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

FORM S-8 REGISTRATION STATEMENT **UNDER** THE SECURITIES ACT OF 1933

Actelis Networks Ir

(Exact		ant as specified in its charter)					
Delaware		52-2160309	52-2160309				
(State or other jurisdiction of incorporation or organization)		(I.R.S. Employer Identification No					
	4039 (Clipper Court					
		nt, CA 94538					
(Add	ress of principal	executive offices) (Zip code)					
	Actelis !	Networks, Inc.					
	2025 Equi	ty Incentive Plan					
	(Full tit	cle of the plan)					
	Tu	via Barlev					
Chief Executive O		and Chairman of the Board of Directors					
		Networks, Inc.					
		Clipper Court					
		nt, CA 94538					
•	(Name and addr	ess of agent for service)					
(Telephone	,	o) 545-1045 ing area code, of agent for service)					
	•	Peled, Esq.					
		rg Traurig, LLP					
		derbilt Avenue,					
		, NY 10017-3852					
		(212) 801-9210 212) 801-6400					
Indicate by check mark whether the registrant is a large accelerate company. See the definitions of "large accelerated filer," "accelerate							
Large accelerated filer		Accelerated filer					
Non-accelerated filer	\boxtimes	Smaller reporting company					
		Emerging growth company	×				
If an emerging growth company, indicate by check mark if the reg accounting standards provided pursuant to Section 7(a)(2)(B) of the			with any new or revised financia				

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this Registration Statement. The documents containing the information specified in Part I of Form S-8 will be delivered to the participants in the plans covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act").

PART II

ITEM 3. INCORPORATION OF DOCUMENTS BY REFERENCE

The following documents filed by Actelis Networks, Inc. (the "Registrant") with the Securities and Exchange Commission (the "Commission") are incorporated by reference into this Registration Statement:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the SEC on March 24, 2025;
- (b) The Registrant's Quarterly Reports on Form 10-Q for the quarter ended March 31, 2025, filed with the Commission on May 13, 2025 and the quarter ended June 30, 2025, filed with the Commission on August 14, 2025;
- (c) The Registrant's Current Reports on Form 8-K (excluding any reports or portions thereof that are deemed to be furnished and not filed) filed on February 4, 2025 (as amended on February 13, 2025); February 13, 2025; March 4, 2025; March 28, 2025; April 1, 2025; May 13, 2025; May 13, 2025; May 21, 2025, June 16, 2025; July 3, 2025; August 6, 2025; August 11, 2025; August 13, 2025; August 14, 2025; August 21, 2025; August 25, 2025; September 2, 2025; September 3, 2025 and September 4, 2025; and
- (d) The description of the Registrant's Common Stock contained in the Registrant's Registration Statement on Form 8-A filed on May 4, 2022 (File No. 001-41375) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report filed for the purpose of updating such description.

All documents, reports and definitive proxy or information statements filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post- effective amendment to this Registration Statement that indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The certificate of incorporation and the by-laws of the Registrant, each as amended to date, provide that the Registrant 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 the Registrant, or who serves or served any other enterprise or organization at the request of the Registrant. Pursuant to Delaware law, this includes elimination of liability for monetary damages for breach of the directors' fiduciary duty of care to the Registrant and the Registrants' 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 the Registrant, 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.

The Certificate of Incorporation of the Registrant provides that the Registrant 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 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 the Registrant or, while a director or officer of the Registrant, is or was serving at the request of the Registrant 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, the Registrant has 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, <u>provided</u>, <u>however</u>, 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 the Certificate of Incorporation of the Registrant.

In addition, the Registrant 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 Registrant or, while an employee or agent of the Registrant, is or was serving at the Registrants' 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. the Registrant 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 Registrants' Board of Directors.

The Registrants' Board of Directors has and expects, to the full extent permitted by applicable law, to authorize an appropriate officer or officers to purchase and maintain at the Registrants' expense insurance: (a) to indemnify the Registrant 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 the Certificate of Incorporation of the Registrant.

the Registrant has entered into agreements with the Registrant directors and executive officers that require the Registrant 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 the Registrant or any of the Registrants' affiliated enterprises, provided the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the Registrant 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 also establish procedures that will apply if a claim for indemnification arises under the agreements.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED.

Not applicable.

ITEM 8. EXHIBITS

Exhibit

Number	Description of Exhibit
3.1	Twenty Fourth Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect (included as Exhibit 3.5 to our Registration
	Statement on Form S-1, as amended, as filed with the Securities and Exchange Commission on May 10, 2022, and incorporated herein by reference).
3.2	Second Amended and Restated By-Laws of the Registrant, as currently in effect (included as Exhibit 3.4 to our Registration Statement on Form S-1, as
	amended, as filed with the Securities and Exchange Commission on May 2, 2022, and incorporated herein by reference).
5.1*	Opinion of Greenberg Traurig LLP, as to the legality of the securities being registered
23.1*	Consent of Kesselman & Kesselman, Certified Public Accountants (Isr.), a member firm of PricewaterhouseCoopers International Limited, independent
	registered public accounting firm.
23.2*	Consent of Greenberg Traurig LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on the signature page of this Registration Statement)
99.1	Actelis Networks, Inc. 2025 Equity Incentive Plan (included as Appendix A to our Definitive Proxy Statement on Schedule 14A filed on June 26, 2025 and
	incorporated by reference herein)
107*	Filing Fee Table

ITEM 9. 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;
 - (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 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) and (a)(1)(ii) do not apply if the information required to be included in a post- effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, 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.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, 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 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 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 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on this 8th day of September 2025.

Actelis Networks, Inc.

By: /s/ Tuvia Barlev

Name: Tuvia Barlev

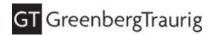
Title: Chief Executive Officer and Secretary

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Tuvia Barlev and Yoav Efron, and each of them, as his or her true and lawful agents, proxies and attorneys-in-fact, 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 (i) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (ii) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (iii) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (iv) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the 8th day of September 2025.

Signature	Title	Date		
/s/ Tuvia Barlev Tuvia Barlev	Chief Executive Officer, Secretary and Chairman of the Board (Principal Executive Officer)	September 8, 2025		
/s/ Yoav Efron Yoav Efron	Deputy CEO and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	September 8, 2025		
/s/ Niel Ransom Niel Ransom	Director	September 8, 2025		
/s/ Gideon Marks Gideon Marks	Director	September 8, 2025		
/s/ Julie Kunstler Julie Kunstler	Director	September 8, 2025		
	II-5			



September 8, 2025

Actelis Networks, Inc. 4039 Clipper Court Fremont, CA 94538

Re: Actelis Networks, Inc. Registration Statement on Form S-8

Ladies and Gentleman:

We are rendering this opinion in connection with the Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, with respect to the registration of 1,800,000 additional shares (the "Shares") of common stock, \$0.0001 par value per share ("Common Stock"), of Actelis Networks, Inc., a Delaware corporation (the "Company"), pursuant to the Actelis Networks, Inc. 2025 Equity Incentive Plan (the "Plan").

We have examined: (i) the Registration Statement; (ii) the Company's Amended and Restated Certificate of Incorporation, as amended to date; (iii) the Company's Second Amended and Restated By-Laws; (iv) the Plan, (v) certain resolutions of the Board of Directors of the Company and the compensation committee of the Board of Directors of the Company related to the filing of the Registration Statement, the authorization and issuance of the Shares and related matters, and (vi) the corporate proceedings relating to the registration of the Shares pursuant to the Plan.

In addition to the examination outlined above, we have conferred with various officers of the Company and have ascertained or verified, to our satisfaction, such additional facts as we deemed necessary or appropriate for the purposes of this opinion. In our examination, we have assumed the authenticity of all documents submitted to us as originals, the conformity to the original documents of all documents submitted to us as copies, the genuineness of all signatures on documents reviewed by us and the legal capacity of natural persons.

