rigetti

2024 Annual Report

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number 001-40140

RIGETTI COMPUTING, INC.

(Exact name of Registrant as specified in its Charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**88-0950636** **(I.R.S. Employer Identification No.)**
775 Heinz Avenue **Berkeley, CA** **(Address of principal executive offices)**	**94710** **(Zip Code)**

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

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	**RGTW**	**The Nasdaq Capital Market**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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	☐	Emerging growth company	☒
Non-accelerated filer	☒	Smaller reporting 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. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of error to previously issued financial statements. ☐

Indicate by check mark whether any of those corrections are restatements the required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of $1.07 per share of the Registrant's common stock on The Nasdaq Capital Market on June 28, 2024 , the last business day of the registrant's most recently completed second fiscal quarter, was $166.0 million. This calculation excludes shares of the Registrant's common stock held by current executive officers, directors and stockholders that the Registrant has concluded are affiliates of the Registrant. This determination of affiliate status is not a determination for other purposes. The number of shares of Registrant's Common Stock outstanding as of March 5, 2025 was 285,828,047.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report incorporates by reference information from the definitive Proxy Statement for the registrant's 2024 Annual Meeting of Stockholders, which is expected to be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended December 31, 2024.

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Cautionary Note Regarding Forward-looking Statements

Unless the context requires otherwise, references in this report to "Rigetti", the "Company", "we", "us", and "our" refer to Rigetti Computing, Inc. and its consolidated subsidiaries.

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). This includes, without limitation, statements regarding the financial position, business strategy and the plans and objectives of management for future operations. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. We have based these forward-looking statements on our current expectations and projections about future events. Any statements that refer to projections, forecasts or other characterizations of future events or circumstances are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intends," "may," "might," "plan," "possible," "potential," "predict," "project," "goal," "objective," "design," "goal," "seek," "target," "should," "could," "will," "would" or the negative of such terms or other similar expressions.

These forward-looking statements are subject to known and unknown risks, uncertainties and assumptions about us that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. Except as otherwise required by applicable law, we disclaim any duty to update any forward-looking statements, all of which are expressly qualified by the statements in this section, to reflect events or circumstances after the date of this Annual Report on Form 10-K.

We caution you that these forward-looking statements are subject to numerous risks and uncertainties, most of which are difficult to predict and many of which are beyond our control. Forward-looking statements in this Annual Report on Form 10-K may include, for example, statements about:

- the sufficiency of our cash resources, our expectations with respect to when we will need to obtain additional capital, including in connection with our investment commitments under the recent Collaboration Agreement (as defined below) entered into with Quanta Computer, Inc. ("Quanta"), and our ability to raise additional capital when needed and on attractive terms,
- our ability to close the Securities Purchase Agreement we entered into with Quanta, including the timing of receipt of regulatory clearance,
- our ability to achieve milestones, and/or technological advancements, including with respect to executing on our technology roadmap and developing practical applications,
- the potential of quantum computing and estimated market size and market growth including with respect to our long-term business strategies for sales of quantum computers and quantum computing as a service ("Quantum Computing as a Service," or "QCaaS"),
- our ability and timeline to monetize our investments in quantum computing, if at all,
- the success of our partnerships and collaborations, including the recent Collaboration Agreement with Quanta,
- our ability to accelerate our development of multiple generations of quantum processors,
- customer concentration and the risk that a significant portion of our revenue currently depends on contracts with the public sector,
- the outcome of any legal proceedings that have or may be instituted against us or others,
- our ability to execute on our business strategy, including monetization of our products,
- our financial performance, growth rate and market opportunity,
- our ability to grow and manage growth profitably, maintain relationships with customers and suppliers and retain our management and key employees,
- costs related to operating as a public company,
- our ability to maintain effective internal controls over financial reporting,
- changes in applicable laws or regulations,

- the possibility that we may be adversely affected by other economic, business, or competitive factors,
- the evolution of the markets in which we compete,
- our ability to implement our strategic initiatives, expansion plans and continue to innovate our existing products and services,
- unfavorable conditions in our industry, the global economy or global supply chain (including any supply chain impacts from future and ongoing military conflicts and wars around the world and sanctions related thereto), including international relations and tariffs, levels of future economic activity, inflation, interest rates and financial and credit market fluctuations,
- changes in applicable laws or regulations, including international trade measures,
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors,
- our estimates regarding expenses, profitability, future revenue, capital requirements and needs for additional financing,
- our ability or decisions to expand or maintain our existing customer base, and
- macroeconomic conditions, including global economic and geopolitical conditions, disruptions to and volatility and uncertainty in the credit and financial markets, uncertainty in levels of future economic activity, inflation and interest rates.

These statements reflect our current views with respect to future events, are based on assumptions and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance, timeframes or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Additional information concerning these risks, uncertainties and other factors that may impact the operations, projections, and other forward-looking statements discussed herein can be found in the section entitled "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K. *Given these risks, uncertainties, and other factors, you should not place undue reliance on these forward-looking statements. In addition, our goals and objectives are aspirational and are not guarantees or promises that such goals and objectives will be met. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this filing. You should read this Annual Report on Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify our forward-looking statements by our cautionary statements. Except as required by law, we assume no obligation to update our forward-looking statements publicly, or to update the reasons that actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.*

Summary Risk Factors

Our business is subject to a number of risks of which you should be aware before making a decision to invest in our securities. These known and unknown risks, uncertainties and other factors include, without limitation:

- We will require a significant amount of cash for expenditures as we invest in ongoing research and development and business operations and may need additional capital sooner than planned. If we are unable to raise additional funding when needed, we may be required to delay, limit or substantially reduce our quantum computing development efforts.
- We are in our early stages and have a limited operating history, which makes it difficult to forecast our future results of operations. We have in the past failed to meet publicly announced milestones and may fail to meet projected technological milestones in the future. In addition, we have in the past changed our technology roadmap, including the anticipated milestones and timing thereof.
- We have a history of operating losses and expect to incur significant expenses and continuing losses for the foreseeable future.
- Even if the market in which we compete achieves its anticipated growth levels, our business could fail to grow at similar rates, if at all.
- Our ability to use net operating loss carryforwards and other tax attributes may be limited.
- We have not produced quantum computers with high qubit counts and we face significant barriers in our attempts to produce quantum computers, including the need to invent and develop new technology. If we cannot successfully overcome those barriers, our business will be negatively impacted and could fail.
- Any future generations of hardware, including any future generations developed to achieve our targeted fidelities and qubit counts, or to demonstrate narrow quantum advantage or broad quantum advantage, may not occur on our anticipated timeline or at all.
- If our computers fail to achieve quantum advantage, our business, financial condition and future prospects may be harmed. Moreover, the standards by which we measure our progress may be based on assumptions and expectations that are not accurate or that may change as quantum computing evolves.
- The quantum computing industry is competitive on a global scale and we may not be successful in competing in this industry.
- We depend on a limited number of customers for a significant percentage of our revenue and the loss or temporary loss of a major customer for any reason could harm our financial condition.
- A significant portion of our revenue depends on contracts with the public sector, and our failure to receive and maintain government contracts or changes in the contracting or fiscal policies of the public sector could have a material adverse effect on our business.
- Our business is currently dependent upon our relationship with our cloud providers. There are no assurances that we will be able to commercialize quantum computers from our relationships with cloud providers.
- We rely on access to high performance third party classical computing through public clouds, high performance computing centers and on-premises computing infrastructure to deliver performant quantum solutions to customers. We may not be able to maintain high quality business relationships and connectivity with these resources which could make it harder for us to reach customers or deliver solutions in a cost-effective manner.
- We depend on certain suppliers to source products. Failure to maintain our relationship with any of these suppliers could have a material adverse effect on our business.
- We have and may in the future enter into collaboration agreements and similar arrangements with third parties for the manufacturing of our products, and these arrangements may never achieve their goals.
- If we are unable to procure the necessary tools, supplies and equipment to build our quantum systems, or are unable to do so on a timely and cost-effective basis, and in sufficient quantities, we may incur significant costs or delays which could negatively affect our operations and business.

- Even if we are successful in developing quantum computing systems and executing our strategy, competitors in the industry may achieve technological breakthroughs which render our quantum computing systems obsolete or inferior to other products.
- We may be unable to reduce the cost of developing our quantum computers, which may prevent us from pricing our quantum systems competitively.
- The quantum computing industry is in its early stages and volatile, and if it does not develop, if it develops more slowly than we expect, if it develops in a manner that does not require use of our quantum computing solutions, if it encounters negative publicity or if our solution does not drive commercial engagement, the growth of our business will be harmed.
- We could suffer disruptions, outages, defects and other performance and quality problems with our quantum computing systems, our production technology partners or with the public cloud, data centers and internet infrastructure on which we rely.
- If our information technology systems or data, or those of third parties upon which we rely, are or were compromised, we could experience adverse consequences resulting from such compromise.
- We have in the past identified material weaknesses in our internal control over financial reporting, leading to a restatement of our financial statements for prior periods. If we identify additional material weaknesses or if we otherwise fail to establish and maintain effective internal control over financial reporting, it may adversely affect our ability to accurately and timely report our financial results in the future, and may adversely affect investor confidence, our reputation, our ability to raise additional capital and our business operations and financial condition.
- Our failure to obtain, maintain and protect our intellectual property rights could impair our ability to protect and commercialize our proprietary products and technology.
- Sales of our securities, or perceptions of sales, by us or holders of our securities in the public markets or otherwise could cause the market price for our securities to decline and even in such case certain holders of our securities may still have an incentive to sell our securities.
- Unstable market and economic conditions have had and may continue to have serious adverse consequences on our business, financial condition and share price.
- Our warrants, including our public warrants, each entitling the holder to purchase one share of our common stock at an exercise price of $11.50 per share, that trade on the Nasdaq Capital Market under the ticker symbol "RGTIW" ("Public Warrants"), private placement warrants, each entitling the holder to purchase one share of our common stock at an exercise price of $11.50 per share ("Private Warrants"), and our Sponsor Vesting Shares (as defined herein) are accounted for as liabilities and the changes in value of our Public Warrants, Private Warrants and Sponsor Vesting Shares could have a material effect on our financial results.
- Our outstanding warrants and stock options are exercisable for Common Stock. We also issue restricted stock units to our employees. The exercise of our outstanding warrants and stock options and vesting of our outstanding restricted stock units increases the number of shares eligible for future resale in the public market, resulting in dilution to our stockholders.

PART I

ITEM 1. BUSINESS

Overview

Our mission is to build the world's most powerful computers to help solve some of humanity's most important and pressing problems. Our strategy is to be at the forefront of superconducting quantum computing.

Classical computers are plateauing, Moore's law has slowed, returns for parallelization are diminishing and energy requirements can't keep up. Today, many of the world's most important computational challenges remain intractable, lying beyond the capabilities of traditional supercomputers and cloud infrastructure. We build and operate quantum computers. We believe quantum computing represents one of the most transformative emerging capabilities in the world today. By leveraging quantum mechanics, our quantum computers process information in fundamentally new, more powerful ways compared to classical computing with meaningful power efficiency. When scaled, we believe these systems are poised to solve problems of staggering computational complexity at unprecedented speed.

The availability of scalable quantum computers is expected to enable scientists and engineers to address problems in areas like climate change, fusion energy, quantitative finance, drug development and discovery, materials science, and artificial intelligence. To unlock this opportunity, we have developed the world's first multi-chip quantum processor for scalable quantum computing systems. We expect this patented and patent pending, modular chip architecture to be the building block for new generations of quantum processors that we expect to achieve a clear advantage over classical computers.

We are a vertically integrated company. We own and operate Fab-1, a wafer fabrication facility dedicated to prototyping and producing our quantum processors. Through Fab-1, we own the means of production of our breakthrough multi-chip quantum processor technology. We leverage our chips through a full-stack product development approach, from quantum chip design and manufacturing through cloud delivery. We believe this full-stack development approach offers both the fastest and lowest risk path to building commercially valuable quantum computers.

We have been deploying our quantum computers to end users over the cloud since 2017. We offer our full-stack quantum computing platform as a cloud service to a wide range of end-users, directly through our Rigetti QCS platform, and also through cloud service providers.

We began selling quantum computers to end users in 2023. In December 2023, we launched the Novera™ QPU, our first commercially available QPU, which includes a 9-qubit chip that features tunable couplers for fast 2-qubit operations and a 5-qubit chip for testing single-qubit operations. The Novera QPU is based on our fourth generation Ankaa™-class architecture.

In the fourth quarter of 2024, we announced the public launch of our 84-qubit Ankaa-3 system, our newest flagship quantum computer featuring an extensive hardware redesign. We also achieved key two-qubit gate fidelity milestones with Ankaa-3: successfully halving error rates in 2024 to achieve a 99.0% median two-qubit iSWAP gate fidelity, as well as demonstrating a 99.5% median two-qubit fidelity with fSim gates based on our internal testing. For information on iSWAP gate fidelity and fSIM gates, see "—Our Technology—Our Superconducting Quantum Processors—Fidelity"

Ankaa-3 is available to our partners via the Rigetti Quantum Cloud Services platform (QCS®) and is expected to be available on Amazon Braket and Microsoft Azure in the first quarter of 2025. Ankaa-3 is intended to enable users to operate our universal iSWAP gates for a wide range of algorithmic research, with a median gate time of 72 nanoseconds. The more specialized fSim gates provide a median gate time of 56 nanoseconds and are useful for specific algorithms such as random circuit sampling. For more information, see "—Our Technology—Our Superconducting Quantum Processors—Fidelity

The Ankaa-3 system features scalable chip architecture with 3D signal delivery while incorporating major enhancements to key technologies. Leveraging our full-stack platform and in-house quantum foundry capabilities, we believe that Ankaa-3 demonstrates our ability to deliver increasingly higher performance quantum computers. We have developed strong customer relationships and collaborative partnerships for the purpose of accelerating the development of key technologies for high-value use cases to potentially unlock strategic market opportunities.

Our partners and customers include commercial enterprises such as Amazon Web Services ("AWS") Standard Chartered Bank and Moody's, along with U.S. government organizations such as Defense Advanced Research Projects Agency ("DARPA"), Department of Energy ("DOE"), and Air Force Research Laboratory ("AFRL") and international government entities. In February 2024, Rigetti UK Limited, a wholly owned subsidiary of our Company, announced that it was awarded a Small Business Research Initiative grant funded by Innovate UK to develop and deliver a 24-qubit quantum computer to the National Quantum Computing Centre.

The Company is enabled by a deep technical team that includes global experts in quantum chip design and manufacturing, quantum computing systems architecture, quantum software, and quantum algorithms and applications.

Powered by the production of our scalable multi-chip quantum processors in Fab-1 and our full-stack product development approach, we are working to develop quantum computing systems that demonstrate clear performance advantages over classical computing alternatives for multiple high-impact application areas.

Quanta Collaboration Agreement

In February 2025, our wholly-owned subsidiary, Rigetti & Co, LLC ("Rigetti Sub"), entered into a Collaboration Agreement (the "Collaboration Agreement") with Quanta Computer Inc., a Taiwan corporation ("Quanta"), whereby the parties may enter into written statements of work from time to time pursuant to which Quanta will develop Covered Components listed in such statement of work that meet the specifications and requirements provided by Rigetti Sub. "Covered Components" may include control systems, dilution refrigerators, flexible cables, and select other non-quantum processing unit ("QPU") components suitable for Rigetti Sub's quantum computing products. No statements of work were entered into by the parties in connection with the entry into the Collaboration Agreement. In addition, the parties have each agreed to invest at least $250 million over the next five years in the field of quantum computing (and Quanta's investment will be towards personnel and capital expenditures for developing products and services and manufacturing capability in furtherance of the Rigetti Sub product roadmap). Further, in connection with the Collaboration Agreement, on February 27, 2025, we entered into a securities purchase agreement (the "Securities Purchase Agreement") with Quanta, pursuant to which we agreed to sell and issue to Quanta in a private placement transaction 3,020,412 shares of our Common Stock at a price per share of $11.58782, for an aggregate value of approximately $35.0 million. The closing of the private placement transaction is subject to regulatory clearance.

Potential Market Opportunity

Demand for computing power capable of solving computationally complex problems is increasing. Many of these types of problems are approached through the use of High Performance Computing ("HPC"), which relies primarily on large classical computers located either in the cloud or on-premises. We believe our quantum computers will be able to solve many computational problems with greater speed and at a lower cost than today's high performance computers, thereby unlocking considerable value for the users of current HPC systems. Furthermore, we believe that quantum computing will be applicable to many use cases that today lie within the realm of the much larger cloud computing market.

Advanced scientific and technical computing applied in fields like drug discovery, materials science, computational fluid dynamics, machine learning, and quantitative finance have underpinned many of society's greatest scientific and industrial advancements over the past half-century. Yet, despite the availability of the latest cloud and supercomputing capabilities, these and many other fields remain constrained by the intractable nature of their thorniest problems. Typically, the computational limits of classical computers are reached because of either the size or complexity of the required calculations. In certain cases, algorithms have been developed that in theory solve a particular computation problem; however, classical computers are limited in their ability to implement and process such algorithms.

For decades, classical computing power increased exponentially as the number of transistors on a microchip were doubling about every two years, while the cost of computing simultaneously decreased significantly. Over the past ten years, this rate of progress in classical computing power has significantly slowed as physical limits on the miniaturization of transistors in nano-scale devices are being reached.

Stages of Evolution of Quantum Computing Maturation

We believe that market demand for our quantum computers will grow in phases that map to the increasing capabilities of our commercially available quantum computing systems similar to those of classical computer technology. With each new phase, we expect quantum computers to solve an ever-increasing breadth of high-impact commercial problems and to do so with greater speed and accuracy. Qubits do not need the latest semiconductor lithography node and, in fact, can be made using 1990's era lithography.

Emerging Quantum Advantage ("eQA") Phase

This phase is characterized by the availability of practical, fully functional and operational quantum computers, whose capabilities do not yet enable them to demonstrate clear performance advantages relative to traditional computers. Currently, our quantum computers are of sufficient scale and capability to be useful in applied research for quantum algorithm development, the exploration of potential applications of quantum computing, and for understanding the skill gaps an organization must resolve in order to be prepared to take advantage of quantum computing capabilities.

We consider the eQA phase to have begun five years ago, and during this time we have worked with business and government researchers, commercial software developers and academic institutions who access our quantum computers via cloud-based services. We have also sold our QPUs to U.S. national labs and others who wish to have their own quantum computer on-site and have launched Novera, our first commercially available QPU, which features a 9-qubit chip, tunable couplers for fast 2-qubit operations and a 5-qubit chip for testing single-qubit operations.

We anticipate that this phase will end when there are repeated demonstrations solving practical problems, of substantial commercial or customer value, with a level of performance that is competitive with the best available classical computing performance.

Narrow Quantum Advantage ("nQA") Phase

If and when our quantum computing processing capabilities have scaled to the point where they can be used to solve practical, operationally relevant problems with improved accuracy, speed or cost over classical computers, we believe we will have reached the phase of nQA.

In the nQA phase, we expect that large enterprises and government organizations will increase their investment in quantum computing as the superior computational capabilities of the technology will have progressed from projected to verifiably advantaged for certain applications. In addition to quantum-based research and development, quantum machine learning ("QML") is likely to emerge as a strong avenue for growth as it can be leveraged in a wide range of business and scientific applications. Research into quantum simulation and quantum optimization opportunities is predicted to increase in the nQA phase.

Broad Quantum Advantage ("bQA")

We will consider the phase of bQA to have begun if and when our quantum computing processing abilities have scaled to the point where they can be used to solve practical problems that would be physically impossible to solve on any classical computer. At such point, with both scaled qubit counts and strong error correction capabilities, we believe our quantum computers would be suitable for many applications of quantum machine learning and begin to be used for a growing number of quantum simulation and quantum optimization problems. In the event we demonstrate bQA, we expect many new potential clients to emerge as the range and value of the problems that are addressable by our quantum computing systems significantly increases.

Large-Scale Fault Tolerant Quantum Computing ("lFTQC")

We will consider the phase of lFTQC to begin if and when systems are available with hundreds of logical qubits, which can be universally controlled and measured with substantially error-free operation through the full course of a quantum computation. It is currently believed in the quantum computing industry that this likely requires systems with 10,000 to 1,000,000 physical qubits. We believe our scalable multi-chip architecture paves the way to scale up to these large systems.

We anticipate the beginning of the large-scale fault tolerant phase to be roughly a decade away. As quantum computing further matures through this phase, systems will likely continue to grow in scale and performance, culminating in full-scale fault tolerance that operates using potentially thousands of effectively perfect logical qubits. This ultimate goal of full-scale fault tolerance represents the largest commercial opportunity.

Business Strategy

Our approach to developing and sustaining what we believe is a strong competitive advantage relies on a four-pronged strategy:

- ***Create high performance quantum computing systems through full-stack product development.*** From the outset, we have approached the market opportunity with a strategy to build quantum computers, the superconducting processors that power them, and the software required to access and program these systems. We believe that vertical integration, from chip manufacturing through sales of QPUs and cloud delivery, unlocks the fastest and lowest risk path to broad commercialization and the largest, long-term market opportunity. This was underscored by our announcement of the industry's first multi-chip quantum processor for scalable quantum computers, a capability realized through many innovations from Fab-1.

- ***Provide broad access to our quantum computers.*** We sold our first QPU in 2023 and in December 2023 launched Novera™, our first commercially available QPU, which features a 9-qubit chip with tunable couplers for fast 2-qubit operations and a 5-qubit chip for testing single-qubit operations. We have been providing cloud access to our quantum computers since 2017 and have since expanded the availability of our machines through distribution agreements with other solution providers, including Amazon Bracket among others. Cloud services efficiently simplify access to our quantum computers and allow for pricing that enables a broad range of scientific, commercial and academic developers to readily participate in the development of quantum computing algorithms, applications and software development tools. Collectively, these cloud services provide a range of choices and capabilities designed to meet the diverse needs of large and small organizations alike.

- ***Develop deep partnerships that accelerate the development and commercialization of quantum computing.*** We have formed commercial partnerships with business and government entities that are designed to advance their mutual understanding of the opportunities, challenges and solutions necessary for quantum computing to excel in specific real-world applications. Examples of these partnerships include our contracted relationships with DARPA, the DOE's Fermi National Accelerator Laboratory ("Fermilab") and AFRL. We believe these types of highly collaborative, multi-year relationships will yield specialized and proprietary market insights and technological advancements. We expect the number and scope of these types of partnerships to expand as the capabilities of our quantum computers continue to grow.

- ***Advance our technology leadership position***. We have invested heavily in a world-class and multidisciplinary team of scientists, hardware and software engineers, system designers and algorithm and application developers to rapidly innovate, invent, engineer and commercialize our quantum computing technologies. We have also developed numerous proprietary technologies required to create quantum computing chips, quantum computer systems, software and cloud-based services and we rigorously protect our unique intellectual property through a portfolio of 104 patents issued and 133 patents pending as of December 31, 2024. We intend to continue deeply investing in finding and fostering the talent required to remain at the forefront of quantum computing innovation, while protecting our growing base of intellectual property.

Key achievements in 2024 include the launch of the 84 qubit Ankaa™-3 system to customers via Rigetti Quantum Cloud Services (QCS). Ankaa-3 is our newest flagship quantum computer featuring an extensive hardware redesign that is intended to enable superior performance. We also achieved key two-qubit gate fidelity milestones with Ankaa-3: successfully halving error rates in 2024 from our error rates in 2023 to achieve a 99.0% median two-qubit iSWAP gate fidelity, as well as demonstrating a 99.5% median two-qubit fidelity with fSim gates based on our internal testing. For information on iSWAP gate fidelity and fSIM gates, see "—Our Technology—Our Superconducting Quantum Processors—Fidelity".

Ankaa-3 is available to our partners via the Rigetti Quantum Cloud Services platform (QCS®) and is expected to be available on Amazon Braket and Microsoft Azure in the first quarter of 2025. Ankaa-3 is intended to enable users to operate iSWAP gates for a wide range of algorithmic research, with a median gate time of 72 nanoseconds. The more specialized fSim gates provide a median gate time of 56 nanoseconds and are useful for specific algorithms such as random circuit sampling. For information, see "—Our Technology—Our Superconducting Quantum Processors—Fidelity".

The Ankaa-3 system continues to feature our scalable chip architecture with 3D signal delivery while incorporating major enhancements to key technologies. Leveraging our full-stack platform and in-house quantum foundry capabilities, we believe Ankaa-3 demonstrates our ability to deliver increasingly higher performance quantum computers.

In 2025, we plan to introduce the next generation of our modular system architecture, while aiming to continue to increase fidelities. By mid-year 2025, we expect to release a 36-qubit system based on four 9-qubit chips tiled together, with a target 2x reduction in error rates from our error rates achieved at the end of 2024. By the end of 2025, we expect to release a system with over 100 qubits with a targeted 2x reduction in error rates from our error rates achieved at the end of 2024.

We will continue to pursue sales of Novera™, our first commercially available QPU, which features a 9-qubit chip, tunable couplers for fast 2-qubit operations and a 5-qubit chip for testing single-qubit operations.

We believe that we will be able to achieve our plans for 2025 described above and elsewhere in this Annual Report on Form 10-K; however, we face various risks and uncertainties relating to our business that could cause actual results to differ materially from our expectations stated herein. This Annual Report on Form 10-K, including this Business Section, should be read in conjunction with the section entitled "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K.

Business Model & Services

Currently, we generate the majority of our revenues from technology development contracts with various partners. We believe our longer term business model will be more weighted towards QPU sales and recurring revenues generated from quantum computing systems made accessible via the cloud in the form of QCaaS and QCS services.

Rigetti Quantum Processing Units.

Our QPUs contain fabricated silicon-based chips featuring superconducting qubits. These high-performance chips provide fast gate times, low latency conditional logic, and fast program execution times. Our QPUs are designed and fabricated at Fab-1, leveraging novel manufacturing methods to create state-of-the art superconducting qubits.

Novera™, our first commercially available QPU, includes a 9-qubit chip that features tunable couplers for fast 2-qubit operations and a 5-qubit chip for testing single-qubit operations. The Novera™ QPU is based on our fourth generation Ankaa-class architecture. We announced our most technically advanced QPU yet, the 84-qubit Ankaa-3, featuring an extensive hardware redesign.

We intend to design and fabricate more advanced QPUs in the future with improved fidelities, faster gate speeds and higher qubit counts. We believe these anticipated improvements and advances in technology will hopefully lead to nQA, bQA and LFTOC in the coming years.

Quantum Computing as a Service (QCaaS)

We sell access to our quantum computers through cloud-based services, commonly referred to as QCaaS. This approach enables us to serve a wide range of customers without the complexity and cost associated with shipping, operating and servicing complex and cryogenic computing equipment on customer premises.

Rigetti Quantum Cloud Services

Rigetti Quantum Cloud Services (QCS) is a proprietary platform to deliver high-performance quantum computing over the cloud. QCS features a hybrid quantum-classical computing environment that incorporates our quantum computers operating in tandem with cloud infrastructure. It provides support for a broad range of programming capabilities, the ability to integrate over public or private clouds, and high-speed connectivity to auxiliary classical computing resources.

The product is designed to meet the needs of a diverse set of customers that all benefit from the high-performance nature of its core computational capabilities. Central to QCS are two very powerful sets of technologies developed by us, our quantum processing units ("QPUs"), described above, and our quantum operating system, as described below:

Quantum Operating System Software

QCS's computing environment is powered by a distributed quantum operating system that natively supports both public and private cloud architectures.

The operating system software includes a rich set of quantum application and software development tools designed to unlock the capabilities of the quantum computing ecosystem by:

- Enabling customers to access our QPUs through a broad range of quantum application software, development frameworks and algorithm libraries;
- Providing software and algorithm developers with the performance and fine-grained control required to expedite a new era of computational breakthroughs; and
- Facilitating the implementation of high performance public and private clouds with ultra-low latency connectivity between classical hardware and our QPUs.

Direct QCaaS Distribution

We provide access on a commercial basis to our quantum computers over QCS, directly engaging with enterprises and government organizations making significant investments in quantum computing research, development and readiness.

We believe many of these customers will have performance, customization and integration requirements best met by our ability to engage deeply and directly with these kinds of clients. We believe our full-stack product development approach, and strategy of forging collaborative customer partnerships positions us to be a highly valued and long-term provider of quantum computing services to these organizations.

To date, these direct customer relationships have been with customers using QCS for general quantum computing research, algorithm development, algorithm benchmarking and software development activities. They represent a cross section of industries, government agencies and partners in the quantum computing ecosystem.

Indirect QCaaS Distribution

There are a large and growing number of providers of classical computing services over the cloud. This creates an opportunity for us to efficiently reach a broad set of end-users, indirectly, by partnering with cloud computing service providers, who in turn sell access to our quantum computer systems to their own customers.

The indirect distribution model is enabled by the same QCS platform used in the direct distribution model, allowing us to address the needs of customers in different market segments. In this instance, we can capitalize on our full-stack product development capabilities to meet the unique requirements of cloud-service providers. For example, one cloud provider or HPC operator might need deep and high-performance integration with a specific Machine Learning service they provide, while another might desire a fast and easy way for small customers to be introduced to quantum computing.

We have signed a distribution agreement with Amazon's Braket service and Microsoft's Azure Quantum Service, providing access to our quantum computing systems to AWS and Azure customers.

Key Technology Development Partnerships

We enter into multi-year development partnerships with organizations that have specialized technical expertise and a strong interest in advancing their understanding and application of quantum computing technology. These partnerships can provide us with deep insight into the unique requirements of market leaders in key industries; advance our engineering and product development capabilities; and lead to the creation of new hardware and software products.

Examples of our development partnerships include contracts with:

- Fermilab and the U.S. DOE's Superconducting Quantum Materials and Systems Center ("SQMS"), to advance the development of scalable and high performance quantum processors;
- AFRL to harness our fabrication capabilities for quantum networking hardware research and development.
- DARPA and National Aeronautics and Space Administration ("NASA") to create quantum computing systems, software and algorithms for optimization applications; and
- Innovate UK, as part of the British government's effort to accelerate commercialization of quantum computing in the United Kingdom and to pursue practical applications in machine learning, molecular simulation and financial optimization.

We expect to add new development partnerships as the capabilities of our quantum computer systems grow and the market's readiness and interest in quantum computing continues to mature.

Rigetti Foundry Services

Rigetti Foundry Services leverages the company's U.S. based in-house wafer fabrication facility ("Fab-1") to deliver superconducting quantum chips to advance and accelerate quantum information science and technology research and development efforts. Customers include researchers spanning academia, defense laboratories, and national laboratories.

Professional Services

In certain engagements, we provide professional services that enhance and advance our customers' ability to consume our core products and services. Our engineers can augment a client's internal capabilities with expertise in algorithm development, benchmarking, quantum application programming and software development. These fee-based services can enhance our customer's readiness for quantum, accelerate our customer's timelines for meaningful discoveries, and increase our depth of knowledge about key application domains and customer requirements for quantum computing in different industries.

Key Applications

Quantum computing is expected to drive value across many different applications and industries. We believe that many of the principal benefits in these areas will spring from four different types of computational problems that are particularly well suited to quantum computing: optimization, machine learning, simulation and quantum mechanical system simulation.

Optimization

The computational properties of a quantum computer inherently support the problem-solving requirements of extremely complex optimization calculations because quantum computers possess the ability to simultaneously evaluate very large numbers of variables, and each additional qubit in a quantum computer exponentially scales our information processing capacity. We believe that quantum computers could allow highly accurate optimization models to be continuously refreshed to reflect the impact of changing conditions on available solutions, ultimately leading to better and more responsive plans and decision-making.

Many of the world's largest and most valuable industries could potentially benefit from enhanced optimization enabled by quantum computing. In financial services, optimization could be applied to portfolio management, algorithmic trading and risk assessment. In telecommunications, optimization could be applied to call routing and network capacity planning. In manufacturing, optimization could help with workforce, warehouses and supply chain planning. In transport, there are logistics applications like fleet routing, driver scheduling, and package loading and delivery that could benefit from further optimization.

These types of problems can quickly overwhelm classical computers due to the large numbers of variables that need to be evaluated, which exponentially scales the computational power required with each additional possibility to be considered. For example, in a vehicle routing problem involving roundtrips to just 10 destinations there can be more than 300,000 permutations to be considered; with 15 destinations, the number of possible routes exceeds 87 billion. If you factor in other real-world considerations such as delivery cost, fleet size, driver availability, or service level agreements, you can see the intractable nature of these kinds of problems in full display.

One of the most active fields of quantum algorithm research is the area of constrained combinatorial optimization. These mathematical equations can arrive at approximate results with a close-to-optimal solution across many possible outcomes-a result that would create high value in many different industries, particularly when the exact solution is unknowable utilizing a classical computer.

In September 2023, we were awarded a DARPA project as part of the Imagining Practical Applications for a Quantum Tomorrow (IMPAQT) program to advance the state-of-the-art in quantum algorithms for solving combinatorial optimization problems. Our project, "Scheduling Problems with Efficient Encoding of Qubits" (SPEEQ), seeks to develop a novel and efficient encoding of optimization problems onto qubits, with the goal of enabling larger problems to be mapped to currently available NISQ-era quantum computers. The project will specifically address scheduling problems, which are among the best-known and most pervasive types of combinatorial optimization problems across numerous industries, as well as some of the most challenging to solve.

In November 2023, we were awarded Phase 2 of the DARPA Quantum Benchmarking Program to develop benchmarks for quantum application performance on large-scale quantum computers. The goal of the DARPA Benchmarking Program was to create key quantum computing metrics for fault tolerant quantum computing, make those metrics testable, and estimate the required quantum and classical resources needed to reach critical performance thresholds.

Rigetti was awarded Phase 1 in March 2022. The key output of Phase 1 of this program was the development of a resource estimation framework to provide insight into the requirements of a superconducting quantum computing system necessary for solving large-scale, complex problems.

Phase 2 is expected to entail refining and optimizing our estimates for selected utility-scale problems, delivering new upper bounds on these requirements. Another anticipated benefit of this resource estimation framework is to enable a cost benefit analysis into whether the resources needed to run a quantum application will be met by the value of solving the particular problem. A challenge in developing quantum algorithms is understanding how a problem will scale, and at what point a dataset is large or complex enough to benefit from the unique properties of quantum computing. Estimating the amount of time, the number of qubits, and the energy required could accelerate the work towards designing an optimized algorithm. Phase 2 is expected to be heavily focused on researching fault-tolerant quantum applications. Of particular interest are dynamical chemistry simulations and modeling the dynamics of quantum systems.

Machine Learning

Machine learning is a well-established field, with broad application, that today is already having a transformative impact on a myriad of markets. At the core of any machine learning application is a series of computations, typically expressed in linear algebra, applied to vast amounts of data in order to do things such as reliably classifying objects and making data-driven predictions. Today, cloud computing and HPC have been the predominant sources of the computational capabilities required to create effective machine learning algorithms, models and data analysis applications.

But the efficiency of HPC-powered machine learning algorithms is limited when faced with richer and larger data sets. For that reason, computer scientists have looked toward the computational promise of quantum computers, and the development of quantum-based algorithms, as a means of both accelerating current machine learning algorithms and creating new approaches that are currently impossible on classical computers.

Given these factors, the emerging field of QML is the focus of much of the current research and development occurring on quantum computers today. We already see emerging machine learning algorithms that take advantage of the unique capabilities of quantum computing to tackle the complex linear algebra problems at the heart of many machine learning tasks. In fact, recent research has emerged demonstrating that quantum algorithms could work better than classical ones for critical machine learning classification problems. As algorithmic research continues to progress, some of these quantum algorithms are improving to the point where their benefits may be realized on smaller scale quantum computers.

Research has also demonstrated the promising application of QML, for Generative Adversarial Networks, ("GANs"), a deep learning technique where a neural network is used to generate highly accurate and new examples that could plausibly have come from an original dataset. The potential utilization of quantum computing for GANs alone is far-reaching and could be impactful in large markets like:

- Healthcare – for medical image analysis used to detect and categorize tumors and predict their growth;
- Drug discovery – for generating molecular structure candidates for medicines to target or cure diseases;
- Finance and banking – for creating models that can detect financial fraud based upon predictive patterns rather than rules determined by previously observed behaviors; and
- Defense and intelligence – for reliably enhancing low resolution satellite imagery into high resolution photography.

The following are examples of our work related to machine learning:

In November 2023, we were awarded an Innovate UK grant as part of the Feasibility Studies in Quantum Computing Applications competition. Joining us in this work are Amazon Web Services (AWS), Imperial College London, and Standard Chartered. The consortium aims to use quantum computing to improve current classical machine learning techniques used by financial institutions to analyze complex data streams. Financial institutions need to continuously interpret complex data streams to extract information necessary for providing accurate credit risk evaluation, managing market-making services, and predicting emissions in the context of green finance, among other things. Classical machine learning techniques used to assist and provide insights to these services have limitations as these data streams are, in general, complex. Combining quantum computing with classical machine learning methodology could offer more powerful resources for processing these data streams, given the potential for quantum computers to process some types of information more efficiently than with classical resources alone.

The aim of the consortium is to address the following research objectives: (1) further develop quantum signature kernels and quantum-enhanced feature maps, (2) benchmark the results against classical machine learning methods for streamed data, and (3) build and study quantum algorithms for computing signatures and signature kernels for long and high-dimensional data streams efficiently.

In October 2023, we were awarded a separate Innovate UK grant as part of the Feasibility Studies in Quantum Computing Applications competition. Joining us in this work are HSBC, the Quantum Software Lab (QSL) based at the University of Edinburgh, and the National Quantum Computing Centre (NQCC). Together, the consortium aims to enhance existing anti-money laundering techniques by using quantum machine learning techniques with the goal of improving the performance of current-state-of-the-art machine learning algorithms. Money laundering poses a significant threat to financial institutions and society. Machine learning technology has the power to detect and prevent financial crime by flagging suspicious transactions and adapting to ever-changing criminal behavior. Quantum computing has the potential to enhance existing classical computing workflows, and in turn could offer improved machine learning methods. In this work, the consortium will aim to extend current anomaly detection quantum machine learning models to detect anomalous behavior indicating money laundering.

Simulation

Classical computers have been used for decades in critical applications that model real-world processes or systems in order to study their behaviors over time. These computer-based simulations have had an enormous impact on fields like pharmaceuticals, material science, finance, logistics, aerospace, defense and computer-aided design and engineering. Simulations are essentially mathematical models of a system and hence are logical candidates to benefit from quantum computing. Many important systems, such as molecular structures, cannot be accurately modeled due to the level of complexity associated with representing the properties and behaviors of the key elemental components.

We believe that quantum computers possess inherent advantages that will allow them to accurately model systems with large numbers of variables that are far outside the reach of classical computers today.

