wires that already connect billions of locations and devices globally (often at low speed, suffering from interruptions and presenting poor information security) — delivering mostly voice, or low speed control signals). However, these lines are readily available at no additional deployment cost and can reach, as we believe, most locations. Using our patented signal-processing technology and system architecture, we can “upgrade” these lines, by deriving Gigabit Grade performance from them, and integrate them with new fiber installations, where available, to create a complete hybrid-fiber-copper network, enabling fast, reliable, and safe Gigabit-Grade connectivity.

Our technology is both powerful and compact, and is built as a relatively small set of featurerich network elements, that serve as building block in many IoT verticals. These elements include switches, concentrators, reach extenders, data encryption elements, power sources and a smart networking software that allows for remote management and monitoring down to the single element and line performance, configuration management making complex network topologies easy to deploy, analyze, debug and remote SW download to help with remote handling of large and small networks.

Our solutions can also provide remote power over the same existing copper lines to power up network elements and IoT components connected to them (like cameras and meters). Connecting power lines to millions of IoT locations can be costly and very time consuming (similar to data connectivity). By offering the ability to combine power delivery over the same copper lines used for high-speed data, we believe our solutions are solving yet another important challenge in connecting hard-to-reach locations. We believe that combining communication and power over the same existing lines is particularly important to help connect many fifth generation, or 5G, small cells and Wifi base stations, as high cost of connectivity and power is often slowing their deployment.

Rapid Deployment and Lower Cost of Critical Connectivity for IoT

We aim to become the global leading provider of cybersecure, cost-effective and quick-to-deploy hybrid networking for all wide-area IoT applications. Our products work over all types of wireline media on the global data network, whether owned or operated by telecom service providers or a private network operated by enterprises or government organizations. Our products are structured as building blocks for many IoT applications, and are feature-rich. This allows for one Actelis box to often replace multiple other platforms available in the market, allowing for space-saving installation, energy conservation (which we believe results in a greener network), and making network planning easier for our customers. We aim at having our products installed and help accelerate deployment of wire-area IoT projects and applications everywhere.

For example, in one of the projects where our solutions are deployed, we found that 70% of locations are easy to-reach with new fiber optic installation. Connectivity for these locations may, as we believe, average \$26,000 per mile for new fiber laid on poles, and can take between days to weeks to connect. However, the remaining 30% of locations may be hard-to-reach with new fiber optics, may require boring or trenching to reach IoT sensors or camera locations, possibly connecting over obstacles, roads, long distances, and may also require obtaining the right of way for extensive civil works. This part of the deployment, as we believe, may cost up to \$400,000 per mile, may sometimes go distances of many miles, and may take many months to complete. Connecting such locations can dramatically increase project budget and cause major delays. Our hybrid networking technology includes fiber-based network elements connecting the easy-to-reach locations over new fiber, as well as copper or hybrid fiber-copper network elements that are capable of upgrading the existing copper infrastructure, such that Gigabit-Grade connectivity may be provided over this existing copper infrastructure, immediately utilizing such readily available lines at no additional cost or time to deploy. Both parts of the network are then combined into a seamless fabric of a hybrid fiber-copper network, under one management software that provides smooth, largely automated operation and end-to-end security.

In another project, we provided hybrid networking connectivity with remote powering to 3G and 4G base stations. Looking forward, we believe that a dense grid of 5G small cells would be required to enable global 5G coverage, which, may be key to IoT deployment in many smart city projects and other dense areas. We believe that connecting these 5G small cells to the network cost effectively and rapidly, in both hard-to-reach and easy-to-reach locations, as well as powering them cost-effectively is key to successful and timely deployment for such network.

[Table of Contents](#)

We expect to release in 2023 a high-speed, cyber-hardened, multi-Gigabit, hybrid fiber-copper solution with optional remote powering aimed to help with 5G small cell deployment, especially in smart city IoT applications, where 5G is most critical. We expect that such solution will add a large sub-vertical market to our growth.

Cyber Security

IoT networks are vulnerable to cyber-attacks. They often carry data related to critical processes and applications, such as provision of energy, water, gas and transportation services to large populations; we believe that this data requires enhanced security within the network.

Our products include cyber safety features that we are constantly developing and particularly include network traffic encryption and coding. We have developed and implemented a multi-layered “Triple Shield” technology that includes (i) information coding for resilience and security (over copper); (ii) multi-line information scrambling for increased resilience and added security (over copper); and (iii) an additional 256-bit hardware-based real-time encryption of data running over fiber or copper — creating end-to-end protection for the entire hybrid network. Our network management software is also cyber-hardened and helps protect the system. Our systems have been selected for deployment in sensitive applications with U.S. DoD and other governments and military organizations, airports, utility companies, oil and gas companies, smart cities, rail and traffic applications globally.

Market Verticals We Address

We execute our vision through a multi-channel, global approach that combines our expertise, with the expertise of our trusted business partners, system integrators, distributors, and consultants.

We run a vertical based marketing plan where we dedicate efforts and resources to each vertical. The IoT verticals that we have focused on include: (1) intelligent transportation systems (ITS); (2) rail; (3) federal and military; (4) airports; (5) energy and water; (6) smart city; (7) education campuses; (8) industrial campuses; and (9) airports. Our products are utilized within networks that have been deployed, for example by The City of Los Angeles, Highways England, Federal Aviation Administration, the US military, including Air Force and Navy, Stanford University, and many others. Our customers benefit from rapidly and cost-effectively enabling their critical IoT functions such as traffic cameras and smart signaling, security cameras, smart parking meters and ticketing, rail signaling and control, electrical substation management and protection, military operations, and many more.

To date, we have been most successful in selling to customers in the intelligent transportation systems, rail, federal and military, and airports markets, primarily in the US, Canada, Europe, and Japan. While we have not yet sold to industrial campuses, we have sold to energy and water, smart city and education campuses. We intend to grow our IoT sales by growing all verticals and our pipeline of sales opportunities includes customers in each of the eight verticals listed above.

State of IoT Connectivity Market

IoT infrastructure connectivity demand is growing rapidly. We believe there is an urgent need to connect tens of millions of locations, with a fast and secure connection. A huge challenge for IoT projects is that implementing connectivity between different IoT points in a network can consume the majority of a project’s cost and time to implement, and that unpredictable challenges in deploying connectivity may compromise IoT projects plans.

According to a report by Facts and Factors (January 2022) Global Internet of Things (IoT) market is expected to grow to \$ 1.8 billion by 2028, at a Compounded Average Growth Rate (CAGR) of 24.5%.

According to a report by Grand View Research (May 2021), the smart city market alone is expected to grow to \$696 billion by 2028 at a Compounded Average Growth Rate (CAGR) of 29.3%. We believe that the number of IoT applications requiring our fast, smart, and secure connectivity is immense and provides us with a great market opportunity to grow our business. From smart transportation systems (smart cameras, smart lights and signals, V2V — Vehicle to Vehicle communication) and smart security (cameras and radars), to smart parking, smart rail, power station monitoring, and industrial and warehouse automation, we believe that we are uniquely positioned to address all of these applications in a versatile and flexible manner.

[Table of Contents](#)

We believe that 5G mobile technology will play a major role in the implementation and scaling of IoT networks. According to research published by ABI Research in January 2021, 5G technology is expected to grow at a CAGR of 41.2% between 2021 and 2027 with a major part of that growth coming from servicing IoT networks.

According to Key Market Insights, the global small cell 5G network market size was valued at \$740.8million in 2020. The market is expected to grow from \$859.4 million in 2021 to approximately \$1.8 billion in 2028, reflecting a CAGR of 54.4% between 2021-2028.

5G base stations and small cells need to be deployed in a dense grid of millions of locations and need to be connected to gigabit speed communication and power. We are addressing these needs for the rapid connectivity and power, aiming at enabling faster and more cost-effective deployment of 5G in IoT.

Our Solutions

Actelis has invested nearly \$100 million over the years to develop its patented, multilayered “Triple Shield” technology, which can serve all connectivity markets. Our technology includes signal processing SW that is implementing optimization of multi-line signal coordination; the elimination of interference to boost connectivity performance; the optimization of coding for resilience and security; multi-line data scrambling for low latency, increased resilience, and added security; our solutions also offer implementation of 256-bit encryption of transmission for data running over fiber or copper for network-wide protection of data. Our technology is packaged into a small set of compact, hardened, feature-rich network elements (such as switches, concentrators and reach extenders) — the MetaLIGHT product family — that are used as building blocks addressing the needs of most wide-area IoT verticals and applications, in a space-and energy-saving fashion. The ability to drive remote powering and synchronization signals to network ends over the same (copper) transmission lines provides additional significant cost-and-time benefits to network operators. We estimate that, as of December 31, 2021, we achieved over \$24 million in our IoT installed base. We define our IoT installed base based on the shipments to our customers in the IoT market from January 1, 2012 through December 31, 2021.

Our offering includes our network management software, providing built-in automation to help configure, manage, monitor, safeguard, install and maintain complex, hybrid networks of thousands of elements remotely.

We aim to continue developing our technology to include more system-wide security and further hybridity across all types of infrastructure and further include cutting-edge computing capabilities to serve all connectivity needs for our IoT customers, in an effective and easily deployable way, while maintaining our commitment to serve our existing Telco customers.

We believe that our strong reputation as a provider of high-quality solutions, and the trust we gain from being recognized as a solid solution provider by prominent customers (such as the U.S. DoD) help us execute our strategy.

Growth Strategy

The key elements of our growth strategy include:

- Utilizing our existing customers and partners globally, as well as our brand name and product differentiation to expand deployment into virtually all IoT verticals globally.
- Growing our network of partners in three continents, aiming to become the vendor of choice for cyber-hardened networking, enabling IoT connectivity globally.
- Introducing broader cyber-protection capabilities at IoT network level, offering protection software and services for IoT devices and users.
- Introducing hybrid fiber-copper-power solutions for effective connectivity and power to enable 5G growth in IoT.
- Adding wireless MMwave technology to fiber-copper connectivity, to be able to offer all three options of IoT connectivity.
- Introducing edge computing capabilities into the MetaLIGHT building blocks, enabling smart applications and recurring SW business models for our customers.

Products

- EADs (Ethernet Access Devices) are a series of products which are cost efficient, compact and hardened Ethernet switches for hybrid-fiber-copper networks, located near the IoT devices connected to the network. This is our MetaLight ML500/600/700/800 series. For example, our EAD can be used to connect street traffic lights and nearby controllers, cameras and IoT devices to the traffic control center. Our product could be installed in an electronic cabinet on the street corner near the traffic light.



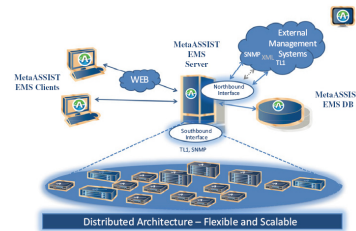
- Network Aggregators can connect hundreds of locations or elements. This product family is designed for large, medium, and small aggregation/operating and control centers. For example, control centers of highways could use such aggregators to communicate with hundreds of EADs installed in cabinets along highways in order to securely connect IoT devices (e.g. security cameras) to the highway network. This is our ML2300 aggregator series.



- Our XR239 series features a repeater to extend connectivity range to long distances, in some cases up to 100Km. These products are installed on long copper lines and can be remotely powered from the data lines themselves, while a special algorithm (Dynamic Spectral Software) is ensuring minimal interference with other signals running on adjacent conduits in the same cable. The repeater is installed outdoors and is resistant to cold, hot, rain, ice or snow. Our repeaters have been installed along rail systems in Alaska and Canada and have been safely performing for more than four years.



- Advanced MetaLIGHT EMS software (Element Management Systems), enable remote management, monitoring, maintenance, and configuration of the installed equipment in the network. It is designed to monitor, control and configure our network elements in the field, locally or remotely, for networks of various scales up to thousands of elements. The UK Highways project, as an example, is using such EMS systems to control thousands of EADs connecting IoT devices along thousands of Highway miles. It includes detailed monitoring, logging and tracking of functions both locally and remotely, to allow for easy debugging and configuration of networks, security management, graphical display of network topologies, management of licenses, remote software download, connectivity to other network and management systems. EMS may also manage other software keys and elements (for example, for encryption or other cyber-safety functions), for which customers may pay separately for the licenses. The EMS software is proprietary.



We also sell support and maintenance services together with the product purchase. This includes consulting, telephone troubleshooting and remote support, training, product repairs and software updates.

Product Specifications

Our products use advanced signal processing implemented at the system level, with an approach that treats multiple copper lines as one multi-line channel, which we believe to achieve the following benefits:

- Increase the effective bandwidth of the communication link by 50% to 500% compared to traditional, single line bandwidth;
- Extend connectivity distances from a few kilometers up to 100Km (for longer range topologies and slower speeds), and improves coverage area for connectivity by 2X to 4X times for the higher speed services; and
- Improve communication reliability even if copper lines are of poor quality, so that network operators can, in most cases, guarantee their customers what we believe are Service Level Availabilities (SLAs) similar to that of fiber optic infrastructure.

In addition to these main benefits, we have focused our efforts and implemented technologies in our products in order to achieve the following:

- Automatic multi-channel calibration based real-time line quality analysis during installation (which greatly shortens the installation process and saves personnel time);
- Transmission in the copper lines to take into account signals in neighboring lines to minimize crosstalk interference and be “Spectrally Friendly”;
- Multi-line spatial coding scrambling of data in a way that enhances connection immunity to interference, and makes tapping into the data very difficult;
- Integration of remote powering and data on the same copper pairs;
- Minimizing transmission delay to support delay-sensitive applications; and
- Ability to safely, and accurately transmit clock signals for cellular base station synchronization (not available yet for 5G).

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, for enterprises and residential customers. Our products and solutions have been deployed with more than 100 telecommunication service providers worldwide, in enterprise, residential and mobile base station connectivity applications. In recent years, as we have further developed our technology and rolled out additional products, we turned our focus on serving the IoT markets. Our operations are focused on our fast-growing IoT business, while maintaining our commitment to our existing Telco customers.

Competitive Advantage Analysis

We have invested heavily and over more than 10 years in the development of copper technologies and hybrid fiber-copper communication systems, with the goal to create a solution that enables high-speed communication over real-life networks of mixed media, securely, reliably, and with gigabit-grade resilience.

Copper lines are readily available in billions of locations. They are often buried in the ground or hanging from telephone poles, and are usually run in groups, or Bundles, of tens or hundreds of wires.

Copper was never designed for high-speed communication; attempts to deliver high-speed would encounter many problems, such as signal attenuation, interference from other lines in the Bundle and from any external electrical sources, variable quality and signal interruptions, variable latency and more. Such wires are also relatively easy to tap into physically, and the information is also radiated outside of the cable and may be exposed to security threats.

We developed technologies utilizing a multi-line approach, encoding, scrambling and processing the signals at system level (rather than at the single lines level), and finally also offering data encryption, to combat interference, electromagnetic noise, and issues with copper line quality and data security. This work was accompanied by registration of some 30 patents, including, as we believe, some of the most fundamental patents in this field.

[Table of Contents](#)

Following the development of the tools to make copper wires highspeed and capable, as we believe, to deliver gigabit-grade service level, the next step was to integrate these technologies into hybrid-fiber-copper building blocks, that allow for seamless communication over mixed, real-life fiber-copper networks, and many other advantages.

These investments have, in the company's opinion, resulted in a unique solution on the market, in terms of value:

- Highest performance hybrid-fiber-copper communication system
 - Speeds from 10Mbps to 10Gbps
 - Reach of up to 100Km (speed declines over long distances in copper)
 - Robust connectivity allowing gigabit-grade service SLAs in various harsh environments over copper or fiber
- Cyber-protection on several levels, or Triple Shield Protection:
 - Multi-line data scrambling and coding (copper)
 - 256-bit system-wide encryption
 - System level protection (encryption and other protections) of management software, operating system and traffic flow
- Dense, feature-full design to replace multiple alternative elements in the market, and allow for installation that is compact, lower cost and power saving:
 - Advanced switching functions supporting complex network topologies
 - Support for both advanced, digital IoT devices as well as existing analog devices with serial interfaces — to save the need to replace these devices while allowing them to join the digital network
 - Power feeding for cameras and other IoT devices with the data cable
 - Ability to install our IoT building blocks in remote locations with no power. Power can be provided from the communication line.
 - Ability to provide precise synchronization over the communication lines to base stations
 - Routing functions
 - Support for spectrally-friendly reach extenders up to 100Km with minimal impact on other communication lines
- Automated software tools for installation and management (including automated line calibration and configuration recognition during installation to avoid manual work, advanced management systems that allow remote troubleshooting of any line connected to the system to save on operation and management time)

We believe that the combination of these advantages provide our customers with a highly cost-effective solution to quickly obtain IoT connectivity anywhere in their network.

We believe that our hybrid-fiber-copper solutions have a significant competitive advantage in several layers: (a) copper performance (speed, reach, link stability and data security); (b) seamless fiber-copper integration and end-to-end data encryption; (c) overall system cyber-hardened design; (d) versatile, compact and feature-dense products with a good fit to the vast majority of applications; (e) very high product and transmission reliability; automatic configuration tools and advanced management of every element in the field; and (f) highly cost-effective when compared to alternatives. We believe that these advantages lead to very good value for our customers for both rapid deployment to all locations, regardless of whether these locations are hard to reach. We also believe that these characteristics provide us with a competitive advantages against many, if not all, companies in our space, such as Cisco, Rad, Nokia, Siemens, Belden and others.

[Table of Contents](#)

We have hundreds of large, medium and small network operators as customers, including municipalities, railway, electricity, water infrastructure companies and military customers. We believe that we enjoy a good reputation for offering reliable, high-performance and high-end products. We expect that the acceptance process for our new products for existing customers will become simpler due to customers positive accumulated experience working with us. We also have many non-exclusive third-party distributors, resellers and system integrators and partners around the world, located in the U.S., Canada, Mexico, Costa Rica, Germany, Italy, Spain, Scandinavian countries, Greece, Netherlands, Japan, and India. These non-exclusive third-party distributors are used to selling our products, and we believe that they appreciate the reliability of our products and the quality of service and support that we provide. All of these advantages constitute an entry barrier, which we believe may make it more difficult for a competitor to reach a similar status.

We believe that over the past years, we have built a reputation for providing, according to our customers, reliable, high-quality communication solutions with better copper and hybrid fiber-copper performance than other alternatives on the market. A competitor who wants to enter the market will have to compete with our reputation, which has been acquired over a long period by providing long-term quality service to hundreds of network operators and hundreds of thousands of end customers and IoT elements.

Actelis' Strategy

Actelis strives to become the global leading provider of secure, cost-effective and quick-to-deploy networking for all IoT applications. We offer secured connectivity solutions over any media on the global internet network, whether owned or operated by telecom service providers or a private network operated by enterprises or government organizations such as municipalities and military bases. Our products include cyber safety features that we are constantly developing, and particularly include network traffic encryption and coding. Our products are fully hybrid across any media (fiber or copper) and we believe are cost-effective to ensure customer ROI. We aim to continue developing our technology to include more security and more media simplicity and further hybridity across all types of infrastructure including wireless and 5G, to cover the needs of communication required by IoT customers. Our products are generic building blocks (for many IoT applications) and are feature-dense, meaning they can replace multiple other platforms, allowing for installation in tight locations and save power. We aim to have our products installed with IoT projects and devices everywhere.

Our Sales and Marketing Strategy

We operate through two regions — Americas and International (consisting of EMEA (Europe, Middle East and Africa) and APAC (Asia Pacific)) in a matrix with a vertical structure that is described below. Our sales and support teams are currently located in the United States, Mexico, Germany, Israel, and India. We also execute our sales and marketing plan through a multi-channel by vertical global approach that combines our expertise with the expertise of our trusted business partners. The types of business partners we have and will seek in the future are system integrators, distributors, contractors, resellers, and consultants. Those business partners are currently located in North America, Central America, throughout Europe, India, Philippines, and Japan. Upon identification of business opportunities of interest in territories where we do not have direct presence, our experience has been to find a suitable business partner or agent to address it. We believe our strong brand name of high-quality communication solutions, as well as the trust we gain from being recognized as a cyber-hardened solution by the U.S. DoD, empowers our ability to execute (MetaLight 600 Series was approved for deployment by U.S. DoD and is on the Approved Product List (APL) since 2019). We run a vertical based marketing plan (ITS — Intelligent Traffic Systems, Rail, smart city, Utilities, Federal and Military) where we dedicate efforts and resources on each vertical to gain presence both by channel programs tailored to each vertical, as well as direct touch, especially in cases where large projects are involved.

We currently derive a significant portion of our revenue from a limited number of our customers. For the years ended December 31, 2021 and December 31, 2020, our top ten customers in the aggregate accounted for approximately 78% and 70% of our revenues, respectively.

ITS — Intelligent Traffic Systems

Intelligent Traffic Systems include customers who manage road systems such as Departments of Traffic at either the municipality, county, state, or national level. Some applications requiring communication in this vertical are road cameras, lane management systems, and road signs.

Rail

Rail systems include customers who own and operate traditional inter-city rail lines as well as light rails. Some applications requiring communication in this vertical are central train control systems, rail signals, safety cameras and alert sensors, and rail station communication. We have projects in North America, Europe, India and Japan.

Federal and Military

Federal and military include customers such as federal aviation authorities, US military, Air Force and Navy bases, and other government and military facilities. Some applications requiring communication in this vertical are radars, perimeter security systems, energy systems, offices, laboratories and residences. We have projects in North America and Europe.

Airports

Airports include customers who are either a State or Federal airport agency, or a service provider to the airport industry. Some applications requiring communication in this vertical are airport security, baggage management, and airport Wi-Fi.

Energy and Water

Energy and water include customers such as electric utilities, oil companies and water utilities. Some applications requiring communication in this vertical are sub-station monitoring, oil and gas pipeline and refineries, electric and water flow monitoring, and perimeter security. We have projects in the United States and Europe.

Smart City

We believe the goal of nearly any city worldwide is to become smarter and better serve its residents and visitors. Smart city customers include such municipalities. Some applications requiring communication in this vertical are security cameras, parking management, energy and water management, waste management, digital signs, and provision of Wi-Fi connectivity. We have projects in more than 100 cities, mostly in North America and Europe.

Telco

Telco customers include communication service providers of both wired and wireless services (including 4G and 5G). Some applications requiring communication in this vertical are enterprise offices, branch offices, residential buildings, educational facilities and back-haul for mobile base stations.

Channel and Territory coverage

The majority of our business is done indirectly through various types of business partners, namely system integrators, distributors, contractors, resellers and consultants. Still, our team often accompanies a channel partner in the selling process in order to help secure a deal with an end-user. We seek to cover the geographic territories in which we sell, in combination with the target verticals described above. In this effort, we take advantage of existing strong relationships with business partners in the United States, Europe, Latin America, and Asia Pacific and also seek to recruit new business partners that can help us expand our coverage.

In addition, we launched a new website (at www.actelis.com) tailored to the IoT strategy and is expanding our marketing initiatives (professional organizations, shows, online targeting, online campaigns and lead generation) to grow our opportunity pipeline.

We operate through two main regional sales teams — Americas and International (consisting of EMEA (Europe, Middle East and Africa) and APAC (Asia Pacific)) in a vertical model similar to that which was described in our marketing strategy above, and generates its pipeline of leads and opportunities through a combination of channel presence, on-line presence as well as direct touch. Our sales teams are very experienced in the target verticals and have significant competencies in the target networks of decision makers. We intend to invest in expanding this presence and strength.

[Table of Contents](#)

Our products are assembled with various contract manufacturers, located in Israel and in Taiwan. Those contract manufacturers are experienced and capable to purchase raw material and components and provide a turn-key solution. As a result of the of COVID-19 pandemic, the world is experiencing shortages of electronic components. The Company is assisting its manufacturers to acquire those components, and may offer replacements, if needed, for certain components. The Company uses state-of-the-art logistics services from professional providers worldwide, and also has in-house expertise in executing such required processes.

Software and Services

Our products consist of hardware and an embedded software that function together to deliver the product's essential functionality. Our products are sold with a two-year warranty for repairs or replacements of the product in the event of damage or failure during the term of the support period, which is accounted for as a standard warranty. Services relating to repair or replacement of hardware beyond the standard warranty period are offered under renewable, fee-based contracts and include telephone support, remote diagnostics, and access to on-site technical support personnel.

We also offer our customers our EMS management software, either as perpetual or term based. EMS is optional and is being sold separately from our hardware products. EMS is sold either as per-element license, or as a license for a whole network.

Our customers may request added functions and features per their specific need which we can customize for an additional fee.

We also offer our customers product support services which include telephone support, remote diagnostics, and access to on-site technical support personnel. Such support service is sold as a standalone contract or in combination with EMS management software and is offered for a term, usually 12 months with a renewal option.

Additionally, our customers can purchase software support service which allow them to receive some additional features or free upgrades. Such support service is sold as a separate contract.

We offer service contracts at different levels (Silver, Gold, Platinum), which may include different levels of support (remotely or in the field), hardware repairs, spare parts, help with network design, and SW/HW upgrades. Such service contracts are sold separately from the sale of hardware products and may be sold combined with our EMS software licenses. It usually covers periods post the expiration of our warranty period and would be renewed on an annual basis. The cost of the service is derived from the size of the network, and the level of support required.

Product and Solution Roadmap

We strive to offer connectivity solutions over any media on the global internet network, including legacy copper or coaxial, fiber, wireless or cellular 4G/5G — whether owned or operated by telecom service providers or a private network operated by enterprises or government organizations such as municipalities and military bases. As we aim to expand our offering of products and services to meet all IoT verticals requirements, we are also focused on offering enhanced cyber protection for the data, the network, and thereafter protecting the applications and the end users. We aim to provide faster and faster speeds (reaching multi-Gigabit services) and to utilize our broad and global presence as IoT building blocks in many networks, to introduce advanced, edge network applications and services, such as security, video analysis, advanced edge cyber protection and more. Our solutions today serve the intelligent traffic systems (ITS), energy water and utilities, smart cities, rail systems, federal government agencies, military, airports, education campuses, oil and gas applications and more. Our products in those environments are usually hardened both for weather and data protection, and may include network cyber security features such as 256-bit end-to-end encryption;

According to Interdigital/Futuresource report from 2020, 82% of all consumer and business IP traffic in 2022 will be video. We aim to expand into edge computing capabilities and introduce more system-level cyber protection for applications, cameras and devices in association with such video traffic.

5G requires a dense grid of millions of base stations to be effective, and suffers delays due (in part) to a significant challenge — connecting base stations with Fiber can be very expensive, and in many locations cost-prohibitive. We aim to enable cost-effective connectivity of the hard-to-reach 5G locations, and further cost savings by adding power on the same copper communication lines.

