

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

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

Datavault AI Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

30-1135279
(I.R.S. Employer
Identification Number)

**One Commerce Square
2005 Market Street, Suite 2400
Philadelphia, PA 19103
(408) 627-4716**

(Address, including zip code, and telephone number, including area code,
of registrant's principal executive offices)

Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan, as amended
(Full Title of Plans)

**Nathaniel Bradley
Chief Executive Officer
One Commerce Square, 24th Floor
Philadelphia, PA 19103
(408) 627-4716**

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

With copies to:
**Jeffrey T. Hartlin, Esq.
Elizabeth A. Razzano, Esq.
Paul Hastings LLP
1117 S. California Avenue
Palo Alto, CA 94304
(650) 320-1804**

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	..	Accelerated filer	..
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	..

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. ..

EXPLANATORY NOTE

Datavault AI Inc. (the “Registrant”) has prepared this Registration Statement on Form S-8 (the “Registration Statement”) in accordance with the requirements of Form S-8 under the Securities Act of 1933, as amended (the “Securities Act”), to register 48,001,213 additional shares of common stock, \$0.0001 par value per share (“Common Stock”), of the Registrant issuable pursuant to the Registrant’s 2018 Long-Term Stock Incentive Plan, as amended (the “2018 LTIP”), pursuant to its “evergreen” provision set forth in Section 5.A. thereof. The Registrant’s stockholders have previously approved the 2018 LTIP, including the shares of Common Stock available for issuance pursuant thereto.

Pursuant to the Registration Statement on Form S-8 (File No. [333-228327](#)) filed by the Registrant with the Securities and Exchange Commission (the “Commission”) on November 9, 2018, the Registration Statement on Form S-8 (File No. [333-265060](#)) filed by the Registrant with the Commission on May 18, 2022, the Registration Statement on Form S-8 (File No. [333-271520](#)) filed by the Registrant with the Commission on April 28, 2023, the Registration Statement on Form S-8 (File No. [333-274154](#)) filed by the Registrant with the Commission on August 22, 2023, the Registration Statement on Form S-8 (File No. [333-279730](#)) filed by the Registrant with the Commission on May 24, 2024, the Registration Statement on Form S-8 (File No. [333-281053](#)) filed by the Registrant with the Commission on July 26, 2024, the Registration Statement on Form S-8 (File No. [333-283118](#)) filed by the Registrant with the Commission on November 12, 2024, the Registration Statement on Form S-8 (File No. [333-285154](#)) filed by the Registrant with the Commission on February 24, 2025, the Registration Statement on Form S-8 (File No. [333-288281](#)) filed by the Registrant with the Commission on June 24, 2025, the Registration Statement on Form S-8 (File No. [333-288568](#)) filed by the Registrant with the Commission on July 8, 2025, the Registration Statement on Form S-8 (File No. [333-291631](#)) filed by the Registrant with the Commission on November 18, 2025 and the Registration Statement on Form S-8 (File No. [333-291767](#)) filed by the Registrant with the Commission on November 25, 2025 (collectively, the “Prior Registration Statements”), the Registrant previously registered an aggregate of 26,477,941 shares of Common Stock under the 2018 LTIP, which number of shares reflects adjustments for reverse stock splits effected by the Registrant.

In accordance with General Instruction E to Form S-8, the contents of the Prior Registration Statements are hereby incorporated by reference.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

Incorporated by reference in this Registration Statement are the following documents filed by the Company with the Commission pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the “Exchange Act”), excluding those portions of any Current Report on Form 8-K that are not deemed “filed” pursuant to the General Instructions of Form 8-K:

- (1) our [Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the Commission on March 18, 2026](#);
- (2) our Current Reports on Form 8-K filed with the Commission on [January 5, 2026](#) (the first Current Report on Form 8-K filed on such date), [January 5, 2026](#) (the second Current Report on Form 8-K filed on such date), [January 7, 2026](#) (the first Current Report on Form 8-K filed on such date), [January 7, 2026](#) (the second Current Report on Form 8-K filed on such date), [January 8, 2026](#), [January 15, 2026](#), [January 23, 2026](#), [February 3, 2026](#), [February 13, 2026](#), [February 27, 2026](#) (the first Current Report on Form 8-K filed on such date), [February 27, 2026](#) (the second Current Report on Form 8-K filed on such date), [March 19, 2026](#) (the second Current Report on Form 8-K filed on such date) and [March 30, 2026](#) (except for Item 2.02 and Item 7.01 of any Current Report on Form 8-K which are not deemed “filed” for purposes of Section 18 of the Exchange Act and are not incorporated by reference in this prospectus); and
- (3) the description of our common stock contained in [Exhibit 4.2](#) – Description of Securities Registered Pursuant to Section 12 of the Exchange Act, to our Annual Report on Form 10-K for the fiscal year ended December 31, 2025, filed with the Commission on March 18, 2026.

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

For the purposes of this Registration Statement, any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document that also is or 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.

You should rely only on the information provided or incorporated by reference in this Registration Statement or any related prospectus. The Registrant has not authorized anyone to provide you with different information. You should not assume that the information in this Registration Statement or any related prospectus is accurate as of any date other than the date on the front of the document.

You may contact the Registrant in writing or orally to request copies of the above-referenced filings, without charge (excluding exhibits to such documents unless such exhibits are specifically incorporated by reference into the information incorporated into this Registration Statement). Requests for such information should be directed to:

Datavault AI Inc.
One Commerce Square
2005 Market Street, Suite 2400
Philadelphia, PA 19103
Attn: Investor Relations
Phone: (408) 627-4716

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the General Corporation Law of the State of Delaware (“DGCL”) provides that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such 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 person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation’s best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who are, were or are a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of such 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) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation’s best interests, provided that no indemnification is permitted without judicial approval if the officer, director, employee or agent 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 against the expenses which such officer or director has actually and reasonably incurred.

Section 145 of the DGCL further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of their status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145 of the DGCL.

Our bylaws provide that we must indemnify our directors and officers to the fullest extent permitted by the DGCL and must also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified.

We have entered into indemnification agreements with certain of our executive officers and directors pursuant to which we have agreed to indemnify such persons against all expenses and liabilities incurred or paid by such person in connection with any proceeding arising from the fact that such person is or was an officer or director of our company, and to advance expenses as incurred by or on behalf of such person in connection therewith.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, as amended, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

We maintain standard policies of insurance that provide coverage (i) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (ii) to us with respect to indemnification payments that we may make to such directors and officers.

See “Item 9. Undertakings” for a description of the Commission’s position regarding such indemnification provisions.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Exhibit Title
4.1	Certificate of Incorporation of Summit Semiconductor, Inc. (incorporated by reference to Exhibit 3.1(i) to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 2, 2018).
4.2	Plan of Conversion of Summit Semiconductor, Inc. (incorporated by reference to Exhibit 2.2 to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 23, 2018).
4.3	Certificate of Amendment to Certificate of Incorporation of Summit Semiconductor, Inc. (incorporated by reference to Exhibit 3.1(ii) to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 25, 2018).
4.4	Certificate of Amendment to Certificate of Incorporation of Summit Wireless Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on April 8, 2020).
4.5	Certificate of Amendment of Certificate of Incorporation of Summit Wireless Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on March 11, 2022).
4.6	Certificate of Amendment to Certificate of Incorporation of WiSA Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on January 26, 2023).
4.7	Certificate of Designation of Preferences, Rights, and Limitations of Series B Convertible Preferred Stock (incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on October 19, 2023).
4.8	Certificate of Amendment to WiSA Technologies, Inc.'s Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on March 25, 2024 (incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on March 26, 2024).
4.9	Certificate of Amendment to Certificate of Incorporation of WiSA Technologies, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on April 12, 2024).
4.10	Certificate of Amendment to WiSA Technologies, Inc.'s Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on February 14, 2025).
4.11	Certificate of Amendment to Datavault AI Inc.'s Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on September 25, 2025 (incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on September 26, 2025).
4.12	Certificate of Amendment to Datavault AI Inc.'s Certificate of Incorporation, filed with the Secretary of State of the State of Delaware on November 24, 2025 (incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on November 24, 2025).