Quantum Mechanical System Simulations

The essential building blocks of nature, whose understanding has been the driver of many breakthrough innovations in pharmaceuticals, healthcare, energy, and material science, are the microscopic systems of molecules, atoms and subatomic particles like electrons and protons. The properties and behaviors of these quantum mechanical systems can be expressed in mathematical rules that have been verified experimentally with high degrees of accuracy, but the complexity associated with such calculations, and their applicability to existing and potential molecular and atomic structures, has proven to be outside the realm of capability for today's classical computers.

Scientists have not found a way to rapidly and accurately model most quantum mechanical systems on a computational device that itself is not quantum in nature. Conversely, we believe quantum computers have the potential to efficiently model the relevant set of potential interactions between quantum mechanical elements because they natively reflect the essential properties of quantum systems and behaviors like entanglement, superposition and wave functions.

Drug discovery is among the fields where research into the applicability of quantum computing for simulating quantum mechanical systems is producing considerable enthusiasm. With the growing high costs to develop new drugs, a quantum-based approach that could help pharmaceutical companies evaluate thousands of potential compounds for a targeted therapeutic, and avoid failed outcomes in costly clinical trials, would have an enormously positive economic and societal effect. Other high potential impact areas for quantum mechanical simulations include the design of chemical catalysts, computational fluid dynamics in aerospace engineering, and nuclear fusion for clean energy.

Our Technology

Introduction to Quantum Computing

Quantum computers encode and process data using a new kind of information storing electrical circuit called a quantum bit, or qubit. By leveraging the quantum mechanical principle of superposition, qubits can represent complex mathematical combinations of *both* zero and one at the same time. In contrast, classical computers are composed of transistors, electronic devices that hold binary zero or one states, therefore requiring billions of transistors in order to execute complex algorithms. This qubit property of superposition creates unique capabilities. By enabling qubits to encode more information than classical bits, it allows for a quantum computer's power to scale exponentially, rather than linearly as with traditional computers based on transistors. Additionally, it makes it possible to construct algorithms that can evaluate all possible solutions to a problem simultaneously, rather than sequentially as is the case with classical computing. Furthermore, making qubits does not require expensive, continually shrinking lithography in order to improve performance, as transistor-based computers do. Qubits can be made using trailing edge semiconductor tools, so computer performance is decoupled from chip manufacturing cost.

These properties enable quantum computers to excel at solving problems with a large number of variables, highly complex and numerous solutions, or strong correlations or interactions. Many of these problems are currently intractable due to the scaling limits of classical computers and thus represent opportunities for computational advancement across many industries, including finance, pharma and biotechnology, energy, logistics, aerospace, defense and intelligence, and basic research and development.

How Quantum Computers Compute

To execute a quantum computation, classical data, which represents the problem to be solved and the algorithm, is translated into control sequences, or quantum logic gates, and applied to the qubits in the quantum computer. These sequences are called quantum circuits. Once the circuit has been executed on the quantum computer, the qubits are measured, resulting in classical data flowing out of the quantum computer and back into classical memory. The level of performance of a quantum computer in executing these circuits and solving computational problems is dictated by many factors. These include the *scale*, or number of qubits available in the quantum processor to encode the problem and algorithm, with more qubits enabling exponentially more complex and challenging problems to be represented; the *fidelity* of the quantum logic gates from which circuits are composed, which determines how often errors occur when the circuit is executed; the *gate speed*, which shapes the time taken to execute a given circuit; the *co-processing* technology and integration, which determines the rate at which classical data representing the problem and algorithm can be loaded into the quantum computer, and the rate at which it flows back out upon completion of the circuit execution; and *re-programmability*, or the speed with which the specific quantum circuit being executed may be updated to move on to the next step in a computational process.

Several candidate physical systems, or modalities, have been proposed or are being pursued, to form the basic physical qubits in quantum computers. These include, first and foremost, the superconducting qubit technology leveraged by us. They also include approaches based on trapped ions, trapped neutral atoms, and photonics. There is a varying degree of promise, potential and risk in building machines capable of meeting the above requirements for broad commercial utility. As outlined below, it is widely believed that superconducting qubit technology is the most mature, the most advanced, and most likely to ultimately lead to broad commercial success.

Requirements for Practical Workloads: Path to Quantum Advantage

Unlocking the broad commercial market for quantum computing calls for quantum computers that are able to solve practical commercial problems better, faster, or cheaper than the best alternative classical computing solution, including even the most powerful supercomputers. This inflection point is referred to as *quantum advantage*. Achieving quantum advantage imposes requirements on the quantum computer itself, the most important of which relate to the above performance factors of *scale*, *fidelity*, *speed*, *co-processing*, and *re-programmability*.

Scale. In order for quantum computers to solve problems out of reach for classical computers, such as modeling molecules with many electrons in order to enhance drug discovery, they require a significant number of high-performing qubits, likely starting at between a few hundred to 1,000 qubits.

Fidelity. A gate fidelity estimates the reliability of an operation. For instance, a two-qubit gate with a gate fidelity of 99% means that 99 out of 100 times the operation will provide the correct result. Errors can be caused by imperfect control, natural manufacturing variations, finite qubit lifetimes (coherence) or other sources. Overall, high fidelities of over 99% are likely necessary to enable performance benefits on practical workloads. An error per operation is defined as (1-fidelity).

Speed. Speed is a crucial metric for all types of computers, both quantum and classical. Since quantum algorithms are ultimately composed of logic gates applied sequentially to qubits in a quantum computer, the speed with which these gates can be executed translates directly into processing speed and workload throughput. Therefore, faster quantum processing speeds can result in a larger number of addressable problems and larger market opportunity, as well as a more direct path to outperforming classical alternatives and a higher intrinsic revenue potential.

Co-processing. Hybrid architectures that leverage quantum computers as co-processors, pioneered by us since the company's inception, have now become widely adopted in the quantum computing industry. Quantum co-processing delivered over the cloud, such as Rigetti Quantum Cloud Services platform, is the predominant framework for building and using quantum computers today. In this paradigm, quantum processors are tightly integrated with classical computing systems and infrastructure to ensure the rate of data flowing in and out of the quantum processor can meet the needs of commercial applications. Effective implementation of co-processing hinges on both the intrinsic technological features of the specific qubit technology, as well as product innovations and system architectures aimed to prioritize this capability. For example, just as in classical computing architecture, fast gate speeds, coupled with a network architecture that achieves low network latency for data flow, are some of the requirements for high performance co-processing.

Reprogrammability. Reprogrammable quantum computers are general purpose machines that should be able to run any quantum algorithm, provided the machine has the scale, fidelity, and other attributes needed to support the particular problem instance. While gate-model quantum computers, such as those made by us, IBM, IonQ and Google, are typically reprogrammable, different technology approaches and architecture choices lead to varying constraints in applying this capability in a practical setting. Specifically, the ability to dynamically reprogram the quantum processor during the execution of a quantum circuit or within the coherence time of its qubits is of particular importance for many anticipated applications and use cases.

While research and development funding and investments into quantum computing have accelerated, we believe that long-term commercial demand for quantum computing systems hinges on the ability to meet the above criteria for running practical workloads. Multiple quantum hardware modalities are being pursued. Among these, we believe the superconducting qubit is the only such modality that has, to date, demonstrated viability across all these requisite metrics.

Our Superconducting Quantum Processors

Introduction to Superconducting Qubits

We build and operate quantum computers based on superconducting qubits. Superconducting qubits are silicon-based electronic devices that encode information in quantum states associated with currents and voltages. Superconducting qubits benefit from the fact that their basic properties can be engineered through well-established semiconductor industry design and manufacturing techniques. This enables chip design and architecture tradeoffs to be made to overcome various practical constraints in building commercial quantum computing systems. They are also improving along these key metrics faster than approaches based on other qubit modalities, such as ion traps, photonics and neutral atoms.

As an example, in June 2011, the largest algorithms demonstrated on programmable, gate model quantum computers across these modalities were in the range of a few qubits. In the ensuing twelve-year period from 2012 to 2024, superconducting systems have successfully scaled up to the range of 100 or more qubits, including demonstrations of quantum supremacy. This rate of scaling has easily outpaced other approaches. We believe this leadership results in part from an intrinsic advantage: superconducting qubits have many inherent similarities to traditional silicon-based chips. As a result, progress in superconducting quantum computers may be achieved by leveraging the existing capabilities – expertise, technologies, workforces, and supply chains, for example – of the semiconductor manufacturing industry, rather than needing to establish such capabilities anew.

Rigetti Quantum Processors

Rigetti quantum processors are based on transmon-style superconducting qubits. Quantum logic gates are actuated by applying electronic signals to the qubits. Chips are packaged, connected to input and output circuitry, and operated in a low-temperature environment. Control and readout signals are generated and processed in a control system operating at room temperature. This control system is subsequently integrated with, or networked into, auxiliary classical computing hardware to enable co-processing system requirements. Our competitive advantage begins at the chip level and extends through the full-stack, with a distinct focus on fabricating scalable hardware meeting the requirements for practical workloads.

Scale

Achieving the scale of quantum processor needed for practical workloads is perhaps the hardest requirement of all. To address this, we have developed a unique patented and patent-pending multi-chip quantum processor technology. This approach leverages techniques long used in classical computer microprocessors and memory ("RAM"). Our scalable processor architecture enables multiple core processor chips, each having many qubits, within a multi-chip assembly to function cohesively as a single, large quantum computer-without introducing additional error sources, network latency or other overhead. Using our modular chip architecture, larger quantum processors may be constructed by assembling more core processors together. From a manufacturing perspective, this enables a single type of core processor chip to support multiple quantum processor generations of increasing scale and performance. We believe that this solution facilitates rapid scaling and can enable even faster development cycles in future chip generations.

In addition to accelerating the pace of scaling, we believe our proprietary modular chip architecture has significant manufacturability and cost benefits. For example, rather than producing large, complex individual chips with 1,000 qubits, we may fabricate 10 chips with 100 qubits each and use our multi-chip technology to assemble them together to produce a 1,000 qubit quantum processor. This solution makes it much easier to produce large processor chips with high yield. As a result, we believe our modular approach to be fundamentally more manufacturable, predictable, and scalable.

Our multi-chip technology incorporates several advances in integrated circuit design, architecture, and silicon device manufacturing. These advances include superconducting multi-chip bonding technology for chip-level 3D integration, superconducting through-silicon via process technology and interchip coupling technology that enables high-fidelity two-qubit logic gates between qubits disposed on different silicon dies. These innovations have resulted from our investment in more than five years of technological development to establishing the essential capabilities to produce quantum processors meeting the requirements for broad commercial utility. We believe our approach to scaling quantum computers will accelerate us toward quantum advantage systems.

Fab-1

We have developed, own and operate the distinctive manufacturing capabilities needed to produce quantum processors in our proprietary scalable architecture. In 2017, we became the first company to build a dedicated and integrated Fab for producing quantum processors. In addition to vertically integrating the process capabilities to produce our proprietary chips, Fab-1 delivers a high mix of development chips to internal teams. This in-house fabrication capability allows for rapid design-fab-test cycles of learning, enabling an innovation cycle we estimate to be two to five times faster than a typical MEMS or semiconductor foundry. In Fab-1, our engineers focus their efforts on rapidly exploring, then optimizing new chip designs and establishing repeatable manufacturing processes. Fab-1 also includes semi-automated chip testing and characterization capabilities. Additionally, by leveraging traditional semiconductor tools and processes, Fab-1 builds on expertise from the existing semiconductor industry, a distinct advantage over other qubit modalities.

This in-house fab capability has enabled us to accumulate the hands-on experience and intellectual property, including know-how, patents, and trade secrets, to produce quantum computer chips within our scalable, proprietary architecture. Furthermore, we believe Fab-1 has enough wafer capacity to supply all of our chip needs for at least the next three years.

Cooling

Like all high-performance computing systems, Rigetti quantum computers require an advanced cooling system. In this case, commercially available dilution refrigerators maintain chip temperatures at around 0.02 Kelvin. Cooling power requirements and associated electricity costs will scale approximately linearly with qubit count, while expected computational utility increases exponentially.

As a result, we expect the electricity costs to run the cooling systems of our quantum computers to make up an ever-decreasing fraction of the overall revenue generated from each machine. In addition, we work closely with refrigerator vendors and anticipate the commercial availability of dilution refrigerator systems with the capabilities to support our product roadmap.

Fidelity

Improvements to the coherence times of superconducting qubits, combined with methods for ever faster and more precise quantum logic gates, have kept superconducting qubits on a pace of continuous fidelity improvement for approximately two decades. In recent years, algorithms have been developed on processors with average two-qubit gate fidelities of 98-99%. As processors scale to broad quantum advantage, fidelity will need to continue to improve, likely to 99.9% and beyond.

We are focused on delivering advances to fidelity through a systematic engineering approach centered on our design-fab-test flywheel powered by our in-house design and manufacturing. Uniquely, our modular processor technology enables improvements to fidelity to be achieved separately from efforts to increase scale; fidelity advancements can be developed on the individual core processor chips, and these improvements can be rapidly integrated into scaled processors through our multi-chip integration technology.

As described above, a quantum logic gate is how computation is expressed on a quantum computer. There are a large number of possible gates that can be used for computation. We physically implement quantum gates through the application of microwave pulses (electronic signals) to the physical qubits on the quantum integrated circuit.

One way that the performance of the system is assessed is by measuring the errors that are introduced in actuating the gates with the application of electronic signals to the physical qubits. There are a variety of metrics that are used to measure these errors; we currently report performance and indicate a measure of error through a fidelity metric applied to 2-qubit gate error or fidelity, usually expressed as a percentage. Gate fidelity represents the reliability of an operation. For example, a 2-qubit gate with a fidelity of 99% means that 99 out of 100 times the measurement of the gate will produce the correct result. Fidelities are related to errors in the following way: 100% - error rate % = gate fidelity %. So, an error rate of .5%, is the same as a fidelity of 99.5%. There are a number of standard benchmarks that are used to measure qubit errors, and are explained further below.

We measure the performance of iSWAP gates with an industry standard technique called Randomized Benchmarking, a commonly used method to measure fidelity. This protocol requires creating random sequences of quantum gates of different sequence length, executing each sequence, and then measuring the outcome of the execution against the mathematically expected results.

We also implement a family of 2-qubit gates referred to as fSim. Generally, any specific fSim gate may not be part of a universal gate set. We use fSIM gates with the goal of achieving high performance for specific algorithms.

We measure the performance of fSim gates with an industry standard technique called cross entropy benchmarking, another commonly used method to measure fidelity. This protocol requires creating random circuits from the provided gate set measuring the results, and comparing the outcomes to an expected probability distribution of outcomes.

In the past we have implemented gate sets based on 2-qubit gates other than iSWAP and fSIM, and may, in the future, choose different gate sets. At the moment there is no standard set of gates agreed on in the industry, and there may never be. Furthermore, other standards for measurement may emerge to measure quantum gate fidelity or performance of quantum computers generally. Accordingly, undue reliance should not be placed on the fidelity measures that we present. See also "Risk Factors— *If our computers fail to achieve quantum advantage, our business, financial condition and future prospects may be harmed. Moreover, the standards by which we measure our progress may be based on assumptions and expectations that are not accurate or that may change as quantum computing evolves*."

Ankaa-3 is Rigetti's newest flagship quantum computer featuring an extensive hardware redesign that is intended to enable superior performance. With Ankaa-3 we successfully halved our error rates in 2024 from our error rates in 2023, achieving a 99.0% median two-qubit fidelity with iSWAP gates and a 99.5% median two-qubit fidelity with fSim gates based on internal testing. Ankaa-3 is designed to enable users to operate the iSWAP gates for a wide range of algorithmic research, with a median gate time of 72 nanoseconds. The more specialized fSim gates provide a median gate time of 56 nanoseconds and are useful for specific algorithms such as random circuit sampling.

Improving our median 2-qubit fidelities is a crucial part of our mission to build the world's most powerful computers. Useful quantum computers will need not only a large number of qubits, but also high-quality qubits. Reaching 99.0% median two-qubit fidelity with iSWAP gates and a 99.5% median two-qubit fidelity with fSim gates on the Ankaa-3 system in 2024 based on our internal testing is the result of years of innovation and commitment from our teams across the technology stack.

We have already designed and deployed a modular architecture, tiling multiple chips together demonstrating what we believe is the way forward towards building larger systems. We believe a densely connected square lattice with tunable couplers that allows us to control qubit interactions is the foundation for driving qubit performance. We believe a 2.0x improvement in error performance compared to our previous QPUs coupled with our scaling approach, shows that we have a promising strategy for building increasingly higher performing QPUs to help our customers solve their most pressing problems.

Speed

One of the strengths of superconducting qubit technology, and our technology in particular, is that gate operations on superconducting processors are faster than other commercially available modalities today.

The speed of gate operations in superconducting qubits are determined by the intentional design of circuit elements on-chip and their optimized parameters, rather than relying on atomic properties. Our recently introduced Ankaa-3 system achieves a median gate time of 72 nanoseconds with universal iSWAP gates. A median gate time of 56 nanoseconds was achieved with the more specialized fSim gates. Median gate time is measured by internal testing.

We believe that superconducting processors' speed advantage will result in a larger market for superconducting quantum computers compared to other modalities, as there are a multitude of high value use cases that require timely results, such as real-time decision making, risk calculations, and more. As in conventional computing, faster gate speeds also equate to higher throughput in commercial deployment and therefore greater potential revenue opportunity.

Co-processing

It is widely believed that unlocking the commercial value of quantum computing requires quantum computers to be tightly integrated with classical computing systems and technology. High-performance co-processing integration accelerates the path to quantum advantage by enabling both quantum and classical computing resources to work in tandem to address computational bottlenecks best suited to their particular strengths. This approach also facilitates adoption and usability by end users who are more familiar with classical programming.

The inherent speed with which superconducting processors can execute circuits and be dynamically re-programmed makes them ideally suited to high-speed co-processing integration. Other modalities have not demonstrated the gate speeds necessary to support high-performance co-processing.

We have invented and patented capabilities at the hardware and software level, such as parametric code compilation, to enable high performance co-processing on a cloud platform. Parametric code compilation supports running faster hybrid algorithms through memory registers shared between classical programs and embedded logic on a QPU control system. This means that users can run algorithms without incurring latency that would otherwise be caused by updating parameters at each step.

Reprogrammability

Our systems are dynamically reprogrammable. Instructions are streamed into the quantum computer or updated within the execution time of the quantum logic circuit. This allows our machines to effectively run both the hybrid variational algorithms that underpin current use cases and quantum error correction routines in future systems. In a production setting, dynamic reprogrammability translates to higher customer job throughput per unit time. Since many applications are expected to require streamed data processing or error correction, we believe this dynamic reprogrammability is central to unlocking the full market potential of quantum computing systems, especially in comparison to alternative modalities that are unable to implement high speed re-programming.

Our quantum computers are orchestrated with a control system operated at room temperature. In our architecture, reprogramming the quantum processor occurs exclusively within this control system. Unlike photonics, for example, reprogramming the system to run a new quantum circuit does not require slow on-chip updates, but only requires changes to the sequence of signals applied to the chip.

Our QPUs today support dynamic programming protocols within microsecond feedback loops. For example, re-setting registers of qubits conditional on the outcomes of previous measurements, can increase overall quantum circuit throughput by 5x relative to non-dynamic implementations of the same workload.

The QPU control system includes hardware for networking, classical microprocessors, FPGAs for control and readout pulse sequencing, and analog signal processing. The integrated system is designed and built to meet the requirements for co-processing and reprogrammability over the cloud.

This capability enables high-speed data flow within the quantum processor, and between the quantum processor and auxiliary classical compute and networking infrastructure. Our systems are thus enabled for high-performance hybrid quantum-classical computing, the implementation of high-throughput quantum programs for practical workloads, and the dynamic control flow and feedback that underpins practical quantum error correction. The control system drives the quantum processor, calibrates and operates gates, and measures qubit states at the end of a computation.

Quantum Error Correction

Direct improvements to qubits and gate fidelities are currently the primary means of advancing the performance of quantum computers. However, at the scale of a few hundred qubits and beyond, a method called quantum error correction can be applied to further accelerate this rate of progress.

In quantum error correction, a large number of individual physical qubits can be transformed, through repeated application of gate and readout operations designed to detect and fix physical errors, into single "logical" qubits, whose properties are exponentially improved relative to the constituent physical qubits. While the methodology of quantum error correction is well-established in the field of quantum computing, systems capable of running such codes at a commercially useful scale are not currently available. Eventually, solving certain classes of problems will require the ability to compute with tens to hundreds or even thousands of logical qubits. This makes the ability to build large qubit count processors at this commercial scale an even more crucial capability.

Additionally, because errors must be identified at a specific physical location within the quantum processor in order to be corrected, those errors must also be well-localized within small regions of the quantum processor. For example, a qubit in one region must not induce errors on some distant qubit but rather be constrained to influencing errors on nearby qubits. This essential requirement underpins modern quantum error correction theory and practice.

Turning to the processor's physical qubit array, the necessity of localizing errors has led to the predominance of nearest-neighbor connectivity graphs in quantum processor design. Our quantum processors meet these essential requirements with a nearest-neighbor, planar connectivity graph. Planar codes are expected to show a high error threshold of approximately 1% error probability per operation. This means that if error rates are below the required threshold (e.g. 1%), then increasing the redundancy (*i.e.*, the number of physical qubits making up a single logical qubit) results in an exponential reduction in logical error. In other words, adding a small number of additional physical qubits per logical qubit will provide exponential improvements. Notably, codes for other modalities, such as Bacon-Shor codes for trapped ion qubits, lack such a threshold behavior and is one reason why we believe superconducting quantum computers to be superior to trapped ion modalities.

We aim to deliver the physical qubit count needed, with the requisite nearest-neighbor connectivity, to enable developers and customers to benefit from this exponential error reduction. In contrast to known approaches for other qubit modalities, our systems are expected to be able to run the same code family at multiple different levels of redundancy without requiring additional complexity such as code concatenation. This approach enables developers to scale the effective error rate and associated overheads up and down as dictated by their use-case requirements. For example, the smallest surface code logical qubit for superconducting processors is 17:1 physical qubits to logical qubits, in comparison to 16:1 for trapped ions. However, for complex applications, the ability to pack more physical qubits into the code (such as 100:1 or 1000:1) is critical because it allows developers to further reduce errors for algorithms based on many quantum gates where errors are more likely to accumulate. In comparison to trapped ions, we believe superconducting processors are better positioned to scale up to the large number of qubits required to run these valuable large codes while also having the fast gate speeds for them to be useful.

Our processor architecture, software tools, and cloud services platform are designed to enable users and partners to directly construct, test and deploy error correction and error mitigation protocols, and to tailor such codes to specific computational tasks through software. This capability is enabled by the re-programmability, co-processing integration, and system design we have established.

Intellectual Property

Our intellectual property portfolio plays a strategic role in advancing our innovation and leadership in quantum computing.

Our patent portfolio seeks to protect our current developments and the intellectual property space for the company's technology roadmap and anticipated areas of development. We rely upon a combination of protections afforded to owners of patents, copyrights, trade secrets, and trademarks, along with confidentiality and proprietary rights agreements with employees, consultants, contractors, vendors and business partners to establish and protect our intellectual property rights.

As of December 31, 2024, we have 104 patents issued and 133 patents pending that are designed to protect our full-stack technology across hardware, software, and services. These patents cover a broad range of key technology areas of the business including (i) quantum computing systems, software and access; (ii) quantum processor hardware; (iii) algorithms and applications for problem solving; and (iv) chip design & fabrication.

We pursue international registration of our domain names and trademarks. We are the registered holder of a variety of domain name registrations, including "rigetti.com." Our trademark registrations include "Rigetti" in the US, U.K. and EU.

Sales & Marketing

During this period of eQA, our go-to-market strategy is focused on being a leader in the key market segments driving the early application of quantum computing. Our sales and marketing efforts are focused on technology development and distribution partnerships with the leading organizations in these markets. In the U.S. government, for example, the Departments of Defense and Energy have each been making significant investments in quantum computing, and we have technology development partnerships with leading agencies and national laboratories.

We are pursuing similar arrangements with customers in other important vertical market segments, like finance, where we are developing specific expertise in several application areas and are collaborating with Moody's, HSBC and Standard Chartered Bank. We also have distribution relationships with customers like Amazon Web Services, Microsoft Azure and Strangeworks.

In connection with our reorganization announced in February 2023, we reduced our investment and expenses in sales and marketing to focus our resources on technology development. As we work to develop new generations of our hardware with the goal of continuing to scale and achieve nQA and then BQA, we anticipate increasing our investment and expenses in both sales and marketing in the future to expand the number of enterprise companies buying our QPUs and directly licensing our QCS platform.

Suppliers

We source our components from multiple industries including: from the electronics and semi-conductor industries with low-noise microwave components, CPUs, GPUs, FPGAs; from the cryogenic industry with dilution refrigerators and associated helium gas products; and from the semiconductor industry with silicon wafers and other specialty materials, tooling and measurement equipment.

Customers & Key Partners

We believe that the realization of quantum computing's promise requires strong relationships across an ecosystem of innovative and quantum-committed organizations and have been developing commercial relationships and collaborative partnerships with organizations that possess a keen understanding of specific industry problems and deep technical expertise in key scientific and engineering disciplines.

To date, we have focused on developing a range of client relationships and research partnerships with:

- Enterprise-sized organizations working on quantum-assisted breakthroughs in applications areas like drug discovery, network optimization, financial modeling, weather forecasting and fusion energy like NASA, Moody's, Standard Chartered Bank, HSBC, AFRL, the U.S. DOE and certain military branches within the U.S. Department of Defense;
- Materials science researchers and quantum algorithm developers at renowned laboratories like Fermilab, NASA Quantum Artificial Intelligence Laboratory and ORNL;
- Quantum-focused software and algorithm companies like Phasecraft, Riverlane and Q-CTRL;
- Cloud service providers like Amazon Web Services and Microsoft Azure; and
- We also enter into multi-year technology development partnerships with organizations that possess specialized technical expertise and strong interests in advancing the development of quantum computing (as referenced in *Business - Key Technology Development Partnerships*). These organizations include DARPA, SQMS, and Innovate UK.

Competition

The quantum computing market is evolving and highly competitive. With the introduction of new innovations and the potential entry of new competitors into the market, we expect competition to increase in the future, which could harm our business, results of operations, or financial condition.

Our current and prospective competitors include companies engaged in the research, development, and operation of quantum computing capabilities. Major companies now developing both quantum hardware and software include IBM, Google, Microsoft, IonQ, D-Wave, Quantinuum and PsiQuantum, among others. In addition, because of the importance of quantum computing, most large public cloud providers and traditional chip makers are researching and investing in quantum computing initiatives, in some cases seeking to build quantum computers. For example, Amazon and Intel are engaged in the research and development of quantum computers. A number of development-stage companies are also seeking to build quantum computers, quantum software and applications, and quantum cloud computing services.

We believe our primary direct competition will come from other companies building or seeking to build universal, gate-model quantum computing systems that can meet the requirements for solving commercial problems. We believe competition will be based on a number of factors, including: different approaches to building quantum computers; quantum computer system performance, including scale, speed, and fidelity; system accessibility and ease of use; supported software and applications; compatibility with existing classical workflows; rate of technological innovation; ability to create value through long-term partnerships; end-user support and customer experience; solutions and insight delivery; price; brand recognition and trust; financial resources; and access to key personnel.

We believe that we are favorably positioned to compete on the basis of these factors. However, we face various risks relating to competition as described in "*Risk Factors-Risks Related to Rigetti's Business and Industry-The quantum computing industry is competitive on a global scale and Rigetti may not be successful in competing in this industry or establishing and maintaining confidence in our long-term business prospects among current and future partners and customers*."

Regulatory

U.S. government contracts, grants, and agreements are subject to regulations and procurement laws. The majority of our current programs are subject to Title 2 of the Code of Federal Regulations, covering Grants and Agreements. We also perform programs authorized under Other Transaction Authority and the Federal Acquisition Regulation. Several of our agreements are also subject to agency level acquisition regulation supplements, including the Defense Federal Acquisition Regulation Supplement and the Department of Energy Acquisition Regulation. These regulations mandate uniform policies and procedures for the administration of government funded programs. This includes requiring compliance with eligibility and responsibility requirements, contractor qualifications, financial and reporting requirements, as well as subjecting the company to audits and to other government reviews covering issues such as cost, performance, internal controls and accounting practices.

Our products and technologies are subject to U.S. export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. U.S. export control and economic sanctions laws include restrictions or prohibitions on the sale or supply of certain products, technologies, and services to U.S. Government embargoed or sanctioned countries, governments, persons and entities. In addition, certain products and technology may be subject to export licensing or approval requirements. Exports of our products and technology must be made in compliance with export control and sanctions laws and regulations.

We are also subject to numerous U.S. state, federal and foreign laws, regulations and rules related to privacy, data use and security. In addition, we are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute, the U.S. Travel Act, and other anti-bribery, and anti-corruption laws in countries in which we conduct activities, and numerous federal, state and local environmental laws and regulations governing, among other things, solid and hazardous waste storage, treatment and disposal, and remediation of releases of hazardous materials.

See also "Risk Factors—Risks Related to Litigation and Government Regulation."

Employees

Our deep and talented workforce is the key to our success. As of March 1, 2025, we employ 140 people globally, of which 137 were full-time employees. The majority of our employees are employed in the areas of quantum physics, chip and hardware engineering and software development. Most of our employees are based in the United States with the remainder based in the United Kingdom, Australia and Canada. In addition, we also engage a small number of consultants and contractors to enhance our research and development and selling general and administrative areas of our business.

To date, we have not experienced any work stoppages and maintain good working relationships with our employees. None of our employees are subject to a collective bargaining agreement or are represented by labor unions at this time.

Corporate Information

Rigetti Computing, Inc., formerly known as Supernova Partners Acquisition Company II, Ltd. ("Supernova"), was incorporated on December 22, 2020 as a Cayman Islands exempted company and a special purpose acquisition company.

On October 6, 2021, Supernova entered into an Agreement and Plan of Merger (the "Merger Agreement") with Supernova Merger Sub, Inc., a Delaware corporation and a direct wholly owned subsidiary of Supernova ("First Merger Sub"), Supernova Romeo Merger Sub, LLC, a Delaware limited liability company and a direct wholly owned subsidiary of Supernova ("Second Merger Sub") and Rigetti Holdings, Inc., a Delaware corporation ("Legacy Rigetti"). Pursuant to the Merger Agreement, on March 1, 2022, Supernova effected a domestication after which it continues as a Delaware corporation, changing its name to "Rigetti Computing, Inc."

On March 2, 2022, pursuant to the Merger Agreement, First Merger Sub merged with and into Legacy Rigetti, the separate corporate existence of First Merger Sub ceasing and Legacy Rigetti being the surviving corporation (the "Surviving Corporation" and, such merger, the "First Merger") and (ii) immediately following the First Merger, the Surviving Corporation merged with and into the Second Merger Sub, with the separate corporate existence of the Surviving Corporation ceasing and the Second Merger Sub being the surviving entity and changing its name to "Rigetti Intermediate LLC".

Our principal executive offices are located at 775 Heinz Avenue, Berkeley, CA 94710 and our telephone number is (510) 210-5550.

Available Information

Our corporate website address is www.rigetti.com. We make available on our website, free of charge, our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (the "SEC"). The SEC maintains a website that contains reports, proxy and information statements and other information regarding our filings at www.sec.gov. We use our corporate website as a channel of distribution of material company information. For example, financial and other material information regarding our company is routinely posted on and accessible on our website. Accordingly, investors should monitor this channel, in addition to following our press releases, SEC filings and public conference calls and webcasts. The information found on our website is not incorporated by reference into this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

ITEM 1A. Risk Factors

RISK FACTORS

Investing in our securities involves a high degree of risk. Before you make a decision to buy our securities, in addition to the risk and uncertainties described above under "Cautionary Note Regarding Forward-Looking Statements", you should carefully consider the risks and uncertainties described below together with all of the other information contained in this Annual Report on Form 10-K. If any of the events or developments described below were to occur, our business, prospects, operating results and financial condition could suffer materially, the trading price of our securities could decline, and you could lose all or part of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Risks Related to Our Financial Condition and Status as an Early-Stage Company

We will require a significant amount of cash for expenditures as we invest in ongoing research and development and business operations and may need additional capital sooner than planned to pursue our business objectives and respond to business opportunities, challenges or unforeseen circumstances, and we cannot be sure that additional financing will be available. If we are unable to raise additional funding when needed, we may be required to delay, limit or substantially reduce our quantum computing development efforts.

Our business and future plans for expansion are capital-intensive, and the specific timing of cash inflows and outflows may fluctuate substantially from period to period. We will require a significant amount of cash for expenditures as we invest in ongoing research and development and business operations. For example, in addition to our continuing investment in our technology roadmap we continue to invest in the expansion of and upgrades to our Fab-1 facility. The actual amounts we may be required to spend on these and other matters may be greater and more significant than our expectations. Further, pursuant to the Collaboration Agreement with Quanta, we agreed to invest at least $250 million in the field of quantum computing, in furtherance of our technology roadmap, over a five-year period commencing in February 2025.

In connection with the Collaboration Agreement, we entered into a Securities Purchase Agreement with Quanta, pursuant to which we agreed to sell and issue to Quanta in a private placement transaction 3,020,412 shares of our Common Stock at a price per share of $11.58782, for an aggregate value of approximately $35.0 million. The closing of the private placement transaction is subject to regulatory clearance. If such regulatory clearance is not obtained by December 31, 2025, the Securities Purchase Agreement may be terminated by either party; in the event of such termination, the Collaboration Agreement may also be terminated by either party. If any of the termination events were to occur, we may never close the private placement with Quanta and/or we may never realize the anticipated benefits of the Collaboration Agreement, which may have a materially adverse impact on our business operations and our financial position or results of operations. See also "*We have and may in the future enter into collaboration agreements and similar arrangements with third parties for the manufacturing of our products, and these agreements and similar arrangements may never achieve their anticipated goals, which may have a materially adverse impact on our business operations and our financial position or results of operations.*"

We believe that our existing cash, cash equivalents and marketable securities should be sufficient to meet our anticipated operating cash needs for at least the next three years based on our current business plan, and expectations and assumptions considering current macroeconomic conditions. Our operating plan may change because of factors currently unknown, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations or other transactions. In addition, we may seek additional capital even if we believe that we have sufficient funds for current or future operating plans. Such financings may result in dilution to stockholders, issuance of securities with priority as to liquidation and dividend and other rights more favorable than common stock, imposition of debt covenants and repayment obligations or other restrictions that may adversely affect our business. Any funds we raise may not be sufficient to enable us to continue to implement our long-term business strategy. Further, our ability to raise additional capital may be adversely impacted by worsening global economic conditions and disruptions to and volatility in the credit and financial markets in the United States and current and future military conflicts and wars around the world including related sanctions and tariffs and trade protection measures. There can be no assurance that deterioration in credit and financial markets and confidence in economic conditions will not occur. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our products and services and our ability to raise additional capital when needed on acceptable terms, if at all. If the equity and credit markets deteriorate, it may make any necessary financing more difficult, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could impair our ability to achieve our growth strategy, could harm our financial performance and stock price, could require us to delay or abandon our business plans, and could require us to delay, limit, or substantially reduce our quantum computing development efforts.

If we are unable to obtain sufficient capital we would be unable to fund our operations and may be required to evaluate alternatives, which could include dissolving and liquidating our assets in which case we may receive less than the value at which those assets are carried on our audited financial statements, and/or seeking protection under bankruptcy laws, and a determination to file for bankruptcy could occur at a time that is earlier than when we would otherwise exhaust our cash resources, and it is unclear to what extent we would be able to pay our obligations, and, accordingly, it is further unclear whether and to what extent any resources would be available for distribution to stockholders. This could potentially cause us to cease operations and result in a complete or partial loss of your investment in our securities. We cannot anticipate all of the ways in which the economic climate and financial market and geopolitical conditions could adversely impact our business.

There can be no assurance that financing will be available to us on favorable terms, or at all. In addition, our ability to raise additional capital through the sale of securities could be significantly impacted by the resale of our securities by holders of our securities which could result in a significant decline in the trading price of our securities and potentially hinder our ability to raise capital at terms that are acceptable to us or at all.

We are in our early stages and have a limited operating history, which makes it difficult to forecast the future results of our operations. We have in the past failed to meet publicly announced milestones and may fail to meet projected technological milestones in the future. In addition, we have in the past changed our technology roadmap, including the anticipated milestones and timing thereof.

Our business was founded in 2013 and has operated quantum computers over the cloud since 2017. As a result of our limited operating history, our ability to accurately forecast the future results of operations is limited and subject to a number of uncertainties, including our ability to plan for and model future growth. Our ability to generate revenues will largely be dependent on our ability to develop and produce quantum computers with increasing numbers of quantum bits ("qubits") and with increasing levels of performance. As of the date hereof, we have deployed a quantum computer having 84 qubits with a 99.0% two-qubit gate fidelity utilizing iSWAP gates and 99.5% median two-qubit gate fidelity utilizing fSim gates based on internal testing. We are still in the technology development phase. Our scalable business model has not been formed as of yet and our technology roadmap may not be realized as quickly as hoped, or even at all. We have in the past failed to meet publicly announced milestones and may fail to meet projected technological milestones in the future. We have in the past changed our technology roadmap, including the anticipated milestones and timing thereof, including in each of the years ended 2018, 2022 and 2023. We may further update the technology roadmap in the future, including anticipated milestones and anticipated timeline for milestones. Furthermore, we may be unable to achieve the milestones in our technology roadmap on their announced anticipated timeline or at all, including our next generation of modular system architecture, targeted qubit counts and fidelities. The development of our scalable business model will likely require the incurrence of a substantially higher level of costs than incurred to date, while our revenues will not substantially increase unless and until more powerful, scalable, higher performing computers are produced, which requires a number of technological advancements which may not occur on the currently anticipated timetable or at all. As a result, our historical results should not be considered indicative of our future performance. Further, in future periods, our growth could slow or decline for a number of reasons, including but not limited to slowing demand for sales of our on-premise quantum computers, QCaaS or QCS, increased competition, changes to technology, inability to scale up or improve performance of our technology, a decrease in the growth of the market, or our failure, for any reason, to continue to take advantage of growth opportunities.

We have also encountered, and will continue to encounter, risks and uncertainties frequently experienced by growing companies in rapidly changing industries. If our assumptions regarding these risks and uncertainties and our future growth are incorrect or change, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, and our business could suffer. Our success as a business ultimately relies upon fundamental research and development breakthroughs in the coming years. There is no certainty these research and development milestones will be achieved as quickly as hoped, or even at all.

We have a history of operating losses and expect to incur significant expenses and continuing losses for the foreseeable future.

We incurred net losses of $201.0 million and $75.1 million for the years ended December 31, 2024 and December 31, 2023, respectively. As of December 31, 2024, we had an accumulated deficit of $554.7 million. We believe that we will continue to incur operating and net losses each quarter until at least the time we begin generating significant revenue from our narrow quantum advantage or broad quantum advantage quantum computers, which may never occur. Even if our computers achieve narrow quantum advantage or broad quantum advantage, we may never become profitable.