Competition

We compete in markets for networking and communications services and solutions for service providers, businesses, government agencies and other organizations worldwide. Our products and services provide solutions supporting voice, data and video communications across fiber-, copper-, coaxial- and wireless-based infrastructure, as well as across wide area networks, local area networks and the internet.

We compete with a number of companies in the markets we serve. Our key competitors include Moxa Technologies, ADTRAN, Inc., FlexDSL Telecommunications AG, EtherWAN Systems, Inc. and Belden Inc.

We believe the following competitive attributes are necessary for our solutions to successfully compete in IoT networking market:

- the performance and reliability of our solutions;
- cost of deployment and return on investment in terms of cost savings;
- sophistication, novel and innovative intellectual property and technology, and functionality of our offerings;
- cross-platform operability;
- security;
- ease of implementation and use of service;
- high quality customer support; and
- price.

We believe that we compare favorably on the basis of the factors listed above. However, many of our competitors have substantially greater financial, technical, and marketing resources; relationships with large vendor partners; larger global presence; larger customer bases; longer operating histories; greater brand recognition; and more established relationships in the industry than we do. Furthermore, new entrants not currently considered to be competitors may enter the market through acquisitions, partnerships, or strategic relationships. See “Risk Factors — New competitors may enter the marketplace and begin to compete with the Company.”

Manufacturing, Procurement and Logistics

We take advantage of the combination of our inhouse skills and those of the third parties we partner with to execute our operational tasks which are planning and manufacturing finished goods inventory, planning and procuring raw materials and delivering products to our customers based on promised delivery schedules.

Our raw material is consisting of electronic chipsets, FPGA components, modems, and other electronic and mechanical components. Most of those components are procured by our contract manufacturers and we assist them as needed in specific cases. Since the breakout of COVID19, as the world is experiencing shortages of electronic components, we assist our manufacturers to acquire components that are harder to find.

Our products are assembled by various contract manufacturers, located in Israel and in Taiwan who possess the expertise of assembly and quality control required for electronic manufacturing in a turn-key fashion. Some of our products are manufactured to our specifications under an OEM arrangement. The company uses state-of-the-art logistics services from the best providers worldwide and also has in-house expertise in executing such required processes.

We believe that we can add and/or replace our contract manufacturer if necessary. We have successfully transitioned from one contract manufacturer to another in the past, and we believe that a transition would be achievable, if necessary, in the future typically within three to six months.

Warranty

Our products are generally sold with a standard warranty of two years for product defects, as well a technical center support, during normal business hours, for incidents raised by properly trained personnel. Within the warranty agreement, we offer to repair or replace defective products, or software bug fixes. Upon expiration of the warranty period, the customer has an option to purchase an extended warranty contract for an additional fee, typically for one or more periods of 12 months.

Growth Strategy

Global Expansion and Recognition

We intend to leverage (a) the customers, partners, and representatives' presence in over 30 countries including the Americas, Europe and Asia, (b) brand recognition developed over more than 10 years, and (c) the fact that our products are differentiated, as we believe, and offer unique value — to expand into virtually all IoT verticals, and become the vendor of choice for cyber-protected building blocks for all IoT networking globally.

In order to achieve the right level of global coverage, we intend to expand our network of partners and representatives and aim increasingly at partnering with larger numbers of companies with global presence.

Our plan is to first focus on the US market, then Europe and Asia.

We would invest in growing our sales, channel management and support teams, and dedicate resources which specialize in specific verticals in each of the theaters.

Expansion of Multi-year deals

Over the past years, we won several large multi-year contracts with ITS, military, airports, and more that will generate more predictable sales for the next several years. We intend to expand this strategy by investing in sales and marketing presence to expand these contracts and add many others.

Expansion into Cyber Security, Recurring Revenue Model

Cyber security is becoming increasingly more important for critical IoT infrastructure. Some countries, like Germany, are starting to mandate encryption on all IoT communication, and we believe this trend will continue. Our products are already capable to deliver sensitive information for many critical IoT applications, and we invest intend to invest more in making this a strong differentiator, and to have our products recognized as the most cyber-safe IoT building blocks in the growing secure IoT communication market.

Beyond that, we are planning on further expansion of our Cyber-protection capabilities, to allow for protection not only of the data that is running in the system, but also to help protect users of the network and IoT devices connected to it. We believe that such capabilities will enable our end customers to sell such capabilities and generate a recurring revenue stream for both them and Actelis.

Adding the 5G Connectivity for IoT

A dense grid of 5G small cells is required in order to build a global 5G coverage, which, as we believe, may be key to IoT deployment in many smart cities and other dense areas. We believe that connecting these 5G small cells to the network cost effectively and rapidly, in both hard-to-reach and easy-to-reach locations, as well as powering them cost-effectively is key to successful and timely deployment.

5G networks deployment is slowed down, as we believe, by the challenge to provide connectivity and power to millions of base station locations that are required for an effective 5G network.

We expect to release in 2023 a high-speed, cyber-hardened, multi-Gigabit, hybrid fiber-copper solution with optional remote powering aimed to help with 5G small cell deployment, especially in smart city IoT applications, where 5G is most critical. We expect that such solution will add a large sub-vertical market to our growth.

We expect that a second generation of this product family may also include precision synchronization delivery for 5G base stations for in-building installations, where GPS base-station synchronization is not available. This offering is still in early stages of concept evaluation, and may only be released in 2024 following successful evaluation and development.

Adding MMwave Technology

While we can offer solutions over fiber and copper, fixed, point-to-point wireless remains a valid option where for high-speed connectivity if line of sight is available and wireline communication is not be available. To complement our coverage or solutions over all possible media, following this offering, we plan to evaluate basic MMWave building blocks that may be acquired from third parties to integrate into our product offerings, for a complete cyber-hardened system with multiple physical media options. Such offering may only be released in 2024–2025. We have not at this finalized evaluation of such third party partners. We expect that the addition of MMwave to our product offerings would add a new significant addressable market for us.

Adding Edge Computing Capabilities

Once mass deployment of our IoT connectivity building blocks is achieved, we are planning to leverage our presence in the field to offer our customers the option to host and integrate various applications into the Actelis building blocks, many of which will be installed in critical information junctions for IoT networks. Such applications may include video analysis, data monitoring and extraction, firewalls and many others, and would enable our customers, as we believe, to develop recurring revenue models for them as well as for us.

Some examples for such applications that we have been evaluating are:

- Enhanced cyber-protection for devices and users;
- Video processing and machine vision (serving the AI ecosystem such as, intruder detection, road safety and robotics); and
- Smart video transmission/compression for delivery of video over 5G/mobile networks.

We expect the development of such capabilities to begin in 2023, and applications may be released starting in 2024. Some of the applications (especially around cyber-security) may be developed by the Company. Others may be offered by third parties and integrated into the Company's platform.

President Biden's Bipartisan Infrastructure Law

President Biden signed the Bipartisan Infrastructure Law (Infrastructure Investment and Jobs Act) in November 2021, a once-in-a-generation investment in the United States infrastructure and competitiveness, totaling approximately \$1.2 trillion.

This Bipartisan Infrastructure Law is intended to rebuild America's roads and bridges investing \$110 billion in this area, expand public transit by investing \$39 billion in this area, expand high-speed rail by investing \$66 billion in this area, upgrade the nation's electricity grid investing \$108 billion in this area, expand access to clean drinking water by investing \$55 billion in this area, modernize the US airports by investing \$25 billion in this area, and an additional \$650 billion in previous authorized funding for roads including nearly \$300 billion for the Highway Trust Fund, and ensuring that every American has access to high-speed internet by investing \$65 billion in this area. We believe that this significant increase in infrastructure spending by the United States Government, which is mostly aimed at funding the customer verticals where we have significant experience (such as road modernization) and that we continue to target (such as roads, highways, rail, electricity, and airports), will likely include investments in the communication infrastructure which we offer.

Growth through Mergers and Acquisitions

We intend to evaluate growth through mergers and acquisitions, or M&A, opportunities in case they can fill business gaps or add key business operations without requiring us to wait years for marketing and sales cycles to materialize. The resulting combination of our existing products and services, new key personnel, and strategic partnerships through M&A could allow us to provide new offerings to our existing market.

If we target businesses in the same sector or location, we hope to combine resources to reduce costs, eliminate duplicate facilities or departments and increase revenue. We believe this strategy will allow for accelerated growth and maximize investor returns.

Environmental

We are not aware of any environmental laws that have been enacted, nor are we aware of any such laws being contemplated for the future, that impact issues specific to our business.

Property and Facilities

We lease our facility in California, which consists of approximately 9,000 square feet of office, lab and warehouse space. Our lease expires in March 2024. We recently agreed to sublease the entire office space in California and are in the process of locating new office space beginning in June 2022.

We lease our facility in Israel, which consists of approximately 13,000 square feet of office, development and testing laboratories and warehouse space. Our lease expires in April 2023.

We believe our facilities are sufficient to meet our current needs and that suitable space will be available as and when needed. We do not own any real property.

Human Capital Resources

As of December 31, 2021, we had approximately 45 employees and contractors, of which 41 were fulltime employees, including 18 in sales and marketing, 22 in research development, engineering, and operations and 5 in general and administration. We have approximately 29 employees and contractors in Israel, 14 in the U.S., 1 in Europe and 1 in Asia. Our U.S.-based employees are employed through a Professional Employer Organization, providing employee benefits and services.

We believe our culture and principles enable us to attract, retain, motivate and develop our workforce as well as drive employee engagement. We believe an engaged workforce leads to a more innovative and productive company that serves its customers better. Our employees work to ensure that our products and services connect and protect our customers critical infrastructure. A testament to that is the long-term retention of many of our employees and their loyalty to Actelis. We measure each one through a goal setting and measurement system to maximize our enterprise value and employee career potential.

We strive for ethnic and gender diversity. We intend to nominate a diverse set of independent directors on our board of directors.

Legal Proceedings

From time to time, we may be involved in various legal proceedings arising out of our operations. We are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business, financial condition, results of operations or prospects. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Government Regulation

Our products get certified for safety and local standards in each country we sell at as needed. In the United States, Canada, Europe, and Japan our products are UL certified (safety), EN (emissions Regulation), VCCI (Japanese emissions standard), CISPR (European emission standard), ICES (Canadian radio frequency emissions standards), ETSI (European electromagnetic compatibility standard), CFR (US Federal Broadcasting Regulation), as well as IEC (European Safety Standard). We have also received the JITC (Joint Interoperability Test Command) certification of meeting certain cybersecurity standards required by the U.S. Department of Defense.

We are subject to numerous federal, state, provincial, local, and foreign laws and regulations relating to the storage, handling, emission, and discharge of materials into the environment, including the Comprehensive Environmental Response, Compensation, and Liability Act; the Clean Water Act; the Clean Air Act; the Emergency Planning and Community Right-To-Know Act; the Resource Conservation and Recovery Act; and similar laws in the other countries in which we operate. While we believe that our existing environmental control procedures are adequate, we will continue to evaluate and update our procedures as needed to address new or changing aspects of environmental matters.

Intellectual Property

We rely on a combination of trade secrets, patent, trademark and copyright laws in the United States, as well as intellectual property licenses and other contractual rights (including confidentiality procedures, contractual provisions, and non-disclosure and assignment-of-intellectual property agreements with our employees, independent contractors, consultants and companies with which we conduct business) to establish and protect our A.I. technology, intellectual property and proprietary rights, trade secrets, databases, and our brand.

We have registered Actelis Networks as a service trademark in the United States, and we are the registered holder of the domain name Actelis.com that includes “Actelis Networks, Inc.”. We also have 27 registered patents and 1 patent application pending in the United States; 5 registered patents and one patent application in Europe, 1 registered patent in Mexico, 1 registered patent in Indonesia, all of which in the general area of high-speed carrier class Ethernet service and transport over bonded VDSL2, G.SHDSL as well as Fiber covering various aspects of our technology. While we continue to consult with counsel on the advisability to seek patent protection of some of our algorithms, we rely heavily on trade secrets to protect our intellectual property around our technology.

Without accounting for any potential patent term adjustments or extensions or other forms of exclusivity with respect to our U.S. issued patents, seven expire between 2022 and 2024, 14 expire between 2025 and 2029, and six expire between 2030 and 2037. Any patent issuing from the pending U.S. application will begin to expire in 2037. With respect to our European patents, two European patents are expected to expire between 2022 and 2024, two European patents are expected to expire between 2025 and 2029, and one European patent is expected to expire between 2030 and 2037. Our Mexican patent is expected to expire in 2026.

We continue to maintain our intellectual property and confidential business information in a number of ways. For instance, we have a policy of requiring all employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting relationship with us. Our employee agreements also require relevant employees to assign to us all rights to any inventions made or conceived during their employment with us in accordance with applicable law. In addition, we have a policy of requiring individuals and entities with which we discuss potential business relationships to sign non-disclosure agreements. Lastly, our agreements with Clients include confidentiality and non-disclosure provisions.

MANAGEMENT**Executive Officers and Directors**

The following table sets forth information regarding our executive officers and directors, including their ages as of the date of this prospectus:

Name	Age	Position
Tuvia Barlev	60	Chief Executive Officer, Secretary and Chairman of the Board
Yoav Efron	53	Chief Financial Officer
Eyal Aharon	49	Vice President R&D
Michal Winkler-Solomon	54	Vice President Marketing
Bruce Hammergren	66	EVP Sales Americas
Yaron Altit	50	EVP Sales Intl.
Hemi Kabir	52	Vice President, Operations
Jan Ruderman	56	Chief Revenue Office – Americas
Elad Domanovitz	43	Chief Technology Officer
Ram Vromen	53	Director
Yariv Gilat	51	Director
Israel Niv ⁽²⁾⁽³⁾	68	Director
Joseph Moscovitz ⁽¹⁾⁽²⁾⁽³⁾	67	Director Nominee
Dr. Naama Halevi-Davidov ⁽¹⁾⁽²⁾	51	Director Nominee
Noemi Schmayer ⁽¹⁾⁽³⁾	54	Director Nominee

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of Nominating and Corporate Governance committee

Tuvia Barlev, Chief Executive Officer, Chairman of the Board, and Secretary

Mr. Barlev serves as our Chief Executive Officer and Secretary since January 2013 and has served as the Chairman of the Board since 2010. Previously, Mr. Barlev founded our company in 1998 and served as the Chief Executive Officer until January 2010. Mr. Barlev is a seasoned serial entrepreneur with more than 25 years of experience in high-technology leadership in military, telecommunications, e-commerce, Big Data and clean energy. Prior to joining Actelis, he was head of the R&D organization at Teledata (acquired by ADC in 1998), a global supplier of advanced digital loop carrier (DLC) equipment from 1996 to 1998. Previously, Mr. Barlev served as a senior research officer with the Israeli government, and he was also founder, Chairman/Acting CEO at companies including Superfish Inc., a leading provider of visual search technology, from 2007 to 2015; Leyden Energy, a leading supplier of breakthrough battery technology from 2010 to 2012; Adyounet Inc., provider of advanced direct marketing services over the Web from 2006 to 2009; and SafePeak LTD., provider of hot data acceleration platform for Big Data across the cloud from 2011 to 2012. Mr. Barlev holds BSC and MSEE degrees from Tel Aviv University, both Summa Cum Laude.

Yoav Efron, Chief Financial Officer

Mr. Efron serves as our Chief Financial Officer since January 2018. Mr. Efron is responsible for all financial aspects of our business and for strategy, as well as Information Technology and Human Resources. Prior to joining Actelis, Mr. Efron was the CFO of TriPlay Inc. and eMusic Inc., a B2C cloud media services company from 2012 to 2017. From 2010 to 2014, Mr. Efron was an entrepreneur in energy efficiency and from 1998 through 2010 worked at Avaya Inc., a Fortune 500 telecommunications company in various executive financial roles including Finance Director. Mr. Efron earned his bachelor's degree in economics and management from the Hebrew University of Jerusalem.

Jan Ruderman, Chief Revenue Office — Americas

Mr. Ruderman serves as our Chief Revenue Officer since December 2021. Prior to joining the Company, Mr. Ruderman gained over 30 years of experience in sales to Federal, State, Government, Transportation and Regulated Industries, helping build sales organizations to large scales of hundreds of millions of dollars Prior to joining us, Mr. Ruderman was the Executive Vice President — Global Sales Global Traffic Technologies from January 2018 to December 2020,

senior director of business development at Samsung from 2016 to 2018 and had many roles at Panasonic from 1996-2016 including vice president and general manager of the mobility business. Mr. Ruderman has served on several public sector boards including TechAmerica (now CompTia) and currently sits on the Communications and Technology Committee for the IACP. Mr. Ruderman served with the US Navy for six years. Mr. Ruderman received a B.S. from Towson University, an MBA from Mount St. Mary's University, and an Advance Management Degree from PA University of Wharton School.

Elad Domanovitz, Chief Technology Officer

Dr. Domanovitz serves as our Chief Technologies Officer since April 2017, prior to that he served as director of technologies from 2014. Dr. Domanovitz brings extensive experience envisioning and developing Actelis' research capabilities. As Actelis' Chief Scientist, Dr. Domanovitz is responsible for driving Actelis' technology development and aligning it with the company's overall vision and worldwide go-to-market strategies. Dr. Domanovitz is also responsible for enriching the Actelis IT portfolio and he also actively participates in standards committees. Dr. Domanovitz joined Actelis in November 2005 and has since held several positions in the Algorithms and CTO groups. Dr. Domanovitz holds a Ph.D., MSc. and a BSc (cum laude) in Electrical Engineering from Tel Aviv University.

Eyal Aharon, VP R&D

Mr. Aharon serves as our Vice President of R&D since January 2018. Previously, Mr. Aharon served as our director of software engineering from 2011 through December 2017. Mr. Aharon brings extensive experience in Research and Development to Actelis, having over 20 years in the telecommunication industry. As Actelis' VP of R&D, Mr. Aharon is responsible for all current and strategic activities of the R&D group. Mr. Aharon joined Actelis in 2000 and has since held several positions within the R&D group. Prior to joining Actelis, he held several positions in ADC Teledata. Mr. Aharon holds a BA in Computer Science and Economics from Tel Aviv University, and a Master's in Economics from Tel-Aviv University.

Michal Winkler-Solomon, VP Marketing

Ms. Winkler-Solomon serves as our Vice President of Marketing since March 2017 and prior as AVP of Product Marketing from March 2016. Ms. Winkler-Solomon has more than 20 years of Product Marketing and Product Management experience. Since joining Actelis in 2001, Ms. Winkler-Solomon has held Product Management, and Product Marketing positions, where she has been responsible for product specifications, positioning, and marketing of the company's industry-leading Ethernet in the First Mile product line.

Prior to Actelis, Ms. Winkler-Solomon held positions as Chief Technology Officer of BeConnected. Prior, Ms. Winkler-Solomon held positions as Product Manager of the Access Division at Telrad Telecommunications where she led Nortel Networks product development. Prior, Ms. Winkler-Solomon spent five years developing communication systems for the Israeli army. Ms. Michal Winkler-Solomon holds a B.Sc in Electrical Engineering from the Technion and an MBA from Tel Aviv University.

Yaron Altit, Executive Vice President, International Sales

Mr. Altit serves as our Vice President of International Sales since June 2017. Prior to joining us, Mr. Altit was self-employed from 2013 to 2017. Mr. Altit brings more than 25 years of experience to his position as Actelis' Executive Vice President International Sales business unit, including vast experience in sales management positions in the Telecom, Datacom, and control plane industries. In his role, Mr. Altit is responsible for all EMEA & APAC regions customer-facing functions, including sales, customer support, pre-sale engineering, business development and regional marketing. Mr. Altit held executive positions in several telecommunication companies, including management of Sales, Customer Support and Business Development at Schema, where he was the General Manager of EMEA Business unit. Previously, Mr. Altit held top sales management positions at Mindspeed Technologies. Mr. Altit was responsible for European and International sales at T-Soft (now Cramer Systems, an Amdocs OSS division). Mr. Altit studied towards a B.A. in Economics and Accounting at the Ramat Gan College.

Hemi Kabir, Vice President, Operations

Mr. Kabir serves as our Vice President of Operations since January 2015. With more than 20 years of experience in operations, supply chain and engineering, Mr. Kabir manages Actelis' Supply Chain, Purchasing, Quality Assurance and Operations Engineering departments, and is responsible for Actelis' operations including manufacturability, continuous improvement initiatives and cost-savings activities. Prior to joining Actelis, Mr. Kabir was head of Supply Chain management and purchasing at "Better place" Israel, where he was in charge of defining and managing the supply chain divisions. Mr. Kabir holds MBA degree from Heriot Watt University, BA degree in management from the Open University and Industrial practical engineering diploma from Israeli College of Management.

Bruce Hambergren, Executive Vice President, Sales, Americas

Mr. Hambergren serves as our Executive Vice President since January 2015. Mr. Hambergren is a 30-year veteran in the Telecom Industry and brings with him experience in RF, wireless, wireline and video businesses. Mr. Hambergren's sales and marketing management experience includes direct sales, indirect sales and OEM/channel partners with Accedian, Motorola, Ericsson, PairGain, Westwave, Actelis and IneoQuest. Mr. Hambergren's responsibilities have included VP positions for the Americas including Field Sales, Field Engineering as well as P&L responsibility. Mr. Hambergren graduated from University of Illinois at Champaign — Urbana with a BS in Commerce/Marketing.

Dr. Ram Vromen, Director

Dr. Vromen serves as a board member in our company since 2015. Dr. Vromen has served as the Managing Partner of Evolution Venture Capital Fund since September 2006. Previously Dr. Vromen was a partner at Millennium Materials Technologies Fund, a venture capital fund focused on material sciences, and prior to that, a managing director of First IsraTech Fund, a venture capital fund focused primarily on medical devices. Before embarking on his VC career Dr. Vromen was a corporate lawyer focused on the hi-tech and venture capital practice. Dr. Vromen has been a board member in over 20 private and public hi-tech companies in the past 20 years. Dr. Vromen has a PhD in history from the Ecole Des Hautes Etudes en Sciences Sociales, Paris, France and an LLB in law from Tel Aviv University. Dr. Vromen has resigned from our board of directors effective upon the closing of this offering.

Dr. Israel Niv, Director

Dr. Niv serves as a board member in our company since 2015. Dr. Niv serves on the board of Palo Alto University, Dealsum, and Attolight AG, and is an advisor to the Silicom Ventures investment group. Dr. Niv served as former Chairman of Femtronix inc. and as GM of Opal Inc. (formerly traded on Nasdaq). Dr. Niv has also founded Optonics, and served as CEO of DGC. Dr. Niv received a BSc in chemistry and a PhD in chemical physics from Ben-Gurion University of the Negev (Israel). Dr. Niv completed his postdoctoral work at the University of Southern California as a Weizmann Postdoctoral Fellow.

Yariv Gilat, Director

Mr. Gilat serves as a board member in our company since 2015. Mr. Gilat is a serial angel investor, and currently serves as the founder of First, an Israeli holding and financial services group operating five companies in the fields of blockchain and cryptocurrency. Prior to this role, Mr. Gilat served in different board and director positions: in Kaymera Technologies, Hiperdia S.A, iPawn.com, Gas Motos, White Smoke, Playtika, Face.com and Oplus Technologies. Earlier in his career, Mr. Gilat served as the CEO of Final Israel and as the CEO of Kryptonite. Mr. Gilat earned his bachelor's degree in economics from the Hebrew University of Jerusalem. Mr. Gilat has resigned from our board of directors effective upon the closing of this offering.

Nominated Directors

Joseph Moscovitz, Director Nominee

Mr. Moscovitz will serve on our board of directors upon completion of this offering. Mr. Moscovitz has served as the Chief Strategy Officer at Telit Communications Plc from January 2019 through December 2021. Prior to that Mr. Moscovitz served as Chief Executive Officer of Telit Automotive Solutions from December 2016 through December 2018 and President of Products and Solutions at Telit Plc from January 2011 through November 2016.

[Table of Contents](#)

Mr. Moscovitz was previously employed as a Chief Executive Officer of Cell Data Ltd. and a Chief Executive Officer by Microkim Ltd. Mr. Moscovitz received his Bachelor of Science in Electrical Engineering from Technion-Israel Institute of Technology.

Dr. Naama Halevi-Davidov, Director Nominee

Dr. Halevi Davidov will serve on our board of directors upon completion of this offering. Dr. Halevi Davidov has served as a Financial Consultant to Joytunes Ltd., a developer of music learning software, since April 2021, as a director of Gamida-Cell Ltd., since January 2022 and as a director and Audit Committee member of Kaltura, Inc. since July 2021. Prior to that, Dr. Halevi Davidov served as Financial Advisor to Gloat Ltd., a talent marketplace platform, and to Healthy IO Ltd., a manufacturer and marketer of medical equipment. Dr. Halevi Davidov served as the Chief Financial Officer of Kaltura from November 2012 to August 2017. Dr. Halevi Davidov has also served on the board of Kaltura, Inc. subsidiary, Kaltura Asia Pte Ltd. since February 2015. Dr. Halevi Davidov is a Certified Public Accountant in Israel. Dr. Halevi Davidov received a Ph.D. in Strategy from Tel Aviv University in 2012, a Master's in Finance and Marketing from Tel Aviv University in 2002 and Bachelor of Arts in Accounting and Economics from Tel Aviv University in 2000. Dr. Halevi Davidov was selected to serve on our board of directors because of her extensive knowledge of and experience with corporate financial strategy.

Noemi Schmayr, Director Nominee

Ms. Schmayr will serve on our board of directors upon completion of this offering. Ms. Schmayr acted as a Senior Partner and Head of the High-tech and global corporations in one of the five largest law firms in Israel. Since then, Ms. Schmayr has been counseling companies and individuals regarding mergers & acquisitions, investments and strategy, and serves as a director of several board of directors including serving as the external director of Somoto Ltd (publicly traded on the Tel Aviv Stock Exchange under the name Nostromo Energy Ltd) and served as legal counsel for Smart Shooter Ltd. Ms. Schmayr is a renowned specialist in corporate law, corporate finance, cross-border transactions, and commercial law. Ms. Schmayr wields particular expertise in M&A, finance transactions, and complexed commercial contracts in High-tech and Biotech. Ms. Schmayr received an LLB in law from Tel Aviv University.

Number and Terms of Office of Officers and Directors

Upon consummation of this offering, our board of directors will have five members, three of whom will be deemed "independent" under SEC and Nasdaq rules.

Our officers are appointed by the board of directors and serve at the discretion of the board of directors, rather than for specific terms of office. Our board of directors is authorized to appoint persons to the offices set forth in our certificate of incorporation as it deems appropriate.