4.13	Bylaws of Summit Semiconductor, Inc. (incorporated by reference to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 2, 2018).
4.14	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed with the SEC on March 29, 2019).
4.15	Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Amendment No. 4 to Registration Statement on Form S-1 (File No. 333-224267) filed with the SEC on July 2, 2018).
4.16	Amendment to WiSA Technologies, Inc.'s 2018 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.50 to the Company's Annual Report on Form 10-K filed with the SEC on March 18, 2026).
4.17	Amendment to WiSA Technologies Inc.'s 2018 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 10.51 to the Company's Annual Report on Form 10-K filed with the SEC on March 18, 2026).
4.18	Amendment to WiSA Technologies, Inc.'s 2018 Long-Term Stock Incentive Plan (filed herewith).
4.19	Form of Restricted Stock Agreement for Directors under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 2, 2018).
4.20	Form of Restricted Stock Agreement for Employees under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to the Company's Registration Statement on Form S-1/A (File No. 333-224267) filed with the SEC on July 2, 2018).
4.21	Form of Restricted Stock Agreement for Directors under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to the Company's Registration Statement on Form S-8 (File No. 333-265060) filed with the SEC on May 18, 2022).
4.22	Form of Restricted Stock Agreement for Employees under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to the Company's Registration Statement on Form S-8 (File No. 333-265060) filed with the SEC on May 18, 2022).
4.23	Form of Restricted Stock Agreement for Directors under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to the Company's Registration Statement on Form S-8 (File No. 333-274154) filed with the SEC on August 22, 2023).
4.24	Form of Restricted Stock Agreement for Employees under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan (incorporated by reference to Exhibit 4.11 to the Company's Registration Statement on Form S-8 filed with the SEC on August 22, 2023).
5.1	Opinion of Paul Hastings LLP (filed herewith).
23.1	Consent of BPM LLP, independent registered public accounting firm (filed herewith).
23.2	Consent of Paul Hastings LLP (reference is made to Exhibit 5.1).
24.1	Power of Attorney (set forth on the signature page of this Registration Statement).
107	Filing Fee Table (filed herewith).

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;

(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) above 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 Securities Exchange Act of 1934 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 therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; and

(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 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 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 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 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 any 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 of whether or not 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 Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Philadelphia, State of Pennsylvania, on April 17, 2026.

DATAVAULT AI INC.

By: /s/ Brett Moyer
Brett Moyer
Chief Financial Officer

POWERS OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Nathaniel Bradley and Brett Moyer, and each or any one of them, as his or her true and lawful attorneys-in-fact and agent, 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 any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, 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 attorneys-in-fact and agents, or any of them or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated

Date: April 17, 2026

By: /s/ Nathaniel Bradley
Nathaniel Bradley
Chief Executive Officer and Director
(principal executive officer)

Date: April 17, 2026

By: /s/ Brett Moyer
Brett Moyer
Chief Financial Officer and Director
(principal financial officer)

Date: April 17, 2026

By: /s/ Stanley Mbugua
Stanley Mbugua
Vice President of Finance and Chief Accounting Officer
(principal accounting officer)

Date: April 17, 2026

By: /s/ Kimberly Briskey
Kimberly Briskey
Director

Date: April 17, 2026

By: /s/ Dr. Jeffrey M. Gilbert
Dr. Jeffrey M. Gilbert
Director

Date: April 17, 2026

By: /s/ David Howitt
David Howitt
Director

Date: April 17, 2026

By: /s/ Helge Kristensen
Helge Kristensen
Director

Date: April 17, 2026

By: /s/ Sriram Peruvemba
Sriram Peruvemba
Director

Date: April 17, 2026

By: /s/ Robert Tobias
Robert Tobias
Director

Date: April 17, 2026

By: /s/ Wendy Wilson
Wendy Wilson
Director

**AMENDMENT TO WISA TECHNOLOGIES, INC.
2018 LONG-TERM STOCK INCENTIVE PLAN**

Pursuant to Section 13 of the WiSA Technologies, Inc. 2018 Long-Term Stock Incentive Plan (the "LTIP"), the Board of Directors (the "Board") of WiSA Technologies, Inc. (the "Corporation") hereby amends the LTIP (the "Amendment"), subject to the approval of the Corporation's stockholders. This Amendment to the LTIP (the "Amendment") is effective as of the date of Stockholder approval.

1. The first sentence of Section 5(A) of the Plan is hereby amended and restated in its entirety to read as follows:

"A. Share Reserve and Limitations on Grants. Subject to adjustment as provided in Section 9, the maximum aggregate number of shares of Common Stock that may be (i) issued under this Plan pursuant to the exercise of Options, (ii) issued pursuant to Stock Awards, (iii) covered by Stock Appreciation Rights (without regard to whether payment on exercise of the Stock Appreciation Right is made in cash or shares of Common Stock) and (iv) covered by Performance Shares shall be limited to 15% of the shares of Common Stock outstanding, which calculation shall be made using the number of shares of Common Stock outstanding as of the first trading day of each fiscal quarter."

2. This Amendment was adopted by the Board on November 24, 2024 and is subject to approval by the affirmative vote of a majority of the shares represented and voting at a duly held meeting at which a quorum is present or by an action by written consent within twelve (12) months of the date the Amendment was adopted by the Board.

3. To record the adoption of this Amendment, the Corporation has caused an authorized officer to affix the Corporation name hereto.

WISA TECHNOLOGIES, INC.

By: /s/ Brett Moyer

*Brett Moyer, Chairman,
President and Chief Executive
Officer*

PAUL
HASTINGS

April 17, 2026

Datavault AI Inc.
2205 Market Street, Suite 2400
Philadelphia, PA 19103

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Datavault AI Inc., a Delaware corporation (the “*Company*”), in connection with the preparation of the registration statement on Form S-8 to be filed by the Company with the U.S. Securities and Exchange Commission (the “*Commission*”) on or about the date hereof (the “*Registration Statement*”) to effect registration under the Securities Act of 1933, as amended (the “*Securities Act*”), of an aggregate of 48,001,213 shares (the “*Shares*”) of the Company’s common stock, \$0.0001 par value per share (“*Common Stock*”), comprised of 48,001,213 shares of Common Stock issuable pursuant to awards to be granted (and/or upon the vesting and settlement or exercise of awards to be granted) by the Company pursuant to the Datavault AI Inc. 2018 Long-Term Stock Incentive Plan, as amended (the “*2018 Plan*”).

As such counsel and for purposes of our opinion set forth below, we have examined and relied upon originals or copies, certified or otherwise identified to our satisfaction, of such documents, resolutions, certificates and instruments of the Company and corporate records furnished to us by the Company, and have reviewed certificates of public officials, statutes, records and such other instruments and documents as we have deemed necessary or appropriate as a basis for the opinion set forth below, including, without limitation:

- (i) the Registration Statement;
- (ii) the Restated Certificate of Incorporation of the Company, as amended, as certified as of December 23, 2025 by the Office of the Secretary of State of the State of Delaware;
- (iii) the Bylaws of the Company as presently in effect, as certified by an officer of the Company on April 17, 2026;
- (iv) the Plans and the forms of award agreements related thereto that were attached as exhibits to the Registration Statement or otherwise incorporated by reference into the exhibits of the Registration Statement;
- (v) a certificate, dated as of April 8, 2026, from the Office of the Secretary of State of the State of Delaware, as to the existence and good standing of the Company in the State of Delaware (the “*Good Standing Certificate*”); and
- (vi) the resolutions adopted by the board of directors of the Company and approvals by the stockholders of the Company regarding the Plans, and other matters related thereto, as certified by an officer of the Company on April 17, 2026.