We may incur significantly higher losses in future periods as we, among other things, continue to incur significant expenses in connection with the design, development and manufacturing of our quantum computers; and as we expand our research and development activities; invest in manufacturing capabilities; build up inventories of components for our quantum computers; increase our sales and marketing activities; develop our infrastructure; and increase our general and administrative functions to support our growing operations and our being a public company.

We may find that these efforts are more expensive than we currently anticipate or that these efforts may not result in revenues, which would further increase our losses. If we are unable to achieve and/or sustain profitability, or if we are unable to achieve the growth that we expect from these investments, it could have a material adverse effect on our business, financial condition or results of operations. Our business model is unproven and may never allow us to cover our costs.

Our operating results may be adversely affected by unfavorable economic and market conditions. In the future we may be required to record significant charges for impairment of our long-lived assets, other assets or investments.

An adverse change in market conditions, including a sustained decline in our stock price, negative changes to the Company's position in the market, or lack of growth in demand for our products and services could be considered to be an impairment triggering event. Such changes in the future could impact valuation assumptions relating to the recoverability of assets and may result in impairment charges to our long-lived assets, other assets or investments, which would have a negative impact on our operating results and harm our business.

There are inherent uncertainties in management's estimates, judgments and assumptions used in assessing recoverability of intangible, and other long-lived assets. Any material changes in key assumptions, including failure to meet business plans, a deterioration in the U.S. and global financial markets, an increase in interest rates or an increase in the cost of equity financing by market participants within the industry or other unanticipated events and circumstances, may decrease our projected cash flows or increase discount rates and could potentially result in an impairment charge. From time to time, we may be required to record a significant charge to earnings in our consolidated financial statements during the period in which any impairment of our long-lived assets is determined, which might have a materially adverse impact on our business operations and our financial position or results of operations.

We may not be able to scale our business quickly enough to meet customer and market demand, which could result in lower profitability or cause us to fail to execute on our business strategies.

In order to grow our business, we will need to continually evolve and scale our business and operations to meet customer and market demand. Quantum computing technology has never been sold at large-scale commercial levels. Evolving and scaling our business and operations places increased demands on our management as well as our financial and operational resources to:

- attract new customers and grow our customer base;
- maintain and increase the rates at which existing customers use our platform, sell additional products and services to our existing customers, and reduce customer churn;
- invest in our platform and product offerings;
- effectively manage organizational change;
- accelerate and/or refocus research and development activities;
- expand manufacturing and supply chain capacity;
- increase sales and marketing efforts;
- broaden customer support and services capabilities;
- maintain or increase operational efficiencies;
- implement appropriate operational and financial systems; and
- establish and maintain effective financial disclosure controls and procedures.

Commercial traction of quantum computing technology may never occur. As noted above, there are significant technological challenges associated with developing, producing, marketing and selling products and services in the advanced technology industry, including our products and services, and we may not be able to resolve all of the difficulties that may arise in a timely or cost-effective manner, or at all. We may not be able to cost effectively manage production at a scale or quality consistent with customer demand in a timely or economic manner.

Our ability to scale is dependent also upon components we must source from multiple industries including: from the electronics and semi-conductor industries with low-noise microwave components, CPUs, GPUs, FPGAs; from the cryogenic industry with dilution refrigerators and associated helium gas products; and from the semiconductor industry with silicon wafers and other specialty materials, tooling and measurement equipment. Shortages or supply interruptions in any of these components will have an adverse impact on our ability to deliver revenues.

If large-scale development of our quantum computers commences, our computers may contain defects in design and manufacture that may cause them to not perform as expected or that may require repair and design changes. Our quantum computers are inherently complex and incorporate technology and components that have not been used for other applications and that may contain defects and errors, particularly when first introduced. We have a limited frame of reference from which to evaluate the long-term performance of our computers. There can be no assurance that we will be able to detect and fix any defects in our quantum computers in a timely manner that does not disrupt our sales of products and services to our customers.

If our technology fails to perform as expected, customers may seek out a competitor or turn away from quantum computing entirely, each of which could adversely affect our sales and brand and could adversely affect our business, prospects and results of operations. If defects in our technology lead to erroneous outputs, third parties relying on those outputs may draw from them erroneous conclusions, creating a risk that we will be liable to those third parties.

If we cannot evolve and scale our business and operations effectively, we may not be able to execute our business strategies in a cost-effective manner and our business, financial condition, profitability and results of operations could be adversely affected.

Even if the market in which we compete achieves its anticipated growth levels, our business could fail to grow at similar rates, if at all.

Our success will depend upon our ability to expand, scale our operations, and increase our sales and support capability. Even if the market in which we compete meets the size estimates and growth forecasted, our business could fail to grow at similar rates, if at all.

Our growth is dependent upon our ability to successfully sell quantum computers, expand our solutions and services, retain customers, bring in new customers and retain critical talent. Unforeseen issues associated with scaling up and constructing quantum computing technology at commercially viable levels could have a negative impact on our business, financial condition and results of operations.

Our growth is dependent upon our ability to successfully market and sell our quantum computers, and quantum computing services and solutions. We do not have experience with the large-scale production and sale of quantum computing technology. Our growth and long-term success will depend upon the development of our sales and retention capabilities.

Moreover, because of our unique technology, our customers will require particular support and service functions, some of which are not currently available, and may never be available. If we experience delays in adding such support capacity or servicing our customers efficiently or experiencing unforeseen issues with the reliability of our technology, we could overburden our servicing and support capabilities. Similarly, increasing the number of our products and services would require us to rapidly increase the availability of these services. Failure to adequately support and service our customers may inhibit our growth and ability to expand.

There is no assurance that we will be able to ramp our business to meet our sales, manufacturing, installation, servicing and quantum computing targets globally, that expected growth levels will prove accurate or that the pace of growth or coverage of our customer infrastructure network will meet customer expectations. For example, our competitors may achieve certain narrow and/or broad quantum milestones faster than us, which may negatively impact our business and prospects. Failure to grow at rates similar to that of the quantum computing industry may adversely affect our operating results and ability to effectively compete within the industry.

We may not manage growth effectively, including with respect to our employee base, and managing our operations successfully.

Our failure to manage growth effectively could harm our business, results of operations and financial condition. We anticipate that a period of significant expansion will be required to address potential growth. This expansion will place a significant strain on our management, operational and financial resources. For example, expansion of and upgrades to our Fab 1 facility is continual and ongoing, and we may not complete the expansion and upgrades on terms originally anticipated, in a timely manner or at all, which could have a material impact on our business, financial condition or results of operations. Expansion and upgrades require significant cash investments and management resources and there is no guarantee that they will generate additional sales of our products or services, or that we will be able to avoid cost overruns or be able to hire additional personnel to support us. In addition, we also need to ensure our compliance with regulatory requirements in various jurisdictions applicable to the sale, installation and servicing of our products.

To manage the growth of our operations and personnel, we must establish, and maintain appropriate and scalable operational and financial systems, procedures and controls and establish and maintain a qualified finance, administrative and operations staff. We may be unable to acquire the necessary capabilities and personnel required to manage growth or to identify, manage and exploit potential strategic relationships and market opportunities.

Our ability to use net operating loss carryforwards and other tax attributes may be limited.

We have incurred losses during our history, do not expect to become profitable in the near future and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire, if at all. As of December 31, 2024 we had U.S. federal net operating loss carryforwards of approximately $282.0 million.

Under current law, U.S. federal net operating loss carryforwards generated in taxable periods beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such net operating loss carryforwards is limited to 80% of taxable income. It is uncertain if and to what extent various states will conform to current federal law.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Code"), our federal net operating loss carryforwards, federal research and development tax credit carryforwards and other tax attributes are subject to annual limitations because of prior cumulative changes in our ownership and may be further limited in the future if additional ownership changes occur. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules apply under state tax laws. Our ability to utilize our federal net operating loss carryforwards, federal research and development tax credit carryforwards and other tax attributes to offset future taxable income or tax liabilities is limited because of prior ownership changes, including changes in connection with the Business Combination (as described in Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K) and other transactions, and may be further limited in the future if additional ownership changes occur. See Note 17 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for information regarding our federal net operating loss carryforwards, federal research and development tax credit carryforwards and other tax attributes.

If we earn taxable income, such limitations will most likely result in increased future income tax liability and have an adverse effect on our future cash flows. We have recorded a valuation allowance related to our net operating loss carryforwards and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Risks Related to Our Business and Industry

We have not produced quantum computers with high qubit counts or at volume and we face significant barriers in our attempts to produce quantum computers, including the need to invent and develop new technology. If we cannot successfully overcome those barriers, our business will be negatively impacted and could fail.

Producing quantum computers is a difficult undertaking. There are significant engineering challenges that we must overcome to build our quantum computers. We are still in the development stage and face significant challenges in completing development of our quantum computers and in producing quantum computers in sufficient volumes. Some of the development challenges that could prevent the introduction of our quantum computers include, but are not limited to, failure to find scalable ways to manipulate qubits, failure to reduce error rates, failure to transition quantum systems to leverage low-cost components, and failure to realize multi-chip quantum computer technology.

Even if we complete development and achieve volume production of our quantum computers, if the cost, accuracy, performance characteristics or other specifications of our quantum computers fall short of our expectations, our business, financial condition and results of operations would be adversely affected.

Any future generations of hardware and software developed to demonstrate narrow quantum advantage and broad quantum advantage, each of which is an important anticipated milestone for our technology roadmap and commercialization, may not occur on our anticipated timeline or at all.

Our successful execution of our technology roadmap is based on the development of multiple generations of quantum computing systems and the achievement of our targeted qubit counts and fidelities, including hardware that demonstrates narrow quantum advantage and broad quantum advantage, each of which is an important anticipated milestone for our technology roadmap and commercialization. The future success of our technology roadmap will depend upon our ability to continue to increase the number of qubits and decrease error rates in subsequent generations of our quantum computers.

If we are unable to achieve the increase in the number of qubits or decrease in error rates on the timeframe that we anticipate, the availability of future generations of quantum computer systems may be materially delayed or may never occur. In the past we have failed to meet publicly announced milestones and may fail to meet projected milestones in the future. If our technology roadmap is delayed or never achieved, this would have a material impact on our business, financial condition or results of operations. See "*We are in our early stages and have a limited operating history, which makes it difficult to forecast our future results of operations*."

If our computers fail to achieve quantum advantage, our business, financial condition and future prospects may be harmed. Moreover, the standards by which we measure our progress may be based on assumptions and expectations that are not accurate or that may change as quantum computing evolves.

Quantum advantage refers to the moment when a quantum computer can compute faster than traditional computers, while quantum supremacy is achieved once quantum computers are powerful enough to complete calculations that traditional supercomputers cannot perform at all. Narrow quantum advantage is when a quantum computer is able to solve practical problems in production workloads with improved accuracy, speed or cost. Broad quantum advantage is when quantum advantage is seen in many applications and developers prefer quantum computers to a traditional computer. No current quantum computers, including our quantum hardware, have reached broad quantum advantage, and may never reach such advantage. Achieving narrow quantum advantage and broad quantum advantage will be critical to the success of any quantum computing company, including ours. However, achieving quantum advantage would not necessarily lead to commercial viability of the technology that accomplished such advantage, nor would it mean that such system could outperform classical computers in tasks other than the one used to determine a quantum advantage. In addition, the definitions and expectations with respect to what constitutes quantum advantage, including the anticipated stages of quantum technology maturation, may continue to evolve and may also diverge from others in the industry. Quantum computing technology, including narrow quantum advantage and broad quantum advantage, may take years or decades to be realized, if ever.

In addition, the standards by which we measure our progress may be based on assumptions and expectations that are not accurate or that may change as quantum computing evolves. For example, we measure the performance of our systems by gate fidelity and median gate speed, among other ways, and utilized iSWAP gates and fSIM gates as part of our internal testing. To the extent others utilize the same gates in fidelity testing, they may apply the test differently and therefore there may be no comparability between such results.

There may be other measures that are utilized in the future to measure our progress and the progress of others in the industry and therefore undue reliance should not be placed on our current performance measures.

If we cannot develop quantum computers that have quantum advantage, customers may not continue to purchase our products and services. If other companies' quantum computers reach narrow quantum advantage or broad quantum advantage prior to the time we reach such capabilities, it could lead to a loss of customers. If any of these events occur, it could have a material adverse effect on our business, financial condition or results of operations.

We may expend our resources to pursue particular products, designs, sectors or investments and we may fail to capitalize on such products, designs, sectors or investments and/or forego other products, designs, sectors or investments that may have been more profitable or for which there may have been a greater likelihood of success.

Because we have limited financial and operational resources, we must prioritize our research and development for use of quantum computing within certain products, designs, sectors or investments. Correctly prioritizing our research and development activities is particularly important for us due to the breadth of companies building or seeking to build universal, gate-model quantum computing systems that can meet the requirements for solving commercial problems.

As a result, we may forego or delay pursuit of opportunities in other products, designs, sectors or investments that later prove to have greater commercial potential and ability to achieve quantum advantage. For example, although we currently believe that quantum machine learning for finance is poised to be an early domain of quantum advantage through rapid value capture from quick integration, the risks associated with developing a product that can compute algorithms that scale efficiently to real-world size applications and will be applicable to multiple use cases and competition in creating such a product, among others, could outweigh the benefits.

We may fail to capitalize on the products, designs, sectors, or investments we choose to pursue, and our resource allocation decisions may cause us to forego viable or more profitable products, designs, sectors or investments, which would have an adverse effect on our business, prospects and financial results.

The quantum computing industry is competitive on a global scale and we may not be successful in competing in this industry or establishing and maintaining confidence in our long-term business prospects among current and future partners and customers.

The markets in which we operate are rapidly evolving and highly competitive. As the marketplace continues to mature and new technologies and competitors enter, we expect competition to intensify. Our current competitors include:

- large, well-established tech companies that generally compete across our products, including Google, Microsoft, Amazon and IBM;

- large research organizations funded by sovereign nations such as China, Russia, Canada, Australia and the United Kingdom, and those in the European Union as of the date of this Annual Report on Form 10-K and we believe additional countries in the future;
- less-established public and private companies with competing technology, including companies located outside the United States; and
- new or emerging entrants seeking to develop competing technologies.

We compete based on various factors, including technology, performance, open architecture, multi-cloud availability, brand recognition and reputation, customer support and differentiated capabilities, including ease of administration and use, scalability and reliability, data governance and security. Many of our competitors have substantially greater brand recognition, customer relationships, and financial, technical and other resources, including an experienced sales force and customer service organization and sophisticated supply chain management. They may be able to respond more effectively than us to new or changing opportunities, technologies, standards, customer requirements and buying practices. In addition, many countries are focused on developing quantum computing solutions either in the private or public sector and may subsidize quantum computers which may make it difficult for us to compete. Many of these competitors do not face the same challenges we do in growing our business. In addition, other competitors might be able to compete with us by bundling their other products in a way that does not allow us to offer a competitive solution.

Additionally, we must be able to achieve our objectives in a timely manner such that we don't lose ground to competitors, including competing technologies. For example, our competitors may achieve certain narrow and/or broad quantum milestones faster than us, which may negatively impact our business and prospects. Because there are a large number of market participants, including certain sovereign nations, focused on developing quantum computing technology, we must dedicate significant resources to achieving any technical objectives on the timelines established by our management team. Any failure to achieve objectives in a timely manner could adversely affect our business, operating results and financial condition.

For all of these reasons, competition may have a negative impact our ability to maintain and grow consumption of our platform or put downward pressure on our prices and gross margins, any of which could materially harm our reputation, business, results of operations, and financial condition.

We depend on a limited number of customers for a significant percentage of our revenue and the loss or temporary loss of a major customer for any reason could harm our financial condition.

We have historically generated most of our revenue from a limited number of customers. Revenue from U.S. government entities accounted for 54.2% and 74.2% of our total revenue for the years ended December 31, 2024, and December 31, 2023, respectively. Because of the concentrated nature of our customer base, our quarterly revenue and results of operations may fluctuate from quarter to quarter and are difficult to estimate, and any delay, reduction or cancellation of orders or services rendered or any acceleration or delay in anticipated purchases or grants and awards by our larger customers could materially affect our revenue and results of operations in any quarterly period. For further information regarding our customer concentration, refer to Note 16 of our audited consolidated financial statements for the year ended December 31, 2024, included elsewhere in this Annual Report on Form 10-K.

We may be unable to sustain or increase our revenue from our larger customers, grow revenues with new or other existing customers, or offset the discontinuation of concentrated purchases by our larger customers with purchases by new or existing customers. These larger customers could also reduce or discontinue their purchases of our products and services in the event they transition to internally developed products and services or determine to divide their purchases of our products and services between us and a second source. We expect that such concentrated purchases will continue to contribute materially to our revenue for the foreseeable future and that our results of operations may fluctuate materially as a result of such larger customers' buying patterns or funding cycles. The loss or temporary loss of such customers, or a significant delay or reduction in their purchases, could materially harm our business, financial condition, results of operations and prospects.

A significant portion of our revenue currently depends on contracts with the public sector, and our failure to receive and maintain government contracts or changes in the contracting or fiscal policies of the public sector could have a material adverse effect on our business.

We derive a significant portion of our revenue from contracts with U.S. federal and foreign governments and government agencies, and we believe that the success and growth of our business will continue to depend on our successful procurement of government contracts. We have historically derived, and expect to continue to derive, a significant portion of our revenue from contracts with agencies of the U.S. federal and foreign governments, either directly by us or through other government contractors. For the year ended December 31, 2024 and 2023, respectively, sales to government entities comprised 89.4% and 80.9% of our total revenue, respectively.

Contracts with government agencies are subject to a number of challenges and risks. The bidding process for government contracts can be highly competitive, expensive, and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate revenue. We also must comply with laws and regulations relating to the formation, administration, and performance of contracts, which provide public sector customers with rights, many of which are not typically found in commercial contracts. In addition, our perceived relationship with the U.S. government could adversely affect our business prospects in certain non-U.S. geographies or with certain non-U.S. governments.

Accordingly, our business, financial condition, results of operations, and growth prospects may be adversely affected by certain events or activities, including, but not limited to:

- Changes in government fiscal or procurement policies, or decreases in government funding available for procurement of goods and services generally, or for our federal government contracts specifically;
- Government entities exercising termination for convenience rights on our existing government contracts with such government entities;
- Changes in government programs or applicable requirements;
- Restrictions in the grant of personnel security clearances to our employees;
- Ability to maintain facility clearances required to perform on classified contracts for U.S. federal government and foreign government agencies;
- Changes in the political environment, including before or after a change to the leadership within the government administration, and any resulting uncertainty or changes in policy or priorities and resultant funding;
- Changes in the government's attitude towards the capabilities that we offer;
- Changes in the government's attitude towards us as a company or our platforms;
- Appeals, disputes, or litigation relating to government procurement, including but not limited to bid protests by unsuccessful bidders on potential or actual awards of contracts to us or our partners by the government;
- The adoption of new laws or regulations or changes to existing laws or regulations;
- Budgetary constraints, including automatic reductions as a result of "sequestration" or similar measures and constraints imposed by any lapses in appropriations for the federal government or certain of its departments and agencies;
- Influence by, or competition from, third parties with respect to pending, new, or existing contracts with government customers;
- Changes in political or social attitudes with respect to security or data privacy issues;
- Potential delays or changes in the government appropriations or procurement processes, including as a result of events such as war, incidents of terrorism, natural disasters, and public health concerns or epidemics, such as the coronavirus pandemic; and
- Increased or unexpected costs or unanticipated delays caused by other factors outside of our control.

Any of the foregoing events or activities, among others, could cause governments and governmental agencies to delay or refrain from entering into contracts with us and/or purchasing our computers in the future, reduce the size or timing of payments with respect to our services to, or purchases from, existing or new government customers, or otherwise have an adverse effect on our business, results of operations, financial condition, and growth prospects.

Our ability to commercialize our quantum computers in the future may be dependent upon our relationships with cloud providers.

We currently offer access to quantum computing as a service ("Quantum Computing as a Service" or "QCaaS"), both directly to our end users with our own Quantum Cloud Services and indirectly to end users through public cloud providers such as Amazon Braket and Microsoft Azure Quantum who integrate our QCS into their own quantum computing platforms. These public cloud partners operate a service in direct competition with our providing direct access to QCS. In addition, we intend to partner with additional partners to provide access to our QCaaS. Cloud computing partnerships could be terminated, or not scale as anticipated, or even at all.

There is risk that one or more of the public cloud providers, such as AWS and Azure, could use their respective control of their public clouds to control market pricing of the services, restrict access, embed innovations or privileged interoperating capabilities in competing products, bundle competing products and leverage their public cloud customer relationships to exclude us from opportunities. Further, they have the resources to acquire or partner with existing and emerging providers of competing technology and thereby accelerate adoption of those competing technologies. All of the foregoing could make it difficult or impossible for us to provide products and services that compete favorably with those of the public cloud providers.

Further, if our contractual and other business relationships with our partners are terminated, either by the counterparty or by us, suspended or suffer a material change to which we are unable to adapt, such as the elimination of services or features on which we depend, we would be unable to provide our QCaaS business at the same scale and would experience significant delays and incur additional expense in transitioning customers to a different public cloud provider.

Currently, our customer agreement with AWS remains in effect until (i) terminated for convenience, which we may do for any reason by providing AWS notice and closing our account and which AWS may do for any reason by providing us at least 30 days' notice or (ii) terminated for cause, which either party may do if the other party has an uncured material breach and which AWS may do immediately upon notice. Although alternative data center providers could host our business on a substantially similar basis to AWS, transitioning the cloud infrastructure currently hosted by AWS to alternative providers could potentially be disruptive, and we could incur significant one-time costs. If we are unable to renew our agreement with AWS on commercially acceptable terms, our agreement with AWS is prematurely terminated, or it adds additional infrastructure providers, we may experience costs or downtime in connection with the transfer to, or the addition of, new data center providers. If AWS or other infrastructure providers increase the costs of their services, our business, financial condition, or results of operations could be materially and adversely affected.

Any material change in our contractual and other business relationships with our partners, could result in reduced use of our systems, increased expenses, including service credit obligations, and harm to our brand and reputation, any of which could have a material adverse effect on our business, financial condition and results of operations.

We rely on access to high performance third party classical computing through public clouds, high performance computing centers and on-premises computing infrastructure to deliver performant quantum solutions to customers. We may not be able to maintain high quality relationships and connectivity with these resources which could make it harder for us to reach customers or deliver solutions in a cost-effective manner.

Our QCS incorporates high performance classical computing through public clouds to provide services to end users and our partners. These services are predominantly on AWS.

Any material change in our contractual and other business relationships with AWS or other cloud providers, could result in reduced use of our systems, increased expenses, including service credit obligations, and harm our brand and reputation, any of which could have a material adverse effect on our business, financial condition and results of operations.

Further, if our contractual and other business relationships with our partners are terminated, either by the counterparty or by us, suspended or suffer a material change to which we are unable to adapt, such as the elimination of services or features on which we depend, we would be unable to provide our QCaaS business at the same scale and would experience significant delays and incur additional expense in transitioning customers to a different public cloud provider.

We depend on certain suppliers to source products. Failure to maintain our relationship with any of these suppliers, or a failure to replace any of these suppliers, could have a material adverse effect on our business, financial position, results of operations and cash flows.

We buy our products and supplies from suppliers that manufacture and source products from the United States and abroad. We enter into agreements with many of our suppliers that provide us with exclusive or restrictive distribution rights, limiting our competitors' ability to source materials from such suppliers. Our ability to identify and develop relationships with qualified suppliers and enter into exclusive or restrictive distribution rights agreements with suppliers who can satisfy our standards for quality and our need to access products and supplies in a timely and efficient manner is a significant challenge. Any failure to maintain our relationship with any of our key suppliers, or a failure to replace any such supplier that is lost, could have a material adverse effect on our business, financial position, results of operations and cash flows. We may be required to replace a supplier if their products do not meet our quality or safety standards. In addition, our suppliers could discontinue selling products at any time for reasons that may or may not be in our control or the suppliers' control, including shortages of raw materials, environmental and social supply chain issues, pandemic, labor disputes or weather conditions. Disruptions in transportation lines or ongoing military conflicts and wars around the world, including related sanctions, may also cause global supply chain issues that affect us or our suppliers. We generally have multiple sources of supply, however, in some cases, materials are provided by a single supplier.

The loss of, or substantial decrease in the availability of, products from our suppliers, or the loss of a key supplier, temporarily or permanently, could result in a material shortage of products, which could lead to price escalations that we may be unable to offset by our prices to our customers. When supply chain issues are later resolved and prices return to normal levels, we may be required to reduce the prices at which we sell our products to our customers in order to remain competitive. In addition, even where these risks do not materialize, we may incur costs as we prepare contingency plans to address such risks. Our operating results and inventory levels could suffer if we are unable to promptly replace a supplier who is unwilling or unable to satisfy our requirements with a supplier providing similar products. In addition, our suppliers' ability to deliver products may also be affected by raw material and commodity cost volatility or financing constraints caused by credit market conditions, which could materially and negatively impact our net sales and operating costs, at least until alternate sources of supply are arranged. Any delay or unavailability of key products required for our development activities could delay or prevent us from further developing our systems and applications on our expected timelines or at all.

Additionally, our business, financial position, results of operations and cash flows could be materially and adversely affected by our inability to continue sourcing products from our suppliers. A weak or declining economy could strain our suppliers, possibly resulting in supply disruption. In addition, there is a risk that our current or future suppliers, service providers, manufacturers or other partners may not survive such difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget. Although we seek to have alternate sources and recover increases in input costs through price increases in our products, shortages, supply chain interruptions or regulatory changes or other governmental actions could result in the need to change suppliers or incur cost increases that cannot, in the short term, or in some cases even in the long-term, be offset by our prices.

We have and may in the future enter into collaboration agreements and similar arrangements with third parties for the manufacturing of our products, and these agreements and similar arrangements may never achieve their anticipated goals, which may have a materially adverse impact on our business operations and our financial position or results of operations.

We may enter into agreements with third parties for the manufacture and development of components for our current and future quantum computers. For example, in February 2025, one of our wholly-owned subsidiaries entered into the Collaboration Agreement with Quanta for the development of certain components to be incorporated into our current and future quantum computers. However, no statements of work were entered into by the parties in connection with the entry into the Collaboration Agreement, and there can be no assurance that we will ever enter into a statement of work with Quanta pursuant to the Collaboration Agreement. If no statement of work has been entered into by December 31, 2025, either party may terminate the Collaboration Agreement. In that instance, or if statements of work are entered into but do not achieve the anticipated results, we may never realize the anticipated benefits of the Collaboration Agreement. In addition, pursuant to the Collaboration Agreement, each of the parties agreed to invest at least $250 million over the next five years in the field of quantum computing (and Quanta's investment will be towards personnel and capital expenditures for developing products and services and manufacturing capability in furtherance of the Rigetti Sub product roadmap). If the Collaboration Agreement is terminated before Quanta fulfills any or all of its investment commitment, we may not receive the anticipated benefits from the Collaboration Agreement.

Further, we also entered into the Securities Purchase Agreement with Quanta in connection with the Collaboration Agreement, pursuant to which Quanta agreed to purchase in a private placement transaction certain shares of our common stock for an aggregate value of approximately $35 million (the "Private Placement"). However, the closing of the Private Placement is subject to, among other things, the expiration of a 30-day waiting period after our submission of a classification request to the Bureau of Industry and Security of the Department of Commerce (the "BIS Clearance"). If the BIS Clearance is not obtained by December 31, 2025, the Securities Purchase Agreement may be terminated by either party; in the event of such termination, the Collaboration Agreement may also be terminated by either party. If any of the termination events were to occur, we may never close the Private Placement and/or we may never realize the anticipated benefits of the Collaboration Agreement, which may have a materially adverse impact on our business operations and our financial position or results of operations.

We may face unknown supply chain issues that could delay the development or introduction of our products and negatively impact our business and operating results.

We are reliant on third-party suppliers for components necessary to develop and manufacture our quantum computing solutions. Any of the following factors (and others) could have an adverse impact on the availability of these components:

- our inability to enter into agreements with suppliers on commercially reasonable terms, or at all;
- difficulties of suppliers ramping up their supply of materials to meet our requirements;
- a significant increase in the price of one or more components, including due to industry consolidation occurring within one or more component supplier markets or as a result of decreased production capacity at manufacturers;

- any reductions or interruption in supply, including disruptions to our global supply chain as a result of the ongoing military conflicts and wars around the world and sanctions related thereto (including as a result of disruptions in global shipping, the transport of products, energy supply, cybersecurity incidents and banking systems as well as our ability to control input costs) or otherwise;
- financial problems of either manufacturers or component suppliers;
- significantly increased freight charges, raw material costs, rising electrical power costs and other expenses associated with our business;
- other factors beyond our control or which we do not presently anticipate, could also affect our suppliers' ability to deliver components to us on a timely basis;
- a failure to develop our supply chain management capabilities and recruit and retain qualified professionals;
- a failure to adequately authorize procurement of inventory by our contract manufacturers; or
- a failure to appropriately cancel, reschedule or adjust our requirements based on our business needs.

If any of the aforementioned factors were to materialize, it could negatively impact our research and development efforts or cause us to halt production of our quantum computing solutions and/or entail higher manufacturing costs, any of which could materially adversely affect our business, operating results, and financial condition and could materially damage customer relationships.

Even if we are successful in developing quantum computing systems and executing our strategy, competitors in the industry may achieve technological breakthroughs which render our quantum computing systems obsolete or inferior to other products.

Our continued growth and success depends on our ability to innovate and develop quantum computing technology in a timely manner and effectively market these products. Without timely innovation and development, our quantum computing solutions could be rendered obsolete or less competitive by changing customer preferences or because of the introduction of a competitor's newer technologies. We believe that many competing technologies will require a technological breakthrough in one or more problems related to science, fundamental physics or manufacturing. While it is uncertain whether such technological breakthroughs will occur in the next several years, that does not preclude the possibility that such technological breakthroughs could eventually occur. Any technological breakthroughs which render our technology obsolete or inferior to other products, could have a material effect on our business, financial condition or results of operations.

We may be unable to reduce the cost of developing our quantum computers, which may prevent us from pricing our quantum systems competitively.

The success of our business is dependent upon the cost per qubit decreasing over the next several years as our quantum computers advance, which is based on achieving anticipated economies of scale related to demand for our computer systems, technological innovation and negotiations with third-party parts suppliers. If we do not achieve economies of scale or if the anticipated cost savings do not materialize, we may be unable to achieve a lower cost per qubit, which would make our quantum computing solution less competitive than those produced by our competitors and could have a material adverse effect on our business, financial condition or results of operations. Due to macroeconomic headwinds, including inflation, we have experienced and may continue to experience increased costs, including with respect to labor and products.

The quantum computing industry is in its early stages and volatile, and if it does not develop, if it develops slower than we expect, if it develops in a manner that does not require use of our quantum computing solutions, if it encounters negative publicity or if our solution does not drive commercial engagement, the growth of our business will be harmed.

The nascent market for quantum computers is still rapidly evolving, characterized by rapidly changing technologies, competitive pricing and competitive factors, evolving government regulation and industry standards, and changing customer demands and behaviors. If demand for quantum computers in general does not develop as expected, or develops more slowly than expected, our business, prospects, financial condition and operating results could be harmed.

In addition, our growth and future demand for our products is highly dependent upon the adoption by developers and customers of quantum computers, as well as on our ability to demonstrate the value of quantum computing to our customers. Delays in future generations of our quantum computers or technical failures at other quantum computing companies could limit acceptance of our solutions. Negative publicity concerning our solutions or the quantum computing industry as a whole could limit acceptance of our solutions. We believe quantum computing will solve many large-scale problems. However, such problems may never be solvable by quantum computing technology.

If our clients and partners do not perceive the benefits of our solutions, or if our solutions do not drive member engagement, then demand for our products may not develop at all, or it may develop slower than we expect. If any of these events occur, it could have a material adverse effect on our business, financial condition or results of operations. If progress towards quantum advantage ever slows relative to expectations, it could adversely impact revenues and customer confidence to continue to pay for testing, access and "quantum readiness." This would harm or even eliminate revenues in the period before quantum advantage.

We could suffer disruptions, outages, defects and other performance and quality problems with our quantum computing systems, our production technology partners or with the public cloud, data centers and internet infrastructure on which we rely.

Our business depends on our quantum computing systems being available. We have experienced and may in the future experience, disruptions, outages, defects and other performance and quality problems with our systems. We have also experienced and may in the future experience, disruptions, outages, defects and other performance and quality problems with the public cloud and internet infrastructure on which our systems rely. These problems can be caused by a variety of factors, including failed introductions of new functionality, vulnerabilities and defects in proprietary and open-source software, hardware components, human error or misconduct, capacity constraints, design limitations, or denial of service attacks or other security-related incidents. We do not have a contractual right with our public cloud providers that compensates us for any losses due to availability interruptions in the public cloud.

Any disruptions, outages, defects and other performance and quality problems with our quantum computing systems or with the public cloud and internet infrastructure on which we rely, could result in reduced use of our systems, increased expenses, including service credit obligations, and harm to our brand and reputation, any of which could have a material adverse effect on our business, financial condition and results of operations.

If we cannot successfully execute our strategy, including in response to changing customer needs and new technologies and other market requirements, or achieve our objectives in a timely manner, our business, financial condition and results of operations could be harmed.

The quantum computing market is characterized by rapid technological change, changing user requirements, uncertain product lifecycles and evolving industry standards. We believe that the pace of innovation will continue to accelerate as technology changes and different approaches to quantum computing mature on a broad range of factors, including system architecture, error correction, performance and scale, ease of programming, user experience, markets addressed, types of data processed, and data governance and regulatory compliance. Our future success depends on our ability to continue to innovate and increase customer adoption of our quantum solutions. If we are unable to enhance our quantum computing systems to keep pace with these rapidly evolving customer requirements, or if new technologies emerge that are able to deliver competitive products at lower prices, more efficiently, with better functionality, more conveniently, or more securely than our platform, our business, financial condition and results of operations could be adversely affected.

We are highly dependent on our ability to attract and retain senior executive leadership and other key employees, such as quantum physicists, software engineers and other key technical employees, which is critical to our success. If we fail to retain talented, highly qualified senior management, engineers and other key employees or attract them when needed, such a failure could negatively impact our business.

Our future success is highly dependent on our ability to attract and retain our executive officers, key employees and other qualified personnel. As we build our brand and become more well known, there is an increased risk that competitors or other companies may seek to hire our personnel. The loss of the services provided by these individuals will have an adverse impact on the achievement of our business strategy. These individuals could leave our employment at any time, as they are "at will" employees. A loss of a member of senior management, or an engineer or other key employee particularly to a competitor, could also place us at a competitive disadvantage. Effective succession planning is also important to our long-term success and may cause disruption to our business due to, among other things, diverting management's attention away from the operations of the business or causing a deterioration in morale. Failure to ensure effective transfer of knowledge and smooth transitions involving key employees could hinder our strategic planning and execution.

Our future success also depends on our continuing ability to attract, develop, motivate, and retain highly qualified and skilled employees. The market for highly skilled workers and leaders in the quantum computing industry is extremely competitive. In particular, hiring qualified personnel specializing in supply chain management, engineering and sales, as well as other technical staff and research and development personnel is critical to our business and the development of our quantum computing systems. Some of these professionals are hard to find and we may encounter significant competition in our efforts to hire them. Many of the other companies with which we compete for qualified personnel have greater financial and other resources than we do.

The effective operation of our supply chain, including the acquisition of critical components and materials, the development and commercialization of our quantum computing technologies and the effective operation of our managerial and operating systems all depend upon our ability to attract, train and retain qualified personnel in the aforementioned specialties.

Additionally, changes in immigration and work permit laws and regulations or the administration or interpretation of such laws or regulations could impair our ability to attract and retain highly qualified employees. If we cannot attract, train and retain qualified personnel in this competitive environment, we may experience delays in the development of our quantum computing technologies and otherwise be unable to develop and grow our business as projected, or even at all.

Our future growth and success depends on our ability to sell effectively to government entities and large enterprises.

Our potential customers tend to be government agencies and large enterprises. Therefore, our future success will depend on our ability to effectively sell our products to such customers. Sales to these end-customers involve risks that may not be present (or that are present to a lesser extent) with sales to non-governmental agencies or smaller customers. These risks include, but are not limited to, (i) increased purchasing power and leverage held by such customers in negotiating contractual arrangements with us and (ii) longer sales cycles and the associated risk that substantial time and resources may be spent on a potential end-customer that elects not to purchase our solutions. Sales to government agencies are often fixed fee development contracts, which involve additional risks. See "*-If our cost and time estimates for fixed fee arrangements do not accurately anticipate the cost of servicing those arrangements, we could experience losses on these arrangements or our profitability could be reduced.* "

In addition, government contracts generally include the ability of government agencies to terminate early which, if exercised, would result in a lower contract value and lower than anticipated revenues generated by such arrangements. See "*Contracts with U.S. government entities subject us to risks including early termination, audits, investigations, sanctions and penalties*."

Government agencies and large organizations often undertake a significant evaluation process that results in a lengthy sales cycle. Our contracts with government agencies are typically structured in phases, with each phase subject to satisfaction of certain conditions. As a result, the actual scope of work performed pursuant to any such contracts, in addition to related contract revenue, could be less than total contract value. In addition, product purchases by such organizations are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. Finally, these organizations typically have longer implementation cycles, require greater product functionality and scalability, require a broader range of services, demand that vendors take on a larger share of risks, require acceptance provisions that can lead to a delay in revenue recognition and expect greater payment flexibility. All of these factors can add further risk to business conducted with these potential customers and could lead to lower revenue results than originally anticipated.

We may not be able to accurately estimate the future supply and demand for our quantum computers, which could result in a variety of inefficiencies in our business and hinder our ability to generate revenue. If we fail to accurately predict our manufacturing requirements, we could incur additional costs or experience delays.

It is difficult to predict our future revenues and appropriately budget for our expenses, and we may have limited insight into trends that may emerge and affect our business. We anticipate being required to provide forecasts of our demand to our current and future suppliers prior to the scheduled delivery of products to potential customers. Currently, there is no historical basis for making judgments on the demand for our quantum computers or our ability to develop, manufacture, and deliver quantum computers, or our profitability, if any, in the future. If we overestimate our requirements, our suppliers may have excess inventory, which indirectly would increase our costs. If we underestimate our requirements, our suppliers may have inadequate inventory, which could interrupt the manufacturing of our products and result in delays in shipments and revenues. In addition, the lead times for materials and components that our suppliers order may vary significantly and depend on factors such as the specific supplier, contract terms and demand for each component at a given time. If we fail to order sufficient quantities of product components in a timely manner, the delivery of quantum computers, QcaaS or QCS to our potential customers could be delayed, which would harm our business, financial condition and operating results.

