

**PROSPECTUS SUPPLEMENT NO. 1
(To Prospectus dated August 25, 2022)**



UP TO 500,000 SHARES OF COMMON STOCK

This prospectus supplement supplements the prospectus, dated August 25, 2022 (the "Prospectus"), which forms a part of our registration statement on Form S-1 (No. 333-266810). This prospectus supplement is being filed to update and supplement the information in the Prospectus with the information contained in our Current Report on Form 8-K filed with the Securities and Exchange Commission on September 16, 2022 (the "Current Report"). Accordingly, we have attached the Current Report to this prospectus supplement.

The Prospectus and this prospectus supplement relate to the offer and sale from time to time by Ampere Computing LLC or its permitted transferees ("Ampere" or the "selling stockholder") of up to 500,000 shares (the "Shares") of common stock, par value \$0.0001 (the "common stock"), of the Company, issued upon the exercise of the vested portion of that certain warrant issued to the selling stockholder (the "Ampere Warrant") pursuant to the warrant subscription agreement, dated as of October 6, 2021, by and between Legacy Rigetti (as defined below) and Ampere (the "Warrant Subscription Agreement"), for an aggregate purchase price (including amounts for exercise) of \$10,000,000, or \$10.00 per share. The Shares consist of 500,000 outstanding shares of common stock issued in connection with the exercise of the vested portion of the Ampere Warrant and receipt by the Company of an aggregate \$5,000,000 (including aggregate exercise price).

The selling stockholder may offer, sell or distribute all or a portion of the Shares publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any of the proceeds from such sales of the Shares.

We will bear all costs, expenses and fees in connection with the registration of these Shares, including with regard to compliance with state securities or "blue sky" laws. The selling stockholder will bear all commissions and discounts, if any, attributable to their sale of Shares. See the section entitled "Plan of Distribution."

This prospectus supplement updates and supplements the information in the Prospectus and is not complete without, and may not be delivered or utilized except in combination with, the Prospectus, including any amendments or supplements thereto. This prospectus supplement is qualified by reference to the Prospectus, including any amendments or supplements thereto, except to the extent that the information in this prospectus supplement updates and supersedes the information contained therein.

Our common stock is listed on the Nasdaq Capital Market under the symbol "RGTT". On September 15, 2022, the last reported sales price of our common stock was \$2.28 per share.

We are an "emerging growth company" as defined under U.S. federal securities laws and, as such, have elected to comply with reduced public company reporting requirements. The Prospectus complies with the requirements that apply to an issuer that is an emerging growth company.

Investing in our securities involves a high degree of risks. You should review carefully the risks and uncertainties described in the section titled "Risk Factors" beginning on page 16 of the Prospectus, and under similar headings in any amendments or supplements to the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the accuracy or adequacy of the prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.

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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): September 16, 2022

RIGETTI COMPUTING, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-40140
(Commission
File Number)

88-0950636
(I.R.S. Employer
Identification No.)

775 Heinz Avenue, Berkeley, California
(Address of principal executive offices)

94710
(Zip Code)

(510) 210-5550
(Registrant's telephone number, including area code)

N/A
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240-13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	RGTI	The Nasdaq Capital Market
Warrants, each whole warrant exercisable for one share of Common Stock at an exercise price of \$11.50 per share	RGTIW	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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 13(a) of the Exchange Act.

Item 8.01. Other Events.

Rigetti Computing, Inc. (the “Company” or “Rigetti”) has announced the following business updates in connection with its previously announced investor presentation being held on September 16, 2022:

Keysight True-Q Error Mitigation Tools on Rigetti Quantum Cloud Services (QCSSM)

Rigetti anticipates the upcoming release of Keysight’s True-Q error mitigation software integrated into Rigetti QCS in the coming months. For Rigetti, this will be the first third party software tool to be integrated directly into the QCS platform, expected to advance the Company’s partnership strategy to accelerate toward quantum advantage.

Collaboration with NVIDIA to Develop Hybrid GPU-QPU Workflow for Climate Modeling

Rigetti is embarking on a new collaboration with NVIDIA to develop a hybrid GPU-QPU workflow for climate modeling applications. The project aims to evaluate the potential for narrow quantum advantage in this research domain by applying quantum machine learning techniques in a high-performance hybrid workflow. The work builds on recent weather modeling application research by Rigetti.

