

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

Amendment No. 1
to
FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ACTELIS NETWORKS, INC.
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

52-2160309

(I.R.S. Employer
Identification No.)

4039 Clipper Court, Fremont, California 94538 (510) 545-1045
(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)

Tuvia Barlev
Chief Executive Officer
4039 Clipper Court
Fremont, California 94538
(510) 545-1045

(Name, address, including zip code, and telephone number,
including area code, of agent for service)

with a copy to:

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting 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 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 prospectus is not complete and may be changed. The selling stockholder may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 20, 2023

PROSPECTUS



1,955,467 Shares of Common Stock

This prospectus relates to the offer and sale from time to time of a total of 1,955,467 shares of Actelis Network, Inc.'s common stock, par value \$0.0001 ("Common Stock") by the selling stockholders identified in this prospectus, consisting of (1) the Investor (as defined below) named in this prospectus of up to 1,889,340 shares of our Common Stock, consisting of (i) 190,000 shares of Common Stock (the "Shares"); (ii) 754,670 shares of Common Stock underlying pre-funded warrants (the "Pre-Funded Warrants") to purchase up to 754,670 shares of Common Stock (the "Pre-Funded Warrant Shares"); and (iii) 944,670 shares of Common Stock underlying warrants (the "Common Warrants") to purchase up to 944,670 shares of Common Stock (the "Common Warrant Shares") issued by us to the Investor; and (2) the Placement Agent (as defined below) of up to 66,127 shares of Common Stock underlying certain warrants (the "Placement Agent Warrants") issued to the Placement Agent (as defined below) to purchase shares of Common Stock (the "Placement Agent Warrant Shares," and together with the Shares, Pre-Funded Warrant Shares and Common Warrant Shares, the "Securities").

We are not selling any Common Stock under this prospectus and will not receive any of the proceeds from the sale or other disposition of shares by any of the selling stockholders, however, we will receive proceeds from the exercise of any Pre-Funded Warrants, Placement Agent Warrants or Common Warrants for cash.

The selling stockholders or its transferees, pledgees, assignees, or successors-in-interest may offer and sell or otherwise dispose of the shares of Common Stock described in this prospectus from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices. The selling stockholder will bear all commissions and discounts, if any, attributable to the sales of shares. We will bear all other costs, expenses, and fees in connection with the registration of the shares. See "Plan of Distribution" beginning on page 5 for more information about how the selling stockholder may sell or dispose of the shares of common stock.

Our Common Stock is traded on the Nasdaq Capital Market under the symbol "ASNS." On June 16, 2023, the closing price of our Common Stock on the Nasdaq Capital Market was \$3.02 per share.

Investing in our securities involves risk. See "Risk Factors" beginning on page 3 of this prospectus.

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.

The date of this prospectus is _____, 2023.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”). The selling stockholders named in this prospectus may from time to time sell the securities described in the prospectus. You should read this prospectus together with the more detailed information regarding our company, our Common Stock, and our financial statements and notes to those statements that appear elsewhere in this prospectus and any applicable prospectus supplement together with the additional information that we incorporate in this prospectus by reference, which we describe under the heading “Where You Can Find More Information.”

You should rely only on the information contained in, or incorporated by reference in, this prospectus and in any accompanying prospectus supplement. We have not authorized anyone to provide you with different information from that contained in, or incorporated by reference in, this prospectus. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

In this prospectus, we frequently use the terms “we,” “our,” “us,” “our company,” and the “Company” to refer to Actelis Networks, Inc.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain certain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act”). We have tried, whenever possible, to identify these forward-looking statements using words such as “may,” “will,” “expect,” “believe,” “estimate,” “anticipate,” “intend,” “continue,” “plan,” “predict,” “seek,” “should,” “would,” “could,” “potential,” “ongoing,” and similar expressions to identify forward-looking statements, whether in the negative or the affirmative. These statements reflect our current beliefs and are based on information currently available to us. Accordingly, such forward-looking statements involve known and unknown risks, uncertainties and other factors which could cause our actual results, performance or achievements to differ materially from those expressed in, or implied by, such statements. Forward-looking statements contained herein include, but are not limited to, statements about:

- our history of losses and need for additional capital to fund our operations and our ability to obtain additional capital on acceptable terms, or at all;
- 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;
- 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, and capital requirements;
- the success of competing products or technologies that are or may become available;
- our ability to grow the business due to the uncertainty resulting from the recent COVID-19 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; and
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act.

