Filed by Supernova Partners Acquisition Company II, Ltd. pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 14a-12 under the Securities Exchange Act of 1934

Subject Company: Supernova Partners Acquisition Company II, Ltd.

Commission File No. 001-40140 Date: February 22, 2022

# Rigetti Computing Founder and CEO, Chad Rigetti, to Provide Business Update on Technology and Partnership Progress

BERKELEY, Calif., Feb. 22, 2022 (GLOBE NEWSWIRE) — Rigetti Computing ("Rigetti" or the "Company"), a pioneer in hybrid quantum-classical computing, today announced that Chad Rigetti, founder and CEO of Rigetti, will discuss the Company's recent technology and partnership announcements tomorrow, Wednesday, February 23, 2022.

#### **Webcast Information**

Time: Wednesday, February 23, 2022 at 8:30 am ET / 5:30 am PT

Speaker: Chad Rigetti, founder and CEO of Rigetti

Webcast link: https://kvgo.com/corporate-services/rigetti-business-update-call

An on-demand replay will be available shortly after the conclusion of the presentation through the webcast link.

#### Commentary

Chad Rigetti, founder and CEO of the Company, commented, "We have recently made several technology and business announcements focused on scale, speed, fidelity, and new partnership engagements. We encourage those interested in Rigetti and quantum computing more broadly to tune in to this update for additional context on the relevance and potential implications of these announcements."

# **Recent Technology Developments**

## 1. Commercial Availability of 80-Qubit Aspen-M System and Results of CLOPS Speed Tests

On 2/15/2022, Rigetti announced the commercial availability of its 80-qubit quantum system, Aspen-M, on Rigetti Quantum Cloud Services (QCS) and to end users on Amazon Braket. Rigetti's 80-qubit gate-model system is the largest quantum computer available on Braket and marks the latest in a series of increasingly powerful Rigetti systems offered through the service since Rigetti served as a launch partner on Amazon Braket in 2019. Rigetti expects the 80-qubit system to be available through Azure Quantum, Strangeworks  $QC^{TM}$  and Zapata's Orquestra<sup>TM</sup> platform in the coming months. In addition, Aspen-M is expected to support a number of Rigetti collaborations taking place with both enterprise and public sector customers, including DARPA, Deloitte, Nasdaq, and the U.S. Department of Energy.

Rigetti also <u>reported results of system speed tests run on Aspen-M</u>. Rigetti performed measurements using the CLOPS metric, or circuit layer operations per second, which characterizes the overall speed of a quantum-classical hybrid system, with a higher CLOPS score indicating faster speed.\* Results on Rigetti's 40-qubit system, Aspen-11, and 80-qubit system, Aspen-M, were 844 CLOPS and 892 CLOPS, respectively, demonstrating that Rigetti's hybrid integration technology delivered comparable or better speed as the Company scaled from 40 qubits to 80 qubits. Read full press release <u>here</u>.

## 2. Fidelities as High as 99.5% on Next-Generation Chip Architecture

Rigetti announced on 2/17/2022 that it has achieved entangling gate fidelities as high as 99.5% on its next-generation chip architecture, crossing what is believed to be a key threshold for achieving commercial quantum computing. This next-generation device builds on several engineering achievements from Rigetti's previous generation processors, including 3D signal delivery and superconducting caps and vias, which are designed to reduce crosstalk among qubits on the chip. It also incorporates some of the company's recent advances in qubit design and gate operations.

Once scaled, Rigetti intends to incorporate the new design into its proprietary modular chip architecture, with the goal of bringing together advancements in scalability, speed and fidelity. Read full press release here.

#### **Recent Partnership Developments**

### 1. Ampere Strategic Partnership Announcement

Rigetti and Ampere Computing announced on 2/16/2022 a strategic partnership to create hybrid quantum-classical computers designed to unlock a new generation of machine learning applications over the cloud. The two companies are expected to integrate Rigetti Quantum Processing Units (QPUs) with Ampere Altra Max cloud-native processors to create a hybrid computing environment intended to meet the rigorous demands of machine learning applications. Read full press release <a href="here">here</a>.

#### 2. Nasdaq Collaborative Agreement Announcement

Rigetti announced on 2/15/2022 a collaborative agreement with Nasdaq (Nasdaq:NDAQ) to pursue the development of quantum applications to help solve high-impact computational problems in the financial industry. The efforts are expected towill be powered by Rigetti Quantum Cloud Services, featuring Rigetti's 80-qubit "Aspen M" series quantum processor – the quantum computing industry's first commercial multi-chip processor. Read full press release <a href="here">here</a>.

