

UNITED STATESSECURITIES AND EXCHANGE COMMISSIONWashington, D.C. 20549 FORM 6-K REPORT OF FOREIGNPRIVATE ISSUERPURSUANT TO RULE 13a-16 OR 15d-16UNDER THE SECURITIES EXCHANGE ACT OF 1934 For the month of December 2024 Commission File Number: 001-40777 ARQIT QUANTUM INC.(Exact name of registrant as specified in itscharter) 1st Floor, 3 Orchard PlaceLondon, SW1H 0BF United Kingdom(Address of principal executive office) Indicate by check mark whether the registrantfiles or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F x Form 40-F x EXPLANATORY NOTE Attached hereto and incorporatedby reference herein are the notice and proxy materials related to the Extraordinary General Meeting of Shareholders of Arqit Quantum Inc.to be held on December 18, 2024. Exhibit List Exhibit No. Description 99.1 Notice and Proxy Materials for the 2024 Extraordinary General Meeting of Arqit Quantum Inc. 99.2 Form of Proxy Card x SIGNATURES Pursuant to the requirementsof the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. ARQIT QUANTUM INC. By:/s/Andy Leaver Name:Andy Leaver Title:Chief ExecutiveOfficer Date: December 9, 2024 Exhibit 99.1 Arqit Quantum Inc.1st Floor, 3 Orchard Place, London, SW1H 0BF United Kingdom December 4, 2024 Dear Shareholder: You are invited to attendthe Extraordinary General Meeting of Arqit Quantum Inc., which will be held at 2:00 p.m., Greenwich mean Time on Wednesday, December 18,2024, at 1st Floor, 3 Orchard Place, London, SW1H 0BF United Kingdom and via webcast. Information concerning thematters to be considered and voted upon at the Extraordinary General Meeting is set forth in the attached Notice and Proxy Statement. The Board of Directors hasfixed October 29, 2024, as the record date for the Extraordinary General Meeting (the "Record Date"), and only holdersof record of shares at such time will be entitled to notice of or to vote at the Extraordinary General Meeting or any adjournment thereof. Your vote on the proposalis important. Whether or not you attend the meeting, we encourage you to vote your shares in order to make certain that you are representedat the meeting. You may vote in person, over the Internet, by telephone or by mailing a proxy or voting instruction card. If you are unableto attend the Extraordinary General Meeting in person or virtually or you wish to be represented, please authorize a proxy to vote yourshares in accordance with the instructions you received. Sincerely, Andy Leaver CEO 1 Arqit Quantum Inc.1st Floor, 3 Orchard Place, London, SW1H 0BF United Kingdom A NOTICE OFEXTRAORDINARY GENERAL MEETING NOTICE IS HEREBY GIVEN thatan Extraordinary general meeting of shareholders of Arqit Quantum Inc. ("Arqit"), an exempted company incorporated with limitedliability under the laws of the Cayman Islands, will be held on December 18, 2024, at 2:00 p.m., Greenwich Mean Time. The meetingwill be held in person at 1st Floor, 3 Orchard Place, London, SW1H 0BF United Kingdom and via webcast. The Extraordinary GeneralMeeting is being held for the following purposes: A To increase the authorized share capital of the Company. A To transact any other business that may properly be considered at the meeting or any adjournment of the meeting. These items of business aredescribed in the attached proxy statement, which we encourage you to read in its entirety before voting. Only holders of record of Arqitordinary shares at the close of business on October 29, 2024, are entitled to notice of the Extraordinary General Meeting and tovote at the Extraordinary General Meeting and any adjournments or postponements thereof. It is important that yourshares be represented and voted at the meeting. Whether or not you plan to attend the meeting in person, we encourage you to submit yourproxy or voting instructions as soon as possible. For specific instructions on how to vote your shares, please refer to the section entitled "Voting and Solicitation" of the proxy statement. You can revoke a proxy at any time prior to its exercise at the meeting byfollowing the instructions in the accompanying proxy statement. A ARQIT QUANTUM INC.PROXY STATEMENTEXTRAORDINARY GENERAL MEETINGDECEMBER 18, 2024 GENERAL INFORMATION This Proxy Statement is beingprovided to solicit proxies on behalf of the Board of Directors of Arqit Quantum Inc. (the "Company," "Arqit," "we," "our" or "us") for use at the 2024 Extraordinary General Meeting of Shareholders (the "ExtraordinaryGeneral Meeting") to be held at 2:00 p.m., Greenwich Mean Time, on December 18, 2024, at 1st Floor, 3 Orchard Place, London, SW1H 0BF United Kingdom, and via webcast, and any adjournments thereof. ThisProxy Statement, together with the notice and the proxy card, are hereinafter referred to as the "Proxy Materials". On orabout December 4, 2024, we first mailed the Proxy Materials to our shareholders. These Proxy Materials can also be accessed, freeof charge, on the Company's website at <https://ir.arqit.uk/investors/sec-filings> and on the SEC's website at www.sec.gov on a Report on Form 6-K. Foreign Private Issuer We are a foreign privateissuer within the meaning of Rule 3b-4 of the U.S. Securities Exchange Act of 1934, as amended, and as a result, we are notrequired to comply with U.S. federal proxy requirements. Attendance at Meeting Onlyshareholders as of the record date, or their duly appointed proxies, may attend the Extraordinary General Meeting, which will be heldboth in person and via webcast at www.virtualshareholdermeeting.com/ARQQ2024SM. To attend the webcast, you will need the16-digit control number provided on your proxy card or in the instructions that accompanied your proxy materials. Toattend the Extraordinary General Meeting in person, you must request an admission ticket and provide the information described below. You may request an admission ticket by e-mailing a request to the Company at investorrelations@arqit.uk no later than December 13,2024. Your request should include documentation demonstrating your status as a shareholder of record of the Company. You may pick upyour ticket at the registration table prior to the meeting. Please be prepared to show your photo identification. If you attend as arepresentative of an entity that owns shares of record, you will need to bring proper identification indicating your authority to representthat entity. If you are a holder of record of our ordinary shares as at the Record Date, you will be admitted to the meeting upon presentinga form of photo identification. If you own ordinary shares beneficially through a bank, broker or otherwise, you will be admitted tothe Extraordinary General Meeting only upon presenting a form of photo identification, proof of share ownership as at the Record Dateand a valid proxy signed by the record holder. Record Date, Share Ownership and Quorum Only holders of record of the Company's ordinary shares, par value US\$0.0025 per share, as of the close of business on October 29, 2024 (the "Record Date"), are entitled to vote at the Extraordinary General Meeting in respect of such ordinary shares. The holders of one-third (1/3)of the ordinary shares, present in person or by proxy, or if a corporation or other non-natural person, by its duly authorized representativeor proxy, shall constitute a quorum for all purposes. Voting and Solicitation Each ordinary share issuedand outstanding as of the Record Date is entitled to one vote at the Extraordinary General Meeting. All proposals at the ExtraordinaryGeneral Meeting will be adopted by an ordinary resolution under Cayman Islands law, which is a resolution passed by a simple majorityof the ordinary shares present in person or by proxy and entitled to vote on the proposal at the Extraordinary General Meeting. A Ordinary shares for whichproxies are properly submitted within the deadline set forth below will be voted at the Extraordinary General Meeting in accordance withthe directions given. If a proxy is submitted but no specific instructions are given,

the proxy holder will vote in favor of the increase in authorized share capital of the Company. The proxy holder will also vote in the discretion of such proxy holder on any other matter that may properly come before the Extraordinary General Meeting, or at any adjournment thereof. Where any holder of ordinary shares affirmatively abstains from voting on any particular resolution, the votes attaching to such ordinary shares will not be included or counted in the determination of the number of ordinary shares voting for the purposes of determining whether such resolution has been passed but they will be counted for the purposes of determining the presence of a quorum. Proxies submitted by registered shareholders and beneficial shareholders (see below) must be received by us no later than 11:59 p.m., Greenwich Mean Time, on December 17, 2024, to ensure your representation at our Extraordinary General Meeting. The manner in which your shares can be voted depends on how your shares are held. If you own shares of record, meaning that your shares are represented by book entries in your name so that you appear as a shareholder in the Register of Members of the Company as maintained by Continental Stock Transfer and Trust Company, our share transfer agent (i.e., you are a registered or record shareholder), you can vote in the following ways: By Internet – You can vote over the Internet at www.proxyvote.com by following the instructions on your proxy card; By Telephone – You can vote by telephone by calling 1-800-690-6903 and following the instructions on your proxy card; or By Mail – You can vote by mail by signing, dating and returning the proxy card. You also may attend the Extraordinary General Meeting and vote in person. If you own ordinary shares of record and you do not vote by proxy or in person at the Extraordinary General Meeting, your shares will not be voted. If you own shares in street name, meaning that your shares are held by a bank, custodian, depositary, brokerage firm, or other nominee, you are considered the beneficial owner of shares held in street name, and as a result, this proxy statement, the notice of Extraordinary General Meeting and a proxy card will be provided to you by your bank, custodian, depositary, brokerage firm, or other nominee holding the shares. You may provide voting instructions to them directly by returning a voting instruction form provided by that institution. If you own ordinary shares in street name and attend the Extraordinary General Meeting, you must obtain a legal proxy from such bank, custodian, depositary, brokerage firm, or other nominee in order to vote your shares at the meeting, but only if such nominee holds such shares of record. You must also provide evidence of such proxy. Revocability of Proxies/Changing Your Vote You can change your vote before the vote is taken at the Extraordinary General Meeting. If you are a shareholder of record, you can change your vote by: voting over the Internet or by telephone at a later time, until 11:59 p.m., Greenwich Mean Time, on December 17, 2024; signing and mailing a new, properly completed proxy card with a later date than your original proxy card; or attending the Extraordinary General Meeting and voting in person. If your shares are held in street name, you must instruct the party that holds your shares of record for your account of your desire to change or revoke your voting instructions.

PROPOSAL WITH RESPECT TO INCREASE THE AUTHORIZED SHARE CAPITAL Only one proposal will be presented for consideration at the Extraordinary General Meeting. Shareholders will be asked to increase in authorized share capital of the Company. 4. Increase in Authorized Share Capital The Directors propose that the authorized share capital of the Company be increased to facilitate:

1. the issuance of the Warrant Shares (as defined below);
2. the registration under one or more Form S-8 Registration Statements of additional ordinary shares issuable pursuant to the Arqit Quantum Inc. 2021 Incentive Award Plan; and
3. the registration under one or more Form F-3 Registration Statements of additional ordinary shares for the offering, issuance and sale by the Company of ordinary shares, preference shares, debt securities and/or warrants in one or more offerings.

Warrant Shares On October 1, 2024, the Company issued to certain investors (i) 5,440,000 of its ordinary shares, \$0.0025 par value each under a shelf registration statement on Form F-3 and (ii) in a concurrent private placement, unregistered warrants to purchase up to 5,440,000 of its ordinary shares, those ordinary shares issuable upon the exercise of the warrants referred to as the Warrant Shares. The warrants are exercisable for a period of one year upon the achievement of certain criteria. Resolution to be Voted Upon The full text of the resolution to be proposed is as follows:

RESOLVED, as an ordinary resolution, that the authorized share capital of the Company be increased from US\$50,000.00 divided into 18,760,000 ordinary shares of a par value of US\$0.0025 each and 1,240,000 preference shares of a par value of US\$0.0025 each to \$100,000.00 divided into 37,520,000 ordinary shares of par value of USD\$0.0025 each and 2,480,000 preference shares of par value of USD\$0.0025 by the creation of 18,760,000 new ordinary shares of par value US\$0.0025 each and 1,240,000 new preference shares of par value US\$0.0025 each in accordance with Article 17.1(a) of the Articles of Association of the Company.

Vote Required The proposal with respect to the increase in authorized share capital of the Company requires an ordinary resolution under Cayman Islands law, which is a resolution passed by the affirmative vote of the holders of a majority of the ordinary shares present, in person or by proxy, and entitled to vote at the Extraordinary General Meeting.

The Board of Directors recommends that you vote FOR the increase in authorized share capital of the Company above.

Unless instructions are given to the contrary, it is the intention of the persons named as proxies to vote the shares to which the proxy is related FOR the increase in authorized share capital of the Company.

OTHER MATTERS We know of no other matters to be submitted at the Extraordinary General Meeting. If any other matters properly come before the Extraordinary General Meeting, it is the intention of the persons named in the enclosed form of proxy to vote the ordinary shares they represent as the Board of Directors may recommend.

By Order of the Board of Directors, Andy Leaver CEO, Exhibit 99.2 Proxy Card (ARQQ EGM 2024) VOTE BY INTERNET - www.proxyvote.com or scan the QR Barcode above. Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. ET on December 17, 2024. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form. During the Meeting - Go to www.virtualshareholdermeeting.com/ARQQ2024SM. You may attend the meeting via the Internet. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE 1-800-690-6903 Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 P.M. ET on December 17, 2024. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

The Board of Directors recommends you vote FOR the following:

1. Increase in and amendment to the authorized share capital of the Company For Against Abstain

NOTE: Such other business as may properly come before the meeting or any adjournment thereof.

ARQIT QUANTUM INC. Extraordinary Meeting of Shareholders December 18, 2:00 PM (GMT) This proxy is solicited by the Board of Directors. The undersigned hereby appoints Patrick Willcocks as proxy, with the power to appoint a substitute, and authorizes him to represent and vote as specified on the other side of this proxy, all ordinary shares of Arqit Quantum Inc. that the undersigned is entitled to vote at the Extraordinary General Meeting of Shareholders to be held at 2:00 p.m. (GMT) on Wednesday, December 18, 2024, at 1st Floor, 3 Orchard Place, London, SW1H 0BF

England, or attend virtuallyonly at www.virtualshareholdermeeting.com/ARQQ2024SM and all adjournments thereof. The shares represented by this proxy will be votedas specified on the other side. If no choice is specified, this proxy will be voted FOR the proposal. The proxies are authorized, in theirdiscretion, to vote such shares upon any other business that may properly come before the Extraordinary General Meeting.Â Â