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 herein 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 “Risk Factors,” “Use of Discussion and Analysis of Financial Condition and Results of Operations,” “Business” and elsewhere herein or by incorporation by reference. 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.”

PROSPECTUS SUMMARY

The information contained in or incorporated by reference into this prospectus summarizes certain information about our company. It may not contain all of the information that is important to you. To understand this offering fully, you should read carefully the entire prospectus, including "Risk Factors," and the other information incorporated by reference into this prospectus.

Our Business

Actelis Networks, Inc. ("we," "the Company", "Actelis", "us", "our") is a market leader in cyber-hardened, rapid-deployment networking solutions for wide-area IoT applications including federal, state and local government, intelligent traffic systems, military, utility, rail, telecom and campus applications. Our unique portfolio of hybrid fiber-copper, environmentally hardened aggregation switches, high density Ethernet devices, advanced management software and cyber-protection capabilities, unlocks the hidden value of essential networks, delivering safer connectivity for rapid, cost-effective deployment.

Our networking solutions use a combination of newly deployed fiber infrastructure and existing copper and coaxial lines which our patented technology can upgrade to Fiber-grade to jointly create what we believe to be 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, or too costly 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, while providing significant budget savings and accelerating deployment of modern IoT networks, as based on our experience, most IoT projects have challenging, hard to reach with Fiber locations which may explode such projects' timeline and budgets. We believe that our solutions can provide connectivity over either fiber or copper with speeds of up to multi-Gigabit communication, while supporting Fiber-grade reliability and quality.

A primary focus of ours is to provide our customers with a cyber-secure network solution. We currently offer Triple-Shield protection of data delivered with coding, scrambling and encryption of the network traffic. We also provide secure, encrypted access to our network management software, and are working to further enhance system-level and device-level software protection. We are also working to introduce additional capabilities for network-wide cyber protection software as an additional SW and license based service.

When high speed, long reach, reliable and secure connectivity is required, network operators usually resort to using wireline communication over physical communication lines such as fiber, coax and copper, rather than wireless communication that is more limited in performance, reliability, reach and security. However, new fiber wireline infrastructure is costly to deploy, involves lengthy civil works to install, and, based on our internal calculations, often accounts for more than 50% of total cost of ownership (ToC) and time to deploy wide-area IoT projects.

Providing new fiber connectivity to hard-to-reach locations is especially costly and time-consuming, often requiring permits for boring, trenching, and right-of-way, sometimes done over many miles. Connecting such hard-to-reach locations may cause significant delays and budget overruns in IoT projects. Our solutions aim to solve these challenges by instantly enhancing performance of such existing copper and coax infrastructure to fiber-grade performance, through the use of advanced signal processing and unique, patented network architecture, without the need to install new fiber lines to hard-to-reach locations. Thus, effectively we can accelerate deployment of many IoT projects, as we estimate, sometimes from many months to only days. The result for the network owner is a hybrid network that optimizes the use of both new Fiber (where available) as well as upgraded, fiber-grade copper and coax that is now modernized, digitized and cyber-hardened. This unique hybrid network approach is making IoT projects often significantly more affordable, fast to deploy and predictable to plan and budget.

In addition, our solutions can also provide power over existing copper and coax lines to remotely power up network elements and IoT components connected to them (like cameras, small cell and wifi base stations sensors etc.). Connecting power lines to millions of IoT locations can be costly and very time consuming as well (similar to data connectivity, for the same reason- need for civil works). By offering the ability to combine power delivery over the same existing copper and coax lines that we use 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 Wi-Fi base stations, as high cost of connectivity and power is often slowing their deployment.