Each of the directors of the Company were elected pursuant to the provisions of the Stockholders Agreement and our Certificate of Incorporation in effect prior to this offering. Tuvia Barlev has a right under the Stockholders Agreement to designate one director. Dr. Niv, Dr. Vromen and Mr. Gilat were elected by the holders of the majority of the Series A Preferred Stock.

Mr. Gilat and Dr. Vromen have resigned from our board of directors effective upon the closing of this offering and effective upon the closing of the offering, Joseph Moscovitz, Naama Halevi-Davidov, and Noemi Schmayr have been elected by both the majority of our outstanding common stock and the holders of the majority of the Series A Preferred Stock and Series Preferred B Stock. From and after the completion of this offering, the Stockholders Agreement will be terminated and each of the directors will be appointed by the holders of the majority of our outstanding common stock pursuant to the provisions of our Certificate of Incorporation to be in effect after this offering with (i) directors in Class I, consisting of Noemi Schmayr, to stand for election at the Annual Meeting to be held in 2023; (ii) directors in Class II, consisting of Joseph Moscovitz and Naama Halevi-Davidov, to stand for election at the annual meeting of stockholders to be held in 2024; and (iii) directors in Class III, consisting of Israel Niv and Tuvia Barlev, to stand for election at the annual meeting of stockholders to be held in 2025.

Director Independence

Our Company is governed by our Board. Currently, each member of our Board, other than Tuvia Barlev, is an independent director; and all standing committees of our Board of Directors are composed entirely of independent directors, in each case under Nasdaq's independence definition applicable to boards of directors. For a director to be considered independent, our Board of Directors must determine that the director has no relationship which, in the opinion of our Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Members of the Audit Committee also must satisfy a separate SEC independence requirement, which provides that they may not accept directly or indirectly any consulting, advisory or other compensatory fee from us or any of our subsidiaries other than their directors' compensation. In addition, under SEC rules, an Audit Committee member who is an affiliate of the issuer (other than through service as a director) cannot be deemed to be independent. In determining the independence of members of the Compensation Committee, Nasdaq listing standards require our Board of Directors to consider certain factors, including, but not limited to: (1) the source of compensation of the director, including any consulting, advisory or other compensatory fee paid by us to the director, and (2) whether the director is affiliated with us, one of our subsidiaries or an affiliate of one of our subsidiaries. Under our Compensation Committee Charter, members of the Compensation Committee also must qualify as "outside directors" for purposes of Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, and as "non-employee directors" for purposes of Rule 16b-3 under the Exchange Act. The independent members of the Board of Directors are Israel Niv, Joseph Moscovitz, Naama Halevi-Davidov, and Noemi Sch Mayer.

Committees of the Board of Directors

Our board intends to establish an audit committee, a compensation committee and a nominating and corporate governance committee, each with its own charter to be approved by the board. The anticipated composition and responsibilities of each committee are described below. Members will serve on these committees until their resignation or until otherwise determined by our board of directors. Upon our listing on The Nasdaq Capital Market, each committee's charter will be available under the Corporate Governance section of our website at www.actelis.com. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

Until such committees are established, our entire board of directors will undertake the functions that would otherwise be undertaken by the committees. In addition, our board of directors may, from time to time, designate one or more additional committees, which shall have the duties and powers granted to it by our board of directors.

Audit Committee

Upon completion of this offering, we will establish an audit committee of our board of directors. Our audit committee will consist of Joseph Moscovitz, Naama Halevi-Davidov, and Noemi Sch Mayer, with Naama Halevi-Davidov serving as Chairperson. The composition of our audit committee meets the requirements for independence under current Nasdaq listing standards and SEC rules and regulations. Each member of our audit committee meets the financial literacy requirements of Nasdaq listing standards. In addition, our board of directors has determined that Naama-Halevi Davidov is an audit committee financial expert within the meaning of Item 407(d) of Regulation S-K under the Securities Act of 1933. The audit committee will operate under a written charter that satisfies the applicable standards of the SEC and Nasdaq. The audit committee will, among other things:

- review our consolidated financial statements and our critical accounting policies and practices;
- select a qualified firm to serve as the independent registered public accounting firm to audit our consolidated financial statements;
- help to ensure the independence and performance of the independent registered public accounting firm;
- discuss the scope and results of the audit with the independent registered public accounting firm and review, with management and the independent registered public accounting firm, our interim and year-end results of operations;

[Table of Contents](#)

- pre-approve all audit and all permissible non-audit services to be performed by the independent registered public accounting firm;
- oversee the performance of our internal audit function when established;
- review the adequacy of our internal controls;
- develop procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- review our policies on risk assessment and risk management; and
- review related party transactions.

Compensation Committee

Upon completion of this offering, we will establish a compensation committee of our board of directors. Our compensation committee will consist of Naama Halevi-Davidov, Israel Niv, and Joseph Moscovitz, with Israel Niv serving as Chairperson. The composition of our compensation committee meets the requirements for independence under Nasdaq listing standards and SEC rules and regulations. Each member of the compensation committee is also a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to compensation of our executive officers. The compensation committee will operate under a written charter that satisfies the applicable standards of the SEC and Nasdaq. The compensation committee will, among other things:

- review, approve and determine, or make recommendations to our board of directors regarding, the compensation of our executive officers;
- administer our stock and equity incentive plans;
- help to ensure the independence and performance of the independent registered public accounting firm;
- review and approve, or make recommendations to our board of directors regarding, incentive compensation and equity plans; and
- establish and review general policies relating to compensation and benefits of our employees.

Nominating and Corporate Governance Committee

Upon completion of this offering, we will establish a nominating and corporate governance committee of our board of directors. Our nominating and corporate governance committee will consist of Noemi Schmayer, Joseph Moscovitz, and Israel Niv, with Joseph Moscovitz serving as Chairperson. The composition of our nominating and corporate governance committee meets the requirements for independence under Nasdaq listing standards and SEC rules and regulations. The nominating and corporate governance committee will operate under a written charter that satisfies the applicable standards of the SEC and Nasdaq. The nominating and corporate governance committee will, among other things:

- identify, evaluate and select, or make recommendations to our board of directors regarding, nominees for election to our board of directors and its committees;
- evaluate the performance of our board of directors and of individual directors;
- consider and make recommendations to our board of directors regarding the composition of our board of directors and its committees;
- review developments in corporate governance practices;
- oversee environmental, social and governance (ESG) matters;
- evaluate the adequacy of our corporate governance practices and reporting; and
- develop and make recommendations to our board of directors regarding corporate governance guidelines and matters.

Compensation Committee Interlocks and Insider Participation

None of our executive officers currently serves, and in the past year has not served, as a member of the compensation committee of any entity that has one or more executive officers serving on our board of directors.

Oversight of Risk Management

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including economic risks, financial risks, legal and regulatory risks and others, such as the impact of competition. Management is responsible for the day-to-day management of the risks that we face, while our Board, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our Board of Directors is responsible for satisfying itself that the risk management processes designed and implemented by management are adequate and functioning as designed. Our Board of Directors assesses major risks facing our Company and options for their mitigation in order to promote our stockholders' interests in the long-term health of our Company and our overall success and financial strength. A fundamental part of risk management is not only understanding the risks a company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for us. The involvement of our full Board of Directors in the risk oversight process allows our Board of Directors to assess management's appetite for risk and also determine what constitutes an appropriate level of risk for our Company. Our Board of Directors regularly includes agenda items at its meetings relating to its risk oversight role and meets with various members of management on a range of topics, including corporate governance and regulatory obligations, operations and significant transactions, risk management, insurance, pending and threatened litigation and significant commercial disputes.

While our Board of Directors is ultimately responsible for risk oversight, various committees of our Board of Directors oversee risk management in their respective areas and regularly report on their activities to our entire Board of Directors. In particular, the Audit Committee has the primary responsibility for the oversight of financial risks facing our Company. The Audit Committee's charter provides that it will discuss our major financial risk exposures and the steps we have taken to monitor and control such exposures. Our Board of Directors has also delegated primary responsibility for the oversight of all executive compensation and our employee benefit programs to the Compensation Committee. The Compensation Committee strives to create incentives that encourage a level of risk-taking behavior consistent with our business strategy.

We believe the division of risk management responsibilities described above is an effective approach for addressing the risks facing our Company and that our Board's leadership structure provides appropriate checks and balances against undue risk taking.

Code of Business Conduct and Ethics

Our Board of Directors has adopted a code of ethical conduct that applies to our principal executive officer, principal financial officer and senior financial management. This code of ethical conduct is embodied within our Code of Business Conduct and Ethics, which applies to all persons associated with our Company, including our directors, officers and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller). In order to satisfy our disclosure requirements under Item 5.05 of Form 8-K, we will disclose amendments to, or waivers of, certain provisions of our Code of Business Conduct and Ethics relating to our chief executive officer, chief financial officer, chief accounting officer, controller or persons performing similar functions on our website promptly following the adoption of any such amendment or waiver. The Code of Business Conduct and Ethics provides that any waivers of, or changes to, the code that apply to the Company's executive officers or directors may be made only by the Audit Committee. In addition, the Code of Business Conduct and Ethics includes updated procedures for non-executive officer employees to seek waivers of the code.

Executive Compensation¹

Summary Compensation Table

The following table shows the total compensation awarded to, earned by, or paid to (1) the individual who served as our principal executive officer during fiscal year 2021; and (2) our next two most highly compensated executive officers who earned more than \$100,000 during fiscal year 2021 and were serving as executive officers as of December 31, 2021. We refer to these individuals in this prospectus as our named executive officers.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Nonequity incentive plan compensation (\$)	Nonqualified deferred compensation earnings (\$)	All other compensation (\$)	Total (\$)
Tuvia Barlev, Chief Executive Officer and Chairman	2021	\$ 181,188	\$					25,000	\$ 206,188
	2020	\$ 180,000						25,000	\$ 205,000
Yoav Efron, Chief Financial Officer	2021	\$ 135,128	\$		29,600			7,029	\$ 171,757
	2020	\$ 130,741						1,817	\$ 132,558
Bruce Hammergren, Executive Vice President, Sales, Americas	2021	\$ 130,000	\$			28,824		4,686	\$ 165,910
	2020	\$ 132,400				39,025		5,094	\$ 176,519

Outstanding Equity Awards at Fiscal Year-End

The following table provides certain information concerning any common share purchase options, stock awards or equity incentive plan awards held by the executive officers named above at the fiscal year ended December 31, 2021.

Name	Option Awards					Stock Awards				
	Number of Securities Underlying Unexercised Options (*) Exercisable	Number of Securities Underlying Unexercised Options (*) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (*)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (*)	Market Value of Shares or Units of Stock That Have Not Vested	Number of Shares, Units or Rights That Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested	
Tuvia Barlev, Chief Executive Officer and Chairman	—	—	—	\$		—	—	—	—	
				\$						
Yoav Efron, Chief Financial Officer	106,991	—	—	\$ 0.1058		—	—	—	—	
		21,740	21,740	\$ 1.3616						
Bruce Hammergren, Executive Vice President, Sales, Americas	41,600	3,510	—	0.1058		—	—	—	—	

Benefit Plans

We maintain a defined contribution employee retirement plan, or 401(k) plan, for our full-time employees. Our named executive officers are eligible to participate in the 401(k) plan on the same basis as our other full-time employees, if they are considered an employee and not a consultant. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Internal Revenue Code. The 401(k) plan provides that each participant may make pre-tax deferrals from his or her compensation up to the statutory limit, which is \$20,500 for calendar year 2022, and other

[Table of Contents](#)

testing limits. Participants that are 50 years or older can also make “catch-up” contributions, which in calendar year 2020 may be up to an additional \$6,500 above the statutory limit. Participant contributions are held and invested, pursuant to the participant’s instructions, by the plan’s trustee.

We have no pension, or profit-sharing programs for the benefit of directors, officers or other employees, but our officers and directors may recommend adoption of one or more such programs in the future. We do not sponsor any qualified or non-qualified pension benefit plans, nor do we maintain any non-qualified defined contribution or deferred compensation plans.

Employment Agreements

We have entered into written employment agreements with our executive officers. All of these agreements contain customary provisions regarding noncompetition, confidentiality of information and assignment of inventions. However, the enforceability of the noncompetition provisions may be limited under applicable law.

Chief Executive Officer

Employment Agreement with Mr. Tuvia Barlev

On February 15, 2015, we entered into an atwill employment agreement with Mr. Tuvia Barlev, which remains in effect as of the date of this prospectus.

Mr. Barlev receives a base salary of \$200,000 per year, and he may receive an annual bonus based on mutually agreed performance targets.

Mr. Barlev’s employment agreement provides that that he will be entitled to severance if we terminate his employment without “Cause” (as defined in the employment agreement), if he terminates his employment for “Good Reason” (as defined in the employment agreement), or following his death or permanent disability. In any event in which Mr. Barlev is entitled to severance pursuant to these provisions, we shall continue to pay Mr. Barlev his then-in-effect base salary and provide benefit continuation at our expense for a period of six months from the date of termination of employment. Any severance payable to Mr. Barlev shall be payable in equal instalments in the same manner and in our regular payroll cycle as other salaried executive employees are paid.

In May 2022, the Company approved an increase to Mr. Barlev’s salary to be effective upon completion of this offering to \$300,000 with performance bonuses of an additional \$260,000. In addition, Mr. Barlev will be entitled to a one-time \$125,000 cash bonus upon completion of this offering and will annually receive \$500,000 of RSUs under the Company’s 2015 Plan.

Consultant Agreement with Barlev Enterprises Inc.

In February 2015, we entered into a consulting agreement with Barlev Enterprises Inc., a company owned by Mr. Tuvia Barlev, our Chief Executive Officer, and his wife, Nurit Barlev, or the Barlev Consulting Agreement. Pursuant to the Barlev Consulting Agreement, Barlev Enterprises Inc. provides services to us as an independent contractor, and receives a monthly retainer of \$2,083 for these services. The Barlev Consulting Agreement contains provisions regarding noncompetition, non-solicitation, confidentiality of information and assignment of inventions. The enforceability of the noncompetition covenants is subject to certain limitations. The Barlev Consulting Agreement will continue to be in full force and effect unless otherwise terminated in accordance with its terms. The Barlev Consulting Agreement may be terminated by either party, with or without cause, at any time upon six (6) months advance written notice to the other party.

Promissory Note with Tuvia Barlev

On February 20, 2015, we made a loan to our Chief Executive Officer, Mr. Tuvia Barlev, in the principal amount of \$106,290, which loan was evidenced by a secured, non-negotiable promissory note, or the Barlev Note. In April 2022, we entered into a Securities Purchase and Loan Repayment Agreement with Mr. Barlev, pursuant to which Mr. Barlev sold to the Company 27,699 shares for a purchase price equal to \$4.55 per share for an aggregate purchase consideration of \$126,023, or the Purchase Consideration. In lieu of paying Mr. Barlev the Purchase Consideration for the shares in cash, the Purchase Consideration was used to repay in full the outstanding loan amount and accrued interest owed to the Company by Mr. Barlev, and the Barlev Note was terminated.

Chief Financial Officer

Employment Agreements with Mr. Yoav Efron

In December 2017, Actelis Israel, our wholly-owned subsidiary, entered into an at will employment agreement with our Chief Financial Officer, Mr. Yoav Efron, and we entered into another, separate, at will employment agreement with our subsidiary. Both of these agreements remain in effect as of the date of this prospectus. Pursuant to the agreements, Mr. Efron is eligible to receive an annual base salary from both entities totaling approximately \$158,000.

Mr. Efron employment agreements provide that that he will be entitled to severance if we terminate his employment without "Cause" (as defined in the employment agreements), if he terminates his employment for "Good Reason" (as defined in the employment agreements), we shall continue to pay Mr. Efron his then-in-effect base salary and provide benefit continuation at our expense for a period of six months from the date of termination of employment following an acquisition of us. Any severance payable to Mr. Efron shall be payable in equal instalments in the same manner and in our regular payroll cycle as other salaried executive employees are paid.

In May 2022, the Company approved an increase to Mr. Efron's salary to be effective upon completion of this offering to \$187,000 with performance bonuses of an additional \$50,000. In addition, Mr. Efron will be entitled to a one-time \$85,000 bonus upon completion of this offering and will annually receive \$100,000 of RSUs under the Company's 2015 Plan.

Executive Vice President, Sales, Americas

Offer Letter with Mr. Bruce Hammergren

In January 2015, we entered into a confirmatory offer letter for at will employment with our Executive Vice President, Sales, Americas, Mr. Bruce Hammergren. At that time, we agreed to annual salary of \$40,000 which has subsequently been increased to an annual salary of \$104,000. In addition, Mr. Hammergren is entitled to receive additional commissions-based compensation based on yearly sales targets.

Director Compensation

None of our current non-employee directors has received any compensation for services as a member of our Board of Directors during the past two fiscal years. Our directors are and will continue to be reimbursed by us for any out-of-pocket expenses incurred in connection with activities conducted on our behalf. The compensation of Mr. Barlev as a named executive officer is set forth in the section above; he does not receive any additional compensation for his service as the Chairman of the Board.

In anticipation of this offering and the increased responsibilities of our directors as directors of a public company, our board of directors intends to adopt a formal non-employee director compensation policy, to become effective on the effective date of the registration statement of which this prospectus forms a part, pursuant to which each of our directors who is not an employee or consultant of our company will be eligible to receive an annual cash retainer of \$10,000 for his or her service on our board of directors and an annual cash retainer of \$2,000 for his or her service on a committee of our board of directors, with the chairperson of each committee receiving an additional \$3,000 annually. In addition, such non-employee directors shall be granted RSUs equal to \$100,000 divided by the price per share of common stock in this offering vesting over 36 months.

Director and Officer Liability Insurance

We intend to purchase director and officer liability insurance that provides financial protection for our directors and officers in the event that they are sued in connection with the performance of their services and also provides employment practices liability coverage, which insures for harassment and discrimination suits.

2015 Equity Incentive Plan

The 2015 Equity Incentive Plan, or the 2015 Plan, was adopted by our board of directors, or the Board, on May 10, 2015. The 2015 Plan provides for the grant of equity-based incentive awards to our employees, directors, and consultants in order to incentivize them to increase their efforts on behalf of our Company and to promote the success of our Company's business.

[Table of Contents](#)

Authorized Shares. As of the date of this offering, there are 1,833,718 options to purchase shares of common stock reserved and available for grant under the Plan. Common stock subject to options granted under the 2015 Plan that expire or become unexercisable without having been exercised in full will become available again for future grant or sale under the Plan.

Administration. The Board, or a duly authorized committee of the Board, administers the 2015 Plan, or the Administrator. Under the Plan, the Administrator has the authority, subject to applicable law, to interpret the terms of the 2015 Plan and any award agreements or awards granted thereunder, designate recipients of awards, determine and amend the terms of awards, including the exercise price of an option award, the fair market value of a share, the time and vesting schedule applicable to an award or the method of payment for an award, accelerate or amend the vesting schedule applicable to an award, prescribe the forms of agreement for use under the 2015 Plan and take all other actions and make all other determinations necessary for the administration of the Plan.

The administrator also has the authority to approve the conversion, substitution, cancellation or suspension under and in accordance with the 2015 Plan of any or all awards, and the authority to modify outstanding awards unless otherwise provided by the terms of the Plan.

The administrator may adopt special appendices and/or guidelines and provisions for persons who are residing in or employed in, or subject to, the taxes of, any domestic or foreign jurisdictions, to comply with applicable laws, regulations, or accounting, listing or other rules with respect to such domestic or foreign jurisdictions.

Eligibility. The 2015 Plan provides for granting awards under various tax regimes, including, without limitation, in compliance with Section 102 of the Ordinance and Section 3(i) of the Ordinance and for awards granted to our United States employees or service providers, including those who are deemed to be residents of the United States for tax purposes, Section 422 of the Code and Section 409A of the Code.

Grants. All awards granted pursuant to the 2015 Plan will be evidenced by an award agreement. Award agreements need not be in the same form and may differ in the terms and conditions included therein. The award agreement will set forth the terms and conditions of the award, including the type of award, number of shares subject to such award, vesting schedule and conditions, the exercise price, if applicable, the date of expiration of the award, any special terms applying to such award (if any), including the terms of any country-specific or other applicable appendix, as determined by our board of directors.

Awards. The 2015 Plan provides for the grant of stock options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Restricted Stock Units.

With respect to options granted under the Plan, unless otherwise determined by the administrator, and subject to the conditions of the Plan, options vest and become exercisable, if applicable, under the following schedule: 25% of the shares covered by the option on the first anniversary of the vesting commencement date determined by the administrator (and in the absence of such determination, the date on which such option was granted) and 6.25% of the shares covered by the option at the end of each subsequent three-month period thereafter over the course of the following three years; provided that the grantee remains continuously as an employee or provides services to our company and our affiliates throughout such vesting dates.

Each option will expire ten years from the date of the grant thereof, unless such shorter term of expiration is otherwise designated by the administrator or required by applicable law.

Options under the 2015 Plan may be exercised by providing our company with a notice of exercise and full payment of the exercise price for such shares underlying the option, if applicable, in such form and method as may be determined by the administrator and permitted by applicable law. An option may not be exercised for a fraction of a share. If the Company's shares are listed for trading on any securities exchange, and if the administrator so determines, all or part of the exercise price and any withholding taxes may be paid by the delivery of an irrevocable direction to a securities broker approved by our company to sell shares and to deliver all or part of the sales proceeds to our company or the trustee, or, the delivery of an irrevocable direction to pledge shares to a securities broker or lender approved by our company, as security for a loan, and to deliver all or part of the loan proceeds to our company, or such other method of payment acceptable to our company as determined by the administrator.

[Table of Contents](#)

Transferability. Other than by will, the laws of descent and distribution or as otherwise provided under the Plan, the awards and shares granted under the 2015 Plan are not assignable or transferable, unless determined otherwise by the Administrator in which case such Award may only be transferred as permitted by Rule 701 of the Securities Act of 1933.

Termination of Relationship. In the event of termination of a grantee's employment or service with our company, all vested and exercisable options held by such grantee as of the date of termination may be exercised within ninety days after such date of termination, unless otherwise determined by the administrator, but in no event later than the date of expiration of the option as set forth in the award agreement. After such ninety-day period, all such unexercised options will terminate, and the shares covered by such options shall again be available for issuance under the Plan.

In the event of termination of a grantee's employment or service with our company or any of our affiliates due to such grantee's death or permanent disability, all vested and exercisable options held by such grantee as of the date of termination may be exercised by the grantee or the grantee's legal guardian, estate or by a person who acquired the right to exercise the options by bequest or inheritance, as applicable, within 12 months after such date of termination, unless otherwise provided by the administrator, but in no event later than the date of expiration of the option as set forth in the award agreement. Any options which are unvested as of the date of such termination or which are vested but not then exercised within the 12-month period following such date, will terminate and the shares covered by such options shall again be available for issuance under the Plan.

All restricted shares still subject to restriction under the applicable restriction period as set by the administrator in the applicable award agreement, lapsed will revert to the Company and again will become available for grant under the Plan.

Rights as a stockholder. Subject to terms of the Plan, a grantee shall have no rights as a stockholder of our company with respect to any shares covered by an award until the grantee shall have exercised the award and paid the exercise price therefor, if applicable, and becomes the record holder of the subject shares.

Transactions. Shares subject to an award, as well as the price per share covered by each outstanding award, shall be proportionately adjusted for any increase or decrease in the number of issued shares resulting from a share split, reverse share split, combination or reclassification of the shares, or any other increase or decrease in the number of issued shares effected without receipt of consideration by our company, provided, however, that the Administrator will make such adjustments to an Award required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

In the event of a merger or Change in Control, each outstanding Award will be treated as the Administrator determines without a Participant's consent, including, without limitation, that either (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control (subject to the provisions of the paragraph above); (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing or other alternative not listed hereinabove. In taking any of the actions permitted under this subsection, the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly. In the event of liquidation or winding up of our company, the administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2019 to which we have been a party, in which the amount involved in the transaction exceeded or will exceed \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive and Director Compensation.” We also describe below certain other transactions with our directors, executive officers and stockholders.

Services Agreement with Ram Vromen

On December 27, 2021, we entered into a service agreement with Dr. Ram Vromen, our director, or the Vromen Services Agreement. Under the terms of the Vromen Services Agreement, Dr. Vromen provides services to us as an independent contractor. The services include advising us and aiding in fundraising, assisting with presentations and providing follow up, negotiating deals, legal assistance. We agreed to pay the outstanding amount for unpaid services rendered by Dr. Vromen during the period between February 15, 2015, and ending on December 31, 2019, of \$197,500 plus VAT, or the Outstanding Fees. Pursuant to the Vromen Services Agreement, Dr. Vromen will also be entitled to additional fees in the amount of \$150,000 plus VAT as follows: Dr. Vromen will receive (1) \$100,000 upon the earlier to occur of (i) the closing of a financing round by us of at least \$2.0 million and (ii) achievement of at least \$3.0 million in EBITDA as reported by us, which VAT was paid to Dr. Vromen in January 2022 following the closing of our private placement, and (2) \$50,000 upon the earlier to occur of (i) the closing of a financing round by us of at least \$4.0 million and (ii) achievement of at least \$3.0 million in EBITDA as reported by us. In the event that we reach one of the milestones set forth above and Dr. Vromen is entitled to receive such additional fees, then we will pay to Dr. Vromen all of the Outstanding Fees, together with the payment of such additional fees, provided that we may pay any and all of the Outstanding Fees in several instalments over a period not to exceed twenty-four (24) months from achievement of the applicable milestone.

Related Party Transaction Policy

We intend to adopt a formal, written policy, which will become effective upon completion of this offering, that our executive officers, directors (including director nominees), holders of more than 5% of any class of our voting securities and any member of the immediate family of or any entities affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior approval or, in the case of pending or ongoing related party transactions, ratification of our audit committee. For purposes of our policy, a related party transaction is a transaction, arrangement or relationship where we were, are or will be involved and in which a related party had, has or will have a direct or indirect material interest.

Certain transactions with related parties, however, are excluded from the definition of a related party transaction including, but not limited to:

- transactions involving the purchase or sale of products or services in the ordinary course of business, not exceeding \$20,000;
- transactions where a related party’s interest derives solely from his or her service as a director of another entity that is a party to the transaction;
- transactions where a related party’s interest derives solely from his or her ownership of less than 10% of the equity interest in another entity that is a party to the transaction; and
- transactions where a related party’s interest derives solely from his or her ownership of a class of our equity securities and all holders of that class received the same benefit on a pro rata basis.