Our quantum computing systems may not be compatible with some or all industry-standard software and hardware in the future, which could harm our business.

We have focused our efforts on creating quantum computing hardware, the operating system for such hardware, a suite of low-level software programs that optimize execution of quantum algorithms on our hardware, application programing interfaces ("APIs") to access our systems, software development kits ("SDKs") for system and application developers, and quantum programming languages for low- and high-level application developers. The industry is rapidly evolving, and customers have many choices for programming languages, application libraries, APIs, and SDKs, some of which may not be compatible with our own languages, APIs or SDKs. Our quantum computing solutions are designed today to be compatible with most major quantum software development kits, including Qiskit, Cirq, and Open QASM, all of which are open source. If a proprietary (not open source) software toolset became the standard for quantum application development in the future by a competitor, usage of our hardware might be limited as a result which would have a negative impact on the Company. Similarly, if a piece of hardware became a necessary component for quantum computing (for instance, quantum networking) and we cannot integrate with it the result might have a negative impact on the Company.

If our customers are unable to achieve compatibility between other software and hardware and our hardware, it could impact our relationships with such customers or with customers, generally, if the incompatibility is more widespread.

In addition, the mere announcement of an incompatibility problem relating to our products with higher level software tools could cause us to suffer reputational harm and/or lead to a loss of customers. Any adverse impacts from the incompatibility of our quantum computing solutions could adversely affect our business, operating results and financial condition.

If we are unable to maintain our current strategic partnerships or we are unable to develop future collaborative partnerships, our future growth and development could be negatively impacted.

We rely on our current collaborative partners and third parties and may rely heavily on future collaborative partners and third parties to develop key, relevant algorithms and programming to make our quantum systems commercially viable. We have entered into, and may enter into, strategic partnerships to develop and commercialize our current and future research and development programs with other companies to accomplish one or more of the following:

- obtain expertise;
- obtain sales and marketing services or support;
- obtain equipment and facilities;
- develop relationships with potential future customers; and
- generate revenue.

We may not be successful in establishing or maintaining suitable partnerships, and we may not be able to negotiate collaboration agreements having satisfactory terms to the Company, or at all. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements could harm our business and financial condition.

If our information technology systems or data, or those of third parties upon which we rely, are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; loss of intellectual property or other confidential business information; and other adverse consequences, which may adversely affect our business.

In the ordinary course of our business, we and the third parties upon which we rely, collect, receive, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, process), proprietary, confidential, and sensitive data, including personal data, intellectual property, controlled unclassified information and trade secrets (collectively, sensitive information). Cybersecurity incidents such as malicious internet-based activity, online and offline fraud, denial-of-service attacks, ransomware attacks, business email compromises, computer malware, viruses, and social engineering (including through deep fakes or other attacks using artificial intelligence which may be increasingly more difficult to identify as fake, and phishing attacks) as well as natural disasters and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties upon which we rely.

Such threats are prevalent in the technology industry and our customers' industries and continue to rise, are increasingly difficult to detect, and come from a variety of sources, including traditional computer "hackers," threat actors, "hacktivists," organized criminal threat actors, personnel (such as through theft or misuse), sophisticated nation states, and nation-state-supported actors. The techniques may be used to sabotage or to obtain unauthorized access to our platform, systems, networks, or physical facilities where our quantum computers are stored, and we may be unable to implement adequate preventative measures or stop cybersecurity incidents from occurring or expanding in scope. U.S. law enforcement agencies have indicated to us that quantum computing technology is of particular interest to certain malicious cyber threat actors, including nation-state-supported actors. In addition, our cybersecurity risk could be increased as a result of the ongoing military conflict between Russia and Ukraine and the related sanctions imposed against Russia.

During times of war and other major conflicts, we, the third parties upon which we rely, may be vulnerable to a heightened risk of cybersecurity incidents, including retaliatory cyber-attacks, that could materially disrupt our systems and operations, our third-party information systems, supply chain, and ability to produce, sell and distribute our goods and services. We and the third parties upon which we rely are subject to a variety of evolving threats, including but not limited to social-engineering attacks (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service attacks (such as credential stuffing), credential harvesting, personnel misconduct or error, ransomware attacks, supply-chain attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, adware, telecommunications failures, earthquakes, fires, floods, and other similar threats.

In particular, severe ransomware attacks are becoming increasingly prevalent and can lead to significant interruptions in our operations, loss of sensitive data and income, reputational harm, and diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments.

Remote work has become more common and has increased risks to our information technology systems and data, as more of our employees utilize network connections, computers and devices outside our premises or network, including working at home, while in transit and in public locations. In addition, future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

We rely on third-party service providers and technologies to operate critical business systems to process sensitive information in a variety of contexts. Our platform is built to be accessed through third-party public cloud providers such as AWS. These providers may also experience cybersecurity incidents and attacks to their products which may impact our systems. Cybersecurity incidents may also result from non-technical means, such as actions by an employee with access to our systems. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If our third-party service providers experience a cybersecurity incident or other interruption, we could experience adverse consequences. While we may be entitled to damages if our third-party service providers fail to satisfy their privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award.

We may expend significant resources or modify our business activities to try to protect against security incidents. Certain data privacy and security obligations may require us to implement and maintain specific security measures to protect our information technology systems and sensitive information. While we and our third-party cloud providers have implemented security measures designed to protect against cybersecurity incidents, there can be no assurance that these measures will be effective and these measures could fail or may be insufficient. Although we take steps designed to detect, mitigate, and remediate vulnerabilities in our information systems (such as our hardware and/or software, including that of third parties upon which we rely), but we may not be able to detect and remediate all vulnerabilities on a timely basis because the threats and techniques used to exploit the vulnerability change frequently and are often sophisticated in nature. Therefore, such vulnerabilities could be exploited but may not be detected until after a cybersecurity incident has occurred.

In addition, applicable data privacy and security obligations may require us to notify relevant stakeholders, including affected individuals, customers, regulators, and investors of cybersecurity incidents. Such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences. Actual or perceived cybersecurity incidents affecting sensitive information about the Company, our partners, our customers or third parties could expose us and the parties affected to a risk of loss or misuse of this information, resulting in litigation and potential liability, paying damages, regulatory inquiries or actions, damage to our brand and reputation or other harm to our business. Our efforts to prevent and overcome these challenges could increase our expenses and may not be successful. If we fail to detect or remediate a cybersecurity incident in a timely manner, or it otherwise affects our customers or impacts our ability to operate our platform, we may experience adverse consequences, such as government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims); indemnification obligations; negative publicity; material damage to our reputation; monetary fund diversions; diversions of management attention; interruptions in our operations (including availability of data); financial loss; and other similar harms.

Cybersecurity incidents and attendant consequences may cause customers to stop using our services, deter new customers from using our services, and negatively impact our ability to grow and operate our business. Cybersecurity incidents also may result in current or future competitors obtaining sensitive information, including proprietary information.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. We cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or to mitigate liabilities arising out of our privacy and security practices, that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

In addition to experiencing a cybersecurity incident, third parties may gather, collect, or infer sensitive information about us from public sources, data brokers, or other means that reveal competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position.

Unfavorable conditions in our industry or the global economy could limit our ability to grow our business and negatively affect our results of operations.

Our results of operations have varied and may continue to vary based in part on the impact of changes in our industry or the global economy on us or our customers and potential customers. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, inflation, financial and credit market fluctuations, international trade relations and tariffs, pandemics, political turmoil, natural catastrophes, warfare, and terrorist attacks on the United States or elsewhere, could cause a decrease in business investments, including the progress on development of quantum technologies, and negatively affect the growth of our business. In addition, in challenging economic times, our current or potential future customers may experience cash flow problems and as a result may modify, delay or cancel plans to purchase our products and services. Additionally, if our customers are not successful in generating sufficient revenue or are unable to secure financing, they may not be able to pay, or may delay payment of, accounts receivable. Moreover, our key suppliers may reduce their output or become insolvent, thereby adversely impacting our ability to execute our research and development plans or manufacture our products .

Furthermore, uncertain economic conditions may make it more difficult for us to raise funds through borrowings or private or public sales of debt or equity securities. We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular industry.

Government actions and regulations, such as tariffs and trade protection measures, may limit our ability to obtain products from our suppliers or sell our products and services to customers. Political challenges between the United States and countries in which our suppliers are located, and changes to trade policies, including tariff rates and customs duties, trade relations between the United States and those countries and other macroeconomic issues could adversely impact our business. The United States administration has announced tariffs on certain products imported into the United States, and some countries have imposed tariffs in response to the actions of the United States. There is also a possibility of future tariffs, trade protection measures or other restrictions imposed on our products or on our customers by the United States or other countries that could have a material adverse effect on our business. Our technology may be deemed a matter of national security and as such our customer base may be tightly restricted. We may accept government grants that place restrictions on the business' ability to operate.

Unstable market and economic conditions have had and may continue to have serious adverse consequences on our business, financial condition and share price.

At times in the past, the global economy, including credit and financial markets, has experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, increases in inflation rates, higher interest rates, bank failures and uncertainty about economic stability. Any volatility or disruptions in market and economic conditions may have adverse consequences on us or the third parties on whom we rely. If general economic conditions were to deteriorate or remain uncertain for an extended period, our liquidity may be harmed and the trading price of our Common Stock could decline.

If the equity and credit markets deteriorate, including as a result of political unrest or war, it may make any necessary financing more difficult to obtain in a timely manner or on favorable terms, more costly or more dilutive, and we could be forced to delay, reduce or eliminate our research and development programs and other efforts. Increased inflation rates have and are expected to adversely affect us by increasing our costs, including labor and employee benefit costs, and costs for equipment and system components associated with system development. In addition, higher inflation could also increase our customers' operating costs, which could result in reduced budgets for our customers and potentially less demand for our systems. Any significant increases in inflation and related increase in interest rates could have a material adverse effect on our business, results of operations and financial condition.

If in the future a financial institution in which we hold funds fails or is subject to significant adverse conditions in the financial or credit markets, we could be subject to a risk of loss of all or a portion of such uninsured funds or be subject to a delay in accessing all or a portion of such uninsured funds. Any such loss or lack of access to these funds could adversely impact our short-term liquidity and ability to meet our operating expense obligations. Further, these events may make financings more difficult to obtain, and additional financing might not be available on reasonable terms, if at all; difficulties obtaining financing could have a material adverse effect on our financial condition, as well as our ability to continue to grow our operations.

If our cost and time estimates for fixed fee arrangements do not accurately anticipate the cost of servicing those arrangements, we could experience losses on these arrangements and our profitability could be reduced.

Our development contracts are often fixed fee arrangements invoiced on a milestone basis. If we underestimate the amount of effort required to deliver on a contract and/or the period of time required to achieve the milestone, our profitability could be reduced. If the actual costs of completing the contract exceed the agreed upon fixed price, we would incur a loss on the arrangement.

In the past we identified material weaknesses in our internal control over financial reporting, leading to a restatement of our financial statements for prior periods. These material weaknesses were subsequently remediated following implementation and testing of a series of new controls and procedures. If we identify additional material weaknesses or if we otherwise fail to establish and maintain effective control over financial reporting, it may adversely affect our ability to accurately and timely report our financial results in the future, and may adversely affect investor confidence, our reputation, our ability to raise additional capital and our business operations and financial condition.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis. In the past we identified material weaknesses in our internal control over financial reporting, leading to a restatement of our financial statements for prior periods. These material weaknesses were subsequently remediated following implementation and testing of a series of new controls and procedures.

We cannot ensure that the measures we have taken to date, and actions we may take in the future, will prevent or avoid potential future material weaknesses due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, in the future our controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our financial statements.

Any failure to maintain effective controls could limit our ability to prevent or detect a misstatement of our accounts or disclosures that could result in additional material misstatements of our annual or interim financial statements. In such a case, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to the listing requirements of the Nasdaq. In addition, we could be subject to sanctions or investigations by the SEC, the Nasdaq Stock Market or other regulatory authorities as well as shareholder litigation which would require additional financial and management resources, and investors may lose confidence in our financial reporting and our stock price may decline as a result.

As a result, our ability to obtain any additional financing, or additional financing on favorable terms, could be materially and adversely affected, which in turn, could materially and adversely affect our business, financial condition and the market value of our common stock and require us to incur additional costs to improve our internal control systems and procedures. In addition, the perceptions of the Company among customers, suppliers, lenders, investors, securities analysts and others could also be adversely affected.

Our facilities or operations could be damaged or adversely affected as a result of prolonged power outages, natural disasters and other catastrophic events.

Our facilities or operations could be adversely affected by power outages as well as events outside of our control, such as natural disasters and other calamities. We cannot assure you that any backup systems will be adequate to protect us from the effects of fire, floods, typhoons, earthquakes, power loss resulting from such natural disasters, telecommunications failures, break-ins, war, riots, terrorist attacks or similar events. Any of the foregoing events may give rise to interruptions, breakdowns, system failures, technology platform failures or internet failures, which could cause delays in development and fabrication, the loss or corruption of data or malfunctions of software or hardware as well as adversely affect our ability to provide services. A significant power outage may disrupt our operations and could have a material adverse impact on our business, financial condition, results of operations and cash flows.

Risks Related to Our International Expansion

Because our success depends, in part, on our ability to expand sales internationally, our business will be susceptible to risks associated with international operations.

We currently maintain offices and have personnel in the United States, the United Kingdom, Australia and Canada. In the years ended December 31, 2024 and December 31, 2023, our non-U.S. revenue was approximately 41.4% and 7.6% of our total revenue, respectively. Depending on customer opportunities and our ability to access quantum engineering talent, we may continue to expand our international operations, which may include opening offices in new jurisdictions. Any additional international expansion efforts that we are undertaking and may undertake may not be successful. In addition, conducting international operations subjects us to new risks, some of which we have not generally faced in the United States or other countries where we currently operate. These risks include, among other things:

- unexpected costs and errors in the localization of our platform and solutions, including translation into foreign languages and adaptation for local culture, practices and regulatory requirements;
- lack of familiarity and burdens of complying with foreign laws, legal standards, privacy and cybersecurity standards, regulatory requirements, foreign export control rules, tariffs and other barriers, and the risk of penalties to our customers and individual members of management or employees if our practices are deemed to not be in compliance;

- practical difficulties of enforcing intellectual property rights in countries with varying laws and standards and reduced or varied protection for intellectual property rights in some countries;
- an evolving legal framework and additional legal or regulatory requirements for data privacy and cybersecurity, which may necessitate the establishment of systems to maintain data in local markets, requiring us to invest in additional data centers and network infrastructure, and the implementation of additional employee data privacy documentation (including locally-compliant data privacy notice and policies), all of which may involve substantial expense and may cause us to need to divert resources from other aspects of our business, all of which may adversely affect our business;
- unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties or other trade restrictions;
- difficulties in managing systems integrators and technology partners;
- differing technology standards;
- different pricing environments, longer sales cycles, longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- increased financial accounting and reporting burdens and complexities;
- difficulties in managing and staffing international operations including the proper classification of independent contractors and other contingent workers, differing employer/employee relationships and local employment laws;
- increased costs involved with recruiting and retaining an expanded employee population outside the United States through cash and equity-based incentive programs and unexpected legal costs and regulatory restrictions in issuing our shares to employees outside the United States;
- global political and regulatory changes that may lead to restrictions on immigration and travel for our employees;
- fluctuations in exchange rates that may decrease the value of foreign-based revenue;
- potentially adverse tax consequences, including the complexities of foreign value added tax (or other tax) systems, restrictions on the repatriation of earnings, and transfer pricing requirements; and
- permanent establishment risks and complexities in connection with international payroll, tax and social security requirements for international employees.

Additionally, operating in international markets also requires significant management attention and financial resources. We cannot be certain that the investment and additional resources required in establishing operations in other countries will produce desired levels of revenue or profitability.

Compliance with laws and regulations applicable to our global operations also substantially increases the cost of doing business in foreign jurisdictions. We have limited experience in marketing, selling and supporting our platform outside of the United States. Our limited experience in operating our business internationally increases the risk that any potential future expansion efforts that we may undertake will not be successful. If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business, financial condition, revenues, results of operations or cash flows will suffer. We may be unable to keep current with changes in government requirements as they change from time to time. Failure to comply with these regulations could harm our business. In many countries, it is common for others to engage in business practices that are prohibited by our internal policies and procedures or other regulations applicable to us. Although we have implemented policies and procedures designed to ensure compliance with these laws and policies, there can be no assurance that all of our employees, contractors, partners and agents will comply with these laws and policies.

Violations of laws or key control policies by our employees, contractors, partners or agents could result in delays in revenue recognition, financial reporting misstatements, enforcement actions, reputational harm, disgorgement of profits, fines, civil and criminal penalties, damages, injunctions, other collateral consequences or the prohibition of the importation or exportation of our solutions and could harm our business, financial condition, revenues, results of operations or cash flows.

Our international sales and operations subject us to additional risks and costs, including the ability to engage with customers in new geographies, exposure to foreign currency exchange rate fluctuations, that can adversely affect our business, financial condition, revenues, results of operations or cash flows.

We derive a significant portion of revenue from our customers in the United States. We may expand our international operations if we are able to achieve narrow or broad quantum advantage. However, there are a variety of risks and costs associated with our international sales and operations, which may include making additional investments prior to the proven adoption of our solutions, the cost of conducting our business internationally and hiring and training international employees and the costs associated with complying with local law. Furthermore, we cannot predict the rate at which our platform and solutions will be accepted in international markets by potential customers.

We currently have sales, customer support and engineering personnel outside the United States in the United Kingdom, Australia and Canada; however, our sales, support and engineering organization outside the United States is smaller than our U.S. sales organization. We believe our ability to attract new customers to purchase our QPUs or subscribe to our platform, or to attract existing customers to expand their purchase of our QPUs or to renew or expand their use of our platform is directly correlated to the level of engagement we obtain with the customer. To the extent we are unable to effectively engage with non-U.S. customers due to our limited sales force capacity, we may be unable to effectively grow in international markets.

Given our international presence, we are exposed to the effects of fluctuations in currency exchange rates. While we have primarily transacted with customers in U.S. dollars, we expect to continue to generate some revenues, denominated in foreign currencies. Additionally, fluctuations in the value of the U.S. dollar and foreign currencies may make our QPUs or subscriptions more expensive for international customers, which could harm our business. Additionally, we incur expenses for employee compensation and other operating expenses at our non-U.S. locations in the local currency for such locations. Fluctuations in the exchange rates between the U.S. dollar and other currencies could result in an increase to the U.S. dollar equivalent of such expenses. These fluctuations could cause our results of operations to differ from our expectations or the expectations of our investors. Additionally, such foreign currency exchange rate fluctuations could make it more difficult to detect underlying trends in our business and results of operations.

Our international operations may subject us to greater than anticipated tax liabilities.

The amount of taxes we pay in different jurisdictions depends on the application of the tax laws of various jurisdictions, including the United States, to our international business activities, changes in tax rates, new or revised tax laws or interpretations of existing tax laws and policies, and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for pricing intercompany transactions pursuant to our intercompany arrangements or disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a challenge or disagreement were to occur, and our position was not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations. Our financial statements could fail to reflect adequate reserves to cover such a contingency. Similarly, a taxing authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a "permanent establishment" under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions.

Risks Related to Litigation and Government Regulation

We are subject to stringent and evolving U.S. state, federal and foreign laws, regulations and rules, contractual obligations, industry standards, policies and other obligations related to privacy, data use and security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; and otherwise, could adversely affect us and our business.

In the ordinary course of business, we collect, receive, store, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, "process") personal data and other sensitive information, including proprietary and confidential business data, trade secrets, and intellectual property. We are, therefore, subject to numerous data privacy and security obligations, such as state and federal laws and regulations, guidance, industry standards, external and internal privacy and security policies, contractual requirements, and other obligations related to privacy, data use and security.

In the United States, federal, state, and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), and other similar laws (e.g., wiretapping laws). In the past few years, numerous U.S. states—including California, Virginia, Colorado, Connecticut, and Utah—have enacted comprehensive privacy laws that impose certain obligations on covered businesses, including providing specific disclosures in privacy notices and affording residents with certain rights concerning their personal data.

As applicable, such rights may include the right to access, correct, or delete certain personal data, and to opt-out of certain data processing activities, such as targeted advertising, profiling, and automated decision-making. The exercise of these rights may impact our business and ability to provide our products and services. Certain states also impose stricter requirements for processing certain personal data, including sensitive information, such as conducting data privacy impact assessments. These state laws allow for statutory fines for noncompliance. For example, the California Consumer Privacy Act amended by the California Privacy Rights Act of 2020 ("CCPA"), applies to personal data of consumers, business representatives, and employees who are California residents, and requires businesses to provide specific disclosures in privacy notices and honor requests of such individuals to exercise certain privacy rights. The CCPA provides for fines of up to $7,500 per intentional violation and allows private litigants affected by certain data breaches to recover significant statutory damages. Similar laws are being considered in several other states, as well as at the federal and local levels. These developments further complicate compliance efforts, and increase legal risk and compliance costs for us, and the third parties upon whom we rely.

Our employees and personnel use generative artificial intelligence ("AI") technologies to perform their work, and the disclosure and use of personal information in generative AI technologies is subject to various privacy laws and other privacy obligations. Additionally, several states and localities have enacted measures related to the use of AI and machine learning in products and services. These developments may further complicate compliance efforts, and may increase legal risk and compliance costs for us, the third parties upon whom we rely, and our customers.

Outside of the United States, foreign governments are raising similar privacy and data security concerns. In particular, the United Kingdom's GDPR ("UK GDPR") imposes strict requirements for processing personal data. For example, under the UK GDPR, companies may face temporary or definitive bans on data processing and other corrective actions; fines of up to 17.5 million pounds or 4% of annual global revenue, whichever is greater; or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. In Canada, the Personal Information Protection and Electronic Documents Act ("PIPEDA") and various related provincial laws, as well as Canada's Anti-Spam Legislation ("CASL"), may apply to our operations.

In the ordinary course of business, we may transfer personal data from the United Kingdom (UK), Canada, Australia and other jurisdictions to the United States or other countries. The UK and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the UK has significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the UK to the United States in compliance with law, such as the UK's international data transfer addendum, these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States.

If there is no lawful manner for us to transfer personal data from the UK or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups.

We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. For example, certain privacy laws, such as the UK GDPR and CCPA, require our customers to impose specific contractual restrictions on their service providers. We publish privacy policies, marketing materials and other statements, such as compliance with certain certifications or self-regulatory principles, regarding data privacy and security. If these policies, materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Obligations related to data privacy and security are quickly changing, becoming increasingly stringent, and creating regulatory uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources, which may necessitate changes to our services, information technologies, systems, and practices and to those of any third parties that process personal data on our behalf. In addition, these obligations may require us to change our business model. We may at times fail (or be perceived to have failed) in our efforts to comply with our data privacy and security obligations. Moreover, despite our efforts, our personnel or third parties on whom we rely may fail to comply with such obligations, which could negatively impact our business operations.

If we or the third parties on which we rely fail, or are perceived to have failed, to address or comply with applicable data privacy and security obligations, we could face significant consequences, including but not limited to: government enforcement actions (e.g., investigations, fines, penalties, audits, inspections, and similar); litigation (including class-action claims); additional reporting requirements and/or oversight; bans on processing personal data; orders to destroy or not use personal data; and imprisonment of company officials.

Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to: loss of customers; interruptions or stoppages in our business operations; interruptions or stoppages of data collection needed to train our algorithms; inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or substantial changes to our business model or operations.

Contracts with U.S. government entities subject us to risks including early termination, audits, investigations, sanctions and penalties.

We have several contracts with various government entities, including contracts with the Defense Advanced Research Project Agency and the Department of Energy, among others, and we may enter into additional contracts with U.S. government entities in the future, which subjects our business to statutes and regulations applicable to companies doing business with the government, including the Federal Acquisition Regulation. These government contracts customarily contain provisions that give the government substantial rights and remedies, many of which are not typically found in commercial contracts and which are unfavorable to contractors. For instance, most U.S. government agencies include provisions that allow the government to unilaterally terminate or modify contracts for convenience, and in that event, the counterparty to the contract may generally recover only its incurred or committed costs and settlement expenses and profit on work completed prior to the termination. If the government terminates a contract for default, the defaulting party may be liable for any extra costs incurred by the government in procuring undelivered items from another source.

In addition, government contracts normally contain additional requirements that may increase our costs of doing business, reduce our profits, and expose us to liability for failure to comply with these terms and conditions. These requirements include, for example:

- specialized disclosure and accounting requirements unique to government contracts;
- cybersecurity safeguards and assessments beyond what are typically required by commercial equivalents;
- financial and compliance audits that may result in potential liability for price adjustments, recoupment of government funds after such funds have been spent, civil and criminal penalties, or administrative sanctions such as suspension or debarment from doing business with the U.S. government;
- public disclosures of certain contract and company information; and
- mandatory socioeconomic compliance requirements, including labor requirements, non-discrimination and affirmative action programs and environmental compliance requirements.

Government contracts are also generally subject to greater scrutiny by the government, which can initiate reviews, audits and investigations regarding our compliance with government contract requirements. In addition, if we fail to comply with government contracting laws, regulations and contract requirements, our contracts may be subject to termination, and we may be subject to financial and/or other liability under our contracts, the Federal Civil False Claims Act (including treble damages and other penalties), or criminal law. In particular, the False Claims Act's "whistleblower" provisions also allow private individuals, including present and former employees, to sue on behalf of the U.S. government. Any penalties, damages, fines or suspension could adversely affect our ability to operate our business and our financial results.

We are subject to U.S. and foreign anti-corruption, anti-bribery and similar laws, and non-compliance with such laws can subject us to criminal or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, and other anti-bribery, and anti-corruption laws in countries in which we conduct activities. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly to generally prohibit companies, their employees, and their third-party intermediaries from authorizing, promising, offering, providing, soliciting, or accepting, directly or indirectly, improper payments or benefits to or from any person whether in the public or private sector. We may engage with partners and third-party intermediaries to market our services and to obtain necessary permits, licenses, and other regulatory approvals. In addition, we or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities.

We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, and of our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. We cannot provide any assurance that all of our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

Detecting, investigating, and resolving actual or alleged violations of anti-corruption laws can require a significant diversion of time, resources, and attention from senior management. In addition, noncompliance with anti-corruption or anti-bribery laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, enforcement actions, fines, damages, other civil or criminal penalties, injunctions, suspension or debarment from contracting with certain persons, reputational harm, adverse media coverage, and other collateral consequences.

We are subject to government export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws.

Our products and technologies are subject to U.S. export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. U.S. export control and economic sanctions laws include restrictions or prohibitions on the sale or supply of certain products, technologies, and services to U.S. Government embargoed or sanctioned countries, governments, persons and entities. In addition, certain of our products and technology are subject to export licensing or approval requirements. Exports of our products and technology must be made in compliance with export control and sanctions laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers.

In addition, changes in our products or technologies or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our products and technologies in international markets or, in some cases, prevent the export or import of our products and technologies to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products and technologies, or in our decreased ability to export or sell our products and technologies to existing or potential customers. Any decreased use of our products and technologies or limitation on our ability to export or sell our products and technologies would likely adversely affect our business, financial condition and results of operations.

Further, the operation of our products within a fully operational quantum system may depend on products and technologies supplied by third parties. Changes in third party products or technologies or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our products and technologies to customers or, in some cases, prevent sales of our products and technologies to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products and technologies, or in our decreased ability to sell our products and technologies to existing or potential customers. Any decreased use of our products and technologies or limitation on our ability to sell our products and technologies would likely adversely affect our business, financial condition and results of operations.

We expect to incur significant costs in complying with these regulations. Regulations related to quantum computing are currently evolving and we face risks associated with changes to these regulations.

Our business is exposed to risks associated with litigation, investigations and regulatory proceedings.

We may in the future face legal, administrative and regulatory proceedings, claims, demands and/or investigations involving stockholder, consumer, competition and/or other issues relating to our business on a global basis. Litigation and regulatory proceedings are inherently uncertain, and adverse rulings could occur, including monetary damages, or an injunction stopping us from engaging in certain business practices, or requiring other remedies, such as compulsory licensing of patents. An unfavorable outcome or settlement may result in a material adverse impact on our business, results of operations, financial position and overall trends. In addition, regardless of the outcome, litigation can be costly, time-consuming, and disruptive to our operations. Any claims or litigation, even if fully indemnified or insured, could damage our reputation and make it more difficult to compete effectively or to obtain adequate insurance in the future. In addition, the laws and regulations our business is subject to are complex and change frequently. We may be required to incur significant expense to comply with changes in, or remedy violations of, these laws and regulations.

Furthermore, while we maintain insurance for certain potential liabilities, such insurance does not cover all types and amounts of potential liabilities and is subject to various exclusions as well as caps on recoverable amounts. Even if we believe a claim is covered by insurance, insurers may dispute our entitlement to recovery for a variety of potential reasons, which may affect the timing and, if the insurers prevail, the amount of our recovery.

We may become subject to product liability claims, which could harm our financial condition and liquidity if we are not able to successfully defend or insure against such claims.

We may become subject to product liability claims, even those without merit, which could harm our business prospects, operating results, and financial condition. We may face an inherent risk of exposure to claims in the event our quantum computers do not perform as expected or malfunction. A successful product liability claim against us could require us to pay a substantial monetary award. Moreover, a product liability claim could generate substantial negative publicity about our quantum computers and business and inhibit or prevent the commercialization of other future quantum computers, which would have material adverse effects on our brand, business, prospects and operating results. Any insurance coverage might not be sufficient to cover all potential product liability claims. Any lawsuit seeking significant monetary damages either in excess of our coverage, or outside of our coverage, may have a material adverse effect on our reputation, business and financial condition. We may not be able to secure additional product liability insurance coverage on commercially acceptable terms or at reasonable costs when needed, particularly if we do face liability for our products and are forced to make a claim under our policy.

We are subject to requirements relating to environmental and safety regulations and environmental remediation matters, which could adversely affect our business, results of operations and reputation.

We are subject to numerous federal, state and local environmental laws and regulations governing, among other things, solid and hazardous waste storage, treatment and disposal, and remediation of releases of hazardous materials. There are significant capital, operating and other costs associated with compliance with these environmental laws and regulations. Environmental laws and regulations may become more stringent in the future, which could increase costs of compliance or require us to manufacture with alternative technologies and materials.

Federal, state and local authorities also regulate a variety of matters, including, but not limited to, health, safety and permitting in addition to the environmental matters discussed above. New legislation and regulations may require us to make material changes to our operations, resulting in significant increases to the cost of production.

Our manufacturing process will have hazards such as but not limited to hazardous materials, machines with moving parts, and high voltage and/or high current electrical systems typical of large manufacturing equipment and related safety incidents. There may be safety incidents that damage machinery or product, slow or stop production, or harm employees. Consequences may include litigation, regulation, fines, increased insurance premiums, mandates to temporarily halt production, workers' compensation claims, or other actions that impact our brand, finances, or ability to operate.

Changes in tax laws or regulations that are applied adversely to us may have a material adverse effect on our business, cash flow, financial condition, or results of operations.

New tax laws, statutes, rules, regulations, or ordinances could be enacted at any time. For instance, the Inflation Reduction Act imposes, among other rules, a 15% minimum tax on the book income of certain large corporations and a 1% excise tax on certain corporate stock repurchases. Further, existing tax laws, statutes, rules, regulations, or ordinances could be interpreted differently, changed, repealed, or modified at any time. Any such enactment, interpretation, change, repeal, or modification could adversely affect us, possibly with retroactive effect. In particular, changes in corporate tax rates, the realization of our net deferred tax assets, the taxation of foreign earnings, and the deductibility of expenses under the Tax Cuts and Jobs Act, as amended by the Coronavirus Aid, Relief, and Economic Security Act or any future tax reform legislation, could have a material impact on the value of our deferred tax assets, result in significant one-time charges, and increase our future tax expenses.

Risks Related to Intellectual Property

Any failure to obtain, maintain and protect our intellectual property rights could impair our ability to protect and commercialize our proprietary products and technology and cause us to lose our competitive advantage.

Our success depends, in significant part, on our ability to obtain, maintain, enforce and defend our intellectual property rights, including patents and trade secrets. We rely upon a combination of the intellectual property protections afforded by patent, copyright, trademark and trade secret laws in the United States and other jurisdictions, as well as license agreements and other contractual protections, to establish, maintain and enforce rights in our proprietary technologies. In addition, we seek to protect our intellectual property rights through nondisclosure and invention assignment agreements with our employees and consultants, and through non-disclosure agreements with business partners and other third parties.

However, we may not be able to prevent unauthorized use of our intellectual property. Our trade secrets may also be compromised, which could cause us to lose our competitive advantage. Third parties may attempt to copy or otherwise obtain, use or infringe our intellectual property.

Monitoring and detecting unauthorized use of our intellectual property is difficult and costly, and the steps we have taken or will take to prevent infringement or misappropriation may not be sufficient. Any enforcement efforts we undertake, including litigation, could be time-consuming and expensive and could divert management's attention, which could harm our business, results of operations, and financial condition. In addition, existing intellectual property laws and contractual remedies may afford less protection than needed to safeguard our intellectual property portfolio, and third parties may develop competitive offerings in a manner that leaves us with limited means to enforce our intellectual property rights against them.

Patent, copyright, trademark and trade secret laws vary significantly throughout the world. A number of foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States. Therefore, our intellectual property rights may not be as strong or as easily enforced outside of the United States and efforts to protect against the unauthorized use of our intellectual property rights, technology and other proprietary rights may be more expensive and difficult outside of the United States.

Failure to adequately protect our intellectual property rights could result in our competitors using our intellectual property to offer products, potentially resulting in the loss of some of our competitive advantage and a decrease in our revenue, which would adversely affect our business, financial condition and operating results.

Our inability to secure patent protection or enforce our patent rights could have a material adverse effect on our ability to prevent others from commercializing similar products or technology.

The application and registration of patents involves complex legal and factual questions. As a result, we cannot be certain that the patent applications that we file will result in patents being issued, or that our patents and any future patents that do issue will afford protection against competitors with similar technology. Numerous patents and pending patent applications owned by others exist in the fields in which we have developed and are developing our technology, and this may make it difficult for us to obtain certain patent coverage on our own. Any of our existing or pending patents may also be challenged by others on the basis that they are otherwise invalid or unenforceable. Furthermore, patent applications filed in foreign countries are subject to laws, rules and procedures that differ from those of the United States, and thus we cannot be certain that foreign patent applications related to issued U.S. patents will be issued.

Even if our patent applications succeed, it is still uncertain whether these patents will be contested, circumvented, invalidated or limited in scope in the future. The rights granted under any issued patents may not provide us with meaningful protection or competitive advantages. The intellectual property rights of others could bar us from licensing and exploiting any patents that issue from our pending applications, and the claims under any patents that issue from our patent applications may not be broad enough to prevent others from developing technologies that are similar or that achieve results similar to ours. In addition, patents issued to us may be infringed upon or designed around by others and others may obtain patents that require license or design around, either of which would increase costs and may adversely affect our business, prospects, financial condition and operating results.

We may face patent infringement and other intellectual property claims that could be costly to defend, result in injunctions and significant damage awards, or limit our ability to use certain key technologies in the future, all of which could harm our business.

Our success depends, in part, on our ability to develop and commercialize our products, services and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. However, we may not be aware that our products, services or technologies are infringing, misappropriating or otherwise violating third-party intellectual property rights and such third parties may bring claims alleging such infringement, misappropriation or violation.

For example, there may be issued patents of which we are unaware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by our current or future products, services or technologies. Also, because patent applications can take years to issue and are often afforded confidentiality for some period of time, there may currently be pending applications, unknown to us, that later result in issued patents that could cover our current or future products, services or technologies. The strength of our defenses will depend on the rights asserted, the interpretation of these rights, and our ability to invalidate the asserted rights. However, we could be unsuccessful in advancing non-infringement and/or invalidity arguments in our defense. Companies that have developed and are developing technology are often required to defend against litigation claims based on allegations of infringement, misappropriation or other violations of intellectual property rights. Our products, services or technologies may not be able to withstand third-party claims against their use. In addition, as compared to us, many companies have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them.

If a third party is able to obtain an injunction preventing us from using or accessing such third-party intellectual property rights, or if we cannot license or develop alternative technology for any infringing aspect of our business, we may be forced to limit or stop sales of our products, services or technologies or cease business activities related to such intellectual property. Although we carry general liability insurance, our insurance may not cover potential claims of this type or may not be adequate to indemnify us for all liability that may be imposed. We cannot predict the outcome of lawsuits and cannot ensure that the results of any such actions will not have an adverse effect on our business, financial condition or results of operations. Even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and harm our business and operating results. Further, there could be public announcements of the intellectual property litigation, and if securities analysts, investors or others perceive the potential impact to be negative or risks to be substantial, it could have an adverse effect on the price of our Common Stock.

- Any intellectual property litigation to which we might become a party, or for which we are required to provide indemnification, regardless of the merit of the claim or our defenses, may require us to do one or more of the following:
- cease selling or using solutions or services that incorporate the intellectual property rights that allegedly infringe, misappropriate or violate the intellectual property of a third party;
- make substantial payments for legal fees, settlement payments or other costs or damages;
- obtain a license, which may not be available on reasonable terms or at all, to sell or use the relevant technology;
- redesign the allegedly infringing solutions to avoid infringement, misappropriation or violation, which could be costly, time-consuming or impossible; or
- indemnify third parties using our products or services.

The occurrence of infringement claims may grow as the market for our products, services and technologies grows. Accordingly, our exposure to damages resulting from infringement claims could increase and this could further exhaust our financial and management resources.

We rely on certain open-source software in our quantum systems. If licensing terms change, our business may be adversely affected.

Our platform utilizes software licensed to us by third-party authors under "open-source" licenses and we expect to continue to utilize open-source software in the future. The use of open-source software may entail greater risks than the use of third-party commercial software, as open-source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. To the extent that our platform depends upon the successful operation of the open-source software we use, any undetected errors or defects in this open-source software could prevent the deployment or impair the functionality of our platform, delay new solution introductions, result in a failure of our platform and injure our reputation. For example, undetected errors or defects in open-source software could render us vulnerable to breaches or security attacks, and, in conjunction, make our systems more vulnerable to data breaches.

Furthermore, some open-source licenses require the release of proprietary source code combined with, linked to or distributed with such open-source software to be released to the public. If we combine, link or distribute our proprietary software with open-source software in a specific manner, we could, under some open-source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar solutions with lower development effort and time and ultimately put us at a competitive disadvantage.

Although we monitor our use of open-source software to avoid subjecting our platform to conditions we do not intend to attach to such platform or our proprietary code, we cannot assure you that our processes for controlling such use will be effective. If we are held to have breached the terms of an open-source software license, we could be required to seek licenses from third parties to continue operating using our solution on terms that are not economically feasible, to re-engineer our solution or the supporting computational infrastructure to discontinue use of code, or to make generally available, in source code form, portions of our proprietary code. This could allow our competitors to create similar solutions with lower development effort and time and ultimately put us at a competitive disadvantage.