Since our inception, our business was focused on serving telecommunication service providers, also known as Telcos, to provide 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 introduced 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. In 2023, we expect to introduce new product offering, some of which could serve both the IoT markets and our Telco customers.

Private Placement

On May 4, 2023, the Company, entered into a securities purchase agreement (the "Purchase Agreement") with an accredited investor, pursuant to which the Company agreed to issue and sell to the Investor in a private placement (the "Offering") (i) the Shares; (ii) the Pre-Funded Warrants to purchase the Pre-Funded Warrant Shares; and (iii) Common Warrants to purchase the Common Warrant Shares, for a purchase price of \$3.705 per share of Common Stock and related Common Warrant or \$3.7049 per Pre-Funded Warrant and related Common Warrant, for a total aggregate gross proceeds of approximately \$3.5 million. The Offering closed on May 8, 2023.

The Common Warrants have an exercise price of \$3.58 per share, are exercisable immediately upon issuance and expire five and one-half years following the issuance. The Pre-Funded Warrants were sold in lieu of shares of Common Stock, are exercisable immediately upon issuance, have an exercise price of \$0.0001 per share and expire when exercised in full. Under the terms of the Common Warrants and Pre-Funded Warrants, the Investor may not exercise the warrants to the extent such exercise would cause the Investor, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% (or, at such Investor's option upon issuance, 9.99%), of the Company's then outstanding Common Stock following such exercise, excluding for purposes of such determination shares of Common Stock issuable upon exercise of such warrants which have not been exercised.

H.C. Wainwright & Co., LLC (the "Placement Agent") acted as the exclusive placement agent for the issuance and sale of the Shares, Pre-Funded Warrants and Common Warrants. The Company has agreed to pay up to an aggregate cash fee equal to 7.0% of the gross proceeds received by the Company from the Offering. The Company also agreed to pay the Placement Agent \$65,000 for non-accountable expenses and a management fee equal to 1.0% of the gross proceeds raised in the Offering. The Company also agreed to issue to the Placement Agent, or its designees, unregistered warrants to purchase up to 7.0% of the aggregate number of the Shares and Pre-Funded Warrants sold to the Investor (or warrants to purchase up to 66,127 shares of Common Stock) at an exercise price per share of \$4.6313 and a term of five and one-half years.

The Shares, the Pre-Funded Warrant Shares, the Common Warrant Shares and the Placement Agent Warrant Shares are being registered for resale hereunder.

Corporate Information

We are a Delaware corporation and our corporate headquarters is located at 4039 Clipper Court, Fremont, California 94538. Our telephone number is (510) 545-1045. Our internet website address is www.actelis.com. The information contained in, and that which can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

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 the Offering

Sales of substantial amounts of our Common Stock by a selling stockholder, or the perception that these sales could occur, could adversely affect the price of our Common Stock.

The sale by the selling stockholders of a significant number of shares of Common Stock could have a material adverse effect on the market price of our Common Stock. In addition, the perception in the public markets that the selling stockholder may sell all or a portion of its shares as a result of the registration of such shares for resale pursuant to this prospectus could also in and of itself have a material adverse effect on the market price of our Common Stock. We cannot predict the effect, if any, that market sales of those shares of Common Stock or the availability of those shares of Common Stock for sale will have on the market price of our Common Stock.

USE OF PROCEEDS

We are not selling any Common Stock under this prospectus and will not receive any of the proceeds from the sale or other disposition of shares by the selling stockholder or the Placement Agent, however, we will receive proceeds from the exercise of any Placement Agent Warrants or Common Warrants for cash.