[Table of Contents](#)

No member of the Audit Committee may participate in any review, consideration or approval of any related party transaction where such member or any of his or her immediate family members is the related party. In approving or rejecting the proposed agreement, our Audit Committee shall consider the relevant facts and circumstances available and deemed relevant by the Audit Committee, including, but not limited to:

- the benefits and perceived benefits to us;
- the materiality and character of the related party's direct and indirect interest;
- the availability of other sources for comparable products or services;
- the terms of the transaction; and
- the terms available to unrelated third parties under the same or similar circumstances.

In reviewing proposed related party transactions, the Audit Committee will only approve or ratify related party transactions that are in, or not inconsistent with, the best interests of us and our stockholders.

The transactions described below were consummated prior to our adoption of the formal, written policy described above, and therefore the foregoing policies and procedures were not followed with respect to the transactions. However, we believe that the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions.

Policy for Approval of Related Party Transactions

Prior to the consummation of this offering, we will adopt our Code of Ethics requiring us to avoid, wherever possible, all conflicts of interests, except under guidelines or resolutions approved by our board of directors (or the appropriate committee of our board of directors) or as disclosed in our public filings with the SEC. Under our Code of Ethics, conflict of interest situations will include any financial transaction, arrangement or relationship (including any indebtedness or guarantee of indebtedness) involving Actelis. A form of the Code of Ethics that we plan to adopt prior to the consummation of this offering is filed as an exhibit to the registration statement of which this prospectus forms a part.

In addition, the Audit Committee of our board of directors will adopt a charter, providing for the review, approval and/or ratification of "related party transactions," which are those transactions required to be disclosed pursuant to Item 404 of Regulation S-K as promulgated by the SEC, by the Audit Committee. At its meetings, the Audit Committee shall be provided with the details of each new, existing, or proposed related party transaction, including the terms of the transaction, any contractual restrictions that the company has already committed to, the business purpose of the transaction, and the benefits of the transaction to the company and to the relevant related party. Any member of the committee who has an interest in the related party transaction under review by the committee shall abstain from voting on the approval of the related party transaction, but may, if so requested by the chairman of the committee, participate in some or all of the committee's discussions of the related party transaction. Upon completion of its review of the related party transaction, the committee may determine to permit or to prohibit the related party transaction. Our Audit Committee will review on a quarterly basis all payments that were made by us to our sponsor, officers, or directors, or our or any of their affiliates.

These procedures are intended to determine whether any such related party transaction impairs the independence of a director or presents a conflict of interest on the part of a director, employee or officer.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock as of the date of this prospectus, and as adjusted to reflect the sale of shares of our common stock offered by this prospectus, by:

- each person known by us to be the beneficial owner of more than 5% of our outstanding common stock;
- each of our executive officers, directors and director nominees that beneficially owns common stock; and
- all our executive officers, directors and director nominees as a group.

The beneficial ownership of our common stock is determined in accordance with the rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power, or the right to receive the economic benefit of ownership. For purposes of the table below, we deem common stock issuable pursuant to options that are currently exercisable or exercisable within 60 days from the date of this prospectus to be outstanding and to be beneficially owned by the person holding the options for the purposes of computing the percentage ownership of that person, but we do not treat them as outstanding for the purpose of computing the percentage ownership of any other person. Percentage of shares beneficially owned before this offering is based on common stock issued and outstanding as of the date of this prospectus. The number of common stock deemed issued and outstanding after this offering is based on common stock which includes the common stock offered hereby but assumes no exercise of the Underwriter's over-allotment option.

Unless otherwise indicated, we believe that all persons named in the table have sole voting and investment power with respect to all of our common stock beneficially owned by them.

Name of Beneficial Owner	Shares beneficially owned	Percentage of Shares beneficially owned	
		Before Offering	After Offering
Tuvia Barlev ⁽¹⁾⁽²⁾	1,581,380	16.17%	10.15%
Yoav Efron ⁽²⁾⁽³⁾	112,426	1.14%	*
Eyal Aharon ⁽⁵⁾	35,417	*	*
Michal Winkler-Solomon ⁽⁶⁾	37,293	*	*
Bruce Hammergren ⁽⁷⁾	42,846	*	*
Yaron Alti ⁽⁸⁾	106,991	1.08%	*
Hemi Kabir ⁽⁹⁾	44,789	*	*
Jan Ruderman	—	—	*
Elad Domanovitz ⁽¹⁰⁾	52,293	*	*
Ram Vromen	633,097	6.47%	4.06%
Yariv Gilat ⁽¹¹⁾	548,369	5.57%	3.5%
Israel Niv ⁽¹²⁾	538,350	5.47%	3.44%
Joseph Moscovitz	—	—	—
Dr. Naama Halevi-Davidov	—	—	—
Noemi Schmayer	—	—	—
All Directors, Director Nominees and Officers as a Group (15 persons)	3,733,251	27.63%	19.32%
Other Greater than 5% Beneficial Owners			
Isard Dunitz ⁽¹³⁾	1,229,612	12.57%	7.89%
Rami Lipman ⁽¹⁴⁾	607,888	6.22%	3.90%
Arik Steinberg ⁽¹⁵⁾	520,073	5.32%	3.34%

* Less than 1%.

(1) Unless otherwise noted, the business address of the following entities or individuals is 47800 Westinghouse Drive Fremont, CA 94539.

(2) Unless otherwise noted, the business address of the following entities or individuals is 25 Bazel St. P.O.B. 3236 Petach-Tikva 4951038 Israel.

(3) Consists of 1,581,380 shares of common stock held by Mr. Barlev.

Table of Contents

- (4) Consists of 112,426 shares of common stock issuable upon the exercise of options issued to Mr. Efron which options are exercisable within 60 days from the date of this prospectus.
- (5) Consists of 35,170 shares of common stock issuable upon the exercise of options issued to Mr. Aharon which options are exercisable within 60 days from the date of this prospectus.
- (6) Consists of 37,293 shares of common stock issuable upon the exercise of options issued to Ms. Winkler-Solomon which options are exercisable within 60 days from the date of this prospectus.
- (7) Consists of 42,846 shares of common stock issuable upon the exercise of options issued to Mr. Hammergren which options are exercisable within 60 days from the date of this prospectus.
- (8) Consists of 106,991 shares of common stock issuable upon the exercise of options issued to Mr. Altit which options are exercisable within 60 days from the date of this prospectus.
- (9) Consists of 44,789 shares of common stock issuable upon the exercise of options issued to Mr. Kabir which options are exercisable within 60 days from the date of this prospectus.
- (10) Consists of 52,293 shares of common stock issuable upon the exercise of options issued to Mr. Domanovitz which options are exercisable within 60 days from the date of this prospectus.
- (11) Consists of 478,261 shares of common stock held by Mr. Gilat and (ii) 70,108 shares of common stock issuable upon the exercise of options issued to Mr. Gilat which options are exercisable within 60 days from the date of this prospectus.
- (12) Consists of (i) 355,698 shares of common stock held by The Niv Family Trust, for which Dr. Niv and his spouse serve as trustees, (ii) 112,543 shares of common stock held by Saron Hava Niv 2015 Irrevocable Trust for which Dr. Niv and his spouse serve as trustees, and (iii) 70,109 shares of common stock issuable upon the exercise of options issued to Dr. Niv which options are exercisable within 60 days from the date of this prospectus.
- (13) Mr. Dunietz's address is 638 La Salle Place, Highland Park, IL 60035.
- (14) Mr. Lipman's address is 10 Beit Haam Street, Ramot Hashavim, Israel.
- (15) Mr. Steinberg's address is 19 Haetzel Street, Ramat Hasharon, Israel.

DESCRIPTION OF SECURITIES

The following description is intended as a summary of our Charter and our Bylaws, each of which will become effective prior to the effectiveness of the registration statement of which this prospectus forms a part, and which will be filed as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of the DGCL. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our Charter and Bylaws.

Authorized Capital Stock

Our Charter authorizes us to issue up to 42,803,774 shares consisting of 30,000,000 shares of common stock with a par value of US\$0.0001 per share, 2,803,774 shares of non-voting common stock with a par value of US\$0.0001 per share and 10,000,000 shares of preferred stock with a par value of US\$0.0001 per share. Upon the closing of this offering (i) we will have 15,601,721 shares of common stock outstanding, all of which will have the voting rights described below and no shares of non-voting common stock will be outstanding, and (ii) all of our shares of preferred stock will automatically convert to common stock, and our non-voting common stock will be redeemed for their par value. As of April 29, 2022, there were 8 holders of record of our common stock, 29 holders of record of our Preferred A Stock and 33 holders of record of our Preferred B Stock.

Common Stock

Upon the closing of this offering, shares of our common stock have the following rights, preferences and privileges:

Voting Rights

Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Any action at a meeting at which a quorum is present will be decided by a majority of the voting power present in person or represented by proxy, except in the case of any election of directors, which will be decided by a plurality of votes cast. There is no cumulative voting.

Dividends Rights

Holders of our common stock are entitled to receive dividends when, as and if declared by our board of directors out of funds legally available for payment, subject to the rights of holders, if any, of any class of stock having preference over the common stock. Any decision to pay dividends on our common stock will be at the discretion of our board of directors. Our board of directors may or may not determine to declare dividends in the future. See “Dividend Policy.” The board’s determination to issue dividends will depend upon our profitability and financial condition any contractual restrictions, restrictions imposed by applicable law and the SEC, and other factors that our board of directors deems relevant.

Liquidation Rights

In the event of a voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of our common stock will be entitled to share ratably on the basis of the number of shares held in any of the assets available for distribution after we have paid in full, or provided for payment of, all of our debts and after the holders of all outstanding series of any class of stock have preference over the common stock, if any, have received their liquidation preferences in full.

Other Rights and Preferences

Upon the closing of this offering, holders of our common stock will 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. Upon the closing of this offering, shares of our common stock are not convertible into shares of any other class of capital stock, nor are they subject to any redemption or sinking fund provisions.

Fully paid and nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred stock

We are authorized to issue up to 10,000,000 shares of preferred stock. Our Charter authorizes the board to issue these shares in one or more series, to determine the designations and the powers, preferences and relative, participating, optional or other special rights and the qualifications, limitations and restrictions thereof, including the dividend rights, conversion or exchange rights, voting rights (including the number of votes per share), redemption rights and terms, liquidation preferences, sinking fund provisions and the number of shares constituting the series. Our board of directors could, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of common stock and which could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, no shares of preferred stock will be outstanding.

Charter and Bylaw Provisions

Charter and Bylaw Provisions

Our Charter and our Bylaws to be effective upon the closing of this offering, 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 Charter to be effective upon the closing of this offering, provides that vacancies on the board of directors may be filled only by the affirmative vote of a majority of the directors then in office, irrespective of whether there is a quorum, or by a sole remaining director. Additionally, the number of directors to serve on our board of directors is fixed solely and exclusively by resolution duly adopted by our board of directors. This would 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.
- *Classified Board of Directors.* In accordance with our Charter, as it will be in effect following the effectiveness of the registration statement of which this prospectus forms a part, our board of directors will be divided into three classes with staggered three-year terms. At each annual general meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes. We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.
- *Special Meetings of Stockholders.* Our Bylaws to be effective upon the closing of this offering, provides that special meetings of our stockholders may be called by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, and special meetings of stockholders may not be called by any other person or persons.
- *No Cumulative Voting.* The DGCL provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless the corporation's certificate of incorporation provides otherwise. Our Charter does not provide for cumulative voting.
- *Amendment of Charter and Bylaw Provisions.* Any amendment of our Charter requires the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment, and the affirmative vote of the majority of the outstanding shares of each class entitled to vote thereon as a class, except that the provision in the Charter regarding the staggered board may not be repealed or amended without the vote of the holders of not less than 80% of the Company's voting stock, voting as a single class. Amendments to our Bylaws may be executed pursuant to a resolution by the Board of Directors pursuant to an affirmative vote of a majority of the directors then in office, or by the affirmative vote of at least 75% of the outstanding shares of capital stock entitled to vote.
- *Delaware Business Combination Statute.* The Company is subject to the "business combination" provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following

the date such person becomes an interested stockholder, unless the business combination or the transaction in which such person becomes an interested stockholder is approved in a prescribed manner. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an “interested stockholder” is a person that, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation’s voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our Board of Directors, and the anti-takeover effect includes discouraging attempts that might result in a premium over the market price for the shares of our common stock.

- *Exclusive Forum.* Unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers, stockholder or other employees to us or our stockholders, (iii) any action asserting a claim against the Corporation or any current or former director, officer, stockholder, employee or agent of the Corporation arising pursuant to any provision of the DGCL, our Charter or our Bylaws, (iv) any action to interpret, apply, enforce or determine the validity of the Company’s Charter or Bylaws, (v) any action asserting a claim against us governed by the internal affairs doctrine or (vi) any action asserting an “internal corporate claim” as that term is defined in Section 115 of the General Corporation Law. The federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint, claim or proceeding asserting a cause of action arising under the Exchange Act or the Securities Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provision in our Charter. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees.

Anti-Takeover Provisions

The provisions of the DGCL, our Charter and our 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.

Our Charter established a classified board of directors, divided in three classes with staggered three-year terms. Under the classified board of directors structure, only one class of directors would be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder for their respective three-year terms. Under the classified board of directors structure: (i) directors in Class I, consisting of Noemi Schmayer, are to stand for election at the Annual Meeting to be held in 2023; (ii) directors in Class II, consisting of Joseph Moscovitz and Naama Halevi-Davidov, are to stand for election at the annual meeting of stockholders to be held in 2024; and (iii) directors in Class III, consisting of Israel Niv and Tuvia Barlev, are to stand for election at the annual meeting of stockholders to be held in 2025.

Limitations on Liability, Indemnification of officers and directors and Insurance

Our Charter and Bylaws contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by the DGCL. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director’s duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

[Table of Contents](#)

- unlawful payments of dividends or unlawful stock repurchases, or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director derived an improper personal benefit.

Listing

We have applied to list our common stock on the Nasdaq Capital Market under the symbol “ASNS”.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be VStock Transfer, LLC. The transfer agent and registrar’s address is 18 Lafayette Place, Woodmere, NY 11598.

Exclusive Forum

Our Charter provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by, or other wrongdoing by, any current or former director, officer, stockholder, employee or agent of the Company to the Company or the Company’s stockholders, (c) any action asserting a claim against the Corporation or any current or former director, officer, stockholder, employee or agent of the Corporation arising pursuant to any provision of the DGCL or the Company’s Certificate of Incorporation or Bylaws, (d) any action to interpret, apply, enforce or determine the validity of the Company’s Certificate of Incorporation or Bylaws, or (e) any action asserting a claim governed by the internal affairs doctrine or (f) any action asserting an “internal corporate claim” as that term is defined in Section 115 of the General Corporation Law. The federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint, claim or proceeding asserting a cause of action arising under the Exchange Act or the Securities Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

Stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provision in our Charter.

The choice-of-forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with the Company or its directors, officers or other employees, and may result in increased costs to a stockholder who has to bring a claim in a forum that is not convenient to the stockholder, which may discourage such lawsuits. Although under Section 115 of the DGCL, exclusive forum provisions may be included in a company’s certificate of incorporation, the enforceability of similar forum provisions in other companies’ certificates or incorporation or bylaws has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. If a court were to find the exclusive forum provision of our Charter inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors.

Anti-Takeover Provisions of the DGCL and Charter Provisions

Certain provisions of the DGCL and certain provisions included in our Charter and Bylaws summarized below may be deemed to have an anti-takeover effect and may delay, deter, or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by stockholders.

Removal of Directors

Our Bylaws provide that stockholders may only remove a director with or without cause by a vote of no less than a majority of the shares present in person or by proxy at the meeting and entitled to vote, voting together as a single class.

Amendments to Certificate of Incorporation

Certain sections of our Certificate of Incorporation require the affirmative vote of the holders of a majority of the voting power of the then outstanding shares of capital stock of the Company entitled to vote, voting together as a single class, except that the provision in the Charter regarding the staggered board may not be repealed or amended without the vote of the holders of not less than 80% of the Company's voting stock, voting as a single class.

Staggered Board

The board of directors is divided into three classes, with regular three-year staggered terms. This classification system increases the difficulty of replacing a majority of the directors and may tend to discourage a third-party from making a tender offer or otherwise attempting to gain control of the Company. In addition, under Delaware law, the Certificate and the By-Laws, the Company's directors may be removed from office by the stockholders only for cause and only in the manner provided for in the Certificate. These factors may maintain the incumbency of the board of directors.

Amendments to Bylaws

Our Charter limits the abilities of the directors and stockholders to amend our Bylaws in certain circumstances. In particular, the Bylaws may be amended only by the vote of a majority of all of the directors then in office, or by the affirmative vote of the stockholders holding at least 75% of the outstanding shares of capital stock entitled to vote in accordance with the provisions of the Charter, Bylaws, and the DGCL.

No Cumulative Voting

Our Charter does not provide for cumulative voting.

Special Meetings of Stockholders

Our Bylaws provide that, except as otherwise required by law, special meetings of the stockholders may be called only by an officer at the request of a majority of our board of directors, by our Chief Executive Officer or President or by the holders of not less than 25% of the holders of stock entitled to vote at the meeting.

Stockholders Agreement

We are party to the Amended and Restated Stockholders Agreement, dated February 2, 2016, or the Stockholders Agreement, pursuant to which certain holders of our common stock have the right to demand that we file a registration statement or request that their common stock be covered by a registration statement that we are otherwise filing. All rights under the Stockholders Agreement will terminate upon the closing of this offering.

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there was no public market for shares of our common stock, and we cannot predict what effect, if any, market sales of our common stock or the availability of our common stock for sale will have on the market price of our common stock prevailing from time to time. Nevertheless, future sales of substantial amounts of our common stock in the public market, or the perception that such sales could occur, could materially and adversely affect the market price of our common stock and could impair our future ability to raise capital through the sale of our equity or equity-related securities at a time and price that we deem appropriate.

Upon the consummation of this offering, we will have an aggregate of approximately 15,601,721 shares of common stock issued and outstanding. In the event the Underwriter exercises the over-allotment option in full, we will have 16,051,721 shares of common stock issued and outstanding. Of the outstanding shares, the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except any shares purchased by our “affiliates,” as that term is defined in Rule 144 under the Securities Act, may be sold only in compliance with the limitations described below.

The remaining outstanding common stock will be deemed restricted securities, as defined under Rule 144. Restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which we summarize below. Approximately of these shares will be subject to lock-up agreements described below.

Taking into account the lock-up agreements described below, and assuming we do not release stockholders from these agreements, the following shares will be eligible for sale in the public market at the following times, subject to the provisions of Rule 144 and Rule 701:

Date Available for Sale	Shares Eligible for Sale	Description
Date of Prospectus		Shares sold in the offering that are not subject to a lock-up
90 Days after Date of Prospectus		Shares saleable under Rules 144 and 701 that are not subject to a lock-up
6 Months after Date of Prospectus		Lock-up released; shares saleable under Rules 144 and 701
12 Months after Date of Prospectus		Lock-up released; shares saleable under Rules 144 and 701

Lock-up Agreements

Pursuant to certain “lock-up” agreements, we, our executive officers and directors and our stockholders of five percent (5%) or more, have agreed not to, without the prior written consent of the Underwriter, offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, for a period of twelve (12) months, subject to certain exceptions. Substantially, all of our other stockholders have agreed to the same lock-up provisions described above for a period of six (6) months. See “Underwriting — Lock-Up Agreements” for additional information.

Rule 144

Affiliate Resales of Restricted Securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours, or who was an affiliate at any time during the 90 days before a sale, who has beneficially owned shares of our common stock for at least 180 days would be entitled to sell in “broker’s transactions” or certain “riskless principal transactions” or to market makers, a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding; and
- the average weekly trading volume in our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

[Table of Contents](#)

Affiliate resales under Rule 144 are also subject to the availability of current public information about us. In addition, if the number of shares being sold under Rule 144 by an affiliate during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of \$50,000, the seller must file a notice on Form 144 with the SEC and Nasdaq concurrently with either the placing of a sale order with the broker or the execution directly with a market maker.

Non-Affiliate Resales of Restricted Securities

Under Rule 144, a person who is not an affiliate of ours at the time of sale, and has not been an affiliate at any time during the 90 days preceding a sale, and who has beneficially owned shares of our common stock for at least six months but less than a year, is entitled to sell such shares subject only to the availability of current public information about us. If such person has held our shares for at least one year, such person can resell without regard to any Rule 144 restrictions, including the 90-day public company requirement and the current public information requirement.

Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchases shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of the registration statement of which this prospectus forms a part is entitled to sell such shares 90 days after such effective date in reliance on Rule 144. Our affiliates can resell shares in reliance on Rule 144 without having to comply with the holding period requirement, and non-affiliates of the issuer can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Exchange Act.

Form S-8 Registration Statement

Following the completion of this offering, we intend to file one or more registration statements on Form S8 under the Securities Act to register the common stock issued or reserved for issuance under our Plan. The registration statement on Form S-8 will become effective automatically upon filing. common stock issued upon exercise of an option and registered under the Form S-8 registration statement will, subject to vesting and lock-up provisions and Rule 144 volume limitations applicable to our affiliates, be available for sale in the open market immediately unless they are subject to a lock-up, in which case, immediately after the term of the lock-up expires.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL SHARE TRANSFER RESTRICTION MATTERS THAT MAY BE OF IMPORTANCE TO A PROSPECTIVE INVESTOR. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN LEGAL ADVISOR REGARDING THE PARTICULAR SECURITIES LAWS AND TRANSFER RESTRICTION CONSEQUENCES OF PURCHASING, HOLDING, AND DISPOSING OF THE COMMON STOCK INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or foreign tax laws are not addressed herein. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in effect as of the date of this offering. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a non-U.S. holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to non-U.S. holders that hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a non-U.S. holder’s particular circumstances, including the impact of the alternative minimum tax or the unearned income Medicare contribution tax. In addition, it does not address consequences relevant to holders subject to particular rules, including, without limitation:

- U.S. expatriates and certain former citizens or long-term residents of the United States;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities or currencies;
- persons that hold more than 5% of our common stock, directly or indirectly;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- corporations organized outside of the United States, any state thereof or the District of Columbia that are nonetheless treated as U.S. taxpayers for U.S. federal income tax purposes;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons for whom our common stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- qualified foreign pension funds as defined in Section 897(1)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons whose “functional currency” is not the U.S. dollar;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an applicable financial statement; and
- tax-qualified retirement plans.

[Table of Contents](#)

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner (or person or entity treated as a partner) in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS LEGAL OR TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a “non-U.S. holder” is any beneficial owner of our common stock that is neither a “U.S. person,” nor an entity or arrangement treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity created or organized under the laws of the United States, any state thereof, or the District of Columbia and treated as a corporation for U.S. federal income tax purposes;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and which has one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) who have the authority to control all substantial decisions of the trust, or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

An individual non-U.S. citizen may, in some cases, be deemed to be a resident alien (as opposed to a nonresident alien) by virtue of being present in the United States for at least 31 days in the calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. Generally, for this purpose, all the days present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year, are counted.

Resident aliens are generally subject to U.S. federal income tax as if they were U.S. citizens. Individuals who are uncertain of their status as resident or nonresident aliens for U.S. federal income tax purposes are urged to consult their tax advisors regarding the U.S. federal income tax consequences of the ownership or disposition of our common stock.

Distributions

As described in the section titled “Dividend Policy,” we do not anticipate declaring or paying distributions to holders of our common stock in the foreseeable future. However, if we do make distributions on our common stock, such distributions of cash or property on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will first constitute a return of capital and be applied against and reduce a non-U.S. holder’s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under “— Sale or Other Disposition of common stock.”

Subject to the discussion below on effectively connected income, backup withholding and foreign accounts, dividends paid to a non-U.S. holder of our common stock that are not effectively connected with the non-U.S. holder’s conduct of a trade or business within the United States will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty).

Non-U.S. holders may be entitled to a reduction in or an exemption from withholding on dividends as a result of either (a) an applicable income tax treaty or (b) the non-U.S. holder holding our common stock in connection with the conduct of a trade or business within the United States and dividends being effectively connected with that trade or business. To claim such a reduction in or exemption from withholding, the non-U.S. holder must provide the applicable withholding agent with a properly executed (a) IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) claiming an exemption from or reduction of the withholding tax under the benefit of an income tax treaty between the United States and the country in which the non-U.S. holder resides or is established, or (b) IRS Form W-8ECI stating that the dividends are not subject to withholding tax because they are effectively connected with the conduct by the non-U.S. holder of a trade or business within the United States, as may be applicable. These certifications must be provided to the applicable withholding agent prior to the payment of dividends and must be updated periodically. If a non-U.S. holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. Non-U.S. holders that do not timely provide the applicable withholding agent with the required certification, but that qualify for a reduced rate under an applicable income tax treaty, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Subject to the discussions below regarding backup withholding and the FATCA, if dividends paid to a non-U.S. holder are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such dividends are attributable), then, although exempt from U.S. federal withholding tax (provided the non-U.S. holder provides appropriate certification, as described above), the non-U.S. holder will be subject to U.S. federal income tax on such dividends on a net income basis at the regular U.S. federal income tax rates. In addition, a non-U.S. holder that is a corporation may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits for the taxable year that are attributable to such dividends, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Sale or Other Disposition of common stock

Subject to the discussions below on backup withholding and FATCA, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock (including a redemption, but only if the redemption would be treated as a sale or exchange rather than as a distribution for U.S. federal income tax purposes) unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the non-U.S. holder maintains a permanent establishment in the United States to which such gain is attributable);
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitute U.S. real property interests, or the USRPIs, by reason of our status as a U.S. real property holding corporation, or the USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above will generally be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates. A non-U.S. holder that is a foreign corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits, as adjusted for certain items, which will include such effectively connected gain.

A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on any gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder (even though the individual is not considered a resident of the United States) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

[Table of Contents](#)

With respect to the third bullet point above, we would be a USRPHC if our USRPIs comprise (by fair market value) at least 50 percent of our business assets. We believe we are not currently and do not anticipate becoming a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our other business assets and our non-U.S. real property interests, however, there can be no assurance we are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a non-U.S. holder of our common stock will not be subject to U.S. federal income tax if our common stock is “regularly traded,” as defined by applicable Treasury Regulations, on an established securities market, and such non-U.S. holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the non-U.S. holder’s holding period. There can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market. If any gain on your disposition is taxable because we are a United States real property holding corporation and your ownership of our common stock exceeds 5%, you will be taxed on such disposition generally in the manner as gain that is effectively connected with the conduct of a U.S. trade or business (subject to the provisions under an applicable income tax treaty), except that the branch profits tax generally will not apply.

