# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

## IONQ, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 85-2992192 (I.R.S. Employer Identification No.)

4505 Campus Drive College Park, MD (Address of principal executive offices)

20740 (Zip Code)

IonQ, Inc. 2021 Equity Incentive Plan (Full title of the plans)

Laurie Babinski General Counsel IonQ, Inc. 4505 Campus Drive College Park, MD 20740 (301) 298-7997

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

Copies to:

John T. McKenna Jaime L. Chase Cooley LLP 3175 Hanover Street Palo Alto, CA 94304 (650) 843-5000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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.

company" in Rule 12b-2 c	of the Exchange Act.		
Large accelerated filer		Accelerated filer	
Non-accelerated filer		Smaller reporting company	×
		Emerging growth company	X
0 00	mpany, indicate by check mark if the registrant has elected not to use the extended transcounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. $\Box$	sition period for complying with an	y

#### EXPLANATORY NOTE

Pursuant to General Instruction E of Form S-8, IonQ, Inc. (the "**Registrant**") is filing this Registration Statement with the Securities and Exchange Commission (the "**Commission**") to register an additional 12,947,703 shares of common stock under the IonQ, Inc. 2021 Equity Incentive Plan, pursuant to the provisions of such plan which provide for annual automatic increases in the number of shares of common stock reserved for issuance under such plan. In accordance with the instructional note to Part I of Form S-8 as promulgated by the Commission, the information specified by Part I of the Form S-8 has been omitted from this Registration Statement.

### PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Commission, are incorporated by reference into this Registration Statement:

- (i) the contents of the Registrant's Registration Statement on Form S-8 (File No. 333-261737), previously filed with the Commission on December 17, 2021;
- (ii) the Registrant's Annual Report on Form 10-K (File No. 001-39694) for the fiscal year ended December 31, 2021, filed with the Commission on March 28, 2022, as amended by the Annual Report on Form 10-K/A filed with the Commission on March 29, 2022;
- (iii) the Registrant's Quarterly Report on Form 10-Q (File No. 001-39694) for the quarterly periods ended March 31, 2022 and June 30, 2022, filed with the Commission on May 16, 2022 and August 15, 2022;
- (iv) the Registrant's Current Report on Form 8-K (File No. 001-39694), filed with the Commission on May 26, 2022 and July 21, 2022; and
- (v) the description of the Registrant's Common Stock which is contained in a registration statement on Form 8-A (File No. 001-39694), filed with the Commission on November 10, 2020 under the Exchange Act of 1934, as amended (the "Exchange Act"), as well as any additional amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, and 15(d) of the Exchange Act, as amended (other than Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K, including any exhibits included with such information that are related to such items), prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in the documents incorporated or deemed to be incorporated by reference in this Registration Statement shall be deemed to be modified, superseded, or replaced for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated or deemed to be incorporated by reference in this Registration Statement modifies, supersedes, or replaces such statement. Any such statement so modified, superseded or replaced shall not be deemed, except as so modified, superseded or replaced, to constitute a part of this Registration Statement.

Item 8. Exhibits.

			Incorporated by Reference				
Exhibit Number	Description	Schedule/ Form	File No.	Exhibit	Filing Date		
3.1	Amended and Restated Certificate of Incorporation of IonQ, Inc.	Form 8-K	001-39694	3.1	October 4, 2021		
3.2	Amended and Restated Bylaws of IonQ, Inc.	Form 8-K	001-39694	3.2	October 4, 2021		
5.1*	Opinion of Cooley LLP.						
23.1*	Consent of Ernst & Young LLP, independent registered public accounting firm.						
23.2*	Consent of Cooley LLP (contained in the opinion filed as Exhibit 5.1 hereto).						
24.1*	Power of Attorney (included in the signature page of this Registration Statement).						
99.1	2021 Equity Incentive Plan.	Form 8-K	001-39694	10.16	October 4, 2021		
99.2	Forms of Option Grant Notice and Option Agreement under 2021 Equity Incentive Plan.	Form 8-K	001-39694	10.17	October 4, 2021		
99.3	Forms of Restricted Stock Unit Grant Notice and Award Agreement under the 2021 Equity Incentive Plan.	Form 10-Q	001-39694	10.1	August 15, 2022		
107*	Filing Fee Table						

 <sup>\*</sup> Filed herewith.

#### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of College Park, State of Maryland, on this 15th day of August, 2022.