SELLING STOCKHOLDERS

The Common Stock being offered by each of the selling stockholders are those previously issued to the selling stockholders, and those issuable to the selling stockholders, upon exercise of either the Placement Agent Warrants, Common Warrants or Pre-Funded Warrants. For additional information regarding the issuances of those shares of Common Stock and Placement Agent Warrants, Common Stock Warrants and Pre-Funded Warrants, see the description of the Private Placement in “*Prospectus Summary - Private Placement*” above. We are registering the shares of Common Stock in order to permit the selling stockholders to offer the shares for resale from time to time. None of the selling stockholders have had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of Common Stock by each of the selling stockholders. The second column lists the number of shares of Common Stock beneficially owned by each selling stockholder, based on its ownership of the shares of Common Stock and the warrants, as of May 24, 2023, assuming exercise of the warrants (either the Common Stock Warrants or the Placement Agent Warrants) held by the selling stockholders on that date, without regard to any limitations on exercises.

The third column lists the shares of Common Stock being offered by this prospectus by each of the selling stockholders.

In accordance with the terms of a Registration Rights Agreement with the Investor, this prospectus generally covers the resale of the sum of (i) Shares; (ii) Pre-Funded Warrant Shares and (iii) Common Warrant Shares. The table below assumes that the outstanding Pre-Funded Warrants, Common Warrants and the Placement Agent Warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination, without regard to any limitations on the exercise thereof. The fourth column assumes the sale of all of the shares of common stock offered by the selling stockholders pursuant to this prospectus. The fifth column lists the percentages of shares of common stock owned by each selling stockholders after this offering, taking account of any limitations on exercise set forth in the applicable Securities.

Under the terms of the Private Placement Warrants, a selling stockholder may not exercise the Private Placement Warrants to the extent such exercise would cause such selling stockholder, together with its affiliates and attribution parties, to beneficially own a number of shares of common stock which would exceed 4.99% or 9.99% of our then outstanding common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of the Private Placement Warrants which have not been exercised. The number of shares in the second column does not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See “*Plan of Distribution.*” The total number of outstanding shares of common stock as of June 20, 2023 was 1,952,764.

Name of selling stockholder	Number of shares of Common Stock Owned Prior to Offering	Shares to be Sold in this Offering	Shares Beneficially Owned After Offering	
			Number	Percentage
Armistice Capital Master Fund Ltd. (1)	1,889,340 ⁽²⁾	1,889,340	-	-
H.C. Wainwright & Co., LLC (3)	66,127	66,127	-	-

- (1) The securities are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Investor”), and may be deemed to be indirectly beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Investor; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein.
- (2) Includes 1,889,340 shares of Common Stock, consisting of (i) 190,000 shares of Common Stock, (ii) 754,670 shares of Common Stock underlying pre-funded warrants to purchase up to 754,670 shares of Common Stock; and (iii) 944,670 shares of Common Stock underlying warrants to purchase up to 944,670 shares of Common Stock issued by us to the Investor.
- (3) H.C. Wainwright & Co., LLC is a registered broker dealer and has a registered address of c/o H.C. Wainwright & Co., LLC 430 Park Ave, 3rd Floor, New York, NY 10022. H.C. Wainwright & Co., LLC has sole voting and dispositive power over the securities held. The number of shares beneficially owned prior to this offering consist of shares of common stock issuable upon exercise of Placement Agent Warrants, which were received as compensation for the Offering. H.C. Wainwright & Co., LLC acquired the Placement Agent Warrants in the ordinary course of business and, at the time the Placement Agent Warrants were acquired, H.C. Wainwright & Co., LLC had no agreement or understanding, directly or indirectly, with any person to distribute such securities.

PLAN OF DISTRIBUTION

The selling stockholders of the securities and any of its pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling securities:

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

The selling stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from each selling stockholder (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

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

The selling stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The selling stockholders have informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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

LEGAL MATTERS

The validity of the shares of the Common Stock offered by this prospectus will be passed upon for us by the law firm of Pearl Cohen Zedek Latzer Baratz LLP, New York, NY.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2022 have been so incorporated 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 file annual, quarterly and current reports, proxy statements and other information with the SEC. We also filed a registration statement on Form S-3, including exhibits, under the Securities Act with respect to the shares of Common Stock offered by this prospectus. This prospectus is a part of the registration statement, but does not contain all of the information included in the registration statement or the exhibits. The SEC maintains a web site, www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may review the registration statement and any other document we file on the SEC's web site. Our SEC filings are also available to the public on our website, actelis.com. The information on our website, however, is not, and should not be deemed to be, a part of this prospectus.