Non-U.S. holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Subject to the discussion below on FATCA, a non-U.S. holder will not be subject to backup withholding with respect to distributions on our common stock we make to the non-U.S. holder, provided the applicable withholding agent does not have actual knowledge or reason to know such holder is a U.S. person and the holder certifies its non-U.S. status, such as by providing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or other applicable certification. However, information returns generally will be filed with the IRS in connection with any distributions (including deemed distributions) made on our common stock to the non-U.S. holder, regardless of whether any tax was actually withheld. Such information returns generally include the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Copies of these information returns may also be made available under the provisions of a specific treaty or agreement to the tax authorities of the country in which the non-U.S. holder resides or is established.

Information reporting and backup withholding may apply to the proceeds of a sale or other taxable disposition of our common stock within the United States, and information reporting may (although backup withholding generally will not) apply to the proceeds of a sale or other taxable disposition of our common stock outside the United States conducted through certain U.S.-related financial intermediaries, in each case, unless the beneficial owner certifies under penalty of perjury that it is a non-U.S. holder on IRS Form W-8BEN or W-8BEN-E, or other applicable form (and the payor does not have actual knowledge or reason to know that the beneficial owner is a U.S. person) or such owner otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a non-U.S. holder’s U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code and applicable Treasury Regulations (commonly referred to as the Foreign Account Tax Compliance Act, or FATCA), on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends paid on our common stock, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of our common stock paid to a “foreign financial institution” or a “non-financial foreign entity” (each as defined in the Code) (including, in some cases, when such foreign financial institution or non-financial foreign entity is acting as an intermediary), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any “substantial United States owners” (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise

[Table of Contents](#)

qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain “specified United States persons” or “United States-owned foreign entities” (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

The withholding provisions under FATCA generally apply to payments of dividends paid on our common stock. Further, current provisions of the Code and Treasury Regulations treat gross proceeds from the sale or other disposition of common stock as subject to FATCA withholding after December 31, 2018. However, recently proposed Treasury Regulations, if finalized in their present form, would eliminate FATCA withholding on payments of gross proceeds from a sale or other disposition of our common stock. In its preamble to such proposed regulations, the U.S. Treasury Department stated that taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued. Prospective investors should consult their tax advisors regarding the potential application of FATCA.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT OR PROPOSED CHANGE IN APPLICABLE LAW.

UNDERWRITING

In connection with this offering, we expect to enter into an underwriting agreement with Boustead Securities, LLC (who we refer to as the Underwriter) with respect to the shares of common stock in this offering. Under the terms and subject to the conditions contained in the underwriting agreement, the Underwriter will agree to purchase from us on a firm commitment basis the respective number of shares of common stock at the public price less the underwriting discounts and commissions set forth on the cover page of this prospectus, at the public offering price per shares less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table.

Underwriter	Number of Shares Common Stock
Boustead Securities, LLC	
Total	

The shares of common stock sold by the underwriter to the public will initially be offered at the initial public offering price set forth on the cover page of this prospectus. Any shares of common stock sold by the Underwriter to securities dealers may be sold at a discount from the initial public offering price not to exceed \$ _____ per share. If all of the shares are not sold at the initial offering price, the Underwriter may change the offering price and the other selling terms. The Underwriter has advised us that it does not intend to make sales to discretionary accounts. The underwriting agreement will provide that the obligations of the Underwriter to pay for and accept delivery of the shares of common stock are subject to the passing upon certain legal matters by counsel and certain conditions such as confirmation of the accuracy of representations and warranties by us about our financial condition and operations and other matters. The obligation of the Underwriter to purchase the shares of common stock is conditioned upon our receiving approval to list the shares of common stock on Nasdaq.

Over-Allotment Option

If the Underwriter sells more shares of common stock than the total number set forth in the table above, we have granted to the Underwriter an option, exercisable one or more times in whole or in part, not later than 45 days after the date of this prospectus, to purchase up to 450,000 additional shares of common stock at the public offering price less the underwriting discount and commissions set forth on the cover page of this prospectus, constituting 15% of the total number of shares of common stock to be offered in this offering (excluding shares subject to this option). The Underwriter may exercise this option solely for the purpose of covering over-allotments, if any, in connection with this offering. Any shares of common stock issued or sold under the option will be issued and sold on the same terms and conditions as the other shares of common stock that are the subject of this offering.

Discounts and Commissions; Expenses

The underwriting discounts and commissions are a cash fee equal to: (i) seven percent (7%) of gross proceeds from the sale of securities in this offering. We have been advised by the Underwriter that it proposes to offer the common stock to the public at the public offering price set forth on the cover of this prospectus and to dealers at a price that represents a concession not in excess of \$ _____ per share under the public offering price. After the offering, the Underwriter may change the public offering price and other selling terms.

The following table summarizes the public offering price and the underwriting discounts and commissions payable to the Underwriter by us in connection with this offering (assuming both the exercise and non-exercise of the over-allotment option that we have granted to the Underwriter):

	Per Share	Total Without Over-Allotment Option	Total With Full Over-Allotment Option
Public offering price	\$	\$	\$
Underwriting discounts and commissions ⁽¹⁾	\$	\$	\$
Non-accountable expense allowance (0.75%)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

(1) Does not include (i) the warrant to purchase a number of shares of common stock equal to 7% of the number of shares sold in the offering, or (ii) amounts representing reimbursement of certain out-of-pocket expenses, each as described below.

[Table of Contents](#)

We estimate that our total expenses of the offering, excluding the estimated underwriting discounts and commissions, will be approximately \$805,052.

We have agreed to issue to the Underwriter (or its permitted assignees) a warrant to purchase up to a total of 210,000 shares of common stock equal to 7% of the aggregate number of the shares sold in this offering at an exercise price equal to 125% of the public offering price of the common stock sold in this offering (or 241,500 shares if the Representative exercises the over-allotment option in full). The Underwriter's Warrant will be exercisable at any time, and from time to time, in whole or in part, commencing from the closing of the offering and expiring five (5) years from the commencement of sales in the offering, will have a cashless exercise provision and will terminate on the fifth anniversary of the effective date of the registration statement of which this prospectus is a part. The Underwriter's Warrants are not exercisable or convertible for more than five years from the commencement of sales of the public offering. The Underwriter's Warrants will also provide for customary anti-dilution provisions and immediate piggyback registration rights with respect to the registration of the shares underlying the warrants for a period of five years from commencement of sales of this offering. The warrants are not redeemable by us. The Underwriter's Warrants and the shares of common stock issuable upon exercise of the Underwriter's Warrants have been included on the registration statement of which this prospectus forms a part.

The Underwriter's Warrants and the underlying shares are deemed to be compensation by FINRA, and therefore will be subject to a 180-day lock-up period pursuant to FINRA Rule 5110(e)(1). In accordance with FINRA Rule 5110(e)(1), neither the Underwriter's Warrants nor any of our common stock issued upon exercise of the Underwriter's Warrants may be sold, transferred, assigned, pledged or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities by any person, for a period of 180 days immediately following commencement of sale of this offering subject to certain exceptions permitted by FINRA Rule 5110(e)(2).

We have agreed to pay the Underwriter a non-accountable expense allowance equal to 0.75% of the gross proceeds received at the closing of this offering.

We have agreed to reimburse the Underwriter for reasonable out-of-pocket expenses incurred by the Underwriter in connection with this offering, regardless of whether the offering is consummated, up to \$230,000. The Underwriter out-of-pocket expenses include but are not limited to: (i) road show and travel expenses, (ii) reasonable fees of Underwriter's legal counsel, (iii) the cost of background check on our officers, directors and major stockholders and due diligence expenses. Any out-of-pocket expenses above \$5,000 are to be pre-approved by the Company. As of the date of this prospectus, we have paid the Underwriter refundable advances of \$50,000 which shall be applied against its actual out-of-pocket accountable expenses. Such advance payments will be returned to us to the extent any portion of the advance is not actually incurred, in accordance with FINRA Rule 5110(g)(4)(A).

Indemnification

We have agreed to indemnify the Underwriter and the other underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended. If we are unable to provide this indemnification, we will contribute to payments that the Underwriter and the other underwriters may be required to make for these liabilities.

Right of First Refusal

Subject to the completion of this offering, the Underwriter has the right of first refusal for two (2) years following the consummation of this offering to act as financial advisor or to act as joint financial advisor on at least equal economic terms on any public or private financing (debt or equity), merger, business combination, recapitalization or sale of some or all of our equity or our assets, whether in conjunction with another broker-dealer or on the Company's own volition (collectively, "Future Services"). In the event that we engage the Underwriter to provide such Future Services, the Underwriter will be compensated consistent with the engagement agreement with the Underwriter, unless we mutually agree otherwise. To the extent we are approached by a third party to lead any public or private financing (debt or equity), merger, business combination, recapitalization or sale of some or all of our equity or assets, the Underwriter will be notified of the transaction and be granted the right to participate in such transaction under any syndicate formed by such third party.

No Sales of Similar Securities

We have agreed not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any shares of our common stock or other securities convertible into or exercisable or exchangeable for shares of common stock at a price per share that is less than the price per shares of common stock in this offering, or modify the terms of any existing securities, whether in conjunction with another broker-dealer or on the Company's own volition for a period of twelve months following date on which our common stock are trading on the Nasdaq Capital Market, without the prior written consent of the Underwriter.

Lock-Up Agreements

Our executive officers, directors following this offering and other security holder(s) of five percent (5%) or more have agreed not to offer, sell, agree to sell, directly or indirectly, or otherwise dispose of any shares of our common stock for a period of twelve (12) months following the closing of this offering, subject to certain exceptions, or the Lock-Up Period. For substantially all of our other security holders, the Lock-Up period will be six (6) months following the closing of this offering.

Notwithstanding the above, the Underwriter of this offering may engage in stabilization activities as described below. The Underwriter may in its sole discretion and at any time without notice release some or all of the shares subject to lock-up agreements prior to the expiration of the Lock-Up Period. When determining whether or not to release shares from the lock-up agreements, the Underwriter will consider, among other factors, the security holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time.

In connection with the offering, the Underwriter may purchase and sell shares in the open market. Purchases and sales in the open market may include short sales, purchases to cover short positions, which may include purchases pursuant to the over-allotment option, and stabilizing purchases.

- Short sales involve secondary market sales by an underwriter of a greater number of shares than they are required to purchase in the offering.
- "Covered" short sales are sales of shares in an amount up to the number of shares represented by the over-allotment option.
- "Naked" short sales are sales of shares in an amount in excess of the number of shares represented by the over-allotment option.
- Covering transactions involve purchases of shares either pursuant to the overallotment option or in the open market after the distribution has been completed in order to cover short positions.
- To close a naked short position, an underwriter must purchase shares in the open market after the distribution has been completed. A naked short position is more likely to be created if an underwriter is concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- To close a covered short position, an underwriter must purchase shares in the open market after the distribution has been completed or must exercise the over-allotment option. In determining the source of shares to close the covered short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option.
- Stabilizing transactions involve bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum.

Purchases to cover short positions and stabilizing purchases, as well as other purchases by an underwriter for its own account, may have the effect of preventing or retarding a decline in the market price of the common stock. They may also cause the price of the common stock to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The Underwriter may conduct these transactions in the over-the-counter market or otherwise. If the Underwriter commences any of these transactions, they may discontinue them at any time.

Determination of Offering Price

In determining the initial public offering price, we and the Underwriter have considered a number of factors, including:

- the information set forth in this prospectus and otherwise available to the Underwriter;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future revenues and earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded securities of generally comparable companies; and
- other factors deemed relevant by the Underwriter and us.

The estimated initial public offering price set forth on the cover page of this preliminary prospectus is subject to change as a result of market conditions and other factors. Neither we nor the Underwriter can assure investors that an active trading market will develop for our common stock, or that the shares will trade in the public market at or above the initial public offering price

Electronic Offer, Sale and Distribution of common stock

A prospectus in electronic format may be delivered to potential investors by one or more of the underwriters participating in this offering. In addition, shares of common stock may be sold by the Underwriter to securities dealers who resell our common stock to online brokerage account holders. The prospectus in electronic format will be identical to the paper version of such prospectus. Other than the prospectus in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the Underwriter in its capacity as Underwriter and should not be relied upon by investors.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the Underwriter that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

LEGAL MATTERS

The validity of the shares of the common stock offered by this prospectus will be passed upon for us by Pearl Cohen Zedek Latzer Baratz LLP, Boston, Massachusetts. Certain legal matters in connection with this offering relating to U.S. law will be passed upon for us by McDermott, Will & Emery LLP, New York, NY. Certain legal matters relating to this offering will be passed upon for the Underwriter by Bevilacqua PLLC.

EXPERTS

The financial statements as of December 31, 2021 and 2020 and for the years then ended included in this Prospectus have been so included in reliance on the report of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, 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 have filed a registration statement on Form S-1 with the SEC under the Securities Act of 1933, as amended, with respect to the securities offered in this prospectus. This prospectus, which is filed as part of a registration statement, does not contain all of the information set forth in the registration statement, some portions of which have been omitted in accordance with the SEC's rules and regulations. Statements made in this prospectus as to the contents of any contract, agreement or other document referred to in this prospectus are not necessarily complete and are qualified in their entirety by reference to each such contract, agreement or other document that is filed as an exhibit to the registration statement.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website. Upon completion of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. The SEC's website contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of that site is <http://www.sec.gov>.

We also maintain a website at www.Actelis.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC.

However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our common stock in this offering.

[Table of Contents](#)

ACTELIS NETWORKS, INC.
2021 CONSOLIDATED FINANCIAL STATEMENTS

ACTELIS NETWORKS, INC.
2021 CONSOLIDATED FINANCIAL STATEMENTS

TABLE OF CONTENTS

	Page
Report of Independent Registered Public Accounting Firm	F-2
Consolidated financial statements — U.S. dollars in thousands:	
Balance sheets	F-3
Statements of comprehensive loss	F-5
Statements of convertible preferred stock and capital deficiency	F-6
Statements of cash flows	F-7
Notes to consolidated financial statements	F-9



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Actelis Networks, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Actelis Networks, Inc. and its subsidiary (the “Company”) as of December 31, 2021 and 2020 and the related consolidated statements of comprehensive loss, of convertible preferred stock and capital deficiency and of cash flows for each of the two years the period ended December 31, 2021, including the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2021 conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt about the Company’s Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 1(c) to the consolidated financial statements, the Company has suffered recurring losses from operations, has negative working capital and cash outflows from operating activities. These factors and the risk inherent in the Company’s operations raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1(c). The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

Tel-Aviv, Israel	/s/ Kesselman & Kesselman
March 30, 2022, except for the effects of the Reverse Stock Split discussed in Note 2(ff) to the consolidated financial statements, as to which the date is May 2, 2022	Certified Public Accountants (Isr.) A member firm of PricewaterhouseCoopers International Limited

We have served as the Company’s auditor since 2019.

*Kesselman & Kesselman, 146 Derech Menachem Begin, Tel-Aviv 6492103, Israel,
P.O Box 7187 Tel-Aviv 6107120, Telephone: +972 -3- 7954555, Fax: +972 -3- 7954556, www.pwc.com/il*

ACTELIS NETWORKS, INC.
CONSOLIDATED BALANCE SHEETS

		December 31,	
	Note	2021	2020
		U. S. dollars in thousands (except for share and per share amounts)	
Assets			
CURRENT ASSETS:			
Cash and cash equivalents		693	569
Trade receivables, net of allowance for doubtful debts of \$61 as of December 31, 2021, and 2020		2,147	1,416
Inventories	3	897	1,077
Prepaid expenses and other current assets	4	398	162
TOTAL CURRENT ASSETS		4,135	3,224
NON-CURRENT ASSETS:			
Property and equipment, net	5	103	86
Restricted cash		102	102
Severance pay fund		266	249
Long term deposits		78	105
TOTAL NON-CURRENT ASSETS		549	542
TOTAL ASSETS		4,684	3,766

ACTELIS NETWORKS, INC.
CONSOLIDATED BALANCE SHEETS — (Continued)

	Note	December 31,	
		2021	2020
U.S. dollars in thousands (except for share and per share amounts)			
Liabilities and redeemable convertible preferred stock net of capital deficiency			
CURRENT LIABILITIES:			
Current maturities of long-term loans	7	758	—
Warrants	11	177	—
Trade payables		1,920	2,137
Deferred revenues		673	581
Employee and employee-related obligations		703	613
Accrued royalties	9	818	560
Other accrued liabilities	6	902	733
TOTAL CURRENT LIABILITIES		<u>5,951</u>	<u>4,624</u>
NON-CURRENT LIABILITIES:			
Long-term loan, net of current maturities	7	5,473	3,021
Warrants	11	1,972	1,023
Convertible loan	8	4,905	3,563
Accrued severance		315	304
Other long-term liabilities		79	44
TOTAL NON-CURRENT LIABILITIES		<u>12,744</u>	<u>7,955</u>
TOTAL LIABILITIES		<u>18,695</u>	<u>12,579</u>
COMMITMENTS AND CONTINGENCIES	9		
REDEEMABLE CONVERTIBLE PREFERRED STOCK:			
Convertible Series A Preferred Stock, \$0.0001 par value, 4,986,039 shares authorized as of December 31, 2021, and 2020; 4,986,039 shares issued and outstanding as of December 31, 2021, and 2020; aggregate liquidation preference of \$5,091 and \$4,714 as of December 31, 2021 and 2020.	10	2,858	2,858
Convertible Series B Preferred Stock, \$0.0001 par value, 3,002,652 shares authorized as of December 31, 2021, and 2020; 2,745,004 shares issued and outstanding as of December 31, 2021, and 2020; aggregate liquidation preference of \$4,271 and \$3,955 as of December 31, 2021 and 2020, respectively.	10	2,727	2,727
TOTAL REDEEMABLE CONVERTIBLE PREFERRED STOCK		<u>5,585</u>	<u>5,585</u>
CAPITAL DEFICIENCY:			
Common stock, \$0.0001 par value: 11,009,315 shares authorized as of December 31, 2021, and 2020, respectively; 2,050,404 and 2,047,641 shares issued and outstanding as of December 31, 2021, and 2020, respectively		*	*
Non-voting common stock, \$0.0001 par value: 2,803,774 shares authorized as of December 31, 2021, and 2020, respectively; 1,783,773 shares issued and outstanding as of December 31, 2021, and 2020, respectively.		*	*
Additional paid-in capital		2,824	2,771
Accumulated deficit		(22,420)	(17,169)
TOTAL CAPITAL DEFICIENCY		<u>(19,596)</u>	<u>(14,398)</u>
TOTAL LIABILITIES AND REDEEMABLE CONVERTIBLE PREFERRED STOCK NET OF CAPITAL DEFICIENCY		<u>4,684</u>	<u>3,766</u>

* Represents an amount less than \$1 thousands.

The accompanying notes are an integral part of these consolidated financial statements.

ACTELIS NETWORKS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Note	For the year ended December 31,	
		2021	2020
		U.S. dollars in thousands (except share and per share amounts)	
REVENUES	15	8,545	8,532
COST OF REVENUES		<u>4,575</u>	<u>3,550</u>
GROSS PROFIT		<u>3,970</u>	<u>4,982</u>
OPERATING EXPENSES:			
Research and development expenses, net		2,443	2,147
Sales and marketing expenses, net		2,204	1,848
General and administrative expenses, net		<u>1,183</u>	<u>1,118</u>
TOTAL OPERATING EXPENSES		<u>5,830</u>	<u>5,113</u>
OPERATING LOSS		<u>(1,860)</u>	<u>(131)</u>
Financial expenses, net	16	<u>(3,391)</u>	<u>(1,374)</u>
NET COMPREHENSIVE LOSS FOR THE YEAR		<u>(5,251)</u>	<u>(1,505)</u>
Net loss per share attributable to common shareholders – basic and diluted	14	<u>\$ (2.56)</u>	<u>\$ (0.74)</u>
Weighted average number of common stock used in computing net loss per share – basic and diluted		<u>2,048,788</u>	<u>2,047,313</u>

The accompanying notes are an integral part of these consolidated financial statements.

ACTELIS NETWORKS, INC.
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND CAPITAL DEFICIENCY

	Convertible Preferred Stock		Common Stock		Non-voting Common Stock		Additional paid-in capital	Accumulated deficit	Total capital deficiency
	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount			
U.S. dollars in thousands (except number of shares)									
BALANCE AS OF									
JANUARY 1, 2020	7,731,043	5,585	2,045,739	*	1,783,773	*	2,728	(15,664)	(12,936)
CHANGES DURING THE YEAR ENDED DECEMBER 31, 2020:									
Exercise of options into common stock	—	—	1,902	*	—	—	*	—	*
Share based compensation	—	—	—	—	—	—	43	—	43
Net comprehensive loss for the year	—	—	—	—	—	—	—	(1,505)	(1,505)
BALANCE AS OF									
DECEMBER 31, 2020	7,731,043	5,585	2,047,641	*	1,783,773	*	2,771	(17,169)	(14,398)
CHANGES DURING THE YEAR ENDED DECEMBER 31, 2021:									
Exercise of options into common stock	—	—	2,763	*	—	—	*	—	*
Share based compensation	—	—	—	—	—	—	53	—	53
Net comprehensive loss for the year	—	—	—	—	—	—	—	(5,251)	(5,251)
BALANCE AS OF									
DECEMBER 31, 2021	7,731,043	5,585	2,050,404	*	1,783,773	*	2,824	(22,420)	(19,596)

* Represents an amount less than \$1 thousands.

The accompanying notes are an integral part of these consolidated financial statements.

ACTELIS NETWORKS, INC.
CONOSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,	
	2021	2020
U.S. dollars in thousands		
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss for the year	(5,251)	(1,505)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	37	46
Changes in fair value related to warrants to lenders	1,031	333
Inventories write-downs	102	495
Exchange rate differences	167	—
Share-based compensation	53	43
Changes in fair value related to convertible loan	1,342	755
Changes in operating assets and liabilities:		
Trade receivables	(731)	3
Inventories	78	(817)
Prepaid expenses and other current assets	(236)	48
Severance pay	(6)	22
Long term deposits	27	(10)
Trade payables	(217)	963
Deferred revenues	92	36
Employee and employee-related obligations	90	(56)
Accrued royalties	258	252
Other accrued liabilities	203	(52)
Accrued interest	235	(899)
Net cash used in operating activities	(2,726)	(343)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of property and equipment	(54)	(21)
Net cash used in investing activities	(54)	(21)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of options	*	*
Repayment of short-term bank credit	—	(1,300)
Proceeds from convertible loan	—	344
Proceeds from long-term debt, net of issuance costs	2,904	3,167
Repayment of long-term loan	—	(1,855)
Net cash provided by financing activities	2,904	356
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS		
	167	—
INCREASE (DECREASE) IN CASH, CASH EQUIVALENTS AND RESTRICTED CASH	124	(8)
BALANCE OF CASH, CASH EQUIVALENTS AND RESTRICTED CASH AT BEGINNING OF YEAR		
	671	679
BALANCE OF CASH, CASH EQUIVALENTS AND RESTRICTED CASH AT END OF YEAR		
	795	671
RECONCILIATION OF CASH, CASH EQUIVALENTS AND RESTRICTED CASH:		
Cash and cash equivalents	693	569
Restricted cash	102	102
Total cash, cash equivalents and restricted cash	795	671

ACTELIS NETWORKS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS — (Continued)

	Year ended December 31,	
	2021	2020
U.S. dollars in thousands		
SUPPLEMENTARY DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid for interest	511	260
SUPPLEMENTARY INFORMATION ON INVESTING AND FINANCING ACTIVITIES NOT INVOLVING CASH FLOWS:		
Additional warrants	95	145

* Represents an amount less than \$1 thousands.

The accompanying notes are an integral part of these consolidated financial statements.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 1 — GENERAL:

- a. Actelis Networks, Inc. (hereafter -the Company) was established in 1998, under the laws of the state of Delaware. The Company has a wholly-owned subsidiary in Israel, Actelis Networks Israel Ltd. (hereafter — the Subsidiary). The Company is engaged in the design, development, manufacturing, and marketing of networking solutions for IoT and Telecommunication companies. The Company's customers include providers of telecommunication services and enterprises as well as resellers of the Company's products.
- b. Following the December 2019 outbreak of Coronavirus (COVID-19) in China and after its spread to a large number of other countries, economic activity has suffered in many regions of the world, including in all markets of the Company (Americas, Europe and Asia as well as specifically Israel). Among other things, the pandemic disrupted supply chains, suppressed the volume of global transportation activity, prompted the Israeli and other governments worldwide to put in place restrictions on movement and employment, and resulted in a drop in the values of financial assets and commodities on global markets. As a result, the Company suffered delays in realization of new orders from its customers, delay in testing of its technologies at customer premises and an inability to conduct business development activities in an effective way. As a result, the Company increased its long-term loan by \$3,000 in order to support the loss of revenue and profit. To date, the Company adhered to all state and federal social distancing requirements while prioritizing health and safety for its employees. The Company has also established cost savings initiatives, cost control processes, and cash conservation to preserve liquidity as well as successfully applying for and receiving various financial aid and government assistance (see note 7).
- c. The Company has suffered recurring losses from operations, has an accumulated deficit as of December 31, 2021, and 2020 as well as negative working capital and cash outflows from operating activities. The Company monitors its cash flow projections on a current basis and takes active measures to obtain the funding it requires to continue its operations. These cash flow projections are subject to various risks and uncertainties concerning their fulfillment. These factors and the risk inherent in the Company's operations raise a substantial doubt as to the Company's ability to continue as a going concern. These consolidated financial statements have been prepared assuming that the Company will continue as a going concern and do not include any adjustments that might result from the outcome of this uncertainty.

The Company's transition to profitable operations is dependent on generating a level of revenue adequate to support its cost structure. The Company must (i) continue to generate excess cash to repay debt principal; (ii) exchange some or all debt for an equity-related instrument and/or (iii) refinance the existing debt. Management has evaluated the significance of these conditions as well as the time in which it has to complete these tasks and has determined that the Company can meet its operating obligations for the foreseeable future. The Company expects to fund operations using cash on hand and through operational cash flows.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES:

a. Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP").

b. Use of estimates in preparation of financial statements

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company evaluates on an ongoing basis its assumptions, including those related to contingencies, Fair value of warrants and convertible loan liabilities, inventory write-offs, as well as in estimates used in applying the revenue recognition policy

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

(See note 2k). The Company's management believes that the estimates, judgment, and assumptions used are reasonable based upon information available at the time they are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

c. Functional currency

The currency of the primary economic environment in which the operations of the Company and its Subsidiary are conducted is the U.S. dollar (" \$" or "dollar"). Therefore, the functional currency of the Company and its Subsidiary is the dollar. In determining the appropriate functional currency to be used, the Company reviewed factors relating to sales, costs and expenses, financing activities and cash flows.

Transactions and balances denominated in dollars are presented at their original amounts. Non-dollar transactions and balances have been re-measured to dollars in accordance with the provisions of ASC 830-10, "Foreign Currency Translation". All transaction gains and losses from re-measurement of monetary balance sheet items denominated in non-dollar currencies are reflected in the statement of comprehensive loss as financial income or expenses, as appropriate.

d. Principles of consolidation

The consolidated financial statements include the accounts of the Company and the Subsidiary. Intercompany transactions and balances have been eliminated upon consolidation.

e. Cash and cash equivalents

The Company considers all highly liquid investments, which include short-term bank deposits that are not restricted as to withdrawal or use to be cash equivalents.

f. Restricted cash

Restricted cash are money market funds. These bank deposits are presented at their cost, including accrued interest. The restricted cash is held mostly as a collateral for the fulfillment of lease commitments and long-term loan.

g. Trade Receivables, net

Trade receivables are recorded at the invoiced amount, are unsecured and do not bear interest. Trade receivables are stated net of allowances. The allowance for doubtful accounts is based on the Company's periodic assessment of the collectability of the accounts based on a combination of factors including the payment terms of each account, its age, the collection history of each customer, and the customer's financial condition. On this basis, management has determined that an allowance for doubtful accounts of \$61 was appropriate as of December 31, 2021, and 2020. Bad debt expense for the years ended December 31, 2021, and 2020 was \$0 and \$31, respectively.

h. Inventories

Inventories are stated at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory write-offs are provided to cover risks arising from slow-moving items, excess inventories, discontinued products, new products introduction and for market prices lower than cost. Any write-off is recognized in the consolidated statement of comprehensive loss as cost of revenues. In

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

addition, if required, the Company records a liability for firm non-cancelable and unconditional purchase commitments with contract manufacturers for quantities in excess of the Company's future demands forecast consistent with its valuation of excess and obsolete inventory.

Cost is determined as follows:

Raw materials, parts, supplies and finished products- using the weighted average cost method.

i. Property and equipment, net

Property and equipment is stated at cost less accumulated depreciation. Maintenance and repairs are expensed as incurred. Depreciation expense is calculated on a straight-line basis over the estimated useful lives of the related assets. The cost and related accumulated depreciation of assets sold or otherwise disposed of are removed from the accounts and the related gain or loss is reported in the statement of comprehensive loss.

Annual rates of depreciation are as follows:

	%
Computers, electronic equipment and software	Mainly 33%
Office furniture and equipment	7
Leasehold improvements	By the shorter of term of the lease and the life of the asset

j. Impairment of long-lived assets subject to amortization

The Company evaluates long-lived assets, such as property and equipment with finite lives, for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. The Company identifies impairment of long-lived assets when estimated undiscounted future cash flows expected to result from the use of the assets plus net proceeds expected from disposition of the assets, if any, are less than the carrying value of the assets. If the Company identifies an impairment, the Company reduces the carrying amount of the assets to their estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values.

k. Revenue recognition:

The Company's product consists of hardware and an embedded software that function together to deliver the product's essential functionality. The embedded software is essential to the functionality of the Company's products. The Company's products are sold with a two-year warranty for repairs or replacements of the product in the event of damage or failure during the term of the support period, which is accounted for as a standard warranty. Services relating to repair or replacement of hardware beyond the standard warranty period are offered under renewable, fee-based contracts and include telephone support, remote diagnostics and access to on-site technical support personnel.

The Company also offers its customers other management software. The Company sells its other non-embedded software either as perpetual or as term based.

The Company provides, to certain customers, software updates that it chooses to develop, which the Company refers to as unspecified software updates, and enhancements related to the Company's management software through support service contracts. The Company also offers its customers product support services which include telephone support, remote diagnostics and access to on-site technical support personnel.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

The Company's customers are comprised of resellers, system integrators and distributors.

The Company follows five steps to record revenue: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) it satisfies its performance obligations.

Performance obligations promised in a contract are identified based on the goods or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the good or service either on its own or together with other resources that are readily available from third parties or from the Company, and are distinct in the context of the contract, whereby the transfer of the goods or services is separately identifiable from other promises in the contract.

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring goods or services to the customer. The Company's contracts do not include additional discounts once product price was set, right of returns, significant financing components or any forms of variable consideration.

The Company uses the practical expedient and does not assess the existence of a significant financing component when the difference between payment and revenue recognition is less than a year. The Company's service period is for one year and is paid for either up front or on a quarterly basis.

Most of the Company's contracts are of a single performance obligation (sales of the product with a standard warranty) thus the entire transaction price is allocated to the single performance obligation. For contracts that contain more than one identified performance obligation (such as when the product is sold with services and the management software), the Company determines standalone selling prices taking into account available information such as historical selling prices of each identified performance obligation, geographic location, and market conditions, and allocates the consideration based on the relative stand-alone selling price of each identified performance obligation. In term-based license arrangements (for the management software), the contracts also include the related services, and as such, the Company determines the stand-alone selling price of the term-base license based on a ratio from the perpetual management software.

Revenue from selling the Company's product and/or the software management (either as term-based or perpetual) is recognized at a point in time which is typically at the time of shipment of products to the customer or when the code is transferred, respectively. Revenue from services is (e.g., product support service, software support service or extended warranty) are recognized on a straight-line basis over the service period, as a time-based measure of progress best reflects our performance in satisfying this obligation.

l. Cost of revenues

Cost of revenues includes cost of materials, costs associated with packaging, assembly and testing costs, as well as cost of personnel (including share-based compensation), shipping costs, royalties, costs of logistics and quality assurance, access to on-site technical support personnel as well as warranty expenses and other expenses associated with manufacturing support.

m. Leases

The Company leases offices space and vehicles under various leasing arrangements. As leases expire, they are normally renewed or replaced in the ordinary course of business. Most lease agreements contain renewal options and rent escalation clauses. Rent expense, is recognized on a straight-line basis over the

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

non-cancellable term of each lease, plus any periods the Company has access to and control over the leased space prior to the beginning of the non-cancellable lease term to construct leasehold improvements and any extension periods that appear to be reasonably assured at the inception of the lease.

The Company's leases are all classified as operating.

n. Basic and diluted net loss per share

Basic net loss per share is computed using the weighted average number of common stock and fully vested RSUs outstanding during the period. In computing diluted loss per share, basic loss per share is adjusted to take into account the potential dilution that could occur upon: (i) the exercise of options and non-vested RSUs granted under employee stock compensation plans, and the exercise of warrants using the treasury stock method; and (ii) the conversion of the convertible preferred stock, and convertible loan using the "if-converted" method, by adding to net loss the change in the fair value of the convertible loan, net of tax benefits, and by adding the weighted average number of shares issuable upon assumed conversion of these instruments.

o. Fair value of financial instruments

Fair value measurements are classified and disclosed in one of the following three categories:

Level 1 — Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 — Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following table represents the fair value hierarchy for the Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31:

Fair value measurements at December 31, 2021				
Description	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds	\$ 102	\$ 102	\$ —	\$ —
Liabilities:				
Convertible Loan (Note 8)	\$ 4,905	\$ —	\$ —	\$ 4,905
Warrants (Note 11)	\$ 2,149	\$ —	\$ —	\$ 2,149

Fair value measurements at December 31, 2020				
Description	Total	Level 1	Level 2	Level 3
Assets:				
Money market funds	\$ 102	\$ 102	\$ —	\$ —
Liabilities:				
Convertible Loan (Note 8)	\$ 3,563	\$ —	\$ —	\$ 3,563
Warrants (Note 11)	\$ 1,023	\$ —	\$ —	\$ 1,023

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

As of December 31, 2021, and 2020, the fair values of the Company's cash, cash equivalents, long term deposits, trade receivables, trade payables, long-term loan and restricted cash approximated the carrying values of these instruments presented in the Company's consolidated balance sheets because of their nature.

p. Concentrations of credit risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents, restricted cash, and trade receivables. Cash and cash equivalents and restricted cash are placed with banks and financial institutions in the United States and Israel.

Management believes that the financial institutions that hold the Company's investments are financially sound and, accordingly, present minimal credit risk with respect to those investments.

The Company's trade receivables are derived primarily from telecommunication operators, the Company's reseller customers and enterprises located mainly in the United States, Europe, and Asia. Credit risk with respect to trade receivables exists to the full extent of the amounts presented in the consolidated financial statements. Management makes judgments as to its ability to collect outstanding accounts receivable and provides allowances for the applicable portion of accounts receivable when collection becomes doubtful.

Management provides allowances based upon a specific review of all significant outstanding invoices, analysis of its historical collection experience, and current economic trends. If the historical data used to calculate the allowance for doubtful accounts does not reflect the Company's future ability to collect outstanding accounts receivable, additional provisions for doubtful accounts may be needed, and the future results of operations could be materially affected.

q. Risks and uncertainties

The Company is subject to a number of risks associated with companies in a similar stage of development, including, but not limited to, dependence on key employees; potential competition from larger, more established companies; the ability to develop and bring new products to market; the ability to attract and retain additional qualified personnel; the ability to obtain raw materials required to deliver its products to customers; and the ability to obtain adequate financing to support its growth.

r. Warranty costs

The Company's products generally include standard warranty of two years for product defects. The Company accrues for warranty at the time revenue is recognized. The Company's estimates of future warranty obligations may change due to product failure rates, material usage, and other rework costs incurred in correcting a product failure. In addition, specific warranty accruals may be recorded if unforeseen problems arise. The provision for warranty amounted to \$158 and \$90 as of December 31, 2021, and 2020, respectively. These provisions are included in other accrued liabilities and non-current liabilities in the accompanying consolidated balance sheets.

The following table sets forth activity in the Company's accrued warranty account for each of the years ended December 31, 2021, and 2020, respectively:

	Year ended December 31,	
	2021	2020
Balance at the beginning of the year	90	93
Cost incurred	(68)	(102)
Expense recognized	136	99
Balance at the end of the year	158	90

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

s. Sales and marketing expenses

Sales and marketing expenses include such expenses for the company's sales teams, business development activities, sales engineering, and customer support.

t. Research and development costs, net

Research and development costs are expensed as incurred and include compensation for engineers, external services, and material costs associated with new product development, enhancement of current products. During 2021, no grants were received and none were recorded. During 2020, the Company was entitled to receive grants from the Israeli Innovation Authority (see also Note 2v) and therefore recorded grants in the amount of \$53 in 2020, as a reduction to research and development expenses. During 2021 the Company was not entitled to receive grants from the Israeli Innovation Authority

According to ASC Topic 350, "*Intangibles — Goodwill and Other*," software that is part of a product or process to be sold to a customer shall be accounted for under ASC Subtopic 985-20. The Company's products contain embedded software which is an integral part of these products because it allows the various components of the products to communicate with each other and the products are clearly unable to function without this coding. Based on the Company's product development process, the Company does not incur material costs after the point in time at which the product as a whole reaches technological feasibility. Therefore, research and development costs are charged to the statement of comprehensive loss as incurred.

u. Shipping and handling

The Company classifies shipping and handling charged to customers as revenues and classifies costs relating to shipping and handling as cost of revenues.

v. Government grants and related royalties

The Company is paying royalties to the government of Israel for funding received for research and development. Royalties are calculated and paid at a rate of 3% of the applicable revenues. During 2021 and 2020, respectively, the Company incurred royalty expenses of \$258 and \$252, included within cost of revenues (see note 9).

w. Segments

The Company operates in one segment. Management does not segregate its business for internal reporting. The Company's chief operating decision maker ("CODM") evaluates the performance of its business based on financial data consistent with the presentation in the accompanying financial statements. The Company concluded that its unified business is conducted globally and accordingly represents one operating segment.

x. Income taxes

The Company accounts for income taxes in accordance with ASC 740, "Income Taxes" ("ASC 740"). ASC 740 prescribes the use of the liability method whereby deferred tax assets and liability account balances are determined based on differences between the financial reporting and the tax basis of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value if it is more likely than not that a portion or all of the deferred tax assets will not be realized.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

ASC 740 contains a two-step approach to recognizing and measuring a liability for uncertain tax positions. The first step is to evaluate the tax position taken or expected to be taken in a tax return by determining if the weight of available evidence indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement.

Taxes which would apply in the event of disposal of investment in foreign subsidiary has not been taken into account in computing the deferred taxes, since the Company's intention is to hold, and not to realize the investment.

y. Employee related benefits:

Severance pay

The Company's liability for severance pay for its Israeli employees is calculated pursuant to the Israeli Severance Pay Law based on the most recent salary of the employees multiplied by the number of years of employment, as of the balance sheet date. Employees whose employment is terminated by the Company or who are otherwise entitled to severance pay in accordance with Israeli law or labor agreements are entitled to one month's salary for each year of employment or a portion thereof. The Company's liability for all of its Israeli employees is partly provided for by monthly deposits for insurance policies and the remainder by an accrual. The value of these policies is recorded as an asset in the Company's consolidated balance sheet. Such deposits are not considered to be "plan assets" and are therefore included in other non-current assets.

During April and May 2008 (the "transition date"), the Company amended the contracts of most of its Israeli employees so that starting on the transition date, such employees are subject to Section 14 of the Severance Pay Law, 1963 ("Section 14") for severance pay accumulated in periods of employment subsequent to the transition date. Pursuant to Section 14, these employees are entitled to monthly deposits made by the Company on their behalf with insurance companies. These deposits are not recorded as an asset on the Company's balance sheet, and there is no liability recorded as the Company does not have a future obligation to make any additional payments. The Company's contributions to the defined contribution plans are charged to the consolidated statements of operations as and when the services are received from the Company's employees. For the Company's employees in Israel that began employment prior to Article 14, the Company calculates the liability for severance pay based on the most recent salary of these employees multiplied by the number of years of employment as of the Article 14 inception date. These liabilities are presented under accrued severance pay in the Company's consolidated balance sheets. The amounts used to fund these liabilities are included in the Company's consolidated balance sheets under severance pay fund.

The carrying value for the deposited funds for the Company's employees' severance pay for employment periods prior to the transition date include profits and losses accumulated up to the balance sheet date. The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to the Israeli Severance Pay Law or labor agreements.

Gain (loss) on amounts funded in respect of employee rights upon retirement totaled approximately \$8 and \$(8) for the years ended December 31, 2020 and 2021, respectively

401(k) profit sharing plans

The Company has a number of savings plans in the United States that qualify under Section 401(k) of the current Internal Revenue Code as a "safe harbor" plan. The Company must make a mandatory contribution to the 401(k) plan to satisfy certain nondiscrimination requirements under the Internal Revenue Code. This mandatory contribution is made to all eligible employees. The contribution costs were \$6 and \$7 for the years ended December 31, 2021, and 2020, respectively.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

z. Share-based compensation

Share-based compensation expense for all share-based payment awards is determined based on the grant-date fair value. The Company recognizes these compensation costs net of actual forfeitures and recognizes compensation cost for all options on a straight-line basis over the requisite service period of the award, which is generally the option vesting term of four years.

The Company accounts for share-based compensation arrangements with nonemployees based on the estimated fair value of the equity instrument using the Black-Scholes option-pricing model. Compensation cost is recognized over the period that the services are provided, and the award is earned by the counterparty.

The Company follows ASC 718 to determine whether a share-based payment should be classified and accounted for as a liability award or equity award. All grants of share-based awards to employees classified as equity awards are recognized in the financial statements based on their grant date fair values which are calculated using an option pricing model.

For options and similar instruments with graded vesting, the Company has elected a fair-value-based measure of the entire award by using a single weighted-average expected term.

For awards granted to employees with only service conditions that has a graded vesting schedule, the Company has elected to recognize the compensation cost on a straight-line basis over the requisite service period for the entire award.

The Company has adopted the actual approach as its accounting policy to account for forfeitures' effect on its share-based payments (i.e., to account for forfeitures as they occur).

aa. Convertible loan

The Company follows ASC 480-10, Distinguishing Liabilities from Equity ("ASC 480-10") in its evaluation of the accounting for a hybrid instrument. A financial instrument that embodies an unconditional obligation, or a financial instrument other than an outstanding share that embodies a conditional obligation, that the issuer must or may settle by issuing a variable number of its equity shares shall be classified as a liability (or an asset in some circumstances) if, at inception, the monetary value of the obligation is based solely or predominantly on any one of the following: (a) a fixed monetary amount known at inception; (b) variations in something other than the fair value of the issuer's equity shares; or (c) variations inversely related to changes in the fair value of the issuer's equity shares. Hybrid instruments meeting these criteria are not further evaluated for any embedded derivatives and are carried as a liability at fair value at each balance sheet date with remeasurements reported in interest expense in the accompanying Consolidated Statement of Comprehensive Loss.

The Company concluded that the value of the loan is predominantly based on a fixed monetary amount known at the date of issuance, to be converted into shares of common stock, at a conversion price per share reflecting a discount of no more than 65% of the lowest price per share paid by any investor in an offering. Accordingly, the loan was classified as a liability and is measured at its fair value, pursuant to the provisions of ASC 480-10. (See note 8).

bb. Warrants

Common stock warrants

The Company accounts for its warrants as either equity-classified or liability-classified instruments based on an assessment of the specific terms of the warrants and applicable authoritative guidance in Accounting Standards Codification ("ASC") 480, "Distinguishing Liabilities from Equity" ("ASC 480"), and ASC 815, "Derivatives and Hedging" ("ASC 815"). The assessment considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

to ASC 480, or meet all of the requirements for equity classification under ASC 815, including whether the warrants are indexed to the Company's own common stock and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. See note 11b.

Preferred stock warrants

The Company accounts for preferred stock warrants at fair value and classifies preferred stock warrants as liabilities in accordance with ASC 480, as the warrants are exercisable into contingently redeemable preferred stock as described in Note 11. All preferred stock warrants are recognized at fair value and re-measured at each balance sheet date. At the end of each reporting period, changes in fair value during the period are recognized as a component of financial income (expense), net.

Following the guidance of ASC 480 the warrants were required to be classified as a liability because the redemption feature of their underlying preferred stock potentially requires the Company to repurchase its stock by transferring assets upon specific events which would not necessarily be within the control of the Company (See note 11).

Warrants issued in connection with obtaining loans and/or securing credit facilities

Warrants issued in connection with obtaining a loan or securing a credit facility are considered deferred issuance costs. Deferred issuance costs for obtaining a loan are reflected as a deduction from the carrying amount of the related loan and are amortized using the effective interest method. Deferred issuance costs incurred in connection with securing a credit facility of non-revolving loans are recorded as an asset on our consolidated balance sheets and amortized on a straight-line basis over the term of the arrangement, until the loan, or a portion of the loan is withdrawn. When the loan or a portion of a loan is withdrawn, the unamortized related deferred issuance cost, or a portion of it, is deducted from the loan and is subsequently amortized according to the effective interest method.

cc. Preferred stock

The Company's preferred stock is not mandatorily redeemable, nor redeemable at the option of the holder after a specified date, but a deemed liquidation event would constitute a redemption event outside of the common shareholders' control. Therefore, all Preferred stock has been presented outside of permanent equity in accordance with ASC 480-10-S99-3A, "Distinguishing Liabilities from Equity".

dd. Commitments and contingencies

The Company accounts for its contingent liabilities in accordance with ASC Topic 450, Contingencies ("ASC 450"). A provision is recorded when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. With respect to legal matters, provisions are reviewed and adjusted to reflect the impact of negotiations, estimated settlements, legal rulings, advice of legal counsel and other information and events pertaining to a particular matter.

ee. Accounting standards updates not yet adopted

As an emerging growth company, the Jumpstart Our Business Startup Act ("JOBS Act") allows the Company to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. The Company has elected to use this extended transition period under the JOBS Act. The adoption dates discussed below reflect this election.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which would require lessees to include all leases on their balance sheets, whether operating or financing, while continuing to recognize the expenses on their statements of operations in a manner similar to current practice. The guidance states that

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. In June 2020, the FASB issued ASU No. 2020-05, Revenue from Contracts with Customers (ASC 606) and Leases (Topic 842): Effective Dates for Certain Entities, which defers the effective date of ASU 2016-02 for non-public entities to fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. The guidance will be effective for the Company beginning January 1, 2022, and interim periods in fiscal years beginning January 1, 2023. Based on the most recent assessment of existing leases, the adoption of Topic 842 will not result in a cumulative effect adjustment as of January 1, 2022, to retained earnings. Management is continuing to assess the values of the right-of-use assets and lease liabilities that will be included on the consolidated balance sheet as of January 1, 2022, and expects to record a Right of Use asset and related liability for the existing leases in an amount of approximately \$522. Management does not expect the adoption of Topic 842 to have a material impact on the Company's results of operations or cash flows.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which replaces the existing incurred loss impairment model with an expected credit loss model and requires a financial asset measured at amortized cost to be presented at the net amount expected to be collected. The guidance will be effective for the Company beginning January 1, 2023, and interim periods therein. Early adoption is permitted.

The Company is currently evaluating the effect that ASU 2016-13 will have on its consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04 "Reference Rate Reform (Topic 848) — Facilitation of the Effects of Reference Rate Reform on Financial Reporting." This guidance provides optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The guidance applies only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. This guidance is effective for all entities as of March 12, 2020, through December 31, 2022.

The Company's exposure to reference rate reform is due to royalties payments the Company is obligated to pay for research and development grants received from the Government of Israel (see note 9b). As of the date of this report, the IIA did not determine an alternative benchmark rate to the LIBOR. However, the Company will consider this guidance as future modifications are made.

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes ("Topic 740"): Simplifying the Accounting for Income Taxes, which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. ASU No. 2019-12 is effective for the Company for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. The adoption of this guidance will not have a significant impact on the Company's consolidated financial statements.

In June 2020 issued Accounting Standards Update ("ASU") 2020-06, "Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity" ("ASU 2020-06"). ASU 2020-06 simplifies the accounting for certain convertible instruments, amends guidance on derivative scope exceptions for contracts in an entity's own equity and modifies the guidance on diluted earnings per share calculations as a result of these changes. ASU 2020-06 will be effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company is currently evaluating the effect of this standard on its consolidated financial statements.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES: (cont.)

In November 2021, the FASB issued an accounting pronouncement (ASU 2021-10) related to government assistance disclosures. The amendments in this update increase the transparency surrounding government assistance by requiring disclosure of 1) the types of assistance received, 2) an entity’s accounting for the assistance, and 3) the effect of the assistance on the entity’s financial statements. The update is effective for annual periods beginning after December 15, 2021. The Company plans to adopt this pronouncement for fiscal year beginning January 1, 2022 and does not expect it to have a material effect on its consolidated financial statements.

ff. Reverse stock split

On April 15, 2022 (the “Closing Date”), the Company’s Board of Directors approved a Reverse Stock Split in the ratio of forty-six to-one. The Reverse Stock split became effective as of May 2, 2022.

The Company accounted for the Reverse Stock Split on a retroactive basis pursuant to ASC 260. As a result, all common stock, Non-voting Common stock, Preferred stock and options outstanding and exercisable for common stock, exercise prices and income (loss) per share amounts have been adjusted, on a retroactive basis, for all periods presented in these consolidated financial statements, to reflect such Reverse Stock Split.

NOTE 3 — INVENTORIES:

	December 31,	
	2021	2020
Raw materials	356	330
Finished goods	541	747
	897	1,077

Inventories write-downs totaled to \$102 and \$495 during the year ended December 31, 2021, and 2020 respectively.

NOTE 4 — PREPAID EXPENSES AND OTHER CURRENT ASSETS:

	December 31,	
	2021	2020
Prepaid expenses	194	60
Governmental authorities	82	42
Accrued income	122	60
	398	162

NOTE 5 — PROPERTY AND EQUIPMENT, NET:

	December 31,	
	2021	2020
Cost:		
Computer, software, and electronic equipment	8,575	8,521
Office furniture and equipment	872	872
Leasehold improvements	292	292
	9,739	9,685
Less: accumulated depreciation	9,636	9,599
Property and equipment, net	103	86

Depreciation expense was \$37 and \$46 for the years ended December 31, 2021, and 2020, respectively.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 6 — OTHER ACCRUED LIABILITIES:

	December 31,	
	2021	2020
Tax authorities	10	—
Accrued expenses	813	687
Accrued standard warranty	79	46
	902	733

NOTE 7 — LOANS:

- a . As a result of the COVID pandemic, the US and Israeli governments offered different programs of financial aid. The Company participated in the following programs:

On May 5, 2020, the Company entered into a loan agreement with an Israeli bank (“COVID19 Israeli Loan”) in the total of \$350. The COVID19 Israeli Loan bears an interest of LIBOR plus 3.1% per annum, the principal shall be repaid in 48 monthly payments starting June 15, 2021 and the interest shall be paid in 60 monthly payments. On December 31, 2020, the Company fully repaid the COVID19 Israeli Loan.

On April 30, 2020, the Company entered into a loan agreement with an American Bank under the Small Business Administration Payroll Protection Program (“PPP Loan”) in the total of \$239. The PPP Loan may be eligible for forgiveness, and if not eligible bears an interest of 1% per annum. The principal and interest, if not forgiven, is payable within 2 years. The Company filed a request for a forgiveness of the loan and received full forgiveness as of December 31, 2020. The forgiven amount was recognized net of payroll expenses.

On July 1, 2020, the Company received funding from an American Bank under the Small Business Administration COVID19 EIDL Program in the total of \$150. The loan bears interest of 3.75% per annum, the principal shall be repaid in 360 equal monthly payments starting October 31, 2022, unless forgiven per program regulations (the “EIDL Loan”).

On February 5, 2021, the Company entered into a loan agreement with an American Bank under the Small Business Administration Payroll Protection Program (“PPP Loan”) in the total of \$191. The PPP Loan may be eligible for forgiveness, and if not eligible bears an interest of 1% per annum. The principal and interest, if not forgiven, is payable within 2 years. The Company filed a request for a forgiveness of the loan and received full forgiveness during 2021. The forgiven amount was recognized net of payroll expenses.

- b . On December 2, 2020, the Company signed a new loan agreement with an Israeli based financial institution (“Migdalar”) for a loan of up to \$6,000 (“Migdalar”). The Company received \$3,000 on December 2020, and additional \$2,000 in January 2021. The loan bears interest of 9.6% per annum. The interest shall first be paid in 12 payments starting February 1, 2021. Starting February 1, 2022, the loan principal and interest shall be repaid in 72 equal payments, plus a onetime interest payment after the 36th month. The loan covenants for the period include a coverage ratio of 90% of the loan by current assets. As of December 31, 2021, the Company met the covenant.

As part of the loan agreement, the Company issued Migdalar warrants to acquire common stock in the amount of \$1,500 (see Note 11 regarding the warrants granted).