Some of our intellectual property has been or may be conceived or developed through government-funded research and thus may be subject to federal regulations providing for certain rights for the U.S. government or imposing certain obligations on us, such as a license to the U.S. government under such intellectual property, "march-in" rights, certain reporting requirements and a preference for U.S.-based companies, and compliance with such regulations may limit our exclusive rights and our ability to contract with non-U.S. manufacturers.

As a result, the U.S. government may have certain rights to intellectual property embodied in our current or future product candidates pursuant to the Bayh-Dole Act of 1980, or the Patent and Trademark Law Amendments Act. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose.

In addition, the U.S. government has the right, under certain limited circumstances, to require the licensor to grant exclusive, partially exclusive or non-exclusive licenses to any of these inventions to a third party if it determines that (1) adequate steps have not been taken to commercialize the invention, (2) government action is necessary to meet public health or safety needs or (3) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in" rights).

The U.S. government also has the right to take title to these inventions if the licensor fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U.S. government requires that any products embodying any of these inventions or produced through the use of any of these inventions be manufactured substantially in the United States, and some of our license agreements require that we comply with this requirement.

This preference for U.S. industry may be waived by the federal agency that provided the funding if the owner or assignee of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture the products substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. To the extent any of our owned or licensed future intellectual property is also generated through the use of U.S. government funding, the provisions of the Bayh-Dole Act may similarly apply.

Risks related to an Investment in our Securities and other General Matters

The market price of our Common Stock and Public Warrants has been and may continue to be volatile.

The price of our Common Stock and Public Warrants has been and may continue to be volatile and has and may fluctuate or decline significantly in response to numerous factors, some of which are beyond our control. The securities markets have experienced and continue to experience significant volatility. As a result of this volatility, investors in our common stock may not be able to sell their shares at or above the prices they paid. Further, as a result of this volatility it may be difficult for us to attract new investments, including additional offerings of our securities, on terms we consider reasonable, or at all.

In the twelve-month period ended December 31, 2024, the market price of our Common Stock varied between a high of $19.35 on December 27, 2024 and a low of $0.66 on September 9, 2024 and the market price of our Public Warrants varied between a high of $8.60 on December 27, 2024 and a low of $0.06 on September 23, 2024. Market volatility, as well as general economic, market or political conditions, could reduce the market price of shares of our Common Stock or Public Warrants regardless of our operating performance. Our operating results could be below the expectations of public market analysts and investors due to a number of potential factors, including:

- our ability to meet our technological milestones, including any delays;
- changes in the industries in which we and our customers operate;
- variations in our operating performance and the performance of our competitors in general;
- material and adverse impact of military conflicts and wars around the world;
- actual or anticipated fluctuations in our quarterly or annual operating results;
- publication of research reports by securities analysts about us or our competitors or our industry;
- the public's reaction to our press releases, our other public announcements and our filings with the SEC;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- additions and departures of key personnel;

- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation involving the Company;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of shares of our Common Stock available for public sale, including the significant percentage of shares of our Common Stock that may be offered for resale;
- the public's response to press releases or other public announcements by us or third parties, including our filings with the SEC;
- guidance, if any, that we provide to the public, any changes in this guidance or our failure to meet this guidance, including with respect to our technology roadmap;
- the development and sustainability of an active trading market for our stock;
- actions by institutional or activist stockholders;
- changes in accounting standards, policies, guidelines, interpretations or principles; and
- other events or factors, including recessions, increases in inflation and interest rates, disruptions to banking systems, foreign currency fluctuations, international tariffs, social, political and economic risks, natural disasters, acts of war (including the conflict involving Russia and Ukraine), terrorism or responses to such events.

These market and industry factors may materially reduce the market price of our Common Stock and our Public Warrants regardless of the operating performance of the Company. In the past, following periods of market volatility, stockholders have instituted securities class action litigation. If we are involved in securities litigation, it could have a substantial cost and divert resources and the attention of executive management from our business regardless of the outcome of such litigation.

The volatility in our stock price can also affect the listing of our Common Stock on the Nasdaq Capital Market. To maintain such listing, we are required to meet certain listing requirements, including a minimum closing bid price of $1.00 per share. In September 2024, we received a letter from the Listing Qualifications Department of the Nasdaq Stock Market, LLC, indicating that, based on the closing bid price for the previous 30 days, the listing of our Common Stock was not in compliance with Nasdaq Listing Rule 5550(a)(2) to maintain a minimum bid price of $1.00 per share. While we regained compliance in November 2024, there can be no assurance that we will be able to maintain compliance with the Nasdaq Capital Market continued listing requirements in the future or regain compliance with respect to any future deficiencies. This could impair the liquidity and market price of our common stock. In addition, the delisting of our common stock from a national exchange would have a material adverse effect on our access to capital markets, and any limitation on market liquidity or reduction in the price of our common stock because of that delisting would adversely affect our ability to raise capital on terms acceptable to us, or at all.

The filing of this Annual Report on Form 10-K will render us a "well-known seasoned issuer" as defined in Rule 405 of the Securities Act because our non-affiliated common stock public float was above $700.0 million as of the relevant determination date. We are therefore currently able to take advantage of the benefits associated with being a well-known seasoned issuer, such as filing a new shelf registration statement on Form S-3ASR that would be automatically effective upon filing (a "Form S-3ASR"). If at a specific measurement time in the future, our public float is below $700.0 million, we may no longer qualify as a well-known seasoned issuer and suffer negative consequences. If we do not qualify as a well-known seasoned issuer, we will not be able to file automatic shelf registration statements on Form S-3ASR and enjoy the benefits associated with such registration statements, such as automatic effectiveness immediately upon filing, permitting companies to omit more information from the base prospectus than permitted for other shelf registration statements, allowing companies to register unspecified amounts of securities and doing so without allocating among securities or between primary and secondary offerings, and permitting companies to pay filing fees on a "pay-as-you-go" basis at the time of each takedown from the shelf registration statement. We would also need to convert any Form S-3ASR to a non-automatic shelf registration statement. Not qualifying as a well-known seasoned issuer could also impact the views or perceptions of investors and analysts and may influence investors' willingness to purchase or hold our securities or analysts' recommendations regarding our securities.

We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act, which could result in sanctions or other penalties that would adversely impact our business.

As a public company, and particularly after we are no longer an "emerging growth company," we have and will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company, including costs resulting from public company reporting obligations under the Securities Act or the Exchange Act, and regulations regarding corporate governance practices.

The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the rules of the SEC, the listing requirements of the Nasdaq, and other applicable securities rules and regulations that impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We have hired additional accounting, finance, and other personnel in connection with our efforts to comply with the requirements of being a public company and our management and other personnel devote a substantial amount of time towards maintaining compliance with these requirements. These requirements have increased our legal and financial compliance costs and made some activities more time-consuming and costly. Changes we have made and any changes we make in the future to comply with these obligations may not be sufficient to allow us to satisfy our obligations as a public company on a timely basis, or at all.

These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

Pursuant to Sarbanes-Oxley Act Section 404, we are required to furnish a report by our management on our internal control over financial reporting in our Annual Reports on Form 10-K with the SEC. However, while we remain an emerging growth company, we are not required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

To achieve compliance with Sarbanes-Oxley Act Section 404, we engaged in a process to enhance our internal control over financial reporting, which was both costly and challenging. Despite our efforts, there is a risk that we will not be able to conclude in the future, that our internal control over financial reporting is effective as required by Sarbanes-Oxley Act Section 404. See *In the past we identified material weaknesses in our internal control over financial reporting, leading to a restatement of our financial statements for prior periods. These material weaknesses were subsequently remediated following implementation and testing of a series of new controls and procedures. If we identify additional material weaknesses or if we otherwise fail to establish and maintain effective control over financial reporting, it may adversely affect our ability to accurately and timely report our financial results in the future, and may adversely affect investor confidence, our reputation, our ability to raise additional capital and our business operations and financial condition.*

We have incurred and will continue to incur substantial costs as a result of operating as a public company, and our management will continue to devote substantial time to new compliance initiatives.

As a public company, we incur substantial legal, accounting, and other expenses that we did not incur as a private company. For example, we are subject to the reporting requirements of the Exchange Act, the applicable requirements of the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the rules and regulations of the SEC and the listing standards of Nasdaq.

The Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business, financial condition and results of operations. Compliance with these rules and regulations increase our legal and financial compliance costs and increase demand on our systems, particularly after we are no longer an emerging growth company. In addition, as a public company, we may be subject to shareholder activism, which can lead to additional substantial costs, distract management and impact the manner in which we operate our business in ways we cannot currently anticipate. As a result of the disclosure of information in this Annual Report on Form 10-K and in filings required of a public company, our business and financial condition are more visible, which may result in threatened or actual litigation, including by competitors.

Our management team may not successfully or efficiently manage the significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These obligations and constituents will require significant attention from our senior management and could divert their attention away from the day-to-day management of the business, which could adversely affect our business, financial condition, and results of operations.

We do not intend to pay cash dividends for the foreseeable future.

We currently intend to retain future earnings, if any, to finance the further development and expansion of our business and do not intend to pay cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in future agreements and financing instruments, business prospects and such other factors as our board of directors deems relevant.

Our quarterly operating results have and may fluctuate significantly and could fall below the expectations of securities analysts and investors due to many factors, some of which are beyond our control, resulting in a decline in our stock price.

Our quarterly operating results have and may fluctuate significantly because of several factors, including:

- labor availability and costs for hourly and management personnel;
- profitability of our products, especially in new markets and due to seasonal fluctuations;
- changes in interest rates;
- impairment of long-lived assets;
- macroeconomic conditions, both nationally and locally;
- negative publicity relating to our products;
- changes in consumer preferences and competitive conditions; and
- expansion to new markets.

Reports published by analysts, including projections in those reports that differ from our actual results, could adversely affect the price and trading volume of our securities.

Securities research analysts have and may establish and publish their own periodic projections for us. These projections may vary widely and may not accurately predict the results we actually achieve. Our share price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on us downgrades our stock or publishes inaccurate or unfavorable research about our business, our share price could decline. If one or more of these analysts fails to publish reports on us regularly, our share price or trading volume could decline. If analysts cease coverage of us, the market price and volume for our securities could be adversely affected.

Sales of our securities, or the perception of such sales, by us or holders of our securities in the public market or otherwise could cause the market price for our securities to decline, and even in such case, certain holders of our securities may still have an incentive to sell our securities.

The sale of our securities in the public market or otherwise, or the perception that such sales could occur, could harm the prevailing market price of shares of our securities. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell securities in the future at a time and price which we deem appropriate. Resales of our securities may cause the market price of our securities to drop significantly, even if our business is doing well.

The market price of our Common Stock could decline if holders of our shares sell them, including pursuant to resale registration statements, or are perceived by the market as intending to sell them. As such, sales of a substantial number of shares of our Common Stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our Common Stock.

Future issuances of our securities may adversely affect us, including the price of our securities and may be dilutive to existing securities holders.

In the future, we may incur debt or issue equity ranking senior to our Common Stock. Those securities will generally have priority upon liquidation. Such securities also may be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our Common Stock.

Because our decision to issue debt or equity in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing, nature or success of our future capital raising efforts. As a result, future capital raising efforts may reduce the market price of our Common Stock and be dilutive to existing stockholders. In addition, our ability to raise additional capital through the sale of equity or convertible debt securities could be significantly impacted by the resale of shares of Common Stock by selling securityholders which could result in a significant decline in the trading price of our Common Stock and potentially hinder our ability to raise capital at terms that are acceptable to us or at all.

In addition, we may issue additional shares of Common Stock from time to time, including under our equity incentive plans or employee stock purchase plan, or preferred stock. Common Stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market once those shares are issued, subject to provisions relating to various vesting agreements and, in some cases, limitations on volume and manner of sale applicable to affiliates under Rule 144, as applicable.

We have filed registration statements on Form S-8 under the Securities Act registering the issuance of shares of Common Stock subject to options or other equity awards issued or reserved for future issuance under our equity incentive plans and employee stock purchase plan.

In addition, we have filed and may file in the future one or more registration statements on Form S-8 under the Securities Act to register additional shares of Common Stock or securities convertible into or exchangeable for shares of Common Stock issued pursuant to our equity incentive plans and employee stock purchase plan, including additional registration statements on Form S-8 to register additional shares of Common Stock pursuant to the "evergreen" provision thereunder. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options and the restrictions of Rule 144 in the case of our affiliates. Sales of a substantial number of shares of our Common Stock in the public market could occur at any time.

Any such issuances of additional shares of Common Stock or preferred stock:

- may significantly dilute the equity interests of our investors;
- may subordinate the rights of holders of Common Stock if preferred stock is issued with rights senior to those afforded our Common Stock;
- could cause a change in control if a substantial number of shares of our Common Stock are issued, which may affect, among other things, our ability to use our net operating loss carry forwards, and could result in the resignation or removal of our present officers and directors; and
- may adversely affect prevailing market prices for our securities.

Furthermore, we currently have on file with the SEC an effective shelf registration statement on Form S-3 with a remaining available balance as of March 1, 2025 of $50 million (original balance of $250 million), which allows us to offer and sell any combination of common stock, common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon exercise of warrants from time to time (the "Form S-3"). Upon filing this Annual Report on Form 10-K, we now qualify as a "well-known seasoned issuer" as defined in Rule 405 of the Securities Act. For so long as we qualify as a "well-known seasoned issuer," we may also issue an unspecified amount of shares of our common stock, preferred stock, debt securities and warrants pursuant to the Form S-3ASR. Sales of such securities under the Form S-3 or Form S-3ASR may be dilutive to existing securities holders and could cause the price of our securities to decline.

We are currently an "emerging growth company" and "smaller reporting company" within the meaning of the Securities Act, and to the extent we have taken advantage of certain exemptions from disclosure requirements available to emerging growth companies or smaller reporting companies, this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an "emerging growth company" within the meaning of the Securities Act, as modified by the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

As a result, our shareholders may not have access to certain information they may deem important. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our Class A ordinary shares held by non-affiliates exceeds $700 million as of June 30, in which case we would no longer be an emerging growth company as of the following fiscal year. We do not know if investors find our securities less attractive because we rely on these exemptions. If some investors find our securities less attractive as a result of our reliance on these exemptions, the trading prices of our securities may be lower than they otherwise would be, there may be a less active trading market for our securities and the trading prices of our securities may be more volatile.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such an election to opt out is irrevocable.

We have elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period, difficult or impossible because of the potential differences in accounting standards used.

Delaware law and our Certificate of Incorporation and Bylaws contain certain provisions, including anti-takeover provisions, that limit the ability of stockholders to take certain actions and could delay or discourage takeover attempts that stockholders may consider favorable.

Our Certificate of Incorporation and bylaws of the Company (the "Bylaws") and the General Corporation Law of the State of Delaware ("DGCL") contain provisions that could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by the board of directors of Rigetti (the "Board") and therefore depress the trading price of our Common Stock. These provisions could also make it difficult for stockholders to take certain actions, including electing directors who are not nominated by the current members of the Board or taking other corporate actions, including effecting changes in our management. Among other things, the Certificate of Incorporation and Bylaws include provisions regarding:

- providing for a classified board of directors with staggered, three-year terms;
- the ability of the Board to issue up to 10,000,000 shares of preferred stock, including "blank check" preferred stock, with any rights, preferences and privileges as they may designate, including the right to approve an acquisition or other change of control;
- provide that the authorized number of directors may be changed only by the resolution of the Board;
- provide that, subject to the rights of the holders of any series of preferred stock, any individual director or directors may be removed only with cause by the affirmative vote of the holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent or electronic transmission;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- provide that special meetings of our stockholders may be called by the chairperson of the Board, the chief executive officer or by the Board pursuant to a resolution adopted by a majority of the total number of authorized directors; and
- not provide for cumulative voting rights, therefore allowing the holders of a majority of the shares of Common Stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in the Board or management.

The Certificate of Incorporation designates the Court of Chancery of the State of Delaware or the United States federal district courts as the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, stockholders, employees or agents.

The Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for state law claims for: (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any current or former director, officer or other employee, or stockholder of Rigetti to Rigetti or our stockholders; (iii) any action or claim against the Company or any current or former director, officer or other employee or stockholder of the Company, arising out of or pursuant to any provision of the DGCL or the Certificate of Incorporation or the Bylaws; (iv) any action seeking to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or the Bylaws; (v) any action or claim as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and (vi) any action against the Company or any current or former director, officer or other employee or stockholder of the Company, governed by the internal-affairs doctrine of the law of the State of Delaware, in all cases to the fullest extent permitted by law. The foregoing provisions will not apply to any claims as to which the Delaware Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of such court, which is rested in the exclusive jurisdiction of a court or forum other than such court (including claims arising under the Exchange Act), or for which such court does not have subject matter jurisdiction, or to any claims arising under the Securities Act and, unless we consent in writing to the selection of an alternative forum, the United States federal district courts will be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules or regulations thereunder. Accordingly, both state and federal courts have jurisdiction to entertain such Securities Act claims.

To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, the Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, United States federal district courts shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. There is uncertainty as to whether a court would enforce the forum provision with respect to claims under the federal securities laws.

This choice of forum provision in our Certificate of Incorporation may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, which may discourage lawsuits with respect to such claims.

There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find the choice of forum provision contained in the Certificate of Incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

Furthermore, investors cannot waive compliance with the federal securities laws and rules and regulations thereunder.

Our warrants, including our Public Warrants, Private Warrants and other warrants we have issued, and our Sponsor Vesting Shares are accounted for as liabilities and the changes in value of our Warrants and Sponsor Vesting Shares could have a material effect on our financial results.

We are subject to complex securities laws and regulations and accounting principles and interpretations. The preparation of our financial statements requires us to interpret accounting principles and guidance and to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported expenses incurred during the reporting periods. We base our interpretations, estimates and judgments on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for the preparation of our financial statements. GAAP presentation is subject to interpretation by the SEC, the Financial Accounting Standards Board and various other bodies formed to interpret and create appropriate accounting principles and guidance. If one of these bodies disagrees with our accounting recognition, measurement or disclosure or any of our accounting interpretations, estimates or assumptions, it may have a significant effect on our reported results and may retroactively affect previously reported results.

On April 12, 2021, the Acting Director of the Division of Corporation Finance and Acting Chief Accountant of the SEC together issued a statement regarding the accounting and reporting considerations for warrants issued by special purpose acquisition companies entitled "Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SPACs")" (the "SEC Statement").

Specifically, the SEC Statement focused on certain settlement terms and provisions related to certain tender offers following a business combination, which terms are similar to those contained in the warrant agreement governing our Warrants. As a result of the SEC Statement, we reevaluated the accounting treatment of our 8,625,000 Public Warrants and 4,450,000 Private Warrants and determined to classify the Warrants as derivative liabilities measured at fair value, with changes in fair value each period reported in earnings.

As a result, included in our balance sheets as of December 31, 2024 and December 31, 2023 contained in this Annual Report on Form 10-K are derivative liabilities related to embedded features contained within our Warrants. Accounting Standards Codification 815, Derivatives and Hedging ("ASC 815"), provides for the remeasurement of the fair value of such derivatives at each balance sheet date, with a resulting non-cash gain or loss related to the change in the fair value being recognized in earnings in the statements of operations. Our balance sheets as of December 31, 2024 and December 31, 2023 also include liabilities for Sponsor Vesting Shares, which are remeasured to fair value at each balance sheet date, with the resulting non-cash gain or loss related to the change in fair value being recognized in earnings in the consolidated statements of operations. As a result of the recurring fair value measurements, our financial statements and results of operations may fluctuate quarterly, based on factors which are outside of our control.

Due to the recurring fair value measurements, we expect that we will recognize non-cash gains or losses on our Warrants and Sponsor Vesting Shares each reporting period and that the amount of such gains or losses could be material. The impact of changes in fair value on earnings may have an adverse effect on the market price of our securities.

No assurance can be given that additional guidance or new regulations or accounting principles and interpretations will not be released that would require a restatement of our financial statements with respect to treatment of the Warrants or the Sponsor Vesting Shares.

Any such restatement of our financial results could, among other potential adverse effects:

- result in us incurring substantial costs;
- affect our ability to timely file our periodic reports until the restatement is completed;
- divert the attention of our management and employees from managing our business;
- result in material changes to our historical and future financial results;
- result in investors losing confidence in our operating results;
- subject us to securities class action litigation; and
- cause our stock price to decline.

Our warrants are exercisable for Common Stock, the exercise of which would increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.

As of December 31, 2024, the following warrants were outstanding:

- Public Warrants and Private Warrants to purchase an aggregate of 13,074,972 shares of Common Stock with an exercise price of $11.50 per share.
- Series C Warrants (as defined herein) to purchase 793,800 shares of Common Stock with an exercise price of $0.01.
- Other Warrants to purchase 2,715,755 shares of our common stock, including a Customer Warrant (as defined herein) to purchase an aggregate of 2,680,607 shares of Class A Common Stock with an exercise price of $1.152 per share.

To the extent the aforementioned warrants are exercised, additional shares of Common Stock will be issued, which will result in dilution to the holders of Common Stock and increase the number of shares eligible for resale in the public market. We believe the likelihood that warrant holders will exercise their warrants, and therefore the amount of cash proceeds that we would receive, is dependent upon the trading price of our Common Stock. If the trading price for our Common Stock is less than $11.50 per share, we believe holders of our Public Warrants and Private Warrants will be unlikely to exercise their warrants. On March 5, 2025, the last reported sales price of our Common Stock was $8.18 per share.

Sales of substantial shares in the public market or the fact that warrants may be exercised could adversely affect the market price of our Common Stock. There is no guarantee that the Public Warrants or Private Warrants will ever be in the money prior to their expiration, and as such, the warrants may expire worthless. See "*The warrants may never be in the money, and they may expire worthless and the terms of the Public Warrants may be amended in a manner adverse to a holder if holders of at least 50% of the then outstanding Public Warrants approve of such amendment*."

The terms of the Public Warrants may be amended in a manner adverse to a holder if holders of at least 50% of the then outstanding Public Warrants approve of such amendment.

The warrants were issued in registered form under a warrant agreement (the "warrant agreement") between American Stock Transfer & Trust Company, as warrant agent, and Supernova. The warrant agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision or correct any mistake but requires the approval by the holders of at least 50% of the then-outstanding Public Warrants to make any change that adversely affects the interests of the registered holders of the Public Warrants. Accordingly, we may amend the terms of the Public Warrants in a manner adverse to a holder if holders of at least 50% of the then-outstanding Public Warrants approve of such amendment and, solely with respect to any amendment to the terms of the Private Warrants or any provision of the warrant agreement with respect to the Private Warrants, 50% of the number of the then outstanding Private Warrants.

Although our ability to amend the terms of the Public Warrants with the consent of at least 50% of the then-outstanding Public Warrants is unlimited, examples of such amendments could be amendments to, among other things, increase the exercise price of the Public Warrants, convert the Public Warrants into cash, shorten the exercise period or decrease the number of shares of Common Stock purchasable upon exercise of a Public Warrant.

We may redeem your unexpired Public Warrants prior to their exercise at a time that is disadvantageous to the holder, thereby making such Public Warrants worthless.

When the price per share of our Common Stock equals or exceeds $18.00, we may redeem the outstanding warrants in whole and not in part, at a price of $0.01 per warrant as follows:

- upon a minimum of 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the shares of our Common Stock equals or exceeds $18.00 per share on the trading day prior to the date on which we send the notice of redemption to the warrant holders.

If the foregoing conditions are satisfied, we issue a notice of redemption of the warrants, each warrant holder will be entitled to exercise its warrant prior to the scheduled redemption date. Any such exercise would not be done on a "cashless" basis and would require the exercising warrant holder to pay the exercise price in cash for each warrant being exercised. The price of the shares of our Common Stock may fall below the $18.00 redemption trigger price as well as the $11.50 warrant exercise price after the redemption notice is issued.

If and when the Public Warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. Redemption of the outstanding Public Warrants could force you to: (i) exercise your Public Warrants and pay the exercise price therefore at a time when it may be disadvantageous for you to do so; (ii) sell your Public Warrants at the then-current market price when you might otherwise wish to hold your warrants; or (iii) accept the nominal redemption price which, at the time the outstanding Public Warrants are called for redemption, is likely to be substantially less than the market value of your warrants.

When the price per share of our Common Stock equals or exceeds $10.00, we may redeem the outstanding warrants in whole and not in part, at a price of $0.10 per warrant as follows:

- upon a minimum of 30 days' prior written notice of redemption provided that holders will be able to exercise their warrants on a cashless basis prior to redemption as described below; and
- if, and only if, the closing price of our Common Stock equals or exceeds $10.00 per share on the trading day prior to the date on which we send the notice of redemption to the warrant holders.

Beginning on the date the notice of redemption is given until the warrants are redeemed or exercised, holders may elect to exercise their warrants on a cashless basis and could potentially receive up to a maximum of 0.361 shares of Common Stock per warrant or a minimum of 0.034 shares of Common Stock per warrant. The number of shares of Common Stock that a warrant holder will ultimately receive upon a cashless exercise in connection with a redemption by us, is based on the fair market value of our Common Stock on the redemption date, determined based on the volume weighted average price of our Common Stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of the warrants, and the number of months that the corresponding redemption date precedes the expiration date of the warrants, as set forth in a table in the warrant agreement.

The value received upon exercise of the Warrants (1) may be less than the value the holders would have received if they had exercised their warrants at a later time where the underlying shares price is higher and (2) may not compensate the holders for the value of the Warrants, including because the number of shares of Common Stock received is capped at 0.361 per share of Common Stock per warrant (subject to adjustment) irrespective of the remining life of the warrants.

None of the Private Warrants will be redeemable by us, subject to certain circumstances, so long as they are held by the Supernova Partners II LLC ("Supernova Sponsor") or its permitted transferees.

The warrant agreement designates the courts of the State of New York or the United States District Court for the Southern District of New York as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by holders of warrants, which could limit the ability of warrant holders to obtain a favorable judicial forum for disputes with us.

The warrant agreement provides that, subject to applicable law, (i) any action, proceeding or claim against us arising out of or relating in any way to the warrant agreement, including under the Securities Act, will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and (ii) that we irrevocably submit to such jurisdiction, which jurisdiction will be the exclusive forum for any such action, proceeding or claim. Under the warrant agreement, we also agree that we will waive any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum.

Notwithstanding the foregoing, these provisions of the warrant agreement do not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal district courts of the United States of America are the sole and exclusive forum. Any person or entity purchasing or otherwise acquiring any interest in any of the Public Warrants or Private Warrants will be deemed to have notice of and to have consented to the forum provisions in our warrant agreement.

If any action, the subject matter of which is within the scope of the forum provisions of the warrant agreement, is filed in a court other than a court of the State of New York or the United States District Court for the Southern District of New York (a "foreign action") in the name of any holder of the Public Warrants or Private Warrants, such holder will be deemed to have consented to: (x) the personal jurisdiction of the state and federal courts located in the State of New York in connection with any action brought in any such court to enforce the forum provisions (an "enforcement action"), and (y) having service of process made upon such warrant holder in any such enforcement action by service upon such warrant holder's counsel in the foreign action as agent for such warrant holder.

This choice-of-forum provision may limit a warrant holder's ability to bring a claim in a judicial forum that it finds favorable for disputes with our company, which may discourage such lawsuits. Alternatively, if a court were to find this provision of our warrant agreement inapplicable or unenforceable with respect to one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could materially and adversely affect our business, financial condition and results of operations and result in a diversion of the time and resources of our management and board of directors.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our Common Stock is volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert management's attention from other business concerns, which could seriously harm our business.

Information available in public media that is published by third parties, including blogs, articles, message boards and social and other media may include statements not attributable to the Company and may not be reliable or accurate.

We have received, and may continue to receive, a high degree of media coverage that is published or otherwise disseminated by third parties, including blogs, articles, message boards and social and other media. This includes coverage that is not attributable to statements made by our officers. Information provided by third parties may not be reliable or accurate and could materially impact the trading price of our Common Stock which could cause stockholders to lose their investments.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Risk management and strategy

We have implemented and maintain various information security processes designed to identify, assess and manage material risks from cybersecurity threats to our critical computer networks, third party hosted services, communications systems, hardware and software, and our critical data, including intellectual property and confidential information that is proprietary, strategic or competitive in nature, including information regarding our product architecture, software, algorithms, and applications ("Information Systems and Data").

Our information security function is supported by members of our legal team and a third party service provider, which helps identify, assess and manage the Company's cybersecurity threats and risks, including through the use of the Company's risk register. This team identifies and assesses risks from cybersecurity threats by monitoring and evaluating our threat environment and the Company's risk profile using various methods including, for example: manual and automated tools; subscribing to and analyzing reports and services that identify cybersecurity threats; conducting scans of our threat environment; evaluating threats reported to us; conducting vulnerability assessments to identify vulnerabilities; and analyzing external threat intelligence feeds.

Depending on the environment, product, or system, we implement and maintain various technical, physical, and organizational measures, processes, standards and policies designed to manage and mitigate material risks from cybersecurity threats to our Information Systems and Data, including, for example: performing risk analyses, establishing an incident response policy, having vulnerability management processes, and implementing certain security certificates for certain functions of our business; encrypting certain data, using network security controls; segregating data; maintaining access and physical security controls; managing, tracking, and disposing of assets; and monitoring our systems. In addition, we may refer to and perform assessments against the Center for Internet Security's Critical Security Controls to help inform our cybersecurity program, as well as perform assessments such as penetration tests.

Our assessment and management of material risks from cybersecurity threats are integrated into the Company's overall risk management processes. For example, (1) cybersecurity risk is addressed as a component of the Company's enterprise risk management program and identified in the Company's risk register; (2) our information security function works with management, including our Chief Technology Officer ("CTO"), to prioritize our risk management processes and mitigate cybersecurity threats that could more likely lead to a material impact to our business; (3) our senior management/committee evaluates material risks from cybersecurity threats against our overall business objectives and on a quarterly basis reports to the cybersecurity subcommittee of the audit committee of the board of directors, with the cybersecurity subcommittee reporting to the audit committee of the board of directors, which oversees our cybersecurity risk as part of our overall enterprise risk.

We use third-party service providers to assist us from time to time to identify, assess, and manage material risks from cybersecurity threats, including for example: professional service firms; threat intelligence service providers; cybersecurity consultants; and cybersecurity software and managed cybersecurity service providers. We use third-party service providers to perform a variety of functions throughout our business, such as application providers and public cloud providers, as well as various third-party suppliers that support our manufacturing and development processes. We use certain vendor management processes to manage cybersecurity risks associated with our use of these providers, which includes reviewing the written information security programs of certain of our vendors. Depending on the nature of the services provided, the sensitivity of the Information Systems and Data at issue, and the identity of the provider, our vendor management process may involve different levels of assessment designed to help identify cybersecurity risks associated with a provider and impose contractual obligations related to cybersecurity on the provider. This can extend to contingent workers as well, who are required to complete background investigations and agree to adhere to policies, including for privacy and cybersecurity.

Governance

Our board of directors addresses the Company's cybersecurity risk management as part of its general oversight function. The board of directors' audit committee, and specifically the subcommittee for cybersecurity, is responsible for overseeing Company's cybersecurity risk management processes, including oversight and mitigation of risks from cybersecurity threats.

Our cybersecurity risk assessment and management processes are implemented and maintained by our legal team along with third-party service providers in coordination with the CTO. The CTO is responsible for hiring appropriate personnel, helping to integrate cybersecurity risk considerations into the Company's overall risk management strategy, and communicating key priorities to relevant personnel. Our CTO is responsible for approving budgets, helping prepare for potential cybersecurity incidents, approving technical cybersecurity processes, and reviewing security assessments and other security-related reports.

Our CTO has over 20 years of experience in engineering and information technology management at various organizations. Our CTO collaborates regularly with our third-party service provider who provides a fractional Chief Information Security Officer, who has extensive experience in cybersecurity and a certification as a CISSP.

Our cybersecurity incident response and vulnerability management processes are designed to escalate certain cybersecurity incidents and vulnerabilities to members of management depending on the circumstances in accordance with the incident response policy, including the CTO, CFO, CEO, and others. Our information security function, together with our CTO, works with the Company's incident response team to help the Company mitigate and remediate cybersecurity incidents of which they are notified. In addition, the Company's incident response and vulnerability management processes include reporting to the cybersecurity subcommittee of the board of directors' audit committee for certain cybersecurity incidents in accordance with the incident response plan. The cybersecurity subcommittee receives periodic reports from the CTO, which reflect input from the third-party service provider, concerning the Company's risk profile, including significant cybersecurity threats and risk and the processes the Company has implemented to address them. The cybersecurity subcommittee also has access to various reports, summaries and presentations related to cybersecurity threats, risk and mitigation.

Cybersecurity Threats

As of December 31, 2024, we have not experienced any material risks from cybersecurity threats, including as a result of any previous cybersecurity incidents or threats, that have materially affected the business strategy, results of operations or financial condition of the Company or are reasonably likely to have such a material effect. However, we have in the past and also anticipate in the future we will be subject to cybersecurity incidents. We have in place insurance coverage designed to provide coverage in connection with cybersecurity incidents, provided, however, that such insurance coverage may be insufficient to cover all insured losses or all types of claims that may arise. For a description of the risks from cybersecurity threats that may materially affect the Company and how they may do so, see our risk factors under Part 1. Item 1A. Risk Factors in this Annual Report on Form 10-K, including *If our information technology systems or data, or those of third parties upon which we rely, are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; loss of customers or sales; loss of intellectual property or other confidential business information; and other adverse consequences, which may adversely affect our business*.

ITEM 2. PROPERTIES

Our principal office is located in Berkeley, California, where we lease approximately 15,625 square feet pursuant to a lease that expires October 31, 2028. Our Fab-1 facility is located in Fremont, California, where the company leases approximately 53,800 square feet pursuant to a lease that expires September 30, 2029. We also have offices for our international operations in the United Kingdom and Australia. We believe that our existing facilities are adequate to meet our current requirements. See Note 13 in the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information about our lease commitments.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be subject to actions, claims, suits and other legal proceedings arising in the ordinary course of business. Our management believes that while the results of any litigation or other legal proceedings are uncertain, we are not currently a party to any material legal proceedings that, if determined adversely to us, would have a material adverse effect on our business, financial position, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information for Common Stock

Our common stock and public warrants trade on The Nasdaq Capital Market under the symbols "RGTI" and "RGTIW," respectively.

Stockholders

As of March 5, 2025, there were approximately 106 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

Equity Compensation Plan Information

Information required by Item 5 of Form 10-K regarding our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report on Form 10-K.

Recent Sales of Unregistered Securities

Other than as previously disclosed in our Current Reports on Form 8-K or Quarterly Reports on Form 10-Q filed with the SEC, we did not issue any unregistered equity securities during the 12 months ended December 31, 2024.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 6. [RESERVED].

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

This Management's Discussion and Analysis of Financial Condition and Results of Operations section should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion and analysis contains forward-looking statements, such as statements of our plans, objectives, expectations and intentions. Any statements that are not statements of historical fact are forward-looking statements. When used, the words "believe," "plan," "intend," "anticipate," "target," "estimate," "expect," "will," "continue," "project," "forecast," "goal," "should," "could," "would," "potential," and the like, and/or future tense or conditional constructions ("will," "may," "could," "should," etc.), or similar expressions, identify certain of these forward-looking statements. These forward-looking statements are subject to risks and uncertainties, including those described under "Cautionary Note Regarding Forward-Looking Statements", "Risk Factors" and elsewhere in this Annual Report on Form 10-K that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. Our actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors.

For purposes of this discussion, "Rigetti," "the Company," "we," "us" or "our" refer to Rigetti Computing, Inc. and its subsidiaries unless the context otherwise requires.

Overview

We build quantum computers and the superconducting quantum processors that power them. We believe quantum computing represents one of the most transformative emerging capabilities in the world today. By leveraging quantum mechanics, we believe our quantum computers process information in fundamentally new, more powerful ways than classical computers. When scaled, it is anticipated that these systems will be poised to solve problems of staggering computational complexity at unprecedented speed.

With the goal of unlocking this opportunity, we have developed the world's first multi-chip quantum processor for scalable quantum computing systems. We believe that this patented and patent pending, modular chip architecture is the building block for new generations of quantum processors that we expect to achieve a clear advantage over classical computers. Our long-term business model centers on revenue generated from sales of quantum processing units (QPUs) and quantum computing systems made accessible via the cloud in the form of Quantum Computing as a Service ("QCaaS') products. However, the substantial majority of our revenues are derived from development contracts, and we anticipate this market opportunity will continue to represent an important source of revenue for at least the next several years as we work to ramp up sales of QPUs and our QCaaS business. Additionally, we are working to further develop a revenue stream and forging important customer relationships by entering into technology development contracts with various partners.

We are a vertically integrated company. We operate Fab-1, a wafer fabrication facility dedicated to prototyping and producing our quantum processors. Through Fab-1, we own the means of production of our breakthrough multi-chip quantum processor technology. We leverage our chips through a full-stack product development approach, from quantum chip design and manufacturing through cloud delivery. We believe this full-stack development approach offers both the fastest and lowest risk path to building commercially valuable quantum computers.

We have been generating revenue since 2018 through partnerships with government agencies and commercial organizations; however, we have not yet generated profits. We have incurred significant operating losses since inception. Our net losses were $201.0 million and $75.1 million for the years ended December 31, 2024 and December 31, 2023, respectively. We expect to continue to incur additional losses for the foreseeable future as we invest in research and development and infrastructure in line with our long-term business strategy. As of December 31, 2024, we had an accumulated deficit of $554.7 million. We believe that our existing cash, cash equivalents and marketable securities should be sufficient to meet our anticipated operating cash needs for at least the next three years and possibly longer based on our current business plan, and expectations and assumptions considering current macroeconomic conditions. Our operating plan may change because of factors currently unknown, and we may need to seek additional funds sooner than planned, through public or private equity or debt financing or other sources, such as strategic collaborations or other transactions. In addition, we may seek additional capital even if we believe that we have sufficient funds for current or future operating plans.

Key achievements include the launch of our 84-qubit Ankaa-3 system, our newest flagship quantum computer featuring an extensive hardware redesign. We also achieved major two-qubit gate fidelity milestones with Ankaa-3: successfully halving error rates in 2024 to achieve a 99.0% median two-qubit iSWAP gate fidelity, as well as demonstrating a 99.5% median two-qubit fidelity with fSim gates.

In 2025, we plan to introduce the next generation of our modular system architecture, while aiming to continue to increase fidelities. By mid-year 2025, we expect to release a 36-qubit system based on four 9-qubit chips tiled together, with a targeted 2x reduction in error rates from our error rates achieved at the end of 2024. By the end of 2025, we expect to release a system with over 100 qubits with a targeted 2x reduction in error rates from our error rates achieved at the end of 2024.

We believe that we will be able to achieve our plans for 2025 described above and elsewhere in this Annual Report on Form 10-K; however, we face various risks and uncertainties relating to our business that could cause actual results to differ materially from our expectations stated herein. This Annual Report on Form 10-K, including this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the section entitled "Risk Factors" in Part I, Item 1A of this Annual Report on Form 10-K.

In February 2023, we announced an updated business strategy, including revisions to our technology roadmap. In connection with this updated strategy, we implemented a workforce reduction beginning in February 2023 to focus the organization and our resources on nearer-term strategic priorities and our efforts to achieve narrow quantum advantage.

The reduction in the workforce impacted approximately 50 employees or 28% of our then workforce. We began implementing activities with respect to the revised business plan and reduction in workforce in February 2023. Affected employees were offered separation benefits, including severance payments and temporary healthcare coverage assistance. We incurred a $1.0 million restructuring charge in the three months ended March 31, 2023, for severance payments and temporary healthcare coverage for effected employees. In addition to the restructuring charge, we also incurred $1.0 million of expenses for contractual severance benefits related to executive officers of the Company that were terminated in the three months ended March 31, 2023.

Quanta Collaboration Agreement

In February 2025, our wholly-owned subsidiary, Rigetti Sub, entered into the Collaboration Agreement with Quanta, whereby the parties may enter into written statements of work from time to time pursuant to which Quanta will develop Covered Components listed in such statement of work that meet the specifications and requirements provided by Rigetti Sub. "Covered Components" may include control systems, dilution refrigerators, flexible cables, and select other non-QPU components suitable for Rigetti Sub's quantum computing products. No statements of work were entered into by the parties in connection with the entry into the Collaboration Agreement. In addition, the parties have each agreed to invest at least $250 million over the next five years in the field of quantum computing (and Quanta's investment will be towards personnel and capital expenditures for developing products and services and manufacturing capability in furtherance of the Rigetti Sub product roadmap). In connection with the Collaboration Agreement, on February 27, 2025, we entered into a Securities Purchase Agreement with Quanta, pursuant to which we agreed to sell and issue to Quanta in a private placement transaction 3,020,412 shares of our Common Stock at a price per share of approximately $11.59, for an aggregate value of approximately $35.0 million. The closing of the private placement transaction is subject to regulatory clearance.

Macroeconomic Considerations

Results of our operations have varied and may continue to vary based on the impact of changes in the domestic or global economy. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, inflation, interest rates, financial and credit market fluctuations, international trade relations and tariffs, pandemics, political turmoil, natural catastrophes, warfare, and terrorist attacks in the United States or elsewhere, could negatively affect our business, including progress toward the development of quantum computing. It is not possible at this time to estimate the long-term impact that these and related events could have on our business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted. If these conditions persist and deepen, we could experience an inability to access additional capital if needed, or our liquidity could otherwise be impacted, and the trading price of our Common Stock could decline.

For further discussion of the potential impacts of macroeconomic events on our business, financial condition, and operating results, see the section titled "Risk Factors," including the risk factor titled *"Unfavorable conditions in our industry or the global economy could limit our ability to grow our business and negatively affect our results of operations."*

Key Components of Results of Operations

Revenue

We generate revenue through our development contracts, as well as from our sales of QPUs, and our QCaaS offerings and other services including training and provision of quantum computing components. Development contracts are generally multi-year, non-recurring arrangements pursuant to which we provide professional services regarding collaborative research in practical applications of quantum computing to technology and business problems within the customer's industry or organization and assists the customer in developing quantum algorithms and applications to assist customers in areas of business interest.

Cost of Revenue

Cost of revenue consists primarily of all direct and indirect costs associated with sales of QPUs, QCaaS offerings and development contracts and other services, including materials, employee costs for program management and personnel associated with the delivery of goods and services to customers, and sub-contract costs for work performed by third parties. Cost of revenue also includes an allocation of facility costs, depreciation and amortization directly related to the development contracts and QCaaS offerings and other services.

Operating Expenses

Our operating expenses primarily consist of research and development, and selling, general and administrative expenses.

Research and Development

Research and development expenses include compensation, employee benefits, stock-based compensation, outside consultant fees, facility costs, depreciation and amortization, materials and components purchased for research and development. We expect research and development expenses to increase as we continue to invest in quantum computing and the superconducting quantum processors needed for quantum computers. We do not currently capitalize any research and development expenditures. Research and development costs are expensed as incurred.

Selling, General and Administrative

Selling, general and administrative expenses include compensation, employee benefits, stock-based compensation, insurance, facility costs, professional service fees, and other general overhead costs other than those associated with sales of QPUs and providing development contracts, QCaaS offerings and other services. We expect selling, general and administrative expenses to increase as we grow our business, particularly to the extent we achieve narrow and broad quantum advantage, and subsequently enhance our product and service offerings, expand our customer base, and implement new marketing strategies.

Restructuring

In February 2023, we announced an updated business strategy, including revisions to our technology roadmap. In connection with this updated strategy, we implemented a workforce reduction in order to focus the organization and its resources on nearer-term strategic priorities. The reduction in the workforce impacted approximately 50 employees or approximately 28% of our then workforce. Affected employees were offered separation benefits, including severance payments and temporary healthcare coverage assistance.

Provision for Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded for deferred tax assets if it is more likely than not that some portion or all of the deferred tax assets will not be realized. We have recorded a full valuation allowance against our deferred tax assets.

Results of Operations

Comparison of the years ended December 31, 2024 and 2023

The following tables set forth our results of operations for the years indicated (in thousands):

	Year Ended December 31,		2024 vs. 2023	
	2024	2023	$ Change	% Change
Revenue	$ 10,790	$ 12,008	$ (1,218)	(10)%
Cost of revenue	5,093	2,800	2,293	82 %
Total gross profit	5,697	9,208	(3,511)	(38)%
Operating expenses:				
Research and development	49,750	52,768	(3,018)	(6)%
Selling, general and administrative	24,457	27,744	(3,287)	(12)%
Restructuring	—	991	(991)	NM
Total operating expenses	74,207	81,503	(7,296)	(9)%
Loss from operations	(68,510)	(72,295)	3,785	(5)%
Other income (expense), net				
Interest expense	(3,255)	(5,779)	2,524	(44)%
Interest income	5,113	5,076	37	1 %
Change in fair value of derivative warrant liabilities	(90,168)	(1,160)	(89,008)	NM
Change in fair value of earn-out liabilities	(43,742)	(949)	(42,793)	NM
Loss on extinguishment of debt	(426)	—	(426)	NM
Total other expense, net	(132,478)	(2,812)	(129,666)	4,611 %
Net loss before provision for income taxes	(200,988)	(75,107)	(125,881)	168 %
Provision for income taxes	—	—	—	
Net loss	$ (200,988)	$ (75,107)	$ (125,881)	

*NM - Not Meaningful

Revenue

Revenue decreased by $1.2 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023. The decrease was primarily due to a $2.0 million reduction in QCaaS revenue for the year ended December 31, 2024, offset in part by higher revenue from development contracts and sales of QPUs.

Our development contracts are typically fixed price milestone or cost share-based contracts and the timing and amounts of revenue recognized in any given period will vary significantly based on the delivery of the associated milestones and/or the work performed. The timing and delivery of sales of QPUs and QCaaS will also vary and impact revenue in any given quarterly or annual period. Revenue is expected to vary in terms of timing and size, resulting in significant fluctuations in revenue levels in future periods.

For the next few years, we expect much of our revenue to be generated from development contracts and anticipated sales of on-premises QPUs.

Cost of Revenue

Cost of revenue increased by $2.3 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023. The increase in cost of revenue was primarily due to a change in the composition of our revenue and variability in the pricing and terms of our development contracts. During the year ended December 31, 2024, we entered into a new contract to deliver a 24-qubit quantum computing system having higher costs and a lower gross margin profile than most of our other contracts. The increase in cost of revenue resulting from the unfavorable mix was partially offset by the impact of lower revenue.

We expect that cost of revenue and total gross profit as a percentage of revenue will vary in future quarterly and annual periods due to changes in the composition of our revenue and variability in the pricing and terms of our development contracts.

Operating Expenses

Research and Development

Research and development expenses decreased by $3.0 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023.

The decrease in research and development expenses for the year ended December 31, 2024, when compared to the year ended December 31, 2023, was largely due to a $0.9 million decrease in salaries and employee related costs due to our February 2023 restructuring and because more engineering time was used to deliver revenue, and a $2.8 million decrease in IT costs due to systems rationalization, offset in part by a $0.8 million increase in bonus expenses. All other research and development costs decreased by a cumulative $0.1 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023.

We anticipate that R&D expenditures will grow in the future as we continue to focus on our technology roadmap and long-term goal of achieving broad quantum advantage.

Selling, General and Administrative

Selling, general and administrative expenses decreased by $3.3 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023.

The decrease for the year ended December 31, 2024, when compared to the year ended December 31, 2023, was primarily due to $2.2 million of expense recognized in the year ended December 31, 2023 for the forward agreement with Ampere Computing and a $0.8 million impairment charge recognized in the year ended December 31, 2023 for deferred offering costs. Costs related to accounting services and public company compliance decreased by $1.2 million during the year ended December 31, 2024, because many of these activities were either performed more efficiently or have been brought in-house. These decreases were partially offset by a $1.1 million increase in stock-based compensation expenses for the year ended December 31, 2024. Stock compensation expenses were favorably impacted during the year ended December 31, 2023 due to forfeitures resulting from the February 2023 restructuring. All other expenses decreased by a cumulative $0.2 million for year ended December 31, 2024, when compared to the year ended December 31, 2023.

We expect selling, general and administrative expenses to increase over the longer term, particularly after we potentially achieve quantum advantage, and plan to subsequently enhance our sales and service offerings, expand our customer base, and implement new marketing strategies.

Restructuring

In February 2023, we announced an updated business strategy, including revisions to our technology roadmap. In connection with this updated strategy, we implemented a workforce reduction in order to focus the organization and our resources on nearer-term strategic priorities. The reduction in the workforce impacted approximately 50 employees or approximately 28% of our then workforce. Affected employees were offered separation benefits, including severance payments and temporary healthcare coverage assistance.

We began implementing activities with respect to our revised business plan, updated technology roadmap and reduction in workforce in February 2023, resulting in a $1.0 million restructuring charge for the year ended December 31, 2023. No further restructuring charges related to this action are expected.

Other Income (Expense), net

Interest Expense

Our outstanding debt with Trinity Capital, Inc., which we repaid in full in December 2024, carried a variable rate of interest. Interest expenses decreased by $2.5 million for the year ended December 31, 2024, when compared to the year ended December 31, 2023. The reduction in interest expense was due to regular principal repayments throughout the year and prepayment of the remaining outstanding principal balance in December 2024.

A discussion regarding the prepayment of our outstanding debt with Trinity Capital Inc. is included in Note 8 to our consolidated financial statements for the year ended December 31, 2024, included elsewhere in this Annual Report on Form 10-K.

Interest Income

Interest income remained consistent at $5.1 million for each of the years ended December 31, 2024 and December 31, 2023. Slight changes in interest income during the years ended December 31, 2024 and December 31, 2023 were due to fluctuations in the balances of our invested cash and available-for-sale investments and rates of interest earned on our investments.

Change in Fair Value of Warrant Liabilities

A discussion of the change in the fair value of warrant liabilities is included in Note 9 to our consolidated financial statements for the year ended December 31, 2024, included elsewhere in this Annual Report on Form 10-K.

The change in fair value of warrant liabilities for the year ended December 31, 2024 was a loss of $90.2 million, compared to a loss of $1.2 million for the year ended December 31, 2023. The increase in loss for the year ended December 31, 2024 was primarily due to the change in our stock price and related share price volatility.

Change in Fair Value of Earn-Out Liabilities

A discussion of the change in the fair value of the earn-out liabilities is included in Note 10 to our consolidated financial statements for the year ended December 31, 2024, included elsewhere in this Annual Report on Form 10-K.

The change in fair value of our earn-out liabilities for the year ended December 31, 2024 was a loss of $43.7 million, compared a loss of $0.9 million for the year ended December 31, 2023. The increase in loss for the year ended December 31, 2024 was primarily due to the change in our stock price and related share price volatility.

Loss on Extinguishment of Debt

On December 9, 2024, we prepaid in full all amounts owed under our Amended Loan Agreement with Trinity Capital Inc. We prepaid an aggregate of $9.5 million in outstanding principal balance, final payment fees of $0.9 million, plus accrued interest and a prepayment premium aggregating $0.1 million. During the year ended December 31, 2024, the Company recorded a $0.4 million loss on the prepayment and extinguishment of the outstanding principal balance owed under the Amended Loan Agreement.

Provision for Income Taxes

We did not record income tax expense during the years ended December 31, 2024 or December 31, 2023 due to the Company's loss position and full valuation allowance.

Liquidity and Capital Resources

We have incurred net losses and negative cash flows from operations since inception. Historically, we financed our operations primarily through the sale and issuance of common stock preferred stock, warrants, convertible notes, debt and revenues. During the years ended December 31, 2024 and December 31, 2023, we incurred net losses of $201.0 million and $75.1 million, respectively. As of December 31, 2024, we had an accumulated deficit of $554.7 million, and we expect to incur additional losses for the foreseeable future.

On November 27, 2024, we closed securities purchase agreements with two institutional investors pursuant to which we received net proceeds of $96.0 million from the sale of 50,000,000 shares of our common stock. On March 14, 2024, we entered into an At-the-Market Sales Agreement (the "ATM Agreement") with B. Riley Securities, Inc. ("B. Riley") and Needham & Company, LLC, pursuant to which we could offer and sell shares of our common stock from time to time having an aggregate offering price of up to $100 million. During the year ended December 31, 2024, we received net proceeds of $97.5 million from the sale of 68,809,485 shares of our common stock pursuant to the ATM Agreement.

In addition, on August 11, 2022, we entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with B. Riley, pursuant to which we had the right to sell shares of our common stock in an aggregate amount up to the lesser of (i) $75 million and (ii) an amount not to exceed 23,648,889 shares of our common stock, subject to certain limitations and conditions.

We received net proceeds of $12.8 million in 2024 and $20.5 million in 2023 from the sale of the maximum 23,648,889 shares of our common stock (inclusive of 171,008 shares issued to B. Riley in 2022 as consideration for the Purchase Agreement) pursuant to the Purchase Agreement. There are no remaining shares available for sale under the Purchase Agreement, and the Purchase Agreement has terminated.

We believe that our existing balances of cash, cash equivalents and available-for-sale investments should be sufficient to meet our anticipated operating cash needs for at least the next three years based on our current business plan, and expectations and assumptions considering current macroeconomic conditions. Our operating plan may change because of factors currently unknown, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations or other transactions. In addition, we may seek additional capital even if we believe that we have sufficient funds for current or future operating plans. We have based these estimates on assumptions that may prove to be wrong and we could use our available capital resources sooner than we currently expect, and future capital requirements and the adequacy of available funds will depend on many factors including those described in the section titled "Risk Factors" in this Annual Report on Form 10-K. If we are unable to raise capital when needed and on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs and/or other efforts. A recession or market corrections resulting from the impact of macroeconomic conditions could materially affect our business and the value of our securities.

Our cash requirements include employee-related costs such as salaries and benefits; materials and components for research and development; working capital requirements; capital expenditures for our quantum chip fabrication facility; quantum computing refrigerators and other requirements; planned development of multiple generations of quantum processors; anticipated investments to scale our operations in the future; and strategic collaborative arrangements and investments.

We will require a significant amount of cash for expenditure as we invest in ongoing research and development and business operations. Until such time as we can generate significant revenue from sales of QPUs, our development contracts and other services, including our QCaaS offering, we expect to finance our cash needs primarily through our existing cash, cash equivalents and available-for-sale investments, potential securities financings or other capital sources. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be, or could be, diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders.

Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to raise additional funds through equity or debt financings when needed and on attractive terms, we may be required to delay, limit, or substantially reduce our quantum computing development efforts. Our future capital requirements and the adequacy of available funds will depend on many factors, including those described in the section titled "Risk Factors" in this Annual Report on Form 10-K.

Cash Flows Used in Operating Activities

Our cash flows from operating activities are significantly affected by our ability to achieve significant growth to offset expenditures related to research and development, and selling, general and administrative activities. Our operating cash flows are also affected by our working capital needs to support growth in personnel-related expenditures and fluctuations in accounts payable and other current assets and liabilities.

Net cash used in operating activities during the year ended December 31, 2024 was $50.6 million, primarily resulting from our net loss of $201.0 million, partially offset by non-cash expenses totaling $153.4 million. Changes in operating assets and liabilities had a $3.1 million unfavorable impact on net cash used in operating activities for the year ended December 31, 2024.

Net cash used in operating activities during the year ended December 31, 2023 was $50.6 million, primarily resulting from our net loss of $75.1 million, partially offset by non-cash expenses totaling $25.0 million. Changes in operating assets and liabilities had a minimal impact on net cash used in operating activities for the year ended December 31, 2023.

Cash used in operating activities during the year ended December 31, 2024 of $50.6 million was virtually unchanged when compared to the year ended December 31, 2023. Our net loss increased by $125.9 million to $201.0 million during the year ended December 31, 2024. Non-cash charges impacting our net loss increased by $128.4 million to $153.4 million during the year ended December 31, 2024, from $25.0 million during the year ended December 31, 2023. Changes in operating assets and liabilities had a $2.6 million unfavorable impact on the change in cash used in operating activities during the year ended December 31, 2024, compared to the year ended December 31, 2023.

Cash Flows (Used in) Provided by Investing Activities

Cash used in investing activities during the year ended December 31 2024 totaled $78.4 million, resulting from $224.8 million of purchases of available-for-sale securities and $11.1 million of purchases of property and equipment, offset in part by $157.5 million of maturities of available-for-sale securities.

Cash provided by investing activities during the year ended December 31 2023 totaled $0.8 million, resulting from $119.1 million of maturities of available-for-sale securities, offset in part by $9.1 million of purchases of property and equipment and $109.3 million of purchases of available-for-sale securities.

Investments in property and equipment relate primarily to process computing equipment, quantum computing refrigerators, and development tools for our chip fabrication facility.

Net cash provided by investing activities during the year ended December 31, 2024 decreased by $79.1 million when compared to the year ended December 31, 2023, due to higher purchases of available-for-sale securities and property and equipment, offset in part by higher maturities of available-for-sale securities.

Cash Flows Provided by Financing Activities

Cash provided by financing activities during the year ended December 31, 2024 totaled $175.5 million, reflecting proceeds of $12.8 million, net of commissions, from the sale of 10.1 million shares of common stock to B. Riley through our prior Purchase Agreement with B. Riley, proceeds of $97.5 million, net of commissions, from the sale of 68.8 million shares of common stock under our ATM Agreement, proceeds of $96.0 million, net of commissions, from the sale of 50.0 million shares of common stock through a registered direct offering and proceeds of $0.6 million from the exercise of stock options and warrants.

The favorable impact from the various stock offerings was offset in part by principal repayments and prepayment and final payment fees of $23.3 million under the loan agreement we had with Trinity Capital Inc., net payments of $6.3 million for tax withholdings from sell-to-cover for equity award transactions and payments of $1.8 million for offering costs. In connection with the repayments, prepayment and final payment fees under the loan agreement, we terminated the loan agreement.

Cash provided by financing activities during the year ended December 31, 2023 totaled $13.2 million, reflecting $20.5 million of proceeds, net of commissions, from the sale of 13.4 million shares of common stock to B. Riley through our prior Purchase Agreement with B. Riley, and proceeds of $1.1 million from the exercise of stock options and warrants, offset in part by principal repayments of $8.3 million under the loan agreement with Trinity Capital Inc. and payments of $0.1 million for offering costs.

Net cash provided by financing activities during the year ended December 31, 2024 increased by $162.2 million when compared to the year ended December 31, 2023, largely due to an increase in sales of common stock under the ATM Agreement and registered direct offerings and sales of shares to B Riley, net of commissions and offering costs, offset in part by higher principal repayments and prepayment and final payment fees under the loan agreement with Trinity Capital, Inc. and net payments of tax withholdings for sell-to-cover equity award transactions. We expect to continue to finance our cash needs primarily through cash, cash equivalents and available-for-sale investments, potential securities financings or other capital sources.

Critical Accounting Estimates

This Management's Discussion and Analysis of Financial Condition and Results of Operations is based on our consolidated financial statements included in this Annual Report on Form 10-K, which have been prepared in accordance with GAAP.

Preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities. We also make estimates and assumptions that affect revenue and expenses during the reporting periods.

Our estimates are based on historical experience and on various other factors that we believe are reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

While our significant accounting policies are described in the Notes to our consolidated financial statements for the year ended December 31, 2024, included elsewhere in this Annual Report on Form 10-K, we believe the following critical accounting estimates are most important to understanding and evaluating our reported financial results.

Public Warrants and Private Warrants

As of December 31 2024, there were 13,074,972 Warrants outstanding, consisting of 1,992,102 Private Warrants and 11,082,870 Public Warrants. Each whole warrant entitles the holder to purchase one share of our Common Stock at a price of $11.50 per share, subject to adjustments and will expire on March 2, 2027 at 5:00 p.m., New York City time or earlier upon redemption or liquidation.

The Private Warrants do not meet the derivative scope exception and are accounted for as derivative liabilities. Specifically, the Private Warrants contain provisions that cause the settlement amounts to be dependent upon the characteristics of the holder of the warrant which is not an input into the pricing of a fixed-for-fixed option on equity shares. Therefore, the Private Warrants are not considered indexed to our stock and should be classified as a liability.

Since the Private Warrants meet the definition of a derivative, we recorded the Private Warrants as liabilities in the consolidated balance sheet at fair value upon the closing of the Business Combination (described in Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K), with subsequent changes in the fair value recognized in the consolidated statements of operations at each reporting date. The fair value of the Private Warrants was measured using the Black-Scholes option-pricing model at each measurement date.

The Public Warrants also fail to meet the indexation guidance in ASC 815 and are accounted for as liabilities as the Public Warrants include a provision whereby in a scenario in which there is not an effective registration statement, the warrant holders have a cap, 0.361 shares of Common Stock per warrant (subject to adjustment), on the issuable number of shares in a cashless exercise. Subsequent to the separate listing and trading of the Public Warrants, the fair value of the Public Warrants has been measured based on the observable listed prices for such warrants and the fair value of the Private Warrants are measured using the Black-Scholes option-pricing model.

On the consummation of the Business Combination, we recorded a liability related to the Private Warrants of $9.6 million, with an offsetting entry to additional paid-in capital . There are a number of variables impacting the Black-Scholes option-pricing model used to value the derivative liability for the Private Warrants. The most impactful variable is the price of our Common Stock. The derivative liability for the Private Warrants will correspondingly increase or decrease as the price of our Common Stock increases or decreases.

As of December 31, 2024 and December 31, 2023 the fair value of the derivative liability for the Private Warrants was $22.8 million and $1.6 million, respectively, with the change in the fair value of the derivative warrant liabilities recorded in the consolidated statements of operations each reporting period.

Similarly, on the consummation of the Business Combination, we recorded a liability related to the Public Warrants of $16.3 million, with an offsetting entry to additional paid-in capital. As of December 31, 2024 and December 31, 2023 the fair value of the derivative liability for the Public Warrants was $70.3 million and $1.3 million, respectively, with the change in the fair value of the derivative warrant liabilities recorded in the consolidated statements of operations each reporting period.

Earn-Out Liabilities

On March 2, 2022 (the "Closing Date"), a merger transaction between Rigetti Holdings, Inc. ("Legacy Rigetti") and Supernova Partners Acquisition Company II, Ltd. ("SNII") was completed (the "Business Combination"). Upon the closing of the Business Combination, SNII, Supernova Partners II, LLC and SNII's directors and officers (collectively the "Sponsor Holders") subjected certain shares of our Common Stock that they own (the "Sponsor Vesting Shares") to forfeiture and vesting as of the Closing if thresholds related to the weighted average price of our Common Stock are not met for the duration of various specified consecutive day trading periods during the five-year period following the Closing (the "Earn-out Triggering Events"). Any such shares held by the Sponsor Holders that remain unvested after the fifth anniversary of the closing of the Business Combination will be forfeited. The price thresholds for vesting under the sponsor support agreement are $12.50 and $15.00.

The Sponsor Vesting Shares are accounted for as liability classified instruments because the Earn-Out Triggering Events that determine the number of Sponsor Vesting Shares to be earned back by the Sponsor Holders include outcomes that are not solely indexed to our Common Stock.

The aggregate fair value of the Sponsor Vesting Shares at the time of the closing of the Business Combination was estimated using a Monte Carlo simulation model and was determined to be $20.4 million. There are a number of variables impacting the Monte Carlo simulation model used to value the Earn-Out liability. The most impactful variable is the price of our Common Stock. The Earn-out liability will correspondingly increase or decrease as the price of our Common Stock increases or decreases. As of December 31, 2024, the Earn-Out Triggering Events were not achieved for any of the Sponsor Vesting Shares. As of December 31, 2024 and December 31, 2023, the fair value of the earn-out liabilities was $45.9 million and $2.2 million, respectively, with the change in the fair value of the earn-out liabilities recorded in the consolidated statements of operations each reporting period.

The $12.50 vesting condition for 2,479,000 shares of Common Stock held by the Sponsor Holders was satisfied in February 2025.

Revenue Recognition

Revenue consists primarily of our contracts that provide access to Rigetti quantum computing systems, collaborative research services, professional services, and the sale of QPUs and custom quantum computing components. Access to Rigetti quantum computing systems can be purchased as a quantum computing subscription, or on a usage basis for a specified quantity of hours. Revenue related to subscription-based access to Rigetti quantum computing systems (i.e., quantum computing subscriptions) is recognized on a ratable basis over the subscription term, which can range from monthly to two years. Revenue related to usage-based access to Rigetti quantum computing systems is recognized over time as the systems are accessed using an output method based on compute credit hours expended. Revenue related to collaborative research services and professional services is recognized over time based on completed milestones or hours or costs incurred as appropriate. Revenue for partially completed milestones deemed probable of being met is recognized using an input measure based on actual labor hours incurred to date relative to total estimated labor hours needed to complete the milestone. Revenue related to cost share contracts is recognized as the reimbursable costs are incurred.

For fixed price milestone-based contracts, revenue is recognized based on the input measure explained above as control is expected to transfer over the time period a milestone is completed. Revenue related to the sale of QPUs and custom quantum computing components is recognized at a point in time, and upon customer acceptance for custom quantum computing components.

Our fixed fee development contracts vary in term from one to five years, with the majority of such contracts having a term of six months to two years. When establishing the pricing for our fixed fee arrangements, we determine the pricing based on estimated costs to complete and expected margins taking into account the scope of work outlined within the contract being evaluated and our historical experience with similar services and contracts. Actual costs incurred over the period in which these contracts are fulfilled could vary from these estimates and therefore, these estimates are subject to uncertainty. On a quarterly basis, management reviews the progress with respect to each contract and its related milestones and evaluates whether any changes in estimates exist. As a result of the quarterly reviews, revisions in the estimated effort to complete the contract are reflected in the period in which the change is identified.

These revisions may impact the overall progress related to transfer of control and therefore result in either increases or decreases in revenues as well as increases or decreases in fulfillment costs and contract margins. In accordance with ASC No. 250, Accounting

Changes and Error Corrections, any changes in estimates are reflected in our consolidated statements of operations in the period in which the circumstances that give rise to the revision become known to management. To date, we have not experienced any changes in estimates that have had a material impact on our results from operations or financial position.

When our contracts with customers contain multiple performance obligations, the transaction price is allocated on a relative standalone selling price basis to each performance obligation. We typically determine standalone selling price based on observable selling prices of our products and services. In instances where standalone selling price is not directly observable, standalone selling price is determined using information that may include market conditions and other observable inputs. Stand-alone selling price is typically established as a range. In situations in which the stated contract price for a performance obligation is outside of the applicable standalone selling price range and has a different pattern of transfer to the customer than the other performance obligations in the contract, we will reallocate the total transaction price to each performance obligation based on the relative standalone selling price of each.

The transaction price is the amount of consideration to which we expect to be entitled in exchange for transferring goods and services to the customer. Revenue is recorded based on the transaction price, which includes fixed consideration and estimates of variable consideration. The amount of variable consideration included in the transaction price is constrained and is included only to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Our contracts with customers may include renewal, upgrade rights or other options at fixed prices. Determining whether such options are considered distinct performance obligations that provide the customer with a material right and therefore should be accounted for separately requires significant judgment. Judgment is required to determine the standalone selling price for each renewal option to determine whether the renewal pricing is reflective of standalone selling price or is reflective of a discount that would provide the customer with a material right. Based on our assessment of standalone selling prices, we determined that certain of the Company's sales contracts for the Novera QPU contain material upgrade rights which have been deferred.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 of our consolidated financial statements for the year ended December 31, 2024 included elsewhere in this Annual Report on Form 10-K.

Emerging Growth Company and Smaller Reporting Company Status

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" may take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Therefore, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. Following the Business Combination (described in Note 2 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K), we still qualify as an emerging growth company and plan to take advantage of the extended transition period that emerging growth company status permits. During the extended transition period, it may be difficult or impossible to compare our financial results with the financial results of another public company that complies with public company effective dates for accounting standard updates because of the potential differences in accounting standards used.

We will remain an emerging growth company under the JOBS Act until the earliest of (a) December 31, 2026, (b) the last date of our fiscal year in which we have total annual gross revenue of at least $1.235 billion, (c) the date on which we are deemed to be a "large accelerated filer" under the rules of the SEC or (d) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the previous three years.

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as the market value of our voting and non-voting Common Stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our voting and non-voting Common Stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are a smaller reporting company as defined by Rule12b-2 of the Exchange Act and are not required to provide the information required under this item.

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

RIGETTI COMPUTING, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

Stockholders and Board of Directors
Rigetti Computing, Inc.
Berkeley, California

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Rigetti Computing, Inc. (the "Company") as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, P.C.

We have served as the Company's auditor since 2021.

Spokane, Washington

March 7, 2025

RIGETTI COMPUTING, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 67,674	$ 21,392
Available-for-sale investments - short-term	124,420	78,537
Accounts receivable	2,427	5,029
Prepaid expenses	3,156	1,938
Other current assets	9,081	771
Total current assets	206,758	107,667
Available-for-sale investments - long-term	25,068	—
Property and equipment, net	44,643	44,483
Operating lease right-of-use assets	7,993	7,634
Other assets	325	129
Total assets	$ 284,787	$ 159,913
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 1,590	$ 5,772
Accrued expenses and other current liabilities	8,005	8,563
Current portion of deferred revenue	113	343
Current portion of debt	—	12,164
Current portion of operating lease liabilities	2,159	2,210
Total current liabilities	11,867	29,052
Debt, less current portion	—	9,894
Deferred revenue, less current portion	698	—
Operating lease liabilities, less current portion	6,641	6,297
Derivative warrant liabilities	93,095	2,927
Earn-out liabilities	45,897	2,155
Total liabilities	158,198	50,325
Commitments and contingencies (Note 20)		
Stockholders' equity:		
Preferred stock, par value $0.0001 per share, 10,000,000 shares authorized, none outstanding	—	—
Common stock, par value $0.0001 per share, 1,000,000,000 shares authorized, 283,546,871 shares issued and outstanding at December 31, 2024 and 147,066,336 shares issued and outstanding at December 31, 2023	29	14
Additional paid-in capital	681,202	463,089
Accumulated other comprehensive income	105	244
Accumulated deficit	(554,747)	(353,759)
Total stockholders' equity	126,589	109,588
Total liabilities and stockholders' equity	$ 284,787	$ 159,913

See accompanying notes to consolidated financial statements.

RIGETTI COMPUTING, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except for per share data)

	Year Ended December 31,	
	2024	**2023**
Revenue	$ 10,790	$ 12,008
Cost of revenue	5,093	2,800
Total gross profit	5,697	9,208
Operating expenses:		
Research and development	49,750	52,768
Selling, general and administrative	24,457	27,744
Restructuring	—	991
Total operating expenses	74,207	81,503
Loss from operations	(68,510)	(72,295)
Other income (expense), net		
Interest expense	(3,255)	(5,779)
Interest income	5,113	5,076
Change in fair value of derivative warrant liabilities	(90,168)	(1,160)
Change in fair value of earn-out liabilities	(43,742)	(949)
Loss on extinguishment of debt	(426)	—
Total other expense, net	(132,478)	(2,812)
Net loss before provision for income taxes	(200,988)	(75,107)
Provision for income taxes	—	—
Net loss	$ (200,988)	$ (75,107)
Net loss per share attributable to common stockholders – basic and diluted	$ (1.09)	$ (0.57)
Weighted average shares used in computing net loss per share attributable to common stockholders – basic and diluted	184,666	131,977

See accompanying notes to consolidated financial statements.

RIGETTI COMPUTING, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,	
	2024	**2023**
Net loss	$ (200,988)	$ (75,107)
Other comprehensive (loss) income:		
Foreign currency translation adjustments	(205)	80
Unrealized gains on available-for-sale debt securities	66	325
Total other comprehensive (loss) income before income taxes	(139)	405
Income taxes	—	—
Total other comprehensive (loss) income after income taxes	(139)	405
Total comprehensive loss	$ (201,127)	$ (74,702)

See accompanying notes to consolidated financial statements.

RIGETTI COMPUTING, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at December 31, 2022	125,257	$ 12	$ 429,025	$ (161)	$ (278,652)	$ 150,224
Issuance of common stock upon exercise of stock options	4,046	—	1,121	—	—	1,121
Issuance of common stock upon exercise of common stock warrants	479	—	5	—	—	5
Issuance of common stock upon release of RSUs	3,863	—	—	—	—	—
Proceeds from sale of common stock pursuant to the Common Stock Purchase Agreement - B. Riley	13,421	2	20,542	—	—	20,544
Capitalization of deferred costs to equity upon share issuance	—	—	(13)	—	—	(13)
Stock-based compensation	—	—	12,409	—	—	12,409
Foreign currency translation gain	—	—	—	80	—	80
Change in unrealized gains on available-for-sale securities	—	—	—	325	—	325
Net loss	—	—	—	—	(75,107)	(75,107)
Balance, December 31, 2023	147,066	14	463,089	244	(353,759)	109,588
Issuance of common stock upon exercise of stock options	995	1	551	—	—	552
Issuance of common stock upon exercise of common stock warrants	179	—	2	—	—	2
Issuance of common stock upon release of RSUs	6,441	—	—	—	—	—
Proceeds from sale of common stock pursuant to the Common Stock Purchase Agreement - B. Riley	10,057	1	12,837	—	—	12,838
Proceeds from sale of common stock through At-The-Market (ATM) Offering	68,809	8	97,492	—	—	97,500
Proceeds from sale of common stock through registered direct offering	50,000	5	95,995			96,000
Capitalization of deferred costs to equity upon share issuance	—	—	(1,833)	—	—	(1,833)
Stock-based compensation	—	—	13,069	—	—	13,069
Foreign currency translation loss	—	—	—	(205)	—	(205)
Change in unrealized gains on available-for-sale securities	—	—	—	66	—	66
Net loss	—	—	—	—	(200,988)	(200,988)
Balance, December 31, 2024	283,547	$ 29	$ 681,202	$ 105	$ (554,747)	$ 126,589

See accompanying notes to consolidated financial statements.

RIGETTI COMPUTING, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,	
	2024	**2023**
Cash flows from operating activities:		
Net loss	$ (200,988)	$ (75,107)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	6,906	7,426
Stock-based compensation	13,069	12,409
Change in fair value of earn-out liabilities	43,742	949
Change in fair value of derivative warrant liabilities	90,168	1,160
Change in fair value of forward contract	—	2,229
Impairment of deferred offering costs	—	836
Accretion of available-for-sale securities	(3,622)	(3,121)
Loss on extinguishment of debt	426	—
Amortization of debt issuance costs, commitment fees and accretion of final payment fees	844	1,453
Non-cash lease expense	1,909	1,682
Changes in operating assets and liabilities:		
Accounts receivable	2,602	1,206
Prepaid expenses, other current assets and other assets	(2,434)	(259)
Deferred revenue	468	(618)
Accounts payable	(1,036)	895
Accrued expenses and operating lease liabilities	(2,681)	(1,719)
Net cash used in operating activities	(50,627)	(50,579)
Cash flows from investing activities:		
Purchases of property and equipment	(11,098)	(9,059)
Purchases of available-for-sale securities	(224,764)	(109,252)
Maturities of available-for-sale securities	157,500	119,084
Net cash (used in) provided by investing activities	(78,362)	773
Cash flows from financing activities:		
Principal repayments and prepayment and final payment fees of notes payable	(23,328)	(8,333)
Net payments of tax withholdings on sell-to-cover equity award transactions	(6,272)	—
Proceeds from sale of common stock through Common Stock Purchase Agreement	12,838	20,544
Proceeds from sale of common stock through At-The-Market (ATM) Offering	97,500	—
Proceeds from sale of common stock through registered direct offering	96,000	—
Payments of offering costs	(1,833)	(107)
Proceeds from issuance of common stock upon exercise of stock options and warrants	554	1,126
Net cash provided by financing activities	175,459	13,230
Effects of exchange rate changes on cash and cash equivalents	(188)	80
Net increase (decrease) in cash and cash equivalents	46,282	(36,496)
Cash and cash equivalents – beginning of period	21,392	57,888
Cash and cash equivalents – end of period	$ 67,674	$ 21,392
Supplemental disclosures of other cash flow information:		
Cash paid for interest	$ 2,350	$ 4,340
Non-cash investing and financing activities:		
Capitalization of deferred costs to equity upon share issuance	—	13
Purchases of property and equipment recorded in accounts payable	466	3,612
Purchases of property and equipment recorded in accrued expenses	150	1,019
Non-cash addition to operating lease right-of-use assets and lease liability	2,268	—
Unrealized gain on short term investments	66	325

See accompanying notes to consolidated financial statements.

(1) Description of Business

Rigetti Computing, Inc. and its subsidiaries (collectively, the "Company" or "Rigetti"), builds quantum computers and the superconducting quantum processors that power them. The Company markets a 9-qubit quantum processing unit (QPU) under the Novera™ QPU trade name. Through the Company's Quantum Computing as a Service ("QCaaS") platform, the Company's machines can be integrated into any public, private or hybrid cloud.

The Company is located and headquartered in Berkeley, California. The Company also operates in Fremont, California; London, United Kingdom; Adelaide, Australia and British Columbia, Canada. The Company's revenue is derived primarily from operations in the United States and the United Kingdom.

(2) Summary of Significant Accounting Policies

Basis of Presentation

On March 2, 2022 (the "Closing Date"), a merger transaction between Rigetti Holdings, Inc. ("Legacy Rigetti") and Supernova Partners Acquisition Company II, Ltd. ("SNII") was completed (the "Business Combination"). In connection with the closing of the Business Combination, the Company changed its name to Rigetti Computing, Inc. and all of SNII Class A ordinary shares and SNII Class B ordinary shares automatically converted into shares of common stock, par value $0.0001, of the Company (the "Common Stock") on a one-for-one basis. The SNII Public Warrants and the SNII Private Warrants became warrants for Common Stock. The Company's Common Stock and Public Warrants trade on the Nasdaq Capital Market under the ticker symbols "RGTI" and "RGTIW," respectively.

The Company determined that Legacy Rigetti was the accounting acquirer in the Business Combination based on an analysis of the criteria outlined in Accounting Standards Codification (ASC) 805, Business Combination.

Accordingly, for accounting purposes, the Business Combination was treated as the equivalent of Legacy Rigetti issuing stock for the net assets of SNII, accompanied by a recapitalization. The primary asset acquired from SNII was cash that was assumed at historical costs. Separately, the Company also assumed warrants that were deemed to be derivatives and meet liability classification subject to fair value adjustment measurements upon closing of the Business Combination (the "Closing"). No goodwill or other intangible assets were recorded because of the Business Combination. While SNII was the legal acquirer in the Business Combination because Legacy Rigetti was deemed the accounting acquirer, the historical financial statements of Legacy Rigetti became the historical financial statements of the combined company, upon the consummation of the Business Combination.

Risks and Uncertainties

The Company is subject to a number of risks similar to those of other companies of similar size in its industry, including, but not limited to, the need for successful development of products, the potential need for additional capital (or financing) in the future, competition from substitute products and services from larger companies, protection of proprietary technology, patent litigation, dependence on key individuals, and risks associated with changes in information technology.

Based on the Company's forecasts, the Company believes that its existing cash and cash equivalents and available for sale investments should be sufficient to meet its anticipated operating cash needs for at least the next 12 months from the issuance date of these financial statements based on the Company's current business plan and expectations and assumptions considering current macroeconomic conditions.

Macroeconomic Conditions

Results of the Company's operations have varied and may continue to vary based in part on the impact of changes in the domestic or global economy. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, inflation, financial and credit market fluctuations, international trade relations and tariffs, pandemics, political turmoil, natural catastrophes, warfare, and terrorist attacks in the United States or elsewhere, could negatively affect the Company's business, including progress toward the development of quantum computing. It is not possible at this time to estimate the long-term impact that these and related events could have on the Company's business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted. If these conditions persist and deepen, the Company could experience an inability to access additional capital if needed, or its liquidity could otherwise be impacted. If the Company is unable to raise capital when needed and on attractive terms, it would be forced to delay, reduce or eliminate its research and development programs and other efforts.

Principles of Consolidation

The accompanying consolidated financial statements of the Company and its subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and applicable rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Emerging Growth Company

Following the Business Combination, the Company qualifies as an emerging growth company (''EGC'') as defined in the Jumpstart our Business Startups (''JOBS'') Act. The JOBS Act permits companies with EGC status to take advantage of an extended transition period to comply with new or revised accounting standards, delaying the adoption of these accounting standards until they apply to private companies. The Company intends to use this extended transition period to enable us to comply with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date the Company (i) is no longer an EGC or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, the consolidated financial statements may not be comparable to companies that comply with the new or revised accounting standards as of public company effective dates.

Use of Estimates

The preparation of the consolidated financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as reported amounts of revenues and expenses during the reporting period. Such management estimates include, but are not limited to, the fair value of share-based awards, the fair value of derivative warrant liabilities, the fair value of Sponsor Vesting Shares issued in connection with the Business Combination, accrued liabilities and contingencies, depreciation and amortization periods, revenue recognition and accounting for income taxes. Management evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors, including the current economic environment and adjusts when facts and circumstances dictate. These estimates are based on information available as of the date of the consolidated financial statements; therefore, actual results could differ from those estimates.

Segments

Our Chief Operating Decision Maker ("CODM"), the Chief Executive Officer, manages the Company's business activities as a single operating and reportable segment at the consolidated level. Accordingly, our CODM uses consolidated net loss to measure segment profit or loss, allocate resources and assess performance. Further, the CODM reviews and utilizes natural expenses such as employee wages and benefits at a consolidated level and capital expenditures including asset additions to manage the Company's operations and strategic growth initiatives. Other segment items include restructuring costs, write-offs of the Ampere Computing forward warrant agreement asset and deferred offering costs, changes in fair value of derivative warrant liabilities and earnout liabilities and other operational expenses which are reflected in the consolidated statements of operations.

Foreign Currency Translation and Transactions

The Company's reporting currency is the US dollar. The functional currencies of the Company's foreign subsidiaries are their respective local currencies (UK pounds sterling, Australian dollar and Canadian dollar), which are the monetary unit of account of the principal economic environment in which the Company's foreign subsidiaries operate. Assets and liabilities of the foreign subsidiaries are translated into US dollars at exchange rates in effect at each period end. Revenues and expenses are translated at average exchange rates in effect during the period. The resulting translation adjustments are recorded in accumulated other comprehensive income (loss) as a component of stockholders' equity.

Foreign currency transaction gains and losses resulting from or expected to result from transactions denominated in a currency other than the functional currency are recognized in other income (expense), net in the consolidated statements of operations and have not been material for all periods presented.

Comprehensive Loss

Comprehensive loss consists of two components including net loss and total other comprehensive (loss) income after taxes. The Company's total other comprehensive (loss) income consists of foreign currency translation adjustments that result from consolidation of its foreign subsidiaries and unrealized gains on available-for-sale debt securities.

Cash and Cash Equivalents

The Company considers all highly liquid investment securities with remaining maturities at the date of purchase of three months or less to be cash equivalents. Cash and cash equivalents consist of funds maintained in demand deposit accounts, money market accounts and a U.S. treasury security. Cash and cash equivalent balances, at times, may exceed federally insured limits. Cash equivalents are stated at fair value.

Investments

The Company determines the classification of its investment securities at the time of purchase. All investments in fixed income securities with remaining maturities at the date of purchase of more than three months are presently classified as available-for-sale and may be sold in response to changes in interest rates, prepayment risk or other market factors. Investments classified as available for sale are recorded at fair value in the consolidated balance sheets and are classified as short-term or long-term assets based on their maturity date and expectations regarding sales. Fair values are primarily determined using quoted market prices or valuations provided by external investment managers who obtain them from a variety of industry standard data providers.

Unrealized gains and losses on available for sale investments are included as a separate component of accumulated other comprehensive income (loss), until realized. The Company evaluates its investments to assess whether those in an unrealized loss position are other than temporarily impaired. Impairments are considered other than temporary if they are related to a deterioration in credit risk or if it is likely the Company will sell the securities before recovery of the amortized cost basis. Realized gains and losses and declines in value determined to be other than temporary are determined based on the specific identification method and are reported in other income (expense), net in the statements of operations. See Note 4 for further information regarding fair value.

Interest income and dividends are recognized in interest income on an accrual basis. Premiums and discounts on debt securities are amortized as an adjustment to interest income over the period to maturity of the related security using the effective interest method.

Accounts Receivable

Accounts receivable are recorded at invoice value, net of allowance for credit losses. Unbilled receivables are included in accounts receivable and include amounts that were invoiced subsequent to the period end for which revenue was recognized in advance of the right to invoice. Expected credit losses for uncollectible receivable balances consider both current conditions and reasonable and supportable forecasts of future conditions. Current conditions considered include predefined aging criteria, as well as specified events that indicate the balance due is not collectible. Reasonable and supportable forecasts used in determining the probability of future collections consider publicly available macroeconomic data and whether future credit losses are expected to differ from historical losses.

The Company is not party to any off-balance sheet arrangements that would require an allowance for credit losses. As of both December 31, 2024 and December 31, 2023, the Company does not have any allowances for credit losses.

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets include prepaid software, prepaid insurance, other prepaid expenses and other current assets, all of which are expected to be recognized or realized within the next 12 months.

Deferred Offering Costs

The Company capitalizes certain legal, accounting, and other third-party fees that are directly associated with the issuance of shares under a registration statement filed with the SEC. After consummation of an issuance of shares, costs allocated to equity-classified instruments are recorded as a reduction to additional paid-in capital. The Company expenses costs allocated to liability-classified instruments.

Property and Equipment, Net

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets.

Furniture and information technology hardware (IT Hardware)	3 years
Process equipment	7 years
Quantum computing fridges	3-10 years
Leasehold and other improvements	Shorter of the lease-term or estimated useful-life

Expenditures for repairs and maintenance are expensed as incurred. Upon disposition, the cost and related accumulated depreciation are removed and any resulting gain or loss is reflected in other income (expense), net in the consolidated statements of operations.

Impairment of Long-Lived Assets

Long-lived assets, which consist of property and equipment and operating lease right-of-use assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset (asset group) may not be recoverable. When such events or changes in circumstances occur, the Company performs an undiscounted cash flow analysis to determine if an impairment exists and, if so, an impairment loss would be recorded based on the excess of the carrying amount of the asset (asset group) over its fair value.

During each of the years ended December 31, 2024 and December 31, 2023, the Company determined there were triggering events related to share price declines or expected near term losses and an undiscounted cash flow analysis was performed. Based on the results of this analysis, the Company's long-lived assets were not impaired and no impairment charges were recorded.

Leases

The Company determines if an arrangement is or contains a lease at inception. Operating lease right-of-use assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease payments consist primarily of the fixed payments under the arrangement.The Company generally uses an incremental borrowing rate estimated based on the information available at the lease commencement date to determine the present value of lease payments unless the implicit rate is readily determinable. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Company accounts for lease and non-lease components as a single lease component for office leases. Lease and non-lease components for all other leases are generally accounted for separately. Additionally, the Company does not record leases on the balance sheet that, at the lease commencement date, have a lease term of 12 months or less. Operating leases are included in operating lease right-of-use assets, current portion of operating lease liabilities, and operating lease liabilities, less current portion in the accompanying consolidated balance sheets.

Deferred Financing Costs

The incremental cost, including the fair value of warrants, directly associated with obtaining debt financing is capitalized as deferred financing costs upon the issuance of the debt and amortized over the term of the related debt agreement using the effective-interest method with such amortized amounts included as a component of interest expense in the consolidated statements of operations. Unamortized deferred financing costs are presented on the consolidated balance sheets as a direct deduction from the carrying amount of the related debt obligation.

Public and Private Warrants

Each whole warrant entitles the holder to purchase one share of the Company's Common Stock at a price of $11.50 per share, subject to adjustments, and will expire on March 2, 2027 at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Private Warrants do not meet the derivative scope exception and are accounted for as derivative liabilities. Specifically, the Private Warrants contain provisions that cause the settlement amounts to be dependent upon the characteristics of the holder of the warrant which is not an input into the pricing of a fixed-for-fixed option on equity shares. Therefore, the Private Warrants are not considered indexed to the Company's stock and should be classified as a liability. Since the Private Warrants meet the definition of a derivative, the Company records the Private Warrants as liabilities in the consolidated balance sheet at fair value upon, with subsequent changes in the fair value recognized in the consolidated statements of operations at each reporting date. The fair value of the Private Warrants are measured using the Black-Scholes option-pricing model.

The Public Warrants also fail to meet the indexation guidance in Accounting Standards Codification ("ASC") Topic 815, *Derivatives and Hedging* ("ASC 815"), and are accounted for as liabilities because they include a provision whereby if there is not an effective registration statement, the warrant holders have a cap of 0.361 shares of Common Stock per warrant (subject to adjustment), on the issuable number of shares in a cashless exercise. Subsequent to the separate listing and trading of the Public Warrants, their fair value has been measured based on the observable listed trading prices for such warrants.

See Notes 4 and 9 for further information regarding the fair value of the Public and Private Warrants.

Earn-Out Liabilities

At the closing of the Business Combination, the Sponsor subjected the Sponsor Vesting Shares to forfeiture and vesting conditions as of the Closing Date, with vesting occurring only if thresholds related to the weighted average price of Common Stock are met for the duration of various specified consecutive day trading periods during the five-year period following the Closing as described in Note 10 (the "Earn-Out Triggering Events"). Any such shares held by the Sponsor that remain unvested after the fifth anniversary of the Closing will be forfeited.

These Sponsor Vesting Shares are accounted for as liability classified instruments because the Earn-Out Triggering Events that determine the number of Sponsor Vesting Shares to be earned back by the Sponsor include outcomes that are not solely indexed to the Common Stock of the Company. The aggregate fair value of the Sponsor Vesting Shares on the Closing Date was estimated using a Monte Carlo simulation model. The earn-out liabilities are adjusted to fair value each reporting period using the Monte Carlo simulation model until such time as the Earn-Out Triggering Events are achieved or the Sponsor Vesting Shares are forfeited. As of December 31, 2024, the Earn-Out Triggering Events were not achieved for any of the tranches of Sponsor Vesting Shares. See Note 10 for further information regarding the earn-out liabilities.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 606, *Revenue from Contracts with Customers* and accounts for certain contract costs in accordance with ASC 340-40, *Other Assets and Deferred Costs—Contracts with Customers.*

The Company recognizes revenue from contracts with customers by applying the following five-step model:

- Identify the contract with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to the performance obligations in the contract
- Recognize revenue when (or as) performance obligations are satisfied

The Company generates revenue through its Quantum Computing as a Service ("QCaaS"), sales of QPUs and custom computing components, and development contracts and other services.

Access to Rigetti quantum computing systems can be purchased as a quantum computing subscription, or on a usage basis for a specified quantity of hours. Revenue related to subscription-based access to ("QCaaS") is recognized over time as access to the systems is provided on a ratable basis over the subscription term, which can range from monthly to two years. This time-based input measure of progress provides a faithful depiction of the transfer of the services because the benefits the customer obtains generally equals the benefit from its access to the systems throughout the subscription term. Revenue related to usage-based access to Rigetti quantum computing systems is recognized over time as the systems are accessed using an output method based on compute credit hours expended. The Company believes this output method provides a faithful depiction of the transfer of the services because the customer has purchased a specified quantity of hours of usage that diminishes each time an hour is expended and therefore each hour of access to the systems is considered a discrete delivery of underlying services in these arrangements.

Revenue related to the sale of QPUs, including Novera™, and custom quantum computing components is recognized at a point in time when obligations under the terms of the contract with our customer are satisfied, generally with the transfer of control upon shipment for sales of QPUs, and upon customer acceptance for sales of custom quantum computing components.

Development contracts are generally multi-year, non-recurring arrangements in which the Company provides professional services regarding practical applications of quantum computing to technology and business problems within the customer's industry or organization and assists the customer in developing quantum algorithms and applications that will provide commercial value to the customer in areas of business interest. Development contracts are generally fixed fee arrangements invoiced on a milestone basis but may also be invoiced on a time and materials or cost reimbursement basis in certain cases.

Revenue related to development contracts and other services is recognized over time based on completed milestones or hours or costs incurred as appropriate. Revenue for partially completed milestones deemed probable of being met is recognized using an input measure based on actual labor hours incurred to date relative to total estimated labor hours needed to complete the milestone. The Company believes this input measure of progress provides a faithful depiction of the transfer of the services because it closely depicts the Company's efforts or inputs to the satisfaction of the performance obligation.

When the Company's contracts with customers contain multiple performance obligations, the transaction price is allocated on a relative standalone selling price basis to each performance obligation. The Company typically determines standalone selling price based on observable selling prices of its products and services. In instances where standalone selling price is not directly observable, standalone selling price is determined using information that may include market conditions and other observable inputs. Standalone selling price is typically established as a range. In situations in which the stated contract price for a performance obligation is outside of the applicable standalone selling price range and has a different pattern of transfer to the customer than the other performance obligations in the contract, the Company will reallocate the total transaction price to each performance obligation based on the relative standalone selling price of each.

The transaction price is the amount of consideration to which the Company expects to be entitled in exchange for transferring goods and services to the customer. Revenue is recorded based on the transaction price, which includes fixed consideration and estimates of variable consideration. The amount of variable consideration included in the transaction price is constrained and is included only to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The Company's contracts with customers may include renewal or other options at fixed prices. Determining whether such options are considered distinct performance obligations that provide the customer with a material right and therefore should be accounted for separately requires significant judgment. Judgment is required to determine the standalone selling price for each renewal or other option to determine whether the renewal or other option pricing is reflective of standalone selling price or is reflective of a discount that would provide the customer with a material right. Certain of the Company's sales contracts for the Novera QPU contain material upgrade rights which have been deferred. The timing of revenue recognition may not align with the right to invoice the customer. The Company records accounts receivable when it has the unconditional right to issue an invoice and receive payment, regardless of whether revenue has been recognized. If revenue has not yet been recognized, a contract liability (deferred revenue) is also recorded. If revenue is recognized in advance of the right to invoice, a contract asset or unbilled receivable is recorded, depending on whether the Company's right to consideration is considered conditional or unconditional. Unbilled receivables are included within accounts receivable in the consolidated balance sheets.

In instances where the timing of revenue recognition differs from the timing of the right to invoice, the Company has determined that a significant financing component generally does not exist. The primary purpose of the Company's invoicing terms is to provide customers with simplified and predictable ways of purchasing the products and services and not to receive financing from or provide financing to the customer. Additionally, the Company has elected the practical expedient that permits an entity not to recognize a significant financing component if the time between the transfer of a good or service and payment is one year or less.

Payment terms on invoiced amounts are typically net 30 days. The Company does not offer rights of return for its products and services in the normal course of business, and contracts generally do not include service-type warranties that provide any incremental service to the customer beyond providing assurance that the goods and services conform to applicable specifications or customer-specific or subjective acceptance provisions. The Company also excludes from revenue government-assessed and imposed taxes on revenue-generating activities that are invoiced to customers.

Costs of Obtaining and Fulfilling Contracts

The Company has elected to apply the practical expedient to expense contract acquisition costs as incurred when the expected amortization period is one year or less.

Cost of Revenue

Cost of revenue consists of direct and indirect costs associated with providing its QCaaS offerings, sales of QPUs and custom computing components, and development contracts and other services. Cost of revenue includes employee related costs, material costs and an allocation of facility costs, depreciation and amortization associated with the delivery of goods and services to customers.

Research and Development

Research and development costs are expensed as incurred. Research and development expenses include compensation, employee benefits, stock-based compensation, outside consultant fees, allocation of facility costs, depreciation and amortization, materials and components purchased for research and development.

Selling, General and Administrative

Selling, general and administrative expenses include compensation, employee benefits, stock-based compensation, professional service fees, allocation of facility costs, depreciation and amortization associated with general selling and administrative overhead activities.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded for deferred tax assets if it is more likely than not that some portion or all of the deferred tax assets will not be realized. As of December 31, 2024 and December 31, 2023 the Company has recorded a full valuation allowance against its deferred tax assets. The Company recognizes the effect of income tax positions only if it is more likely than not that those positions will be sustained. Recognized income tax positions are measured at the largest amount that has a greater than 50% likelihood of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest related to unrecognized tax benefits in interest expense and penalties in income tax expense.

Net Loss Per Share

Basic net loss per common share is computed by dividing the net loss available to common stockholders (the numerator) by the weighted average number of common shares outstanding (the denominator) during the period. Diluted net loss per common share is computed by dividing the net loss available to common stockholders by the weighted average number of common shares and potential common shares outstanding when the impact is not antidilutive. Potential common shares from stock options, unvested restricted stock units and common stock warrants are computed using the treasury stock method. Contingently issuable shares are included in basic net loss per share only when there is no circumstance under which those shares would not be issued. Shares issuable for little or no cash consideration shall be considered outstanding common shares and included in the computations of basic and diluted net loss per share.

Stock-Based Compensation

The Company accounts for share-based compensation in accordance with ASC 718, Compensation – *Stock Compensation*. The Company's share-based compensation awards are all equity-classified and consist of stock options, restricted stock units ("RSU") and restricted stock awards ("RSA"). Most stock options and RSUs have a service-based vesting condition ranging from 1 to 5 years. Some stock options and RSUs include both a market-based and service-based vesting condition. RSAs are fully vested on the date of grant. The Company occasionally issues awards that might have different vesting conditions.

Compensation expense is based on the grant-date fair value of the awards and recognized over the requisite service period using a straight-line method for awards that have a service-based vesting condition. Compensation expense for awards with a market-based vesting condition is recognized over the requisite service period regardless of whether the market condition is met, unless the underlying service requirement is not met. Compensation expense for RSAs is recognized fully on the date of grant. The Company has elected to account for forfeitures of employee stock awards as they occur. The Company intends to issue new shares for all equity based awards.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and trade accounts receivable. The Company's cash and cash equivalents are placed with high-credit-quality financial institutions, and at times exceed federally insured limits. To date, the Company has not experienced any credit loss relating to its cash and cash equivalents.

Fair Value Measurements

The Company reports all financial assets and liabilities and nonfinancial assets and liabilities that are recognized or disclosed at fair value in the consolidated financial statements on a recurring basis. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities.

Level 3—Inputs are unobservable for the asset or liability.

The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest-level input that is significant to the fair value measurement in its entirety.

Balance Sheet Reclassifications

Certain balance sheet accounts from the prior period have been reclassified to conform with the current period presentation.

Recently Adopted Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-06, Debt - (Topic 815) ("ASU No. 2020-06"), which simplifies an issuer's accounting for convertible instruments and its application of the derivatives scope exception for contracts in its own equity. ASU No. 2020-06 was effective for the Company as of January 1, 2024. The Company determined that the adoption of this standard did not have a material impact on the consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, "Segment Reporting - Improvements to Reportable Segment Disclosures" ("ASU No. 2023-07"). ASU No. 2023-07 updates reportable segment disclosure requirements by requiring disclosures of significant reportable segment expenses that are regularly provided to the Chief Operating Decision Maker ("CODM") and included within each reported measure of a segment's profit or loss. ASU No. 2023-07 also requires disclosure of the title and position of the individual identified as the CODM and an explanation of how the CODM uses the reported measures of a segment's profit or loss in assessing segment performance and deciding how to allocate resources. ASU No. 2023-07 was effective for the Company for the year ended December 31, 2024, and interim periods within fiscal years beginning after December 15, 2024. As a result of the Company's adoption of ASU No. 2023-07, additional disclosures were included in Note 2 "Summary of Significant Accounting Policies" and Note 16 "Segments, Geographical Information, Concentrations and Significant Customers".

Recently Issued Accounting Pronouncements Not Yet Adopted

In June 2022, the FASB issued ASU 2022-03, ASC Subtopic 820 "Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions". The FASB issued this update (1) to clarify the guidance in Topic 820, Fair Value Measurement, when measuring the fair value of an equity security subject to contractual restrictions that prohibit the sale of an equity security, (2) to amend a related illustrative example, and (3) to introduce new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value in accordance with Topic 820. ASU 2022-03 is effective for the Company for annual periods beginning after December 15, 2024, and interim periods within those fiscal years, with early adoption permitted. The Company is still evaluating the impact of this pronouncement on the consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09, "Income Taxes - Improvements to Income Tax Disclosures" requiring enhancements and further transparency to certain income tax disclosures, most notably the tax rate reconciliation and income taxes paid. ASU 2023-09 is effective for the Company for annual periods beginning after December 15, 2024 on a prospective basis. Retrospective application is also permitted. The Company is still evaluating the impact of this pronouncement on the consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, "Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures: Disaggregation of Income Statement Expenses," which requires disclosure of disaggregated information about specific categories underlying certain income statement expense line items in the footnotes to the financial statements for both annual and interim periods. ASU 2024-03 is effective for the Company for annual periods beginning after December 15, 2026, and interim reporting periods within annual periods beginning after December 15, 2027. Early adoption is permitted. The Company is still evaluating the impact of this pronouncement on the consolidated financial statements.

(3) Investments

All investments in fixed income securities are classified as cash equivalents or available-for-sale in the consolidated balance sheets based on the underlying maturity date of each investment. Fixed income securities are recorded at their estimated fair value. The amortized cost, gross unrealized holding gains and losses included in other comprehensive income (loss) and the fair value of the fixed income securities as of December 31, 2024 and December 31, 2023, respectively, are presented in the tables below (in thousands):

	December 31, 2024			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	$ 29,806	$ —	$ —	$ 29,806
U.S. treasury security	24,835	—	—	24,835
Cash equivalents	$ 54,641	$ —	$ —	$ 54,641
Available-for-sale investments-short-term:				
U.S. treasury securities	$ 124,352	$ 69	$ (1)	$ 124,420
Available-for-sale investments – short-term	$ 124,352	$ 69	$ (1)	$ 124,420
Available-for-sale investments-long-term:				
U.S. treasury security	$ 25,059	$ 9	$ —	$ 25,068
Available-for-sale investments – long-term	$ 25,059	$ 9	$ —	$ 25,068

	December 31, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Money market funds	$ 15,681	$ —	$ —	$ 15,681
Available-for-sale investments-short-term:				
U.S. treasury securities	$ 45,252	$ 18	$ —	$ 45,270
U.S. government agency bonds	7,933	—	(6)	7,927
Corporate bonds	25,341	6	(7)	25,340
Available-for-sale investments – short-term	$ 78,526	$ 24	$ (13)	$ 78,537

The Company invests in highly rated investment grade debt securities. All of the Company's available-for-sale securities have final maturities of one year or less, except for one U.S. treasury security classified as long-term which matures on March 31, 2026. The Company reviews the individual securities that have unrealized losses on a regular basis. The Company evaluates whether it has the intention to sell any of these investments and whether it is more likely than not that it will be required to sell any of them before recovery of the amortized cost basis. Neither of these criteria were met as of December 31, 2024 or December 31, 2023, respectively.

The Company additionally evaluates whether the decline in fair value of the securities below their amortized cost basis is related to credit losses or other factors. Based on this evaluation, the Company determined that the unrealized losses for its available-for-sale securities were primarily attributable to changes in interest rates and non-credit-related factors.

Accordingly, the Company determined that none of the unrealized losses were other-than-temporary, and that recognition of an impairment charge was not required as of December 31, 2024 or December 31, 2023, respectively. As of December 31, 2024, there was one security in an unrealized loss position with a market value of $24.4 million. The amount of the loss on this security was inconsequential. None of the Company's available-for-sale securities have been in an unrealized loss position for more than one year. No available-for-sale securities were sold during the years ended December 31, 2024 or December 31, 2023, respectively.

See Note 4 for additional information regarding the fair value of the Company's investments.

(4) Fair Value Measurements

The following tables present the fair value hierarchy used to measure the Company's financial assets and liabilities that are measured as of December 31, 2024 and December 31, 2023, respectively (in thousands):

	December 31, 2024		
	Level 1	Level 2	Level 3
Assets:			
Cash equivalents:			
Money market funds	$ 29,806	$ —	$ —
U.S. treasury security	—	24,835	—
Short-term investments:			
U.S. treasury securities	—	124,420	—
Long-term investments:			
U.S. treasury security	—	25,068	—
Total Assets	$ 29,806	$ 174,323	$ —
Liabilities:			
Derivative warrant liability – Public Warrants	$ 70,265	$ —	$ —
Derivative warrant liability – Private Warrants	—	—	22,830
Earn-out liabilities	—	—	45,897
Total Liabilities	$ 70,265	$ —	$ 68,727

	December 31, 2023		
	Level 1	Level 2	Level 3
Assets:			
Cash Equivalents:			
Money Market Funds	$ 15,681	$ —	$ —
Short-term investments:			
U.S treasury securities	—	45,270	—
U.S. government agency bonds	—	7,927	—
Corporate bonds	25,340	—	—
Total Assets	$ 41,021	$ 53,197	$ —
Liabilities:			
Derivative warrant liability – Public Warrants	$ 1,323	$ —	$ —
Derivative warrant liability – Private Warrants	—	—	1,604
Earn-out liabilities	—	—	2,155
Total Liabilities	$ 1,323	$ —	$ 3,759

As of December 31, 2024 and December 31, 2023, the Company has recorded the following financial instruments subject to fair value measurements: 1) Derivative warrant liabilities—Public Warrants and Private Warrants, 2) Money Market Funds, 3) U.S. treasury securities, 4) U.S. government agency bonds and 5) Earn-out liabilities.

The Company had long-term debt with a variable interest which was repaid in full prior to December 31, 2024. The carrying value of the long-term debt as of December 31, 2023 consisted of the original principal amounts borrowed, accretion of final payment fees, less principal payments and unamortized debt issuance costs.

The fair value of the Public Warrants has been measured based on the observable listed prices for such warrants, a Level 1 measurement. The fair value of the Company's Level 2 financial assets are determined by using inputs based on quoted market prices for similar instruments. All other financial instruments are classified as Level 3 instruments as they all include unobservable inputs. The Private Warrants are measured at fair value using a Black Scholes model. The fair value of the Earn-out liabilities are estimated using a Monte Carlo simulation model. The Company estimates the volatility of its Private Warrants and Earn-out liabilities based on the historical volatility of the Company's common stock.

The Company estimated the fair value of a Forward Warrant Agreement that was in place throughout most of 2023 using a forward analysis with unobservable inputs which included selected risk-free rate and probability outcomes. During the year ended December 31, 2023, the Company reduced the estimated probability of occurrence for the Forward Warrant Agreement from 50% to 0% because Ampere's obligation to make the additional payment under the Forward Warrant Agreement expired in October 2023 without taking effect. See Note 5 for further discussion regarding the Forward Warrant Agreement.

Previously, the Company used the implied volatility of its Public Warrants in its valuation models for the Private Warrants and Earn-out liabilities. As of December 31, 2024, the Company used the historical volatility of its common stock for these valuation models because the implied volatility of the Public Warrants was no longer meaningful due to the rapid increase in the price of the Public Warrants during the fourth quarter of 2024. There were no other changes in fair value measurement techniques during the years ended December 31, 2024 or December 31, 2023.

There were no transfers in or out of Level 3 of the fair value hierarchy during the years ended December 31, 2024 or December 31, 2023, except for the conversion of Private Warrants, a Level 3 measurement, to Public Warrants, a Level 1 measurement. During the years ended December 31, 2024 and December 31, 2023, Private Warrants converted to Public Warrant totaled 1,280,732 and 1,177,166, respectively. During the years ended December 31, 2024, and December 31, 2023, the favorable impact of the conversion on the Company's net loss was $2.4 million and $0.5 million, respectively. Current estimates of fair value may differ from the amounts presented.

A summary of the changes in the fair value of the Company's Level 3 financial instruments during the years ended December 31, 2024, and December 31, 2023, respectively, is as follows (in thousands):

	Derivative Warrant Liability - Private Warrants	Forward Warrant Agreement	Earn-out Liabilities
Balance – December 31, 2023	$ 1,604	$ —	$ 2,155
Change in fair value during the year	26,828	—	43,742
Transfer from Private Warrants to Public Warrants	(5,602)	—	—
Balance – December 31, 2024	$ 22,830	$ —	$ 45,897
Balance – December 31, 2022	$ 1,068	$ (2,229)	$ 1,206
Change in fair value during the year	1,064	2,229	949
Transfer from Private Warrants to Public Warrants	(528)	—	—
Balance – December 31, 2023	$ 1,604	$ —	$ 2,155

(5) Forward Warrant Agreement

In connection with the execution of the Merger Agreement in October 2021 (See Note 2), Rigetti entered into a warrant subscription agreement ("Forward Warrant Agreement") with a strategic partner, Ampere Computing LLC ("Ampere") for the purchase of a warrant for an aggregate purchase price (including amounts from exercise) of $10.0 million. The Forward Warrant Agreement provided for the issuance of a warrant for the purchase of up to an aggregate of 1,000,000 shares of Common Stock at an exercise price of $0.0001. The purchase of the warrant was conditioned upon, among other things, the consummation of the Business Combination and the entry into a collaboration agreement between Rigetti and Ampere. The parties entered into the collaboration agreement in January 2022. Ampere was required to pay $5.0 million to Rigetti no later than the later of (i) the Closing and (ii) June 30, 2022.

On June 30, 2022, pursuant to the Forward Warrant Agreement, the Company issued the warrant to Ampere upon receipt of an aggregate of $5.0 million (including the exercise price), and upon such payment and issuance, 500,000 shares of the Company's Common Stock vested under the warrant and were immediately exercised by Ampere pursuant to the terms of the warrant. Ampere was required to pay an additional $5.0 million to Rigetti no later than the closing date of the listing of Ampere's capital stock on a stock exchange, provided that if the listing had not occurred by the second anniversary of the Forward Warrant Agreement (October 2023), Ampere was not obligated to make the additional payment. Ampere's obligation to make the additional $5.0 million payment has now expired. The Company filed a registration statement, pursuant to a Registration Rights Agreement with Ampere, registering the resale of the initial 500,000 shares issued under the warrant which was declared effective during the year ended December 31, 2022.

The Company evaluated the Forward Warrant Agreement as a derivative in conjunction with the guidance of ASC 480, "Distinguishing Liabilities from Equity". The Company calculated the fair value of the Forward Warrant Agreement at inception using the Forward Contract Pricing methodology. The Forward Warrant Agreement was subsequently re-measured at each reporting period using the Forward Contract Pricing methodology with the change in fair value recorded in selling, general and administrative expense in the condensed consolidated statement of operations.

During the year ended December 31, 2023, the Company reduced the estimated probability of occurrence for the Forward Warrant Agreement from 50% to 0% because Ampere's obligation to make the additional payment under the Forward Warrant Agreement expired without taking effect. As a result, the Forward Warrant Agreement had no value as of December 31, 2024 or December 31, 2023.

(6) Property and Equipment, Net

Property and equipment as of December 31, 2024 and December 31, 2023 are composed of the following (in thousands):

	December 31, 2024	December 31, 2023
Quantum computing fridges	$ 42,854	$ 39,801
Process equipment	27,233	25,121
Leasehold improvements	8,868	8,372
IT Hardware	3,558	3,245
Construction in progress	1,339	—
Furniture and other assets	1,100	1,246
Total property and equipment	84,952	77,785
Less: Accumulated depreciation and amortization	(40,309)	(33,302)
Property and equipment - net	$ 44,643	$ 44,483

As of December 31, 2024 and December 31, 2023, 98.79% and 99.95%, respectively, of the total gross property and equipment was located in the United States, and 1.21% and 0.05%, respectively, of the total gross property and equipment was located in the United Kingdom. Total depreciation and amortization expense for the years ended December 31, 2024 and December 31, 2023 was $6.9 million and $7.4 million, respectively.

(7) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	December 31, 2024	December 31, 2023
Utilities	$ 2,789	$ 2,273
Property and other taxes	391	2,039
Property and equipment	150	1,019
Payroll and other payroll costs	3,599	1,654
Subcontractor cost	173	775
Accrued interest	—	297
Professional and subscription fees	430	220
Others	473	286
	$ 8,005	$ 8,563

(8) Financing Arrangements

Loan and Security Agreement

On June 21, 2024, (the "Amendment Date"), the Company entered into the Amended and Restated Loan and Security Agreement (the "Amended Loan Agreement"), by and between Trinity Capital Inc., as lender (the "Lender"), and Rigetti & Co, LLC and Rigetti Intermediate LLC, as borrowers, which amended and restated in its entirety the Company's existing loan and security agreement, dated as of March 10, 2021 (as amended from time to time, the "Existing Loan Agreement"). The economic terms and cash flows of the Term Loans (defined below) remain unchanged under the Amended Loan Agreement.

Under the Existing Loan Agreement, the Company drew $12.0 million in March 2021, $8.0 million in May 2021, $7.0 million in November 2021 and $5.0 million in January 2022 (collectively, the "Term Loans"). The outstanding principal balance of the Term Loans as of the Amendment Date was $16.2 million. Each Term Loan was to be amortized in equal monthly installments through 48 months following the disbursement date of each Term Loan (each, a "Maturity Date"), with interest at a rate equal to the greater of 11% or the US Prime Rate plus 7.50% per annum, payable monthly.

The Company had the right to prepay the outstanding Term Loans, in whole or in part, subject to a prepayment premium that remains unchanged from the Existing Loan Agreement. In addition, the Company was required to pay on the respective Maturity Date, or the date of an earlier prepayment, a final payment fee equal to 2.75% of the aggregate original principal amount of the Term Loans, which remains consistent with the Existing Loan Agreement. The final payment fees were being accreted and amortized into interest expense using the effective interest rate method over the term of the loan.

On December 9, 2024, the Company prepaid in full all amounts owed under the Amended Loan Agreement. The Company prepaid an aggregate of $9.5 million in outstanding principal balance, final payment fees of $0.9 million, plus accrued interest and a prepayment premium aggregating $0.1 million. During the year ended December 31, 2024, the Company recorded a $0.4 million loss on the prepayment and extinguishment of the outstanding principal balance owed under the Amended Loan Agreement.

Long term debt and the unamortized discount balances as of December 31, 2023 were as follows (in thousands):

	December 31, 2023
Outstanding principal amount	$ 22,376
Add: accreted liability of final payment fee	673
Less: unamortized debt discount, long-term	(224)
Less: current portion of long-term debt principal	(12,931)
Debt – net of current portion	$ 9,894
Current portion of long-term debt – principal	12,931
Less: current portion of unamortized debt discount	(767)
Debt – current portion	$ 12,164

During the years ended December 31, 2024 and December 31, 2023, the Company recorded interest expense of $3.3 million and $5.8 million, respectively. During the years ended December 31, 2024 and December 31, 2023, interest expense includes accretion of final payment fees, amortization of the underlying commitment fee and amortization of debt issuance costs totaling $0.8 million and $1.5 million, respectively. The effective interest rate for all tranches of the debt was approximately 23.1% and 22.5% as of December 31, 2024 and December 31, 2023, respectively.

(9) Warrants

Each whole Public Warrant and Private Warrant entitles the holder to purchase one share of Common Stock at a price of $11.50 per whole share, subject to adjustment as discussed below. Pursuant to the warrant agreement, a warrant holder may exercise its warrants only for a whole number of shares of Common Stock. The warrants will expire on March 2, 2027 at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

Public Warrants

When the price per share of the Company's Common Stock equals or exceeds $18.00, the Company may redeem the outstanding warrants in whole and not in part, at a price of $0.01 per warrant as follows (except as described herein with respect to the Private Warrants):

- upon a minimum of 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the shares of the Company's Common Stock equals or exceeds $18.00 per share on the trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

If the foregoing conditions are satisfied and the Company issues a notice of redemption of the warrants, each warrant holder will be entitled to exercise its warrant prior to the scheduled redemption date. Any such exercise would not be done on a "cashless" basis and would require the exercising warrant holder to pay the exercise price in cash for each warrant being exercised. The price of the shares of the Company's Common Stock may fall below the $18.00 redemption trigger price as well as the $11.50 warrant exercise price after the redemption notice is issued.