We are "incorporating by reference" specified documents that we file with the SEC, which means:

- incorporated documents are considered part of this prospectus;
- we are disclosing important information to you by referring you to those documents; and
- information we file with the SEC will automatically update and supersede information contained in this prospectus.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the registration statement on Form S-3 filed under the Securities Act with respect to securities offered by this prospectus and prior to the effectiveness of such registration statement and (ii) after the date of this prospectus and before the end of the offering of the securities pursuant to this prospectus:

- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2022, filed with the SEC on March 29, 2023;
- Our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended March 31, 2023, filed with the SEC on May 12, 2023;
- Our Current Reports on Form 8-K filed with the SEC on [March 27, 2023](#), [April 18, 2023](#) and [May 8, 2023](#);
- Any other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since December 31, 2022; and
- The description of our common stock in [Exhibit 4.1](#) of our Form 10-K filed on March 29, 2023, including any other amendment or report filed for the purpose of updating such description.

Notwithstanding the foregoing, documents or portions thereof containing information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, are not incorporated by reference in this prospectus.

You may request a copy of any of these filings, at no cost, by request directed to us at the following address or telephone number:

Actelis Networks, Inc.
4039 Clipper Court
Fremont, California 94538
(510) 545-1045
Attention: Corporate Secretary

You should not assume that the information in this prospectus or any prospectus supplement, as well as the information we file or previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate as of any date other than the respective date of such documents. Our business, financial condition, results of operations and prospects may have changed since that date.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses payable by the Company in connection with this offering. All expenses incurred with respect to the registration of the common stock will be borne by the Company. All amounts are estimates, except the SEC registration fee.

SEC registration fee	\$	744.91
Printing expenses	\$	5,000
Accounting fees and expenses	\$	6,000
Legal fees and expenses	\$	72,600
Total	\$	84,344.91

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 102(b)(7) of the Delaware General Corporation Law (the “Delaware Law”) enables a corporation, in its original certificate of incorporation or an amendment thereto, to eliminate or limit the personal liability of a director for monetary damages for breach of the director’s fiduciary duty, except (i) for any breach of the director’s duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the Delaware Law (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions), or (iv) for any transaction from which the director derived an improper personal benefit. The Company’s Sixth Amended and Restated Certificate of Incorporation, as amended (“Certificate of Incorporation”), contains such a provision.

In addition, Section 145 of the Delaware Law provides that a corporation may indemnify any persons, including officers and directors, who are, or are threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that such person is or was an officer, director, employee or agent of the corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner the person reasonably believed to be in or not opposed to the corporation’s best interests and, with respect to criminal proceedings, had no reasonable cause to believe that the person’s conduct was unlawful. A Delaware corporation may indemnify officers or directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against expenses (including attorneys’ fees) that he or she actually and reasonably incurred.

The Company’s Certificate of Incorporation and Restated Bylaws provide for indemnification of directors and officers to the fullest extent permitted by the Delaware Law.

ITEM 16. EXHIBITS

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Registration Statement.