#### IONO, INC.

By: /s/ Peter Chapman

Peter Chapman

President and Chief Executive Officer

#### POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Thomas Kramer and Laurie Babinski, and each of them, as his 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 sign any and all amendments to this Registration Statement (including post-effective amendments), 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 or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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 dates indicated.

Signature	Title	Date
/s/ Peter Chapman	President, Chief Executive Officer and Director	August 15, 2022
Peter Chapman	(Principal Executive Officer)	
/s/ Thomas Kramer	Chief Financial Officer	August 15, 2022
Thomas Kramer	(Principal Financial and Accounting Officer)	
/s/ Craig Barratt	Chairman of the Board of Directors	August 15, 2022
Craig Barratt		
/s/ Ronald Bernal	Director	August 15, 2022
Ronald Bernal		
/s/ Blake Byers	Director	August 15, 2022
Blake Byers		114845010, 2022
/s/ Kathryn Chou	Director	August 15, 2022
Kathryn Chou		114845010, 2022
/s/ Niccolo de Masi	Director	August 15, 2022
Niccolo de Masi	<u> </u>	
/s/ Jungsang Kim	Co-Founder, Chief Technology Officer and Director	August 15, 2022
Jungsang Kim		
/s/ Inder M. Singh	Director	August 15, 2022
Inder M. Singh		
/s/ Harry You	Director	August 15, 2022
Harry You		



John T. McKenna +1 650 843 5059 jmckenna@cooley.com

August 15, 2022

IonQ, Inc. 4505 Campus Drive College Park, MD 20740

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

Ladies and Gentlemen:

We have acted as counsel to IonQ, Inc., a Delaware corporation (the "Company"), in connection with the filing of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission covering the offering of up to 12,947,703 shares (the "Shares") of the Company's common stock, par value \$0.0001 per share ("Common Stock"), issuable pursuant to the Company's 2021 Equity Incentive Plan (the "2021 Plan").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and related prospectuses, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, (c) the 2021 Plan and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below.

We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Plans, the Registration Statement and related prospectuses, will be validly issued, fully paid, and nonassessable (except as to shares issued pursuant to deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ John T. McKenna

John T. McKenna

Cooley LLP 55 Hudson Yards New York, NY 10001 t: (212) 479-6000 f: (212) 479-6275 cooley.com

### **Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the IonQ, Inc. 2021 Equity Incentive Plan of our report dated March 28, 2022, with respect to the consolidated financial statements of IonQ, Inc. included in its Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Tysons, Virginia

August 15, 2022

#### CALCULATION OF REGISTRATION FEE

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	IonQ, Inc. 2021 Equity	Other(2)					
	Incentive Plan (Common						
	stock, \$0.0001 par value						
	per share)		12,947,703(3)(4)	\$5.82(2)	\$75,355,631.46(2)	.0000927	\$6,985.47
Total Offering Amounts				\$75,355,631.46		\$6,985.47	
Total Fee Offsets						_	
Net Fee Due						\$6,985.47	

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of IonQ, Inc's (the "Registrant") common stock, par value \$0.0001 ("Common Stock") which become issuable under the IonQ, Inc. 2021 Equity Incentive Plan (the "2021 Plan") by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without receipt of consideration which results in an increase in the number of shares of the Registrant's outstanding Common Stock.
- (2) Estimated pursuant to Rules 457(c) and 457(h) solely for the purpose of calculating the registration fee. The proposed maximum offering price per share and proposed maximum aggregate offering price are based on the average of the high and low sale prices of the Common Stock as reported on the New York Stock Exchange on August 9, 2022.
- (3) Represents shares of Common Stock reserved for issuance pursuant to future awards under the 2021 Plan. To the extent that any awards outstanding under the 2021 Plan are forfeited, are cancelled, are held back upon exercise or settlement of an award to cover any exercise price, as applicable, or tax withholding, are reacquired by the Registrant prior to vesting, are satisfied without the issuance of stock or are otherwise terminated (other than by exercise) subsequent to the date of this Registration Statement, the shares reserved for issuance pursuant to such awards will become available for issuance as shares of Common Stock under the 2021 Plan.
- (4) The number of shares reserved for issuance under the 2021 Plan will automatically increase on January 1 of each year for a period of ten years commencing on January 1, 2022 and ending on (and including) January 1, 2031, in an amount equal to 5% of the Fully-Diluted Common Stock on December 31 of the preceding year; *provided*, *however*, that the Registrant's board of directors may act prior to January 1st of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock.