UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AMTECH SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Arizona (State or other jurisdiction of incorporation or organization)

58 South River Drive Suite 370, Tempe, Arizona (Address of principal executive offices)

86-0411215 (I.R.S. Employer Identification No.)

85288 (Zip Code)

Amtech Systems, Inc. 2022 Equity Incentive Plan, as amended

(Full title of the plan)

Wade M. Jenke **Chief Financial Officer** 58 South River Drive, Suite 370 Tempe, Arizona 85281 (480) 967-5146

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

With a copy to:

Gregory R. Hall DLA Piper LLP (US) 2525 E. Camelback Road, Suite 1000 Phoenix, Arizona 85016-4232 Tel: (480) 606-5116 Fax: (480) 606-5516

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

Large accelerated filer □ Non-accelerated filer □	Accelerated filer ⊠ Smaller reporting company ⊠ Emerging growth company □
If an emerging growth company, indicate by check mark if the registrant has elected not to unaccounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	use the extended transition period for complying with any new or revised financial

REGISTRATION OF ADDITIONAL SECURITIES PURSUANT TO GENERAL INSTRUCTION E OF FORM S-8 EXPLANITORY NOTE

Pursuant to General Instruction E of Form S-8, Amtech Systems, Inc. (the "Registrant") is filing this Registration Statement on Form S-8 with the Securities and Exchange Commission (the "SEC") for the purpose of registering 1,000,000 additional shares of common stock, par value \$0.01 per share (the "Common Stock") under the Registrant's 2022 Equity Incentive Plan (the "Incentive Plan"), pursuant to an amendment of the Incentive Plan. First Amendment to the Incentive Plan (attached hereto as Exhibit 99.2), which increased the number of shares of common stock available for issuance under the Incentive Plan by 1,000,000 shares from 1,000,000 shares to 2,000,000 shares, was approved by the board of directors of the Registrant on January 13, 2025, and by the shareholders at the Registrant's Annual Meeting held on March 5, 2025. In accordance with the instructional note to Part I of S-8 as promulgated by the SEC, the information specified by Part I of the Form S-8 has been omitted from this Registration Statement.

The Registrant previously registered shares of its Common Stock for issuance under the Incentive Plan on a Registration Statement on Form S-8 filed with the SEC on March 25, 2022 (File No. 333-263875) (the "Prior Registration Statement"). Pursuant to General Instruction E to Form S-8, this Registration Statement hereby incorporates by reference the contents of the Prior Registration Statement.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

Except to the extent that information is deemed furnished and not filed pursuant to securities laws and regulations, the Registrant hereby incorporates by reference into this Registration Statement the following documents:

(a) The Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2024, filed with the SEC on <u>December 12, 2024</u>, which incorporates by reference certain portions of the Registrant's Definitive Proxy Statement for its 2025 Annual Meeting of Shareholders filed on <u>January 24, 2025</u>, as supplemented by that certain Supplement No. 1 to Proxy Statement Relating to the 2025 Annual Meeting of Shareholders filed on <u>February 24, 2025</u>;

(b) The Registrant's Quarterly Report on Form 10-Q for the quarter ended December 31, 2024, filed with the SEC on February 5, 2025;

(c) The Registrant's Current Reports on Form 8-K filed with the SEC on <u>December 9, 2024</u>, <u>January 23, 2025</u>; <u>February 5, 2025</u>, and <u>March 7, 2025</u>; and

(d)The description of the Registrant's securities contained in the Registration Statement on Form 8-A, filed with the SEC on December 15, 1994, including any amendments or reports filed for the purpose of updating such description (p).

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act of 1934, as amended, after the date of this Registration Statement and prior to the filing of a post-effective amendment that indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, are incorporated by reference in this Registration Statement and are a part hereof from the date of filing of such documents; except as to any portion of any future annual or quarterly report to shareholders or document or current report furnished under current Items 2.02 or 7.01 of Form 8-K that is not deemed filed under such provisions.

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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 other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

The exhibits to this Registration Statement are listed below:

Exhibit No.	Exhibit Description
4.1	Amended and Restated Articles of Incorporation, as amended through February 6, 2012 (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2011, filed with the SEC on February 9, 2012).
4.2	Amended and Restated Bylaws of Amtech Systems, Inc., dated as of September 23, 2020 (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on September 15, 2020).
4.3	<u>First Amendment to Amended and Restated and Restated Bylaws</u> (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed with the SEC on November 19, 2021).
5.1*	Legal Opinion of DLA Piper LLP (US).
23.1*	Consent of KPMG LLP
23.2*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
24.1*	Power of Attorney (included in signature page to this Registration Statement).
99.1	Amtech Systems, Inc. 2022 Equity Incentive Plan (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Current Report on Form S-8, filed with the SEC on March 25, 2022.)
99.2*	First Amendment to the Amtech Systems, Inc. 2022 Equity Incentive Plan
107*	Filing Fee Table

^{*} Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tempe, State of Arizona, on March 19, 2025.

AMTECH SYSTEMS, INC.

/s/ Wade M. Jenke Wade M. Jenke Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Wade M. Jenke, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in their name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Capacity in Which Signed	
/s/ Robert C. Daigle Robert C. Daigle	Chairman, President, and Chief Executive Officer (Principal Executive Officer)	March 19, 2025
/s/ Wade M. Jenke Wade M. Jenke	Director, Vice President, and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 19, 2025
/s/ Robert M. Averick Robert M. Averick	Director	March 19, 2025
//s/ Michael Garnreiter Michael Garnreiter	Director	March 19, 2025
/s/ Asif Y. Jakwani Asif Y. Jakwani	Director	March 19, 2025
/s/ Michael M. Ludwig Michael M. Ludwig	Director	March 19, 2025



DLA Piper LLP (US) 2525 East Camelback Road, Suite 1000 Phoenix, Arizona 85016 www.dlapiper.com

T 480.606.5100 F 480.606.5101

March 19, 2025

Amtech Systems, Inc. 58 South River Drive, Suite 370 Tempe, AZ 85281

Re: Registration Statement on Form S-8

Dear Ladies and Gentlemen:

We have acted as counsel for Amtech Systems, Inc., an Arizona corporation (the "Company"), in connection with the preparation and filing of the Registration Statement on Form S-8 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act of 1933, as amended, of 1,000,000 additional shares of the Company's Common Stock, par value \$0.01 per share (the "Shares"), reserved for issuance under the Amtech Systems, Inc. 2022 Equity Incentive Plan, as amended (the "Plan").

In connection herewith, we have examined and relied upon such records, documents, certificates and other instruments as in our judgment are necessary or appropriate to form the basis for the opinions hereinafter set forth. In all such examinations, we have assumed the genuineness of signatures on original documents and the conformity to such original documents of all copies submitted to us as certified, conformed or photographic copies, and as to certificates of public officials, we have assumed the same to have been properly given and to be accurate. As to matters of fact material to this opinion, we have relied, without independent verification, upon statements and representations of representatives of the Company and public officials.

We do not express any opinion herein concerning any law other than the Arizona Business Corporation Act (including the statutory provisions, all applicable provisions of the Arizona Constitution and the reported judicial decisions interpreting the foregoing) and the federal law of the United States of America.

This opinion speaks only at and as of its date and is based solely on the facts and circumstances known to us at and as of such date. In addition, in rendering this opinion, we assume no obligation to revise, update or supplement this opinion (i) should the present aforementioned laws of the State of Arizona or federal laws of the United States of America be changed by legislative action, judicial decision or otherwise after the date hereof, or (ii) to reflect any facts or circumstances which may hereafter come to our attention after the date hereof.

Based upon, subject to and limited by the foregoing, we are of the opinion and so advise you that the Shares have been duly authorized and, when issued and delivered in accordance with the terms of the Plan and pursuant to the agreements which accompany the Plan, will be validly issued, fully paid, and nonassessable.



Amtech Systems, Inc. March 19, 2025 Page Two

* * *

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

DLA Piper LLP (US)



KPMG LLP 60 East Rio Salado Parkway Tempe, AZ 85281-9125

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated December 12, 2024, with respect to the consolidated financial statements of Amtech Systems, Inc. and subsidiaries, and the effectiveness of internal control over financial reporting, incorporated herein by reference.

/s/ KPMG LLP

Phoenix, Arizona March 19, 2025

FIRST AMENDMENT TO THE AMTECH SYSTEMS, INC. 2022 EQUITY INCENTIVE PLAN

WHEREAS, Amtech Systems, Inc. (the "Company") maintains the 2022 Equity Incentive Plan of Amtech Systems, Inc. (the "Plan"); and

WHEREAS, Section 15 of the Plan provides that the Plan may be amended from time to time; and

WHEREAS, the Company desires to amend the Plan in certain respects;

NOW, THEREFORE, the Plan is hereby amended, effective as of the date the shareholders of the Company approve this amendment, in the following respects:

- 1. Section 4(a) of the Plan is amended to read in its entirety as follows:
- "(a) Maximum Shares Available. Subject to Section 4(b) and to adjustment as provided in Section 12(a), the number of Shares that may be the subject of Awards and issued under the Plan shall be 2,000,000. No further awards may be made under the Prior Plans after the effective date of this Plan. Shares issued under the Plan may be Shares that either were reacquired by the Company, including Shares purchased on the open market, or authorized but unissued Shares. In determining the number of Shares to be counted against this share reserve in connection with any Award, the following rules shall apply:
 - (1) Shares shall be counted against the share reserve as one Share for every one Share granted.
- (2) Where the number of Shares subject to an Award is variable on the Grant Date, the number of Shares to be counted against the share reserve shall be the maximum number of Shares that could be received under that particular Award, until such time as it can be determined that only a lesser number of shares could be received.
- (3) Shares subject to Substitute Awards shall not be counted against the share reserve, nor shall they reduce the Shares authorized for grant to a Participant in any calendar year.
- (4) Awards that may be settled solely in cash shall not be counted against the share reserve, nor shall they reduce the Shares authorized for grant to a Participant in any calendar year."
 - 2. Section 7(d)(1) of the Plan is amended to read in its entirety as follows:
 - (1) An Option Award will constitute an Incentive Stock Option Award only if the Participant receiving the Option Award is an Employee, and only to the extent that (i) it is so designated in the applicable Agreement and (ii) the aggregate Fair Market Value (determined as of the Option Award's Grant Date) of the Shares with respect to which Incentive Stock Option Awards held by the Participant first become exercisable in any calendar year (under the Plan and all other plans of the Company and its Affiliates) does not exceed \$100,000 or such other amount specified by the Code. To the extent an Option Award granted to a Participant exceeds this limit, the Option Award shall be treated as a Non-Qualified Stock Option Award. The maximum number of Shares that may be issued upon the exercise of Incentive Stock Option Awards under the Plan shall be 2,000,000, subject to adjustment as provided in Section 12(a).

This Amendment, in conjunction with the Plan, constitutes the entire agreement with respect to the subject matter hereof and supersedes all oral and written agreements and understandings made and entered into prior to the date hereof. In the event of any conflict between the terms and conditions of the Plan and the terms and conditions of this Amendment, the terms and conditions of this Amendment shall prevail and control. If any term or provision of this Amendment or the application thereof to any persons or circumstances shall, to any extent, be invalid or unenforceable, the remainder of this Amendment or the application of such term or provision to persons or

circumstances other than those as to which it is held invalid or unenforceable shall not be affected thereby, and each term and provision of this Amendment shall be valid and enforced to the fullest extent permitted by law.

IN WITNESS WHEREOF, the undersigned has executed this Amendment as of the date first written above on behalf of the Company.

Amtech Systems, Inc.

By: /s/ Robert C. Daigle_____

Name: Robert C. Daigle

Title: President and Chief Executive Officer

Calculation of Filing Fee Table

Form S-8 (Form Type)

Amtech Systems, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title ⁽¹⁾	Fee Calculation Rule	Amount Registered ⁽²⁾	Proposed Maximum Offering Price Per Unit ⁽³⁾	Maximum Aggregate Offering Price ⁽³⁾	Fee Rate	Amount of Registration Fee ⁽³⁾
Equity	Common Stock, par value \$0.01 per share	Other	1,000,000	\$4.875	\$4,875,000.00	0.00015310	\$746.36
Total Offeri	ng Amounts				\$4,875,000.00		\$746.36
Total Fees Previously Paid						_	
Total Fee Offsets						_	
Net Fee Due							\$746.36

1.In addition to the number of shares of common stock, par value \$0.01 per share (the "Common Stock"), of Amtech Systems, Inc. (the "Registrant") set forth in the above table, this Registration Statement on Form S-8 covers an indeterminate number of options and other rights to acquire Common Stock, to be granted pursuant to the Amtech Systems, Inc. 2022 Equity Incentive Plan, as amended (the "Incentive Plan").

2.Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement on Form S-8 also shall cover any additional shares of Common Stock in respect of the securities identified in the above table as a result of any stock dividend, stock split, recapitalization or other similar transaction, and any other securities with respect to which the outstanding shares are converted or exchanged.

3.Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and Rule 475(h) under the Securities Act. The proposed maximum offering price per share, the proposed maximum aggregate offering price and the amount of registration fee have been computed based on the average high and low prices per share of the Common Stock reported on the Nasdaq Stock Market LLC on March 13, 2025.