Exhibit No.	Description
4.1	Description of Securities (filed as Exhibit 4.1 to the Company's Form 10-K for the fiscal year ended December 31, 2022, filed on March 29, 2023)
4.2	Form of Representative's Warrant (as filed as Exhibit 4.1 to the Company's Form S-1/A, filed on May 2, 2022)
4.3	Form of Common Warrant (as filed as Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on May 8, 2023)
4.4	Form of Pre-Funded Warrant (as filed as Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on May 8, 2023)
4.5	Form of Placement Agent Warrant (as filed as Exhibit 4.3 to the Company's Current Report on Form 8-K, filed on May 8, 2023)
5.1	Opinion of Pearl Cohen Latzer Zedek Baratz LLP (as filed as Exhibit 5.1 to the Company's Registration Statement on Form S-3, filed on May 24, 2023)
10.1	Lease by and between Actelis Networks Israel, Ltd. and Moshe Smucha, dated January 13, 2000 (as filed as Exhibit 10.2 to the Company's Form S-1/A, filed on May 2, 2022)
10.2	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 (as filed as Exhibit 10.3 to the Company's Form S-1/A, filed on May 2, 2022)
10.3	Employment Agreement between Actelis Networks, Inc. and Mr. Tuvia Barlev dated February 15, 2015 (as filed as Exhibit 10.9 to the Company's Form S-1/A, filed on May 2, 2022)
10.4	Offer letter between Actelis Networks, Inc. and Mr. Yoav Efron dated November 30, 2017 (as furnished as Exhibit 10.10 to the Company's Form S-1/A, filed on May 10, 2022)
10.5	Employment Agreement between Actelis Networks Israel, Ltd. And Mr. Yoav Efron dated November 30, 2017 (as furnished as Exhibit 10.11 to the Company's Form S-1/A, filed on May 10, 2022)
10.6	Consulting Agreement between Actelis Networks, Inc. and Barlev Enterprises dated February 20, 2015 (as furnished as Exhibit 10.12 to the Company's Form S-1/A, filed on May 10, 2022)
10.7	Actelis Networks, Inc. 2015 Equity Incentive Plan (as filed as Exhibit 10.13 to the Company's Form S-1, filed on April 15, 2022)
10.8	Amendment No. 1 to 2015 Equity Incentive Plan (as filed as Exhibit 10.14 to the Company's Form S-1, filed on April 15, 2022)
10.9	Senior Loan Agreement between Migdalar Business Investment Fund and Actelis Networks Israel, Ltd., dated December 2, 2020 (as filed as Exhibit 10.16 to the Company's Form S-1, filed on April 15, 2022)
10.10	Amendment Number 1 to Senior Loan Agreement between Migdalar Business Investment Fund and Actelis Networks Israel, Ltd., dated November 17, 2021 (as filed as Exhibit 10.17 to the Company's Form S-1, filed on April 15, 2022)
10.11	Securities Purchase and Loan Repayment Agreement between Actelis Networks, Inc. and Mr. Tuvia Barlev dated April 15, 2022 (as filed as Exhibit 10.18 to the Company's Form S-1, filed on April 15, 2022)
10.12	Form of Securities Purchase Agreement (as filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on May 8, 2023)
10.13	Form of Registration Rights Agreement (as filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on May 8, 2023)
23.1	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.) a member firm of PricewaterhouseCoopers International Limited, independent registered accounting firm for the Company*
107	Filing Fee Table (as filed as Exhibit 107 to the Company's Registration Statement on Form S-3, filed on May 24, 2023)

* Filed herewith

ITEM 17. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

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

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

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

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

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

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the undersigned registrant is relying on Rule 430B:

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

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, 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 Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, on June 20, 2023.

ACTELIS NETWORKS, INC.

By: /s/ Tuvia Barlev
Tuvia Barlev
Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Tuvia Barlev and Yoav Efron and each of them, the true and lawful attorneys-in-fact of the undersigned, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign this registration statement and any or all amendments to this registration statement, including post-effective amendments, and registration statements filed pursuant to 462(b) under the Securities Act, and to file or cause to be filed the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys or attorneys-in-fact or any of them or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons on June 20, 2023 in the capacities indicated.

<u>Signature</u>	<u>Title</u>
<u>/s/ Tuvia Barlev</u> Tuvia Barlev	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
<u>/s/ Yoav Efron</u> Yoav Efron	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
<u>/s/ Joseph Moscovitz</u> Joseph Moscovitz	Director
<u>/s/ Naama Halevi-Davidov</u> Dr. Naama Halevi-Davidov	Director
<u>/s/ Israel Niv</u> Israel Niv	Director
<u>/s/ Noemi Schmayer</u> Noemi Schmayer	Director



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of Actelis Networks, Inc. of our report dated March 29, 2023 relating to the financial statements, which appears in Actelis Networks, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022. 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

June 20, 2023