Paul Hastings LLP | 1117 S. California Avenue | Palo Alto, California 94304
t: +1.650.320.1800 | www.paulhastings.com

Datavault AI Inc.
April 17, 2026

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In addition to the foregoing, we have made such investigations of law as we have deemed necessary or appropriate as a basis for the opinion set forth in this opinion letter.

In such examination and in rendering the opinion expressed below, we have assumed, without independent investigation or verification: (i) the genuineness of all signatures on all agreements, instruments, corporate records, certificates and other documents submitted to us; (ii) the authenticity and completeness of all agreements, instruments, corporate records, certificates and other documents submitted to us as originals; (iii) that all agreements, instruments, corporate records, certificates and other documents submitted to us as certified, electronic, facsimile, conformed, photostatic or other copies conform to originals thereof, and that such originals are authentic and complete; (iv) the legal capacity and authority of all persons or entities (other than the Company) executing all agreements, instruments, corporate records, certificates and other documents submitted to us; (v) the due authorization, execution and delivery of all agreements, instruments, corporate records, certificates and other documents by all parties thereto (other than the Company); (vi) that no documents submitted to us have been amended or terminated orally or in writing except as has been disclosed to us in writing; (vii) that the statements contained in the certificates and comparable documents of public officials, officers and representatives of the Company and other persons on which we have relied for the purposes of this opinion letter are true and correct; (viii) that there has not been any change in the good standing status of the Company from that reported in the Good Standing Certificate; and (ix) that each of the officers and directors of the Company has properly exercised his or her fiduciary duties. As to all questions of fact material to this opinion letter, and as to the materiality of any fact or other matter referred to herein, we have relied (without independent investigation or verification) upon representations and certificates or comparable documents of officers and representatives of the Company. Our knowledge of the Company and its legal and other affairs is limited by the scope of our engagement, which scope includes the delivery of this opinion letter. We do not represent the Company with respect to all legal matters or issues. The Company may employ other independent counsel and, to our knowledge, handles certain legal matters and issues without the assistance of independent counsel. We have also assumed that the individual issuances, grants, awards or grants of purchase rights under the 2018 Plan will be duly authorized by all necessary corporate action of the Company in accordance with the requirements of law.

Based upon the foregoing, and in reliance thereon, and subject to the assumptions, limitations, qualifications and exceptions set forth herein, we are of the opinion that the Shares are duly authorized and, when issued and sold as described in the Registration Statement and in accordance with the 2018 Plan will be validly issued, fully paid and nonassessable.

Without limiting any of the other limitations, exceptions and qualifications stated elsewhere herein, we express no opinion with regard to the applicability or effect of the laws of any jurisdiction other than the General Corporation Law of the State of Delaware, as in effect on the date of this opinion letter.

This opinion letter deals only with the specified legal issues expressly addressed herein, and you should not infer any opinion that is not explicitly stated herein from any matter addressed in this opinion letter.

This opinion letter is rendered solely in connection with the issuance and delivery of the Shares as described in the Registration Statement and in accordance with the terms of the 2018 Plan and the applicable award agreement or form of instrument evidencing purchase rights thereunder. This opinion letter is rendered as of the date hereof, and we assume no obligation to advise you or any other person with regard to any change after the date hereof in the circumstances or the law that may bear on the matters set forth herein after the effectiveness of the Registration Statement even if the change may affect the legal analysis or a legal conclusion or other matters in this opinion letter.

PAUL
HASTINGS

Datavault AI Inc.
April 17, 2026

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

Very truly yours,

/s/ Paul Hastings LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Datavault AI Inc. of our report dated March 18, 2026 relating to the consolidated financial statements, which appears in Datavault AI Inc.'s Annual Report on Form 10-K for the year ended December 31, 2025.

/s/ BPM LLP

Irvine, California
April 17, 2026