We have also assumed that, at the time of the issuance of the Shares: (i) the Registration Statement and any amendments thereto (including post-effective amendments) will have become effective and will remain effective, (ii) no stop order of the Commission preventing or suspending the use of the prospectus described in the Registration Statement will have been issued, (iii) the prospectus described in the Registration Statement and any required prospectus supplement will have been delivered to the recipient of the Shares as required in accordance with applicable law, (iv) the resolutions of the Board of Directors of the Company referred to above will not have been modified or rescinded, (v) the Company will receive consideration for the issuance of the Shares required by the Plan and that is at least equal to the par value of the Common Stock, (vi) all requirements of the Delaware General Corporate Law ("DGCL"), the Amended and Restated Certificate of Incorporation, as amended to date, and the Second Amended and Restated By-Laws will be complied with when the Shares are issued, (vii) sufficient shares of Common Stock will be authorized for issuance under the Amended and Restated Certificate of Incorporation of the Company, as amended to date, that have not otherwise been issued or reserved for issuance and (viii) neither the issuance nor sale of the Shares will result in a violation of any agreement or instrument then binding upon the Company or any order of any court or governmental body having jurisdiction over the Company.

Greenberg Traurig, LLP | Attorneys at Law

One Vanderbilt Avenue | New York, New York 10017 | T +1 212.801.9200 | F +1 212.801.6400

Alhany. Amsterdam. Atlanta, Austin. Berlin: Boston. Charlotte. Chicago. Dallas. Delaware. Denver. Fort Lauderdale. Houston. Las Vegas. London. Long Island. Los Angeles. Mexico City: Miami. Milan: Minneapolis. New Jersey. New York. Northern Virginia. Orange County. Orlando. Philadelphia. Phoenix. Portland. Sacramento. Salt Lake City. San Diego. San Francisco. Seoul: Shanghai. Silicon Valley. Singapore Tallahassee. Tampa. Tel Aviv: Tokyo: Warsaw: Washington, D.C. West Palm Beach. Westchester County.

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Based on the foregoing, we are of the opinion that the Shares will be validly issued, fully paid and nonassessable by the Company when the issuance of such Shares has been duly and validly approved by the board of directors of the Company and such Shares have been delivered in accordance with the Plan.

We do not express any opinion herein concerning any law other than the Delaware General Corporation Law, as currently in effect.

We consent to the filing of this opinion as an exhibit to the Registration Statement and we consent to the use of our name wherever it appears in the Registration Statement. In giving this consent, we do not hereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission thereunder.

Very truly yours,

/s/ Greenberg Traurig, LLP

Greenberg Traurig, LLP

Greenberg Traurig, LLP | Attorneys at Law

One Vanderbilt Avenue | New York, New York 10017 | T +1 212.801.9200 | F +1 212.801.8400

Albany. Amsterdam. Atlanta. Austin. Berlin: Boston. Charlotte. Chicago, Dallas. Delaware. Denver. Fort Lauderdale. Houston. Las Vegas. London. Long Island. Los Angeles. Mexico City: Miami. Milan: Minneapolis. New Jersey. New York. Northern Virginia. Orange County. Orlando. Philadelphia. Phoenix. Portland. Sacramento. Salt Lake City. San Diego. San Francisco. Seoul: Shanghai. Silicon Valley. Singaporé Tallahassee. Tampa. Tel Aviv: Tokyo: Warsaw: Washington, D.C. West Palm Beach. Westchester County.

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Actelis Networks, Inc. of our report dated March 24, 2025 relating to the financial statements, which appears in Actelis Networks, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2024.

/s/ Kesselman & Kesselman

Kesselman & Kesselman

Certified Public Accountants (Isr.) A member firm of PricewaterhouseCoopers International Limited Tel-Aviv, Israel September 8, 2025

CALCULATION OF FILING FEE TABLES S-8

ACTELIS NETWORKS INC

Table 1: Newly Registered and Carry Forward Securities

Line Item Type	Security Type	Security Class Title	Notes	Fee Calculation Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
	Security Type			ered Securities	Trop Section			100111110	
Fees to be Paid	Equity	Common Stock, \$0.0001 par value per share, reserved for issuance pursuant to the Actelis Networks, Inc. 2025 Equity Incentive Plan	(1)	Other	1,800,000	\$ 0.43	\$ 774,000.00	0.0001531	\$ 118.50
						_	\$ 774,000.00		118.50 0.00 0.00 \$ 118.50

Offering Note(s)

⁽¹⁾ Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement (the "Registration Statement") shall also cover any additional ordinary shares that become issuable under the Actelis Networks, Inc. 2015 Equity Incentive Plan (the "2015 Plan") by reason of any share dividend, share split, recapitalization or other similar transaction.