Public Preview of Rigetti Quantum Processors on Microsoft Azure Quantum

Earlier this week, Rigetti announced the release of its Aspen-M-2 80-qubit and Aspen-11 40-qubit in public preview on Azure Quantum. Rigetti’s integration with Azure supports Quil, Rigetti’s native quantum programming language, and Quil-T for pulse level programming. With the Azure announcement, Rigetti is now available on the world’s two largest public cloud platforms.

Performance at Scale: Aiming to Deliver Next-Generation Hardware in 2023

- Rigetti remains on track to deliver against its previously disclosed hardware roadmap in 2023 with a focus on delivering performance at scale. The upcoming 84-qubit AnkaaSM system is planned for release in 2023, followed by the 336-qubit LyraSM system expected later in 2023. Ankaa and Lyra are expected to leverage Rigetti’s fourth generation circuit architecture, introducing higher connectivity and tunable coupling, designed to ultimately deliver fidelities exceeding 99%. Notably, the Lyra system is expected to bring together Rigetti advancements in scale and performance by combining Rigetti’s existing multi-chip scaling technology with the fourth generation architecture.
- Rigetti is expanding its Fab-1 facility, which it expects to be completed late in the fourth quarter of 2022. The build-out includes an additional 5,000 square feet of clean room space for wafer manufacturing—nearly doubling its original capacity—as well as additional capabilities for performing tightly integrated cryo-microwave testing on Rigetti quantum chips.
- Rigetti has entered into a partnership with Bluefors, a leading provider of cryogenic systems, to develop next-generation cryogenic platforms expected to be used for Rigetti’s anticipated 336-qubit, 1,000+ qubit, and 4,000+ qubit quantum processing units. These new KIDE cryogenic platforms are expected to provide the larger size, increased cooling power, and modular design needed to support Rigetti’s integrated product roadmap. Rigetti plans to take delivery of its first KIDE in early 2023, with subsequent deliveries planned for late 2023 and beyond.

Cautionary Language Concerning Forward-Looking Statements

Certain statements in this communication may be considered forward-looking statements, including statements with respect to expectations for the anticipated launch of the Company’s 84-qubit quantum computer, 336-qubit multi-chip processor, 1,000+ qubit system, and 4,000+ qubit system, including these systems’ timing and potential performance; expectations relating to the Company’s technology roadmap and the timing thereof; expectations with respect to its partnership with Bluefors, including the development of necessary refrigerators to support the Company’s technology roadmap and the timing thereof; expectations with respect to leveraging fourth generation circuit architecture and introducing higher connectivity and tunable coupling, designed to ultimately deliver fidelities exceeding 99%; the timing, capabilities and capacity of the Company’s fab-1 expansion; expectations with respect to the Company’s partnership with NVIDIA to evaluate the potential for narrow quantum advantage, including the potential to address climate challenges; expectations with respect to the anticipated release of Keysight’s True-Q error mitigation software integrated into Rigetti QCS in the coming months; expectations with respect to the Company’s goal of delivering performance at scale with the [goal/mission] of being the industry standard and the ability of its strategic investments in quantum hardware, software, and partnerships to enable progress toward Quantum Advantage; and expectations relating to growth of the business, including with respect to future potential government and commercial contracts, development activities and expansion of QCaaS. 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,” “believe,” “predict,” “potential,” “pursue,” “aim,” “goal,” “mission,” “outlook,” “anticipate” or “continue,” or the negatives of these terms or variations of them or similar terminology. 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 Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: Rigetti’s ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCaaS business; the success of Rigetti’s partnerships and collaborations; Rigetti’s ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; the risk that the business combination disrupts current plans and operations of Rigetti; the ability to recognize the anticipated benefits of its recent business combination with Supernova, which may be affected by, among other things, competition, the ability of Rigetti 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 with Supernova and operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti 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; the expected use of proceeds from the Company’s past and future financings or other capital; the sufficiency of Rigetti’s cash resources; unfavorable conditions in Rigetti’s industry, the global economy or global supply chain, including financial and credit market fluctuations and uncertainty, rising inflation, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; 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, the Company’s Form 8-K filed with the Securities and Exchange Commission (the “SEC”) on March 7, 2022, and in the Company’s Form 10-Q for the three months ended March 31, 2022, and other documents filed by the Company from time to time with the SEC, including the Company’s Quarterly Report on Form 10-Q for the three months ended June 30, 2022. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. The Company does not give any assurance that it will achieve its expectations.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: September 16, 2022

RIGETTI COMPUTING, INC.

By: /s/ Chad Rigetti

Chad Rigetti

Chief Executive Officer