In November 2021, the Company received additional funding in the amount of \$1,000 from Migdalar. The loan bears interest of 9.6% per annum. Starting February 1, 2022, the loan principal and interest shall be repaid in 72 equal monthly payments, plus a onetime interest payment after the 24th month. The Company increased the value of the warrant to Migdalar to \$1,800 (see also Note 11). As of December 31, 2021, the total loan balance outstanding was \$6,231 (including \$758 current maturities).

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 7 — LOANS: (cont.)

As of December 31, 2021, future minimum payments are summarized as follows:

	EIDL	New	New
	Loan	Loan from December 2020 and January 2021-In NIS	Loan from November 2021-In NIS
2022	2	3,511(\$1,128)	670(\$216)
2023	9	3,683(\$1,184)	704(\$226)
2024	9	5,568(\$1,790)	1,081(\$347)
2025	9	3,683(\$1,184)	704(\$226)
2026	9	3,683(\$1,184)	704(\$226)
2027 and thereafter	112	3,990(\$1,283)	762(\$245)
Less – accumulated interest	—	(8,070)(\$2,593)	(1,761)(\$565)
Total	150	16,048(\$5,160)	2,864(\$921)

NOTE 8 — CONVERTIBLE LOAN:

On March 28, 2017, the Company entered into a convertible loan agreement (“the Agreement”) in a total amount of up to \$ 2,000, out of which only \$1,526 was received to date. The loan bears an interest of 10% per annum. Following an amendment in March 2022, which has been approved by the required majority of the CLA holders, the maturity date of the CLA will be the earlier of (i) January 1, 2023, (ii) event of default (as defined in the Agreement) or (iii) deemed liquidation event (as defined in the Company’s certificate of incorporation), in which the lenders are entitled to receive an amount equal to 300% of the principal amount of the loan. the lenders are entitled to convert the principal of the loan in case of other equity financing as follows:

- Upon consummation of an equity finance, including the closing of this offering, the principal amount of the loan will be mandatorily converted into shares of common stock, at a conversion price per share reflecting a discount of no more than 65% of the lowest price per share paid by any investor in the offering.
- Upon consummation of a reverse merger with a public shell company, or upon merger between the Company and any other entity in which the current shareholders of the Company hold less than 50% of the surviving entity, the lenders have the right to convert the loan amount to shares of the surviving entity representing 25% of the aggregate number of shares, options and warrants allocated in such transaction, or receive a payment of 300% of the amount of the loan.

The Company determined the equity finance as being the predominant conversion scenario. The Company measured the convertible loan in its entirety at fair value with changes in fair value recognized as financial income or loss in accordance with ASC 480-10.

The Company recorded financial expenses during 2021 and 2020 in the amount of \$362 and \$755, respectively.

As of December 31, 2021, and 2020, the estimated fair value of the CLA was based on a hybrid valuation methodology with a weighted average that combined Option Pricing Model (OPM) and Probability Weighted Expected Return Method (PWERM); therefore, it is categorized as Level 3 in accordance with ASC 820.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 8 — CONVERTIBLE LOAN: (cont.)

The valuation was performed under a scenario of an IPO and staying private.

The IPO scenario was estimated at 37.5% (2020: 50%) of an IPO occurring in May 2022 (2020: September 2021). Upon consummation of an IPO, the holders of the CLA have the right to convert the principal amount of the loan into common stock at a conversion price per common stock reflecting a discount of 30% plus an additional 1% for each two calendar months following March 2017. In addition, the holders of the CLA would be entitled to an additional discount of 40% pursuant to convertible note subscription agreement from January 2022. Under this scenario, the fair value of the CLA was estimated at the conversion value using a discount of 77.2% (2020: 58%) on the anticipated value of a common stock and a risk adjusted-discount rate of 20.8% (2020: 20.5%). The remain private scenario estimated at 62.5% (2020: 50%) probability of remaining private for an expected period of 3 years (2020: 4 years) and an equity value of \$24.3 million (2020: 24 million). The Company applied a volatility of 58% (2020: 57%) and a risk-free rate of 0.97% (2020: 0.27%).

The following is a roll forward of the fair values:

	Year ended December 31,	
	2021	2020
Fair value at the beginning of the year	3,563	2,464
Proceeds from convertible loan	—	344
Change in fair value reported in statement of comprehensive loss	1,342	755
	4,905	3,563

NOTE 9 — COMMITMENTS AND CONTINGENCIES:

- a** . As of December 31, 2021, the Company was obligated under noncancellable operating lease agreements for certain sales offices and vehicles.

Future minimum lease payments for noncancellable operating leases with initial or remaining terms in excess of one year are as follows:

Fiscal year ending December 31:

2022	573
2023	294
2024	42
Total minimum lease payments	909

The lease fees expensed in each of the years ended December 31, 2021, and 2020 were \$516 and \$493 respectively.

- b** . The Company is obligated to repay certain research and development grants received from the Government of Israel in the form of a royalty rate on future sales of products derived from the funded research and development activities (see also Note 2v). The aggregate amount of royalties to be paid is determined based on 100% of the total grants received for qualified projects plus interest based on LIBOR. The Company may be required to pay royalties based on previous years funding in periods after December 31, 2021, for the future sale of product that includes technology developed and funded with these research and development grants received to date.

As of December 31, 2021, the Company received approximately \$14,300 (approximately \$15,500 including LIBOR) and repaid approximately \$10,000.

As of December 31, 2021, and 2020, the Company had a liability to pay royalties in the amount of approximately \$818 and \$560, respectively.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 10 — CONVERTIBLE PREFERRED STOCK:

The rights, preferences, and privileges of the preferred stock (series A and series B) are described below:

Dividends:

- a. The holders of preferred stock shall be entitled to receive dividends, out of any assets legally available therefore, when and as declared by the Board of Directors from time to time, out of any assets of the Company legally available, therefore.
- b. The Company may not declare or pay any dividends or make any distribution of assets on, or redeem, purchase or otherwise acquire, shares or any other capital shares of the Company ranking junior to the preferred stock as to the payment of dividends or the distribution of assets upon liquidation, dissolution or winding up, unless a corresponding distribution is effected in respect of the preferred stock as if the preferred stock had been converted into common stock.

No dividends have been declared to date.

Conversion rights:

Each of the holders of preferred stock shall have the right, at such holder's discretion, at any time or from time to time, to convert each preferred stock held by it into such number of fully paid and non-assessable shares of common stock as it is determined by dividing the applicable original issue price by the applicable conversion price per share for the preferred stock in effect at the time of conversion. The initial conversion price for each preferred stock shall be the original issue price for such preferred stock. The conversion price is subject to adjustment.

Each preferred stock will automatically convert into shares of common stock at the the effective conversion price for each such share immediately upon the earlier of: (i) the Company's sale of its common stock in a firm commitment, underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended, which results in aggregate gross proceeds to the Company of not less than \$5,000 at a Company valuation of at least \$15,000; or (ii) the date specified in a written request to the Company for such conversion from either the holders (a) of at least 75% of the series B preferred stock then outstanding, or (b) from the holders of at least 75% of the series A preferred stock then outstanding.

Liquidation rights:

Upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary or deemed liquidation the assets of the Company available for distribution to its shareholders shall be distributed in the following order of priority:

First and in preference to any distribution of any available assets to the holders of any other class or series of share of the corporation, the holders of series B preferred stock shall be entitled to receive an amount equal to \$0.9991 per share plus interest at the rate of 8% per annum from the original issuance date of such series B preferred stock. If the assets are insufficient to permit a full payment, then all assets shall be distributed ratably among the holders of series B.

In the event that, following the satisfaction of the B preference in full, the available assets shall exceed the amount necessary to pay the B preference, the remaining assets shall be distributed among the holders of series A preferred stock in preference to holders of common stock, an amount equal to \$0.60168 per share plus interest at the rate of 8% per annum from the original issuance date of such series A preferred stock.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 10 — CONVERTIBLE PREFERRED STOCK: (cont.)

If the assets are insufficient to permit a full payment, then all assets shall be distributed ratably among the holders of series A. If the assets exceed the amount necessary to fulfill the payment, then the remaining assets shall be distributed ratably among the holders of common stock.

Voting rights:

The holders of preferred stock will vote together with, in the same manner and with the same effect as the holders of common stock on all matters on which the holders of common stock shall be entitled to vote. The holders of preferred Stock shall be entitled to cast such number of votes equal to the number of shares of common stock into which the preferred stock are then convertible.

The Company applied the provision of ASC 480-10-S99-3A and classified the preferred Stock outside of permanent equity. The Company concluded that it is not currently probable the preferred stock will become redeemable (e.g., it is not probable a contingency that triggers redemption will be met). Therefore, an adjustment of the initial carrying amount is not necessary until it is probable that the security will become redeemable.

NOTE 11 — WARRANTS:

- a.** During February 2018, the Company issued warrants to Mizrahi-Tefahot Bank (“Mizrahi”) contemporaneously with obtaining a loan and a credit facility. The warrants are convertible into series B convertible preferred stock or common stock in a qualified financing round. The number of series B convertible preferred stock is determined by dividing the warrant amount (as determined under the contract) by the applicable exercise price which depends on the triggering event as established in the contract, or the lowest stock purchase price in a qualified financing round, the lower of the two. During February 2019, the Company issued additional warrants to Mizrahi with identical terms to those issued in 2018. During November 2020, the Company issued additional warrants to Mizrahi with identical terms apart from the established warrant amount that is used to calculate the number of series B convertible preferred stock to be issued. As of December 31, 2021, the warrants are still outstanding.
- b.** During December 2020, the Company issued warrants to Migdalor contemporaneously with obtaining a loan. See note 7b above. The warrants can either be:
- 1) converted into the Company’s common stock (the number of which shall be determined based on the warrant amount established in the contract and the Company’s valuation as defined in the contract, or based on a triggering event), at any time during a period of 96 months; or
 - 2) redeemed for cash based on the lower of a predetermined amount or a formula as set in the contract, at any time and in the financial institution’s own discretion, during a period of 96 months.

The Company classified these warrants as liabilities mainly due to the redemption feature over the options. Due to certain conditions in the warrant’s agreement, part of the warrants (\$177) was classified as short-term liability. As of December 31, 2021, these warrants are still outstanding.

In November 2021, the Company received additional funding in the amount of \$1,000 from Migdalor (see also note 7b), increased the warrants from \$1,500 to \$1,800 for calculating the number of common stock to be converted into, and increased the predetermined amount of the cash redemption option. As the new warrants were issued in connection with obtaining the additional funding, and no amendment has been made to the original loan, the warrants were accounted for as deferred issuance costs attributed to the additional loan. These deferred issuance costs are reflected as a deduction from the carrying amount of the additional related loan and are amortized using the effective interest method.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 11 — WARRANTS: (cont.)

- c. The table below shows the impact on the statement of comprehensive loss related to the warrants for the year ended December 31

	2021	2020
Outstanding as of January 1	1,023	544
Fair value changes	1,031	334
Additions	95	145
Outstanding as of December 31	2,149	1,023

As of December 31, 2021, and 2020, the estimated fair value of the warrants was based on a hybrid valuation methodology with a weighted average that combined Option Pricing Model (OPM) and Probability Weighted Expected Return Method (PWERM) using Level 3 inputs. The valuation was performed under scenarios of IPO and staying private using a volatility of 58% (2020: 57%), a risk-free rate of 0.97% (2020: 0.27%) and an expected term of 0.4 years (2020: 0.75 years) in the scenario of IPO and 3 years (2020: 4 years) in the scenario of staying private.

NOTE 12 — CAPITAL DEFICIENCY:

a. Share capital

The Company's share capital as of December 31, 2021 and 2020, is composed of common stock and Non-voting common stock, of \$0.0001 par value, as follows:

	December 31, 2021	
	Authorized	Issued and outstanding
	Number of shares	
Common stock	11,009,315	2,050,404
Non-voting Common stock	2,803,774	1,783,773

	December 31, 2020	
	Authorized	Issued and outstanding
	Number of shares	
Common stock	11,009,315	2,047,641
Non-voting Common stock	2,803,774	1,783,773

b. Non-voting common stock

Non-voting common stock, par value \$0.0001, has no voting or dividend rights, and only having the right to receive distributable proceeds upon certain qualifying events of liquidation, which will be equal to the pro rata portion of the acquisition amount less amounts paid to settle all Company debt outstanding, and all costs and fees associated with such liquidation event. In addition, the Company has a right to redeem these shares at par value in case of an IPO. In case of an IPO, should the Company decide not to redeem the non-voting common stock, there will be no change in this stock.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 12 — CAPITAL DEFICIENCY: (cont.)

c. Share-based compensation

In February 2015, under and in accordance with the equity restructure, the Company’s Board of Directors terminated the Old Plan. On June 30, 2015, the Company adopted the 2015 Equity Incentive Plan (“the 2015 Plan”).

Under the 2015 Plan, the Board of Directors may grant up to 2,804 Incentive Share Options, Non statutory shares options, share appreciation rights, restricted share and restricted share units to employees, directors, and consultants. The exercise price of an option cannot be less than 100% of the fair market value of the underlying share of common stock on the date of grant for incentive share options (not less than 110% of the fair market value for shareholders owning more than 10% of all classes of share) as determined by the Board of Directors. The maximum option term is 10 years (five years for shareholders owning more than 10% of all classes of share). The 2015 Plan grants the Board of Directors the discretion to determine when the options granted become exercisable.

In January 2016, the Company’s Board of Directors approved an additional quantity of 216 share options permitted to be granted under the 2015 Plan.

As of December 31, 2021, and 2020, 2,033 shares of common stock were issued to key personnel, par value, having full voting rights and entitled to receive all dividends and other distributions paid with respect to such shares.

During the year ended December 31, 2021, the following awards were granted:

Award Type (2015 Plan)	Number of Awards	Vesting Conditions	Expiration Date
Options	43,261	Over 4 years from grant date	10 th anniversary of Grant Date

Pursuant to the current Section 102 of the Israeli Tax Ordinance, which came into effect on January 1, 2003, options may be granted through a trustee (i.e., Approved 102 Options) or not through a trustee (i.e., Unapproved 102 Options). The Company elected to grant its options through a trustee. As a result, the Company will not be allowed to claim as an expense for tax purposes in Israel the amounts credited to the employee as capital gains to the grantees, although it will generally be entitled to do so in respect of the salary income component (if any) of such awards when the related tax is paid by the employee.

A summary of the Company’s share option activity under option plans is as follows:

	Number of Options	Weighted- Average Exercise Price	Weighted Average Remaining Contractual Life
Outstanding – January 1, 2020	883,585	\$ 0.0874	7.2
Granted	14,891	\$ 0.1058	
Exercised	1,902	\$ 0.1058	
Expired and forfeited	17,323	\$ 0.1012	
Outstanding – December 31, 2020	879,251	\$ 0.0874	6.25
Exercisable – December 31, 2020	730,765	\$ 0.0828	5.92

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 12 — CAPITAL DEFICIENCY: (cont.)

	Number of Options	Weighted- Average Exercise Price	Weighted Average Remaining Contractual Life
Outstanding – January 1, 2021	879,251	\$ 0.0874	6.25
Granted	43,261	\$ 1.3616	
Exercised	2,763	\$ 0.1058	
Expired and forfeited	29,256	\$ 0.0874	
Outstanding – December 31, 2021	890,493	\$ 0.1518	5.43
Exercisable – December 31, 2021	801,562	\$ 0.276	5.10

No income tax benefit has been recognized relating to share-based compensation expense and no tax benefits have been realized from exercised share options.

The following table summarize information as of December 31, 2021, regarding the number of shares of common stock issuable upon outstanding options and exercisable options:

Exercise price	Options outstanding as of December 31, 2021	Weighted average remaining contractual life (years)	Options exercisable as of December 31, 2021	Weighted average remaining contractual life of options exercisable (years)
0.0644	359,267	3.63	359,267	3.63
0.1058	487,965	6.42	442,295	6.3
1.3616	43,261	9.41	—	—

The weighted-average fair value of options granted, estimated by using the BlackScholes option-pricing model, was \$1.242, for the years ended December 31, 2021 and 2020. The aggregate intrinsic value was calculated as the difference between the exercise price of the share options and the fair value of the underlying common stock as of December 31, 2021 and 2020.

The weighted-average grant-date fair value of options granted during the years ended December 31, 2021, and 2020 was \$54 and \$18.6, respectively. The intrinsic value of options exercised in 2021 and 2020 was approximately \$0. The aggregate intrinsic value represents the total intrinsic value (the difference between the fair value of the Company's common shares on December 31 of the respective year and the exercise price, multiplied by the number of options that would have been received by the option holders had all option holders exercised their options on such date).

Key assumptions used to estimate the fair value of the share options granted during the year ended December 31, 2021 and 2020 included:

	Year Ended December 31	
	2021	2020
Expected term of options (years)	5.4	6.1
Expected common stock price volatility*	58%	57%
Risk-free interest rate	0.97%	0.51%
Expected dividend yield	—	—

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 12 — CAPITAL DEFICIENCY: (cont.)

The expected volatility was based on the historical stock prices of publicly traded comparable companies.

Share-based compensation expense for share options in the consolidated statement of comprehensive income (loss) is summarized as follows:

	Year Ended December 31	
	2021	2020
Cost of revenues	3	3
Research and development	24	23
Sales and marketing	16	13
General and administrative	10	4
Total Share-based compensation expense	53	43

NOTE 13 — INCOME TAXES:

- a. The Company is subject to U.S. and Israeli income tax laws.
- b. The US entity is subject to a federal income tax rate of 21% in 2019 and thereafter and State taxes of 9%. The Subsidiary is subject to ordinary corporate income tax rate of 23% in 2019 and thereafter.
- c. Carryforward tax losses:

As of December 31, 2021, the Company has net operating loss carry forwards of approximately \$1,963. In addition, the Company has loss carry forward of approximately \$29,867, which the Company did not perform a qualification test for and has certain doubts regarding their qualification. Net operating loss carry forwards relate to activity in the U.S has an indefinite carry forward period.

As of December 31, 2021, the Company's subsidiary has net operating loss carry forwards of approximately \$133,205. Net operating loss carry forwards relate to activity in Israel has an indefinite carry forward period.

Utilization of the U.S. federal and state net operating losses may be subject to a substantial limitation due to the change in ownership limitations provided by the Internal Revenue Code of 1986, as amended and similar to state provisions. The annual limitation may result in the expiration of the net operating losses and credits before their utilization.

- d. Loss before taxes on income are comprised as follows:

	Year Ended December 31	
	2021	2020
Domestic	(3,273)	(974)
Foreign Subsidiary	(1,978)	(531)
Total	(5,251)	(1,505)

- e. Reconciliation of the theoretical tax expense to actual tax expense:
The main reconciling item between the statutory tax rate of the Company and the effective rate is the provision for a full valuation allowance in respect of tax benefits from carry forward tax losses due to the uncertainty of the realization of such tax benefits.
- f. The Company's major tax jurisdictions are the United States and Israel. Due to unutilized net operating losses and research credits, the tax years through 2016 remain open and subject to examinations by the appropriate governmental agencies in the United States. Tax assessments filed by the Company's subsidiary through the year 2015 are considered to be final.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 13 — INCOME TAXES: (cont.)

The components of the Company's net deferred tax assets were as follows:

	Year Ended December 31	
	2021	2020
Deferred tax assets (liabilities):		
Loss carryforwards	31,049	39,412
Valuation allowance	(31,049)	(39,412)
Total net deferred tax assets	—	—

The Company provided a valuation allowance equal to the deferred income tax assets for the years ended December 31, 2021 and 2020 because it is not presently known whether future taxable income will be sufficient to utilize the loss carryforwards.

The valuation allowance could be reduced or eliminated based on future earnings and future estimates of taxable income.

NOTE 14 — BASIC AND DILUTED LOSS PER SHARE:

Basic net loss per share is computed using the weighted average number of common stock and fully vested RSUs outstanding during the period. In computing diluted loss per share, basic loss per share is adjusted to take into account the potential dilution that could occur upon: (i) the exercise of options and non-vested RSUs granted under employee stock compensation plans, and the exercise of warrants using the treasury stock method; and (ii) the conversion of the convertible preferred stock, and convertible loan using the "if-converted" method, by adding to net loss the change in the fair value of the convertible loan, net of tax benefits, and by adding the weighted average number of shares issuable upon assumed conversion of these instruments.

Options to purchase 890,493 and 879,251 shares of common stock at an average exercise price of \$0.1518 and \$0.0874 per share were outstanding as of December 31, 2021 and 2020, respectively, but were not included in the computation of diluted EPS because to do so would have had antidilutive effect on the basic loss per share.

Preferred stock, which was convertible into 7,731,043 shares of common stock was outstanding as of December 31, 2021 and 2020 but was not included in the computation of diluted EPS because to do so would have had antidilutive effect on the basic loss per share.

The convertible loan (see Note 8) was not included in the calculation of the diluted loss per share as the loan is convertible into shares only on contingent event which have yet to occur as of December 31, 2021 and 2020.

Warrants (as described in Note 11) are convertible into 178,281 and 120,899 of the Company's preferred stock were outstanding as of December 31, 2021 and 2020, respectively, but were not included in the computation of diluted EPS because to do so would have had antidilutive effect on the basic loss per share.

Warrants (as described in Note 11) are convertible into 48,109 and 12,040 of the Company's common stock were outstanding as of December 31, 2021 and 2020, respectively, but were not included in the computation of diluted EPS because to do so would have had antidilutive effect on the basic loss per share.

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 15 — ENTITY WIDE INFORMATION AND DISAGREGATED REVENUES:

The Company operates as one operating segment (developing and marketing access broadband equipment for copper and fiber networks).

a. Geographic information:

Following is a summary of revenues by geographic areas. Revenues attributed to geographic areas, based on the location of the end customers:

	Year Ended December 31	
	2021	2020
North America	4,637	6,268
Europe, the Middle East and Africa	3,373	1,905
Asia Pacific	520	326
Latin America	15	33
	8,545	8,532

b. The Company's long-lived assets are located as follows:

Property and Equipment, net:

	December 31	
	2021	2020
Israel	101	82
North America	2	4
	103	86

c. Customers representing 10% or more of net revenues and the amount of revenues recognized are as follows:

	December 31, 2021	
	%	
Customer A	22%	1,887
Customer B	19%	1,663
Customer C	10%	835

	December 31, 2020	
	%	
Customer A	18%	1,556
Customer B	13%	1,076
Customer C	10%	846

The majority of the Company's revenues are recognized at a point in time.

NOTE 16 — FINANCIAL EXPENSES, NET:

a. Financial expenses:

	Year Ended December 31	
	2021	2020
Interest expenses	690	260
Change in convertible loan fair value	1,342	755
Change in warrants' fair value	1,031	333
Other	50	19
Exchange rates differences	278	7
	3,391	1,374

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 17 — RELATED PARTY TRANSACTIONS:

1. Share purchase agreement

On February 20, 2015, the Company completed a financing round where common stock were issued to investors (the “Financing Round”). The Company’s chief executive officer (the “CEO”) participated in the Financing Round on the same terms and conditions as were offered to all other investors. The CEO purchased 1,472,132 common stock for the amount of \$106. In order to fund the common stock purchase, the Company issued a secured promissory note, not subject to forgiveness to the CEO in the amount of \$106 (see 17(3) for further details).

2. Share based Compensation

On February 20, 2015, the Company entered into a restricted share repurchase agreement (the “Agreement”) with the CEO in relation to the common stock the CEO had purchased in the Financing Round (see 17(1)). Under the Agreement the common stock the CEO purchased (1,472,132) will be subject to repurchase rights by the Company, under certain continuous employment conditions (the “RSU”). The RSU vests over a five-year period and is valued at \$106 as the grant date.

3. Promissory Note

On February 20, 2015, the Company issued a secured promissory note not subject to forgiveness to the CEO in the amount of \$106 to fund the CEO’s participation in the financing round as described above (see 17(2)), with a term of 6 years. The promissory note bears an annual interest of 2.41% to be repaid with the principal amount at the due date (which is the earlier of 6 years, a deemed liquidation event or a distribution event). In November 2020, the Company extended the term by an additional 5 years under the same terms of the original Note. The Company recorded a receivable related to the promissory note as a reduction in equity, since cash for the related issuance of common stock (as described above) was yet to be received.

4. Management fees

As part of the Shareholder Agreement (the “SHA”), commencing on February 15, 2015, the company was paying one of its shareholders a monthly management fee of \$5. The Company and the shareholder agreed to amend the agreement with the shareholder to replace the monthly payment with a success-based fees, effective on January 1, 2020. The amendment offers success-based fee of up to \$150 on funding of up to \$4,000. During January 2022, the Company paid the shareholder an amount of \$100 related to the amendment (see note 18(b) for further details). The Company recorded the payment as a prepaid expense for uncompleted services.

5. Convertible Loan

In March 2017, the Company issued a convertible loan to investors (see note 8). The Company’s CEO participated in the convertible loan in an amount of \$26 and received identical terms and conditions as other investors of the convertible loan.

NOTE 18 — SUBSEQUENT EVENTS:

- a . The Company evaluates events or transactions that occur after the balance sheet date but prior to the issuance of the consolidated financial statements to identify matters that require additional disclosure. For its annual consolidated financial statements as of December 31, 2021, and for the year then ended, the Company evaluated subsequent events through March 30, 2022, the date that the consolidated financial statements were issued. The Company has concluded that no subsequent event has occurred that require disclosure other than the below.
- b . During December 2021 to March 2022, the Company offered up to \$3,000 of the Company’s 6% convertible notes due three years from the date of execution (the “Notes”). The Notes were subject to optional and mandatory conversion into shares of the Company’s Common stock, \$0.0001 par value. In January 2022 the Company performed a first closing \$2,100 convertible notes out of the \$3,000 offered, which private

ACTELIS NETWORKS, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
U.S. DOLLARS IN THOUSANDS

NOTE 18 — SUBSEQUENT EVENTS: (cont.)

placement was completed pursuant to an exemption from registration under Rule 506(b) of the Securities Act and was funded by this amount (less fees and expenses). The notes may be converted at any time by the holders into common stock and automatically converted to common stock upon the consummation of an Initial Public Offering. The conversion price for the notes will be at a 40% discount.

- c . On February 24, 2022, a full-scale military invasion of Ukraine by Russian troops was reported. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine could lead to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions for some of our mining equipment components. Our operations would be particularly vulnerable to potential interruptions in the supply of certain critical materials and metals.
- d . On April 15, 2022, the Company's Board of Directors approved a Reverse Stock Split. The Reverse Stock split became effective as of May 2, 2022. See Note 2(ff).