## 3. New Phase in Zapata Partnership

Rigetti and Zapata Computing announced on 2/10/2022 a new phase in their long-standing partnership. In this new phase, the companies are working to developing an industry first hybrid quantum-classical compilation toolchain to better enable researchers to advance hybrid applications, including in quantum sampling and quantum machine learning. As part of the work, Zapata is expected to integrate Orquestra, its unified platform for building and deploying quantum-ready applications<sup>TM</sup> at enterprise scale, directly with Rigetti's Quantum Cloud Services (QCS). This new, full-stack combination is designed to optimize access to the new device and speed up execution of hybrid applications. Read full press release here.

### 4. Phase 2 of DARPA ONISQ Program

Rigetti Computing announced on 1/27/2022 that it has been selected to deliver hardware, software and benchmarks for phase two of a DARPA (Defense Advanced Research Projects Agency) program designed to develop quantum computers capable of solving complex optimization problems important for national security and commercial applications.

In partnership with the Universities Space Research Association (USRA) and the NASA Quantum Artificial Intelligence Laboratory (QuAIL), the goal of the collaboration is to deliver a full-stack solution with a proven quantum advantage over classical techniques. Read the full press release <a href="https://example.com/hereal/bases

\*CLOPS is calculated as  $M \times K \times S \times D$  / time taken where: M = number of templates = 100; K = number of parameter updates = 10; K = number of shots = 100 (or 1000); and K = number of parameter updates = 10; K = number of shots = 100 (or 1000); and K = number of K = number of templates = 100; K = number of parameter updates = 10; K = number of QV = 100; K = numbe

Other than IBM, others in the industry have not announced CLOPS as a speed test. As a result, the speed of other competitors as measured by CLOPS is not currently known. In addition, the solution accuracy provided by quantum computers is another key factor, and a quantum computer that may be slower may be preferable to users if it provides a more accurate answer for certain applications. Moreover, the relative leads reflected by speed tests such as CLOPS can change as new generations of quantum computers are introduced by industry participants and, consequently, any advantages cannot be considered permanent and can be expected to change from time to time. Current CLOPS tests may not be indicative of the results of future tests.

### **About Rigetti Computing**

Rigetti Computing is a pioneer in full-stack quantum computing. The Company has operated quantum computers over the cloud since 2017 and serves global enterprise, government and research clients through its Rigetti Quantum Cloud Services platform. The Company's proprietary quantum-classical infrastructure provides ultra-low latency integration with public and private clouds for high-performance practical quantum computing. Rigetti has developed the industry's first multi-chip quantum processor for scalable quantum computing systems. The Company designs and manufactures its chips in-house at Fab-1, the industry's first dedicated and integrated quantum device manufacturing facility. Rigetti was founded in 2013 by Chad Rigetti and today employs more than 140 people with offices in the United States, U.K. and Australia. Learn more at <a href="https://www.rigetti.com">www.rigetti.com</a>.

#### Additional Information and Where to Find It

In connection with the previously announced proposed business combination between Rigetti and Supernova Partners Acquisition Company II Ltd ("Supernova") (NYSE:SNII), Supernova has filed a registration statement on Form S-4 (as amended, the "Form S-4") with the SEC, which includes a proxy statement/prospectus, that is both the proxy statement to be distributed to holders of Supernova's ordinary shares in connection with its solicitation of proxies for the vote by Supernova's shareholders with respect to the proposed business combination and other matters as may be described in the registration statement, as well as the prospectus relating to the offer and sale of the securities to be issued in the business combination. Supernova has mailed a definitive proxy statement/prospectus and other relevant documents to its shareholders. This communication does not contain all the information that should be considered concerning the proposed business combination and is not intended to form the basis of any investment decision or any other decision in respect of the business combination. Supernova's shareholders and other interested persons are advised to read the definitive proxy statement/prospectus and other documents filed in connection with the proposed business combination, as these materials will contain important information about Rigetti, Supernova and the business combination. The Registration Statement was declared effective by the SEC on February 9, 2022 and the definitive proxy statement/prospectus and other relevant documents were mailed to shareholders of Supernova as of the record date established for voting on the proposed Business Combination and the other proposals regarding the Business Combination. Shareholders are able to obtain copies of the definitive proxy statement and other documents filed with the SEC, without charge, at the SEC's website at <a href="https://www.sec.gov">www.sec.gov</a>, or by directing a request to Supernova's secretary at 4301 50th Street NW, Suite 300 PMB 1044, Washington, D

# **Participants in the Solicitation**

Supernova and its directors and executive officers may be deemed participants in the solicitation of proxies from Supernova's shareholders with respect to the proposed business combination. A list of the names of those directors and executive officers and a description of their interests in Supernova is contained in Supernova's definitive proxy statement/prospectus, which was filed with the SEC and is available free of charge at the SEC's website at <a href="https://www.sec.gov">www.sec.gov</a>. To the extent such holdings of Supernova's securities may have changed since that time, such changes have been or will be reflected on Statements of Change in Ownership on Form 4 filed with the SEC.

Rigetti and its directors and executive officers may also be deemed to be participants in the solicitation of proxies from the shareholders of Supernova in connection with the proposed business combination. A list of the names of such directors and executive officers and information regarding their interests in the proposed business combination is included in the proxy statement/prospectus for the proposed business combination.

#### No Offer or Solicitation

This communication does not constitute (i) a solicitation of a proxy, consent or authorization with respect to any securities or in respect of the proposed business combination or (ii) an offer to sell, a solicitation of an offer to buy, or a recommendation to purchase any security of Supernova, Rigetti, or any of their respective affiliates.

### **Forward-Looking Statements**

Certain statements in this communication may be considered forward-looking statements. Forward-looking statements generally relate to future events and can be identified by terminology such as "pro forma", "may", "should", "could", "might", "plan", "possible", "project", "strive", "budget", "forecast", "expect", "intend", "will", "estimate", "anticipate", "believe", "predict", "potential" or "continue", or the negatives of these terms or variations of them or similar terminology. These forward-looking statements include, but are not limited to, statements relating to potential quantum computing applications to the financial services industry and Rigetti's related partnerships, including the potential development of algorithms and software that demonstrate the advantages of hybrid quantum-classical computers and solve problems; statements relating to the capabilities of Aspen-M, its future availability, the reliability of the CLOPS test, including potential deficiencies in, or in the application of, the test, customer experience replicating Rigetti's or competitors' test performance, expected collaborations, programs, partnerships and applications; statements with respect to entering into a new era of quantum advantage and ability to advance commercial application of quantum computing, including the ability to scale and encode real-world problems; statements relating to Rigetti's new chip architecture, key characteristics and thresholds for commercial quantum computing and new algorithm R&D and statements relating to Rigetti's plans to scale test devices to higher qubits and incorporate its new design into its modular chip architecture; statements relating to Rigetti's plans to deliver technology for Phase 2 of DARPA's ONISQ Program; statements relating to certain aspects of Rigetti's partnership with Zapata; statements relating to quantum computing applications to machine learning and related partnerships, including the potential discovery and deployment of high-performance machine learning algorithms, development of a cloud platform for machine learning and addressing problems of extreme computational complexity in areas like climate change, fusion energy, quantitative finance, drug development, and materials science. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Supernova and its management, and Rigetti and its management, as the case may be, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: the outcome of any legal proceedings that may be instituted against Supernova, Rigetti, the combined company or others following the announcement of the business combination and any definitive agreements with respect thereto; the inability to complete the proposed business combination due to the failure to obtain approval of the shareholders of Supernova or to satisfy other conditions to closing; changes to the proposed structure of the business combination that may be required or appropriate as a result of applicable laws or regulations or as a condition to obtaining regulatory approval of the business combination; the ability to meet stock exchange listing standards following the consummation of the business combination; the risk that the proposed business combination disrupts current plans and operations of Rigetti as a result of the announcement and consummation of the proposed business combination; the ability to recognize the anticipated benefits of the business combination, which may be affected by, among other things, competition, the ability of the combined company to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; costs related to the business combination; changes in applicable laws or regulations; the possibility that Rigetti or the combined company may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigetti's business; and other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in the registration on Form S-4 and proxy statement/prospectus discussed above and other documents filed with Supernova from time to time with the SEC.

Nothing in this communication should be regarded as a representation by any person that the forward-looking statements set forth herein will be achieved or that any of the contemplated results of such forward-looking statements will be achieved. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. Neither Supernova nor Rigetti undertakes any duty to update these forward-looking statements.

## **Contact Data**

Lauren Rugani Rigetti Computing press@rigetti.com

Polly Pearson Investor Relations RGTI@investorrelations.com