NOTE 19 — Events Subsequent to Original Issuance of Financial Statements (unaudited):

The Company has evaluated subsequent events after March 30, 2022 through May 5, 2022, the date the consolidated financial statements were available for issuance.

1. Initial public offering

The Company is in the process of an Initial public offering (the "IPO"). Prior to the effectiveness of this IPO, the Company will consummate a recapitalization transaction, as described below:

- a . Issuance of 1,300,248 shares of common stock due upon the conversion of the convertible loan agreement, in the amount of \$1,526 (see Note 8).
 - b . Immediate conversion of 7,731,043 shares of convertible preferred stock on a one (1) for one (1) basis into 7,731,043 shares of common stock (see Note 10).
 - c . Exercise of warrants:
 - a . Issuance of 181,192 shares of common stock issuable pursuant to an option to purchase shares of common stock granted to Migdalar as part of the loan agreement with Migdalar (see Note 7(b)).
 - b . Issuance of 601,708 shares of common stock issuable upon the exercise of warrants issued to Mizrahi-Tefahot Bank (see Note 11(a)).
 - d . Issuance of 720,001 shares of common stock from the convertible notes granted in the Company's offering during December 2021 and March 2022 (see Note 18(b)).
 - e . Redemption of up to 1,783,773 shares of our non-voting common stock for their par value.
- 2. During April 2022, the Company performed a second closing of \$60 of the convertible note offering described in Note 18(b) above.**
- 3. Change in authorized stock**

On May 2, 2022, the Company's Board of Directors approved an amendment to the Company's Bylaws, stating the number of authorized stock to 42,803,774 shares of stock to be increased, as described below:

- a . Common stock, \$0.0001 par value — authorized shares increase to 30,000,000 shares from 11,009,315 shares.
- b . Non-voting common stock, \$0.0001 par value-authorized shares remain 2,803,774 shares.
- c . Preferred stock, \$0.001 par value — authorized shares increase to 10,000,000 shares from 7,988,691 shares.



PRELIMINARY PROSPECTUS

, 2022

Through and including 2022 (the 25th day after the date of this offering), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.



PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the Securities and Exchange Commission registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq Capital Market listing fee.

	Amount to be paid
SEC registration fee	\$ 1,738.99
FINRA filing fee	\$ 3,313.91
Nasdaq Capital Market listing fee	\$ 65,000
Printing and engraving expenses	\$ 50,000
Legal fees and expenses	\$ 550,000
Accounting fees and expenses	\$ 80,000
Transfer agent and registrar fees and expenses	\$ 15,000
Miscellaneous expenses	\$ 40,000
Total	\$ 805,052

Item 14. Indemnification of Directors and Officers.

The certificate of incorporation and the by-laws of our company, each as amended to date, provide that our company will indemnify, to the fullest extent permitted by the General Corporation Law of the State of Delaware, each person who is or was a director, officer, employee or agent of our company, or who serves or served any other enterprise or organization at the request of our company. Pursuant to Delaware law, this includes elimination of liability for monetary damages for breach of the directors' fiduciary duty of care to our company and its stockholders. These provisions do not eliminate the directors' duty of care and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to our company, for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for any transaction from which the director derived an improper personal benefit, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reasonable cause to believe his or her conduct was unlawful. In a derivative action (i.e., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the Delaware Chancery Court or the court in which the action or suit was brought shall determine that such person is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

Our Certificate of Incorporation provides that we shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or

[Table of Contents](#)

investigative, by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of our Company or, while a director or officer of our Company, is or was serving at our request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding.

In connection therewith, we have agreed to pay the expenses (including attorneys' fees) incurred by an any such person in defending any such proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of such proceeding shall be made only upon receipt of an undertaking by such person to repay all amounts advanced if it should be ultimately determined that such person is not entitled to be indemnified under our Certificate of Incorporation.

In addition, we may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of our Company or, while an employee or agent of our Company, is or was serving at our request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. We may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any proceeding in advance of its final disposition on such terms and conditions as may be determined by our Board of Directors.

Our Board of Directors may, and expects to following the closing of the offering, to the full extent permitted by applicable law, authorize an appropriate officer or officers to purchase and maintain at the Company's expense insurance: (a) to indemnify the Company for any obligation which it incurs as a result of the indemnification of directors, officers and employees; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of our Certificate of Incorporation.

We have entered into agreements with our directors and executive officers that require us to indemnify these persons against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred (including expenses of a derivative action) in connection with any proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that the person is or was a director or officer of our company or any of our affiliated enterprises, provided the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to our company's best interests and, with respect to any criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful. The indemnification agreements will also establish procedures that will apply if a claim for indemnification arises under the agreements.

Reference is made to our undertakings in Item 17 with respect to liabilities arising under the Securities Act.

Reference is also made to the form of underwriting agreement filed as Exhibit 1.1 to this registration statement for the indemnification agreements between us and the Underwriter.

Item 15. Recent Sales of Unregistered Securities.

During the past three years, we issued securities which were not registered under the Securities Act as set forth below. We believe that each of such issuances was exempt from registration under the Securities Act in reliance on Section 4(2), Rule 701 and/or Regulation S under the Securities Act.

The following is a summary of transactions during the preceding three fiscal years involving sales of our securities that were not registered under the Securities Act.

- On February 28, 2018, February 13, 2019, and November 4, 2020, we issued to Mizrahi Bank three warrants to purchase stock at an aggregate value of \$750,000, at an exercise price at the lower of \$0.02172 per share, if exercised into Series B Preferred Stock or at the qualified financing price if exercised at a financing round, including the consummation of this offering. The warrants were issued contemporaneously with obtaining a loan and a credit facility. The loan and credit facility were terminated on December 31, 2020.

[Table of Contents](#)

- On December 2, 2020, we signed the Migdalor Loan, for a loan of up to approximately \$6.0million. The loan bears interest of 9.6% per annum. The interest shall first be paid in 12 payments starting February 1, 2021. Starting February 1, 2022, the loan principal and interest shall be repaid in 72 equal payments, plus an interest bonus after the 36th month. As part of the Migdalor Loan, we granted Migdalor an option to purchase common stock in the amount of \$1.5 million, at an exercise price to be calculated based on the initial offering price. As of December 31, 2020, the balance outstanding under the Migdalor Loan was \$3.0 million. In January 2021 and November 2021, we received additional funding from Migdalor of \$2.0 million and \$1.0 million, respectively, bearing similar terms. In November 2021, we increased the value of the option granted to Migdalor to \$1.8 million.
- On December 14, 2020, we issued a warrant to Lauderdale GmbH & Co. KG in the amount of \$8,380, convertible into Series B Preferred Shares.
- From December 2021 through April 2022, we offered up to \$3.0 million of our 6% convertible notes due three years from the date of execution, or the Notes. The Notes were subject to optional and mandatory conversion into shares of our common stock, \$0.0001 par value. To date, we closed a private placement of \$2,160,200 convertible notes in a private placement pursuant to an exemption from registration under Rule 506(b) of the Securities Act. The Underwriter acted as placement agent in the Private Placement and received commissions of \$151,214, plus expenses and five-year warrants to purchase a number of shares of common stock equal to 7% of number of shares of common stock into which the Notes convert into. The Notes may be converted at any time by the holders into common stock. The conversion price for the Note will be at a 40% discount (and no less than \$2.40 per share). On April 29, 2022, the Underwriter and the Company cancelled the April Warrant and the January Warrant prior to any exercise of the warrant.
- We have granted under the 2015 Plan options to purchase an aggregate of 1,467,149 shares of our common stock to a total of 116 employees, consultants, and directors (of which 870,002 to 61 employees, consultants and directors are outstanding), having exercise prices ranging from \$0.0644 to \$1.362 per share. 32,865 of such options granted under the 2015 Plan have been exercised at a weighted-average exercise price of \$0.0741 per share.

Item 16. Exhibits and Financial Statements Schedules.

(a) Exhibits.

Exhibit No.	Description
1.1	Form of Underwriting Agreement**
3.1	Twenty-Third Amended and Restated Certificate of Incorporation of the Registrant, as in effect prior to this offering**
3.2	Amendment of the Twenty-Third Amended and Restated Certificate of Incorporation of the Registrant, dated May 2, 2022**
3.3	Bylaws of the Registrant, as in effect prior to this offering**
3.4	Form of Amended and Restated Bylaws of the Registrant to become effective upon the closing of this offering**
3.5	Form of Twenty-Fourth Amended and Restated Certificate of Incorporation of the Registrant to become effective upon the closing of this offering*
4.1	Form of Representative's Warrant**
5.1	Opinion of Pearl Cohen Zedek Latzer Baratz LLP**
10.1	Amended and Restated Stockholders Agreement, dated February 2, 2016, by and among Actelis Networks, Inc. and each of its common and preferred shareholders listed thereto**
10.2	Lease by and between Actelis Networks Israel, Ltd. and Moshe Smucha, dated January 13, 2000**
10.3	First Amendment to the Lease and Management Agreements from October 22, 2017, by and between Homerton Investments, Ltd. and Actelis Networks Israel Ltd., dated April 14, 2021**
10.4	Form of Service Agreement with Dr. Ram Vromen, dated December 27, 2021**
10.5	Form of Restricted Stock Repurchase Agreement with Company CEO Mr. Tuvia Barlev dated February 20, 2015**

[Table of Contents](#)

Exhibit No.	Description
10.6	Form of secured non-negotiable Promissory Note between the Company and Mr. Tuvia Barlev dated February 20, 2015**
10.7	Series A Preferred Stock Purchase Agreement dated January 27, 2015**
10.8	Series B Preferred Stock Purchase Agreement dated February 2, 2016**
10.9	Employment Agreement between Actelis Networks, Inc. and Mr. Tuvia Barlev dated February 15, 2015**
10.10	Offer letter between Actelis Networks, Inc. and Mr. Yoav Efron dated November 30, 2017**
10.11	Employment Agreement between Actelis Networks Israel, Ltd. And Mr. Yoav Efron dated November 30, 2017**
10.12	Consulting Agreement between Actelis Networks, Inc. and Barlev Enterprises dated February 20, 2015**
10.13	Actelis Networks, Inc. 2015 Equity Incentive Plan**
10.14	Amendment No. 1 to 2015 Equity Incentive Plan**
10.15	Form of Director and Officer Indemnification Agreement**
10.16	Senior Loan Agreement between Migdalor Business Investment Fund and Actelis Networks Israel, Ltd., dated December 2, 2020**
10.17	Amendment Number 1 to Senior Loan Agreement between Migdalor Business Investment Fund and Actelis Networks Israel, Ltd., dated November 17, 2021**
10.18	Securities Purchase and Loan Repayment Agreement between Actelis Networks, Inc. and Mr. Tuvia Barlev dated April 14, 2022**
10.19	Offer letter between Actelis Networks, Inc. and Mr. Bruce Hambergren, dated January 20, 2015**
21.1	Subsidiaries of the Registrant**
23.1	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.) a member firm of PricewaterhouseCoopers International Limited, independent registered accounting firm for the Registrant*
23.2	Consent of Pearl Cohen Zedek Latzer Baratz LLP (included in Exhibit 5.1)**
24.1	Power of Attorney (included in signature page to Registration Statement)**
99.1	Consent of Joseph Moscovitz to be Named as Director Nominee**
99.2	Consent of Dr. Naama Halevi-Davidov to be Named as Director Nominee**
99.3	Consent of Noemi Schmayder to be Named as Director Nominee**
107	Filing Fee Table**

* Filed herewith.

** Previously filed.

*** To be filed by amendment.

†† Indicates a management contract or compensatory plan

(b) Financial Statements Schedules.

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

(c) Filing Fee Table.

The Filing Fee Table and related disclosure is filed herewith as Exhibit 107.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the Underwriter at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the Underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this Registration Statement, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a

[Table of Contents](#)

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 hereunder, 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 of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- i. For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- ii. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, California on May 10, 2022.

ACTELIS NETWORKS, INC. By: <u>/s/ Tuvia Barlev</u> Tuvia Barlev Chief Executive Officer and Secretary

Pursuant to the requirements of the Securities Act of 1933, this amendment to the registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Tuvia Barlev</u>	Chief Executive Officer, Secretary and Chairman	May 10, 2022
Tuvia Barlev	of the Board (Principal Executive Officer)	
<u>/s/ Yoav Efron</u>	Chief Financial Officer (Principal Financial Officer	May 10, 2022
Yoav Efron	and Principal Accounting Officer)	
<u>*</u>	Director	May 10, 2022
Ram Vromen		
<u>*</u>	Director	May 10, 2022
Yariv Galit		
<u>*</u>	Director	May 10, 2022
Israel Niv		

*By: <u>/s/ Tuvia Barlev</u> Tuvia Barlev Attorney-in-fact
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STATE OF DELAWARE
 CERTIFICATE of AMENDMENT
to the
 TWENTY-FOURTH AMENDED AND RESTATED
 CERTIFICATE of INCORPORATION
of
 ACTELIS NETWORKS, INC.

ACTELIS NETWORKS INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (**“DGCL”**), does hereby certify that:

1. The present name of the Corporation is ACTELIS NETWORKS, INC.

2. The date of filing of the original Certificate of Incorporation of the Corporation with the Secretary of State of the State of Delaware was on November 12, 1998, as ACTEL Networks, Inc. The Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on May 6, 1999. A Certificate of Amendment to the Certificate of Incorporation was filed on June 14, 1999. A Certificate of Amendment to the Certificate of Incorporation was filed on July 6, 1999. A Certificate of Amendment to the Certificate of Incorporation was filed on July 28, 1999. The Second Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 19, 1999. The Third Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 1, 1999. The Fourth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 20, 2001. The Fifth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 26, 2001. The Sixth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on June 12, 2001. The Seventh Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 9, 2004. The Eighth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on January 7, 2005. A Certificate of Amendment to the Certificate of Incorporation was filed on September 14, 2005. The Ninth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on November 21, 2006. The Tenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 28, 2006. The Eleventh Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 30, 2008. A Certificate of Amendment to the Certificate of Incorporation was filed on January 27, 2009. The Twelfth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 13, 2009. The Thirteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 23, 2009. A Certificate of Amendment to the Certificate of Incorporation was filed on June 4, 2009. The Fourteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on August 25, 2009. The Fifteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 2, 2009. The Sixteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 16, 2011. The Seventeenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on June 14, 2013. The Eighteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on July 1, 2013. The Nineteenth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 24, 2014. The Twentieth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 24, 2015. The Twenty Second Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 27, 2015. A Certificate of Amendment to the Twenty Second Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 29, 2015. A Certificate of Amendment to the Twenty Third Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 1, 2016. A Certificate of Amendment to the Twenty Third Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 29, 2022 (the **“Certificate of Incorporation”**).

3. This Twenty Fourth Amended and Restated Certificate of Incorporation, which amends and restates the Corporation’s Certificate of Incorporation in its entirety, has been duly adopted pursuant to the provisions of Sections 242 and 245 of the DGCL, and the stockholders of the Corporation have given their written consent hereto in accordance with Section 228 of the DGCL. The provisions of the Twenty Fourth Amended and Restated Certificate of Incorporation are as follows

FIRST: The name of the corporation is Actelis Networks, Inc. (the **“Corporation”**).

SECOND: The registered office in the State of Delaware is located at Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801 and its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business, and the objects and purposes proposed to be transacted, promoted and carried on, are to do any lawful act or thing for which a corporation may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The aggregate number of shares of stock which the Corporation shall have authority to issue is 42,803,774 shares, consisting of 30,000,000 shares of Common Stock with a par value of US\$0.0001 per share (the **“Common Stock”**), 2,803,774 shares of Non-Voting Common Stock with a par value of US\$0.0001 per share (the **“Non-Voting Common Stock”**) and 10,000,000 shares of preferred stock with a par value of US\$0.0001 per share (the **Preferred Stock** or the **“Preferred Shares”**).

RESOLVED, that the Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as set forth on **Exhibit A** hereto, and which restates, integrates, and further amends the provisions of the Certificate of Incorporation of the corporation as previously amended or supplemented.

Exhibit A referred to above is hereby incorporated herein by this reference. This Twenty Fourth Amended and Restated Certificate of Incorporation was approved by the holders of the requisite number of shares of this corporation in accordance with section 228 of the DGCL.

This Twenty Fourth Amended and Restated Certificate of Incorporation (the **“Certificate of Incorporation”**), which restates, integrates, and further amends the provisions of this corporation’s Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the DGCL.

IN WITNESS WHEREOF, the corporation has caused this Twenty Fourth Amended and Restated Certificate of Incorporation to be signed by its duly authorized officer and the foregoing facts stated herein are true and correct.

Dated: May _____, 2022

ACTELIS NETWORKS, INC.

By: _____

Name: Tuvia Barlev

Title: CEO

EXHIBIT A**TWENTY FOURTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION**

of

ACTELIS NETWORKS, INC.**ARTICLE I: NAME**

The name of the Corporation is Actelis Networks, Inc. (the "Corporation")

ARTICLE II: REGISTERED OFFICE

The address of its registered office in the State of Delaware is located at Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801 and its registered agent at such address is The Corporation Trust Company.

ARTICLE III: PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV: AUTHORIZED STOCK**1. Total Authorized.**

The total number of shares of all classes of capital stock that the Corporation has authority to issue is 42,803,774 shares, consisting of 30,000,000 shares of Common Stock with a par value of US\$0.0001 per share (the "**Common Stock**"), 2,803,774 shares of Non-Voting Common Stock with a par value of US\$0.0001 per share (the "**Non-Voting Common Stock**") and 10,000,000 shares of preferred stock with a par value of US\$0.0001 per share (the "**Preferred Stock**" or the "**Preferred Shares**").

The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of capital stock representing a majority of the voting power of all the then-outstanding shares of capital stock of the Corporation entitled to vote thereon, irrespective of the provisions of Section 242(b)(2) of the DGCL.

2. Rights of Common Stock.

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations, or restrictions thereof in respect of each class of capital stock of the Corporation.

2.1 Voting Rights. Each holder of Common Stock shall have the right to one (1) vote per share of Common Stock held of record by such holder. The holders of shares of Common Stock shall (a) be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation, and (b) be entitled to vote upon such matters and in such manner as may be provided by applicable law.

2.2 Liquidation, Dissolution or Winding Up. Upon the dissolution, liquidation or winding up of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive ratably all assets of the Corporation available for distribution to its stockholders.

2.3 Dividend and Distribution Rights. Shares of Common Stock shall be treated equally, identically, and ratably, on a per share basis, with respect to any dividends or distributions as may be declared and paid from time to time by the Board of Directors out of any assets of the Corporation legally available therefor.

2.4 Merger or Consolidation. In the case of any distribution or payment in respect of the shares of Common Stock upon the consolidation or merger of the Corporation with or into any other entity, or in the case of any other transaction having an effect on stockholders substantially similar to that resulting from a consolidation or merger, such distribution or payment shall be made ratably on a per share basis among the holders of the Common Stock.

2.5 Vote by Written Consent. Unless otherwise provided in this Certificate of Incorporation or the Bylaws, any action required to be taken at any annual or special meeting of stockholders of the Corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing. For the purposes of this Section 2 of this ARTICLE IV, to the extent permitted by applicable law, an electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed, and dated as of the date on which such writing or other electronic transmission is transmitted.

ARTICLE V: PREFERRED STOCK

The Board of Directors of the Corporation (the "Board") is hereby expressly authorized to provide out of the unissued shares of the Preferred Stock for one or more series of Preferred Stock and to establish from time to time the number of shares to be included in each such series and to fix the voting rights, if any, designations, powers, preferences and relative, participating, optional, special and other rights, if any, of each such series and any qualifications, limitations and restrictions thereof, as shall be stated in the resolution or resolutions adopted by the Board providing for the issuance of such series and included in a certificate of designation (a "Preferred Stock Designation") filed pursuant to the DGCL, and the Board is hereby expressly vested with the authority to the full extent provided by law, now or hereafter, to adopt any such resolution or resolutions.

The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in the Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE VII: AMENDMENT OF BYLAWS

The Board shall have the power to adopt, amend or repeal the Bylaws of the Corporation. Any adoption, amendment or repeal of the Bylaws of the Corporation by the Board of Directors shall require the approval of a majority of the Whole Board. For purposes of this Certificate of Incorporation, the term “Whole Board” shall mean the total number of directors then in office. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the Corporation by the affirmative vote of at least 75% of the outstanding shares of capital stock entitled to vote.

ARTICLE VIII: MATTERS RELATING TO THE BOARD OF DIRECTORS

1. Director Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board. In addition to the powers and authority expressly conferred upon them by statute or by this Certificate of Incorporation or the Bylaws of the Corporation, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation.

2. Number of Directors. The number of directors shall be fixed from time to time by resolution adopted by a majority of the voting power of the then-outstanding shares of capital stock of the Corporation then entitled to vote at an election of directors voting together as a single class which shall initially be 5 directors.

3. Staggered Board. Commencing on the closing date of the Corporation’s initial public offering of securities (“IPO”), in lieu of electing the whole number of directors annually, the directors, shall be divided, with respect to the time for which they severally hold office, into three classes, as nearly equal in number as is reasonably possible, with the term of office of the first class (“Class I”) to expire at the first annual meeting of stockholders held following the IPO, the term of office of the second class (“Class II”) to expire at the second annual meeting of stockholders held following the IPO, and the term of office of the third class (“Class III”) to expire at the third annual meeting of stockholders held following the IPO, with each director to hold office until his or her successor shall have been duly elected and qualified unless earlier removed. At each annual meeting of stockholders, commencing with the first annual meeting of stockholders held following the IPO, directors elected to succeed those directors whose terms then expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election, with each director to hold office until his or her successor shall have been duly elected and qualified unless earlier removed. Notwithstanding that a lesser percentage may be permitted from time to time by applicable law, no provision of this Section 3 may be altered, amended or repealed in any respect, nor may any provision inconsistent therewith be adopted, unless such alteration, amendment, repeal or adoption is approved by the affirmative vote of the holders of at least 80% of the combined voting stock of the Corporation voting together as a single class at a meeting of stockholders called by the action of the board of directors.

5

4. Term and Removal. Each director shall hold office until such director’s successor is elected and qualified, or until such director’s earlier death, resignation, or removal. Any director may resign at any time upon notice to the Corporation given in writing or by any electronic transmission permitted in the Corporation’s Bylaws or in accordance with applicable law. No decrease in the number of directors constituting the Whole Board shall shorten the term of any incumbent director.

5. Vacancies. Directors may be elected to fill any vacancy on the board of directors, regardless of how such vacancy shall have been created by the approval of a majority of the Whole Board who are then in office.

6. Vote by Ballot. Election of directors need not be by written ballot.

ARTICLE IX: DIRECTOR LIABILITY

To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL or any other law of the State of Delaware is amended after approval by the stockholders of this ARTICLE IX to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL as so amended.

Any amendment, repeal, or modification of the foregoing provisions of this ARTICLE IX by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such amendment, repeal, or modification.

ARTICLE X: INDEMNIFICATION

The following indemnification provisions shall apply to the persons enumerated below.

1. Right to Indemnification of Directors and Officers. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an “Indemnified Person”) who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “Proceeding”), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys’ fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this ARTICLE X the Corporation shall be required to indemnify an Indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board.

6

2. Prepayment of Expenses of Directors and Officers. The Corporation shall pay the expenses (including attorneys’ fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, *provided, however,* that, to the extent required by law, such payment of expenses in advance of the final disposition of the

Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this ARTICLE X or otherwise.

3. Claims by Directors and Officers. If a claim for indemnification or advancement of expenses under this ARTICLE X is not paid in full within thirty (30) days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

4. Indemnification of Employees and Agents. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board.

5. Advancement of Expenses of Employees and Agents The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board.

6. Non-Exclusivity of Rights The rights conferred on any person by this ARTICLE X shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of this Certificate of Incorporation, the Bylaws, or any agreement, or pursuant to any vote of stockholders or disinterested directors or otherwise.

7

7. Other Indemnification. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another Corporation, partnership, limited liability company, joint venture, trust, organization, or other enterprise shall be reduced by any amount such person may collect as indemnification from such other Corporation, partnership, limited liability company, joint venture, trust, organization, or other enterprise.

8. Insurance. The Board may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this ARTICLE X; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this

ARTICLE XI: AMENDMENT OR REPEAL

Any repeal or modification of the foregoing provisions of ARTICLE X shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors, and administrators.

ARTICLE XII: MATTERS RELATING TO STOCKHOLDERS

Advance notice of stockholder nominations for the election of directors of the Corporation and of business to be brought by stockholders before any meeting of stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation.

ARTICLE XIII: CHOICE OF FORUM; EXCLUSIVE FORUM

Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for: (i) any derivative action or proceeding brought on behalf of the Corporation; (ii) any action asserting a claim that is based upon a breach of a fiduciary duty owed by, or other wrongdoing by, any current or former director, officer, stockholder, employee or agent of the Corporation to the Corporation or the Corporation's stockholders; (iii) any action asserting a claim against the Corporation or any current or former director, officer, stockholder, employee or agent of the Corporation arising pursuant to any provision of the General Corporation Law, this Restated Certificate of Incorporation or the Bylaws or as to which the General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware; (iv) any action to interpret, apply, enforce or determine the validity of this Restated Certificate of Incorporation or the Bylaws; (v) any action asserting a claim against the Corporation governed by the internal affairs doctrine; or (vi) any action asserting an "internal corporate claim" as that term is defined in Section 115 of the General Corporation Law. The federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint, claim or proceeding asserting a cause of action arising under the Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended ("Securities Act").

Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and to have consented to the provisions of this Article. Failure to enforce the foregoing provisions of this Article would cause the Corporation irreparable harm, and the Corporation shall be entitled to equitable relief, including injunctive relief and specific performance, to enforce the foregoing provisions.

8

ARTICLE XIV: AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right to amend or repeal any provision contained in this Certificate of Incorporation in the manner prescribed by the laws of the State of Delaware and the provisions set forth in this ARTICLE XIV. Any amendment to or repeal of this Certificate of Incorporation or any provision or article thereof shall require the affirmative vote of the holders of a majority of the voting power of the then-outstanding shares of capital stock of the Corporation entitled to vote, voting together as a single class.

9



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING

We hereby consent to the use in this Registration Statement on Form S-1 of Actelis Networks, Inc. of our report dated March 30, 2022, except for the effects of the Reverse Stock Split discussed in Note 2(ff) to the consolidated financial statements, as to which the date is May 2, 2022 relating to the financial statements which appears in this Registration Statement. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Kesselman & Kesselman
Certified Public Accountants (Isr.)
A member firm of PricewaterhouseCoopers International Limited

Tel-Aviv, Israel
May 10, 2022

Kesselman & Kesselman, 146 Derech Menachem Begin St. Tel-Aviv 6492103, Israel,
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