When the price per share of the Company's Common Stock equals or exceeds $10.00, the Company may redeem the outstanding warrants in whole and not in part, at a price of $0.10 per warrant as follows (except as described herein with respect to the Private warrants):

- upon a minimum of 30 days' prior written notice of redemption provided that holders will be able to exercise their warrants on a cashless basis prior to redemption as described below; and
- if, and only if, the closing price of the Company's Common Stock equals or exceeds $10.00 per share on the trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

Beginning on the date the notice of redemption is given until the warrants are redeemed or exercised, holders may elect to exercise their warrants on a cashless basis and could potentially receive up to a maximum of 0.361 shares of Common Stock per warrant or a minimum of 0.034 shares of Common Stock per warrant. The number of shares of Common Stock that a warrant holder will ultimately receive upon a cashless exercise in connection with a redemption by the Company, is based on the fair market value of the Company's Common Stock on the redemption date, determined based on the volume weighted average price of the Company's Common Stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of the warrants, and the number of months that the corresponding redemption date precedes the expiration date of the warrants, as set forth in a table in the warrant agreement.

As of December 31, 2024 and December 31, 2023, Public Warrants issued and outstanding were 11,082,870 and 9,802,138, respectively (Refer to Note 4 for fair value measurement). The Public Warrants are accounted for as a derivative liability. The fair value of the Public Warrants is measured at each reporting period based on the listed price for the warrants, with subsequent changes in the fair value recognized in the consolidated statement of operations at each reporting date.

The calculated fair value of the derivative liability for the Public Warrants as of December 31, 2024 and December 31, 2023 was $70.3 million and $1.3 million, respectively. The change in the fair value of the Public Warrants included in the consolidated statement of operations during the years ended December 31, 2024 and December 31, 2023 was a loss of $63.3 million and a loss of $0.6 million, respectively.

Private Warrants

The Private Warrants have terms and provisions identical to those of the Public Warrants, including as to exercise price, exercisability and exercise period, except that if the Private Warrants are held by the initial purchasers, or such purchasers' permitted transferees, then the Private Warrants are not redeemable by the Company and may be exercised for cash or on a cashless basis. If the Private Warrants are held by someone other the initial purchasers or such purchasers permitted transferees, then the Private warrants become Public Warrants and are redeemable by the company and exercisable by such holders on the same basis as the Public Warrants.

As of December 31, 2024 and December 31, 2023, Private Warrants issued and outstanding were 1,992,102 and 3,272,834, respectively (Refer to Note 4 for fair value measurement).The Private Warrants are accounted for as a derivative liability. The fair value of the Private Warrants is determined using the Black-Scholes option-pricing model, with subsequent changes in the fair value recognized in the consolidated statements of operations at each reporting date.

The calculated fair value of the derivative liability for the Private Warrants as of December 31, 2024 and December 31, 2023 was $22.8 million and $1.6 million, respectively. The change in the fair value of the Private Warrants included in the consolidated statements of operations during the years ended December 31, 2024 and December 31, 2023 was a loss of $26.8 million and loss of $0.5 million, respectively.

Significant inputs into the Black-Scholes option-pricing models used to value the Private Warrants at December 31, 2024 and December 31, 2023 are as follows:

Valuation Assumptions	December 31, 2024	December 31, 2023
Stock Price	$ 15.26	$ 0.98
Strike Price	$ 11.50	$ 11.50
Volatility (annual) (%)	140.00%	144.50%
Risk-free rate (%)	4.21%	4.00%
Estimated time to expiration (years)	2.17	3.17
Dividend yield (%)	—	—

During the years ended December 31, 2024 and December 31, 2023, Private Warrants converted to Public Warrants because of transfer from the initial purchasers or such purchasers permitted transferees to other holders were 1,280,732 and 1,177,166, respectively.

Equity Classified Warrants

Series C Preferred Stock Financing Warrants

During 2020, a subsidiary of Legacy Rigetti issued and sold an aggregate of 54.5 million shares of its Series C Preferred Stock at a purchase price of $1.15 per share, for an aggregate purchase price of $56.2 million (the "Series C Preferred Stock Financing"). In conjunction with the Series C Preferred Stock Financing, the Company issued a total of 5,248,183 warrants to purchase Class A Common Stock to the Series C investors (the "Series C Warrants"). The Series C Warrants have a $0.01 per share exercise price and a 10-year term to expiration. The Series C Warrants can be exercised for cash or on a cashless basis.

The Company determined that the Series C Warrants met the requirements for equity classification under ASC 480 and ASC 815. The Company estimated the fair value of the Series C Warrants using the Black-Scholes model and allocated approximately $1.2 million in proceeds from the Series C Preferred Stock to the value of the Series C Warrants on a relative fair value basis, which was recorded to additional paid in capital.

As of December 31, 2024 and December 31, 2023, Series C Warrants issued and outstanding were 793,800 and 972,578, respectively.

Customer Warrant

In February 2020, the Company issued a warrant to purchase 2,680,607 shares of Class A Common Stock to a customer in conjunction with a revenue arrangement (the "Customer Warrant"). The Customer Warrant has an exercise price of $1.152 per share and has a 10-year term to expiration. The Customer Warrant vests upon the achievement of certain performance conditions (i.e., sales milestones) defined in the agreement, and upon a change of control, either 50% or 100% of the then unvested Customer Warrant will become fully vested, dependent on the acquiring party in the change of control transaction. The Customer Warrant can be exercised for cash or on a cashless basis. The Customer Warrant was assumed by the Company in connection with the Business Combination and converted into a warrant to purchase shares of Common Stock.

The Company followed the guidance in ASC 718 and ASC 606 for the accounting of non-cash consideration payable to a customer. The Company determined that the Customer Warrant met the requirements for equity classification under ASC 718 and measured the Customer Warrant based on its grant date fair value, estimated to be $0.2 million. The Company recorded this amount as a deferred asset and additional paid in capital as of the issuance date, as the Company believes it is probable that all performance conditions (i.e., sales milestones) in the Customer Warrant will be met. As of both December 31, 2024 and December 31, 2023, the deferred asset balance outstanding is approximately $0.1 million, which will be recognized as a reduction in revenue in future periods.

The vesting status of the Customer Warrant is as follows:

	December 31, 2024	December 31, 2023
Vested Customer warrant shares	1,340,297	1,340,297
Unvested Customer warrant shares	1,340,310	1,340,310
	2,680,607	2,680,607

(10) Earn-out Liabilities

Upon the closing of the Business Combination on March 2, 2022, SNII, Supernova Partners II LLC (the "Sponsor") and SNII's directors and officers (collectively the "Sponsor Holders") subjected certain shares of Common Stock that they own (the "Sponsor Vesting Shares") to forfeiture for a five-year period following the closing of the Business Combination, with vesting occurring only if thresholds related to the weighted average price of Common Stock are met as described below (the "Earn-out Triggering Events"). Any such shares held by the Sponsor Holders that have not vested by the fifth anniversary of the closing of the Business Combination will be forfeited.

Sponsor Vesting Shares – Vesting Provisions:

(i) 2,479,000 shares of Common Stock held by the Sponsor Holders became unvested and subject to forfeiture as of the closing of the Business Combination and will only vest if, during the five year period following the closing of the Business Combination, the volume weighted average price of Common Stock equals or exceeds $12.50 for any twenty trading days within a period of thirty consecutive trading days (such shares, the "Promote Sponsor Vesting Shares"), and

(ii) 580,273 shares of Common Stock held by the Sponsor Holders became unvested and subject to forfeiture as of the closing of the Business Combination and will only vest if, during the five year period following the closing of the Business Combination, the volume weighted average price of Common Stock equals or exceeds $15.00 for any twenty trading days within a period of thirty consecutive trading days (such shares, the "Sponsor Redemption-Based Vesting Shares," and, collectively with the Promote Sponsor Vesting Shares, the "Sponsor Vesting Shares"). Any such shares held by the Sponsor Holders that remain unvested after the fifth anniversary of the closing of the Business Combination will be forfeited.

The $12.50 vesting condition with respect to the 2,479,000 shares of Common Stock held by the Sponsor Holders was satisfied in February 2025.

The Earn-out liabilities are adjusted to fair value each reporting period using the Monte Carlo simulation model until such time as the Earn-Out Triggering Events are achieved or the Sponsor Vesting Shares are forfeited.

The calculated fair value of the Earn-out liabilities with respect to the Sponsor Vesting Shares as of December 31, 2024 and December 31, 2023 was $45.9 million and $2.2 million, respectively. The change in the fair value of the Earn-out liabilities included in the consolidated statements of operations for years ended December 31, 2024 and December 31, 2023 was a loss of $43.7 million and a loss of $0.9 million, respectively. Significant inputs into the Monte Carlo simulation models as of December 31, 2024 and December 31, 2023 are as follows:

Valuation Assumptions	December 31, 2024	December 31, 2023
Stock price	$ 15.26	$ 0.98
Simulated trading days	542	798
Annual volatility (%)	140.00%	144.50%
Risk-free rate (%)	4.21%	4.00%
Estimated time to expiration (in years)	2.17	3.17

(11) Leases

The Company leases facilities for its fab, lab and office space, and equipment under various lease agreements with terms extending through 2029. Under the terms of the facility leases the Company bears the costs for certain insurance, property taxes and maintenance, and the lease agreements provide for increasing rental payments at fixed intervals.

On September 24, 2024, the Company entered into a lease amendment for its corporate headquarters located in Berkeley, California which, among other things, extends the lease term by three years to October 31, 2028, sets a new annual rental rate of approximately $0.9 million effective as of November 1, 2025 and provides an option to extend the lease for an additional five years.

Rental rates increase at the rate of 3% per year over the lease term and the five year option period. The Company did not include the five year option as part of its right-of-use assets and lease liabilities because exercise of the option was deemed unlikely.

The Company remeasured the lease liability for its Berkeley headquarters facility over the remaining lease term of 4.1 years using an incremental borrowing rate of 6.32%. The effect of the lease amendment increased the Company's operating lease right-of-use assets and operating lease liabilities by $2.3 million.

Components of lease costs are as follows (in thousands):

	Year Ended December 31,	
	2024	2023
Operating lease cost	$ 2,188	$ 2,098
Short-term lease cost	872	727
Sub-lease income	—	(44)
Total lease cost	$ 3,060	$ 2,781

Total cash paid for amounts included in the measurement of operating lease liabilities was $2.2 million and $2.1 million for the years ended December 31, 2024 and December 31, 2023, respectively. During the year ended December 31, 2024, there were no new operating leases with a lease term greater than 12 months except for the lease amendment for the Berkeley headquarters facility mentioned above. During the year ended December 31, 2023, there were no new operating leases with a lease term greater than 12 months.

As of December 31, 2024 and December 31, 2023 the weighted-average remaining lease term is approximately 4.44 years and 5.07 years, respectively, and the weighted-average discount rate is 7.65% and 8.01%, respectively.

Operating lease liabilities are based on the net present value of the remaining lease payments over the remaining lease term. In determining the net present value of its lease payments, the Company used an estimated incremental borrowing rate that is applicable to the Company based on the information available at the later of the lease commencement date, lease modification date or the date of Adoption of Topic 842.

Maturities of operating lease liabilities are as follows (in thousands):

Years Ending December 31,	
2025	$ 2,235
2026	2,313
2027	2,380
2028	2,293
2029	1,175
Total operating lease payments	10,396
Less: Imputed interest	(1,596)
Present value of operating lease liabilities	$ 8,800
Operating lease liabilities, current	$ 2,159
Operating lease liabilities, noncurrent	6,641
	$ 8,800

(12) Stockholders' Equity

Common Stock

As discussed in Note 2, on March 2, 2022, the Company consummated a Business Combination which has been accounted for as a reverse recapitalization. Pursuant to the certificate of incorporation as amended on March 2, 2022, the Company is authorized to issue 1,000,000,000 shares of Common Stock and 10,000,000 shares of Preferred Stock. The holders of shares of Common Stock are entitled to one vote for each share of Common Stock held. The Preferred Stock is non-voting. No shares of Preferred Stock were issued and outstanding as of December 31, 2024 or December 31, 2023.

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, and after payment to the holders of shares of Preferred Stock of their liquidation preferences, the holders of the Common Stock are entitled to the entire remaining assets of the Company on a pro rata basis.

As of December 31, 2024, the Company has reserved the following shares of Common Stock for issuance upon the conversion, exercise or vesting of the underlying instruments:

	Common Stock
Common Stock warrants	16,584,527
Stock-Based Awards—RSUs Outstanding	11,177,661
Stock-Based Awards—Options Outstanding	8,131,235
Total	35,893,423

Registered Direct Offering

On November 27, 2024, the Company closed securities purchase agreements with two institutional investors pursuant to which the Company sold, in a registered direct offering, an aggregate of 50,000,000 shares of the Company's Common Stock at a price of $2.00 per share. During the year ended December 31, 2024, the Company raised gross proceeds of $100.0 million from the registered direct offering and received net proceeds of $96.0 million, after deducting sales agent commissions of $4.0 million.

At-the-Market Offering Agreement

On March 15, 2024, the Company entered into an At-the-Market ("ATM") Sales Agreement (the "ATM Agreement") with B. Riley Securities, Inc. and Needham & Company, LLC, pursuant to which the Company sold, from time to time at its sole discretion, shares of its Common Stock having an aggregate offering price of $100,000,000.

The shares offered and sold in the ATM offering were issued pursuant to the Company's effective shelf registration statement on Form S-3 and the related prospectus supplement. The Company paid the sales agents a commission rate of up to 3% of the gross sales proceeds and has agreed to provide the sales agents with customary indemnification, contribution and reimbursement rights. The ATM Agreement contains customary representations and warranties and conditions to the placements of the shares pursuant thereto.

During the year ended December 31, 2024, the Company raised gross proceeds of $100 million pursuant to the ATM offering from the sale of 68,809,485 shares of its Common Stock at a weighted average price of $1.45 per share. The net proceeds from the ATM offering during the year ended December 31, 2024 were $97.5 million, after deducting sales agent commissions of $2.5 million. As of December 31, 2024, there were no remaining shares available for sale under the ATM offering agreement.

Common Stock Purchase Agreement

The Company entered into a Common Stock Purchase Agreement (the "Purchase Agreement") with B. Riley Principal Capital II, LLC ("B. Riley") on August 11, 2022 pursuant to which the Company was able to issue and sell to B. Riley the lesser of i) $75.0 million in aggregate gross purchase price of newly issued shares of the Company's Common Stock or ii) an amount not to exceed 23,648,889 shares of Common Stock (such number of shares equal to approximately 19.99% of the aggregate number of shares of Common Stock issued and outstanding immediately prior to the execution of the agreement and inclusive of 171,008 shares of Common Stock issued to B. Riley on August 11, 2022 as consideration for entering into the Purchase Agreement).

In consideration of the parties entering into the foregoing agreement, the parties also entered into a Registration Rights Agreement on August 11, 2022, pursuant to which the Company provides B. Riley with registration rights with respect to such Common Stock and pursuant to which the Company filed a registration statement covering the resale of such Common Stock.

During the year ended December 31, 2024, the Company received proceeds of $12.8 million from the issuance and sale of 10,056,799 shares of Common Stock to B. Riley under the Purchase Agreement. During the year ended December 31, 2023, the Company received proceeds of $20.5 million, from the issuance and sale of 13,421,082 shares of Common Stock to B. Riley under the Purchase Agreement. As of December 31, 2024, there were no remaining shares available for sale under the Purchase Agreement; as a result, the Purchase Agreement has terminated.

The Company was not able to sell shares of Common Stock under the Purchase Agreement for an extended period in early 2023 while its share price was trading below $1.00 per share. As a result, the Company recognized impairment charges during the year ended December 31, 2023 of $0.8 million for previously deferred offering costs primarily related to the Purchase Agreement, which were recorded as selling, general and administrative expense in the accompanying condensed consolidated statement of operations.

(13) Stock-Based Compensation

2013 Equity Incentive Plan

In 2013, the Company adopted the 2013 Equity Incentive Plan (the "2013 Plan") which provided for the grant of qualified incentive stock options ("ISOs") and nonqualified stock options ("NSOs"), restricted stock, restricted stock units ("RSUs") or other awards to the Company's employees, officers, directors, advisors, and outside consultants. After the Business Combination became effective on March 2, 2022, no additional awards were issued under the 2013 Plan. Awards outstanding under the 2013 Plan will continue to be governed by such plan; however, the Company will not grant any further awards under the 2013 Plan.

2022 Equity Incentive Plan

In connection with the Business Combination, the shareholders approved the Rigetti Computing, Inc. 2022 Equity Incentive Plan (the "2022 Plan") which provides for the grant of ISOs, NSOs, stock appreciation rights, restricted stock awards, RSUs, performance awards and other forms of awards to employees, directors, and consultants, including employees and consultants of the Company's affiliates. As of December 31, 2024, there were 22,827,028 shares of common stock reserved for issuance under the 2022 Plan, of which 5,445,767 shares remain available for future issuance. The number of shares reserved for issuance under the 2022 Plan will automatically increase on January 1st of each year for a period of nine years commencing on January 1, 2023 and ending on (and including) January 1, 2032, in an amount equal to 5% of the total number of shares of common stock of all classes outstanding on a fully diluted basis on December 31st of the preceding year; provided, however, that the board of directors of the Company 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. Accordingly, as of January 1, 2025, the number of shares of common stock reserved for issuance under the "2022 Plan" was increased by 15,972,015 shares.

Stock Option Activity

The following is a summary of stock option activity (intrinsic values in thousands):

	Options Outstanding	Weighted Average Exercise Price Per Share	Weighted-Average Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding, December 31, 2023	7,049,290	$ 0.82	8.23	$ 2,017
Granted	2,605,070	1.47		
Exercised	(994,533)	0.55		4,490
Forfeited and expired	(528,592)	1.58		
Outstanding and expected to vest, December 31, 2024	8,131,235	$ 1.01	8.04	$ 115,878
Exercisable, December 31, 2024	3,632,041	$ 0.71	6.91	$ 52,829

The Company's outstanding stock options generally have exercise prices equal to fair market value on the date of grant, expire after ten years and have service-based vesting conditions ranging from 1-5 years, except that 500,000 stock options granted in 2022 have a market-based vesting condition tied to the Company's Common Stock price. The vesting condition with respect to the market-based stock option grants was satisfied in January 2025.

The weighted-average grant date fair value of stock options granted during the years ended December 31, 2024 and December 31, 2023 was $1.27 and $1.03 per share, respectively. The intrinsic value of a stock option is the amount by which the market price of the underlying common stock exceeds the option's exercise price. The intrinsic value of stock options exercised during the years ended December 31, 2024 and December 31, 2023 was $4.5 million and $2.0 million, respectively. The Company received proceeds from stock option exercises during the years ended December 31, 2024 and December 31, 2023 of $0.6 million and $1.1 million, respectively.

Stock-based compensation expense related to stock options for the years ended December 31, 2024 and December 31, 2023 was $1.9 million and $1.5 million, respectively. As of December 31, 2024, the unrecognized compensation expense related to unvested stock options was $4.3 million, which is expected to be recognized over a weighted-average period of 2.37 years.

Fair Value of Stock Option Grants

The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option-pricing model that uses the assumptions noted in the tables below.

For the first nine months of 2024, expected volatility for the Company's Common Stock was determined based on a blended average of the historical volatility of a peer group of similar public companies, the historical volatility of the Company's Common Stock and the implied volatility from the Company's Public Warrants. For the last three months of 2024, expected volatility for the Company's Common Stock was determined based on a one-third weighting of the historical volatility of a peer group of similar public companies and a two-thirds weighting of the historical volatility of the Company's Common Stock. The implied volatility from the Company's Public Warrants was excluded because the calculation did not produce a meaningful result. The Company has not been public for a sufficient length of time to derive expected volatility solely from trading in its Common Stock.

The expected term of stock options granted was calculated using the simplified method, which represents the average of the contractual term and the weighted-average vesting period of the option. The Company uses the simplified method because it does not have sufficient historical exercise data for its options to provide a reasonable basis upon which to estimate the expected term.

The assumed dividend yield is based upon the Company's expectation of not paying dividends in the foreseeable future. The risk-free rate is based upon the U.S. Treasury yield curve in effect at the time of grant for the period equivalent to the expected term of the stock option. In determining the exercise prices for stock options granted, the Company's board of directors has utilized the fair value of the Common Stock as of the grant date.

Before the Business Combination, the fair value of the Common Stock had been determined by the board of directors at each award grant date based upon a variety of factors, including the results obtained from an independent third-party valuation, the Company's financial position and historical financial performance, the status of technological developments within the Company, the composition and ability of the current engineering and management team, an evaluation or benchmark of the Company's competition, the current business climate in the marketplace, the illiquid nature of the Company's Common Stock, arm's-length sales of the Company's capital stock, the effect of the rights and preferences of the preferred shareholders, and the prospects of a liquidity event, among others.

The range of valuation assumptions used as inputs to the Black-Scholes option-pricing model to value service-based stock options granted during the years ended December 31, 2024 and December 31, 2023 were as follows:

Valuation Assumptions	December 31, 2024	December 31, 2023
Strike price	$0.98 - $2.03	$0.60 - $2.09
Annual volatility (%)	112% - 130%	99% - 122%
Risk- free rate (%)	4.18%-4.45%	3.63%-4.54%
Expected term (years)	5.50 - 6.02	5.77 - 6.03

Restricted Stock Unit activity

The following is a summary of restricted stock unit ("RSU") activity:

	Shares	Weighted Average Grant Date Fair Value
Non-vested at December 31, 2023	11,517,422	$ 2.20
Granted	7,380,872	1.07
Vested	(6,441,249)	2.16
Forfeited	(1,279,384)	1.71
Non-vested at December 31, 2024	11,177,661	$ 1.53

The Company's RSUs generally have service-based vesting conditions ranging from 1-4 years, except that 3,850,000 RSUs granted in 2023 have a market-based vesting condition tied to the Company's stock price. Based upon the terms of such awards, 50% of the shares vest if the Company's Common Stock trades at or above $2.00 per share and the other 50% of the shares vest if the Company's Common Stock trades at or above $4.00 per share, for 20 out of 30 trading days through the fifth anniversary of the grant date. The $2.00 per share vesting condition was satisfied in December 2024, and the $4.00 per share vesting condition was satisfied in January 2025. The income tax withholding obligation for all RSUs are satisfied through the sale of shares into the market, otherwise known as Sell-To-Cover ("STC"). The STC transaction and the income tax withholding remittance for the market-based RSUs that vested in December 2024 took place on December 30, 2024. The $6.3 million proceeds from the STC were received by the Company on January 2, 2025, and is included in other current assets in the accompanying balance sheet as of December 31, 2024.

The weighted-average grant date fair value of RSUs granted during the years ended December 31, 2024 and December 31, 2023 was $1.07 and $1.12 per share, respectively. The aggregate fair value of outstanding RSUs based on the closing share price of the Company's Common Stock as of December 31, 2024 and December 31, 2023 was $170.6 million and $11.3 million, respectively. The aggregate fair value of RSUs that vested based on the closing price of the Company's Common Stock on the vesting date during the years ended December 31, 2024 and December 31, 2023 was $28.4 million and $5.0 million, respectively.

Fair Value of RSUs Awards

The number of service-based RSUs granted during the years ended December 31, 2024 and December 31, 2023 was 7,380,872 and 5,196,029, respectively. The service-based RSUs vest over periods ranging from 1-4 years and require continuous employment. The fair value of the Company's service-based RSUs was calculated based on the fair market value of the Company's common stock on the date of grant. The 3,850,000 market-based RSUs granted in 2023 vest over the requisite service period and require continuous employment. The fair value of the market-based RSUs granted during 2023 was based on the fair market value of the Company's Common Stock on the date of grant using a Monte Carlo simulation model. The weighted-average grant date fair value of the market-based RSUs granted during the year ended December 31, 2023 was $0.56 per RSU. Significant inputs into the Monte Carlo simulation model used to value market-based RSUs granted during the year ended December 31, 2023 were as follows:

Valuation Assumptions	Market-based RSUs
Stock price	$ 0.60
Simulated trading days	1,260
Annual volatility (%)	140.50%
Risk- free rate (%)	3.63%
Estimated time to expiration (years)	5.00

Stock-based compensation expense related to RSUs was $11.2 million and $10.9 million for the years ended December 31, 2024 and December 31, 2023, respectively. As of December 31, 2024, the unrecognized compensation expense related to unvested RSUs was $14.0 million which is expected to be recognized over a weighted-average period of 1.96 years.

Summarized Stock-Based Compensation Expenses

The table below summarizes total stock-based compensation expenses for the years ended December 31, 2024 and December 31, 2023 (in thousands):

	Year Ended December 31,	
	2024	2023
Research and development	$ 9,039	$ 9,442
Selling, general and administrative expenses	4,030	2,967
Total stock-based compensation expenses	$ 13,069	$ 12,409

(14) Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders (in thousands, except per share amounts):

	Year Ended December 31,	
	2024	2023
Numerator:		
Net loss	$ (200,988)	$ (75,107)
Denominator:		
Weighted-average shares outstanding - basic and diluted	184,666	131,977
Net loss per share - basic and diluted	$ (1.09)	$ (0.57)

There are 3,059,273 Sponsor Vesting Shares that were not included in the computations of basic and diluted net loss per share for the years ended December 31, 2024 and December 31, 2023 because the contingencies for the issuance of these shares have not been met. The weighted-average common shares outstanding for the years ended December 31, 2024 and December 31, 2023 include 963,297 and 1,194,069 weighted-average shares for warrants having an exercise price of $0.01 per share each, respectively.

The Company's potential dilutive securities, which include stock options, restricted stock units and warrants have been excluded from the computation of diluted net loss per share as the effect would be anti-dilutive. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share is the same. The Company excluded the following potential common shares from the computation of diluted net loss per share for the years ended December 31, 2024 and December 31, 2023:

	Year Ended December 31,	
	2024	2023
Common Stock warrants (1)	14,450,417	14,450,417
Stock Options	8,131,235	7,049,290
Restricted Stock Units	11,177,661	11,517,422
	33,759,313	33,017,129

(1) The number of outstanding warrants does not include unvested customer warrants for 1,340,310 shares as of December 31, 2024 and December 31, 2023.

(15) Revenue Recognition

The following tables depict the disaggregation of revenue according to the type of good or service and timing of transfer of goods or services for the years ended December 31, 2024 and December 31, 2023 (in thousands):

	Year Ended December 31,	
	2024	2023
Collaborative research and professional services	$ 8,044	$ 7,862
Collaborative research materials and sales of quantum computers	2,390	1,810
Access to quantum computing systems	356	2,336
	$ 10,790	$ 12,008

	Year Ended December 31,	
	2024	2023
Revenue recognized at a point in time	$ 1,579	$ 748
Revenue recognized over time	9,211	11,260
	$ 10,790	$ 12,008

Selected consolidated balance sheet line items that reflect accounts receivable, contract assets and liabilities as of December 31, 2024, December 31, 2023 and December 31, 2022 were as follows (in thousands):

	December 31, 2024	December 31, 2023	December 31, 2022
Trade receivables	$ 1,498	$ 2,650	$ 6,143
Unbilled receivables	$ 929	$ 2,379	$ 92
Current portion of deferred revenue	$ (113)	$ (343)	$ (961)
Deferred revenue, less current portion	$ (698)	$ —	$ —

Changes in deferred revenue from contracts with customers were as follows:

	Year Ended December 31,	
	2024	2023
Balance at beginning of period	$ (343)	$ (961)
Deferral of revenue	(698)	(2,499)
Recognition of deferred revenue	230	3,117
Total deferred revenue at end of period	$ (811)	$ (343)
Current portion of deferred revenue	$ (113)	$ (343)
Deferred revenue, less current portion	$ (698)	$ —

Amounts recognized as revenue from beginning contract liabilities during the years ended December 31. 2024 and December 31, 2023 totaled $0.2 million and $0.8 million, respectively. Remaining performance obligations represent the portion of the transaction price that has not yet been satisfied or achieved. As of December 31, 2024, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately $2.2 million. The Company expects to recognize estimated revenues related to performance obligations that are unsatisfied (or partially satisfied) during the next twelve months, except for the non-current portion of deferred revenue of $0.7 million.

The Company has not identified any costs that are incremental to the acquisition of customer contracts that would be capitalized as deferred costs on the balance sheet in accordance with ASC 340-40. Accordingly, the Company does not have any capitalized contract fulfillment costs as of December 31, 2024 or December 31, 2023, respectively.

(16) Segments, Geographical Information, Concentrations and Significant Customers

In addition to consolidated net loss, our CODM reviews and utilizes natural expenses such as employee wages and benefits at a consolidated level and capital expenditures including fixed asset additions to manage the Company's operations and strategic growth initiatives. The measure of segment assets is reported in the balance sheet as total consolidated assets. The following table sets forth our segment information of revenue, expenses and net loss (in thousands):

	Year Ended December 31,	
	2024	2023
Revenue	$ 10,790	$ 12,008
Less:		
Salaries and employee related costs	28,838	27,994
Stock-based compensation	13,069	12,409
Rent and facilities	9,134	9,770
Professional services and legal fees	6,414	7,140
Technology & IT costs	4,571	6,142
Direct and indirect materials	2,500	2,735
Depreciation and amortization expense	6,906	7,426
Interest expense	3,255	5,779
Other segment items[(1)]	137,091	7,722
Segment and net loss	$ (200,988)	$ (75,108)

(1) Other segment items include interest income, restructuring costs, write-off of Ampere forward agreement and deferred offering costs, changes in fair value of derivative warrant liabilities and earnout liabilities and other operational expenses which are reflected in the consolidated statements of operations.

The following table presents a summary of our segment fixed asset additions (in thousands):

	Year Ended December 31,	
	2024	2023
Quantum computing fridges	$ 3,052	$ 9,584
Process equipment	2,111	1,791
Leasehold improvements	497	811
IT Hardware	313	210
Construction in progress and other assets	1,194	—
Total property and equipment	$ 7,167	$ 12,396

The following table presents a summary of revenue by geography (in thousands):

	Year Ended December 31,	
	2024	2023
United States	$ 6,326	11,095
Europe	3,725	913
Asia and Others	739	—
Total revenue	$ 10,790	12,008

Revenues from external customers are attributed to individual countries based on the physical location in which the services are provided or the particular customer location with whom the Company has contracted.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and trade accounts receivable. The Company's cash and cash equivalents are placed with high-credit-quality financial institutions, and at times exceed federally insured limits. To date, the Company has not experienced any credit loss relating to its cash and cash equivalents.

Significant customers that represent 10% or more of revenue are set forth in the following tables:

	Year Ended December 31,	
	2024	2023
Customer A	15%	30%
Customer B	11%	*
Customer C	*	17%
Customer D	27%	*
Customer E	16%	20%
Customer F	*	11%

* Customer accounted for less than 10% of revenue in the respective periods.

During the years ended December 31, 2024 and December 31, 2023, sales to government entities comprised 89.4% and 80.9% of the Company's total revenue, respectively.

Significant customers that represent 10% or more of accounts receivable are set forth in the following tables:

	December 31, 2024	December 31, 2023
Customer A	*	39%
Customer B	15%	*
Customer C	23%	*
Customer D	*	12%
Customer E	26%	*
Customer F	31%	*

* Customer accounted for less than 10% of accounts receivable at the respective point in time.

(17) Income Taxes

Domestic and foreign components of loss before income taxes are as follows:

	Year Ended December 31,	
	2024	2023
Domestic	$ (198,588)	$ (71,331)
Foreign	(2,400)	(3,776)
	$ (200,988)	$ (75,107)

The Company did not pay any income taxes for the years ended December 31, 2024 or December 31, 2023, respectively. All components of the Company's current and deferred income tax provisions for the years ended December 31, 2024 and December 31, 2023 were zero.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the deferred income tax assets and liabilities as of December 31, 2024 and December 31, 2023, are as follows:

	Year Ended December 31,	
	2024	2023
Deferred tax assets:		
Net operating loss carryforwards	$ 71,054	$ 56,529
Accruals and reserves	41	81
Stock-based compensation	601	1,298
Research and development credits	11	11
Intangible assets	25,007	20,155
Operating lease liability	2,147	2,146
Gross deferred assets	98,861	80,220
Deferred tax liabilities:		
ROU asset	(1,950)	(1,926)
Depreciation and amortization	(3,915)	(3,156)
Total deferred tax liabilities	(5,865)	(5,082)
Total net deferred tax assets	92,996	75,138
Valuation allowance	(92,996)	(75,138)
Net deferred tax assets	$ —	$ —

The effective tax rate differs from the statutory rate, primarily due to the Company's history of incurring losses which have not been benefited, write-off of federal and state net operating loss carryforwards and research and development tax credit carryforwards under Internal Revenue Code (IRC) section 382 limitation, stock-based compensation and other permanent differences.

Significant components of the differences between the statutory tax rate and the Company's effective tax rate for the years ended December 31, 2024 and December 31, 2023 are as follows:

	Year Ended December 31,	
	2024	2023
Component	Rate Impact	Rate Impact
Total pre-tax book income	21 %	21 %
State and local income taxes	1 %	(5)%
Executive Compensation - IRC 162M	(1)%	—
Net operating loss limitation ownership change	— %	(10)%
Stock-based compensation	2 %	(7)%
Fair market value adjustments	(14)%	(1)%
Change in valuation allowance	(9)%	2 %
Total:	— %	— %

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net U.S. federal and state deferred tax assets have been fully offset by a valuation allowance. The net change in total valuation allowance increased by approximately $17.9 million and decreased by $1.2 million for the years ended December 31, 2024 and December 31, 2023, respectively.

As of December 31, 2024, the Company had net operating loss carryforwards for federal income tax purposes of $282.0 million, of which $278.4 million does not expire; federal research and development tax credits of $6.1 million, which will start to expire in 2044; net operating loss carryforwards for state income tax purposes of $134.9 million, which will start to expire in 2038; and state research and development tax credits of $6.1 million, which do not expire.

Under Section 382 of the Internal Revenue Code of 1986, as amended, the Company's federal net operating loss carryforwards and research and development tax credit carryforwards, and other tax attributes are subject to annual limitation because of prior cumulative changes in the Company's ownership and may be further limited in the future if additional ownership changes occur. Similar rules apply under state tax laws. These ownership changes limit the amount of net operating loss carryforwards and research and development tax credit carryforwards that can be utilized annually to reduce the Company's federal and state income tax liabilities, if any. Such annual limitations could result in the expiration of the net operating loss carryforwards and research and development tax credit carryforwards before their utilization.

During the year ended December 31, 2023, the Company assessed whether an ownership change, as defined by Section 382, occurred from its formation through December 31, 2022. Based upon this assessment, the Company reduced the gross deferred tax assets related to its federal and state net operating loss carryforwards and federal research and development tax credit carryforwards. For financial statement purposes, the Company previously included the federal and state net operating loss carryforwards and research and development tax credit carryforwards in deferred tax assets with a full valuation allowance. Due to the valuation allowance, the reduction in the net operating loss carryforwards and research and development tax credit carryforwards did not have an impact on the Company's net loss for the year ended December 31, 2023.

During the year ended December 31, 2024, the Company again assessed whether an ownership change, as defined by Section 382, occurred during the period from January 1, 2023 through December 31, 2024. Based upon the updated assessment conducted in 2024, the Company concluded that an additional ownership change occurred in November of 2024; however, based on the annual limitation from the November 2024 ownership change, none of the net operating losses or research and development tax credits are expected to expire prior to their potential use, as such there was no additional reduction to the gross deferred tax assets during the year ended December 31, 2024.

The Company files U.S. and various state income tax returns as well as foreign income tax returns in Australia, Canada and the United Kingdom with varying statutes of limitations. All tax years from inception in 2013 remain open to examination due to the carryover of unused net operating losses and tax credits. The Company had unrecognized tax benefits of $10.9 million as of December 31, 2024, all of which are offset by a full valuation allowance. These unrecognized tax benefits, if recognized, would not affect the effective tax rate. There were no interest or penalties accrued as of December 31, 2024.

A reconciliation of the beginning and ending amounts of unrecognized income tax benefits is as follows:

	Year Ended December 31,	
	2024	2023
Beginning balance	$ 5,861	$ 4,672
Current year increase	5,835	3,517
Reduction of prior year position	(769)	(2,328)
Ending balance	$ 10,927	$ 5,861

(18) Restructuring and severance

In February 2023, the Company announced an updated business strategy, including revisions to the Company's technology roadmap. In connection with this updated strategy, the Company implemented a workforce reduction to focus the organization and its resources on nearer-term strategic priorities. The reduction in the workforce impacted approximately 50 employees or approximately 28% of the Company's then workforce. Affected employees were offered separation benefits, including severance payments and temporary healthcare coverage assistance. The Company began implementing activities with respect to the revised business plan, updated technology roadmap and reduction in workforce in February 2023 and incurred a restructuring charge of $1.0 million which was paid in full during 2023. Work activities regarding the revised business plan and updated technology roadmap are ongoing.

In addition to the charge for restructuring, the Company also incurred $1.0 million for contractual severance benefits related to executive officers of the Company that were terminated in the year ended December 31, 2023. The remaining balance in the Company's accrual for contractual severance benefits related to executive officers as of December 31, 2023 of $0.2 million was paid out monthly through February 2024.

(19) Accumulated Other Comprehensive Income (Loss)

Components of accumulated other comprehensive income (loss) are as follows (in thousands):

	Foreign Currency Translation Adjustment	Available-for-Sale Securities	Accumulated Other Comprehensive Income (Loss)
Balances at December, 2022	$ 153	$ (314)	$ (161)
Other comprehensive income	80	325	405
Balances at December, 2023	$ 233	$ 11	$ 244
Other comprehensive income (loss)	(205)	66	(139)
Balances at December, 2024	$ 28	$ 77	$ 105

There are no reclassification adjustments or income taxes associated with any of the components of accumulated other comprehensive income (loss).

(20) Contingencies

Legal Proceedings

From time to time, the Company is party to litigation and other legal proceedings in the ordinary course of business. While the results of any litigation or other legal proceedings are uncertain, the Company is not currently a party to any material legal proceedings that, if determined adversely to the Company, would individually or taken together have a material adverse effect on the Company's business, financial position, results of operations or cash flows. The Company accrues loss contingencies when it is both probable that a loss will be incurred and when the amount of the loss or range of loss can be reasonably estimated.

Indemnification Provisions

The Company's agreements include provisions indemnifying customers against intellectual property and other third-party claims. In addition, the Company has entered into indemnification agreements with its directors, executive officers and certain other officers that require the Company, among other things, to indemnify them against certain liabilities that may arise as a result of their affiliation with the Company. The Company has not incurred any costs as a result of such indemnification obligations and has not recorded any liabilities related to such obligations in the consolidated financial statements.

(21) Subsequent Event

On February 27, 2025, the Company entered into a Collaboration Agreement (the "Collaboration Agreement") with Quanta Computer Inc., a Taiwan corporation ("Quanta"). The term of the Collaboration Agreement is for five years, subject to cancellation under certain circumstances, including as a result of the failure to obtain the BIS Clearance (as defined below) by December 31, 2025.

Pursuant to the Collaboration Agreement, during the five year period following February 27, 2025, the Company has agreed it will invest at least $250.0 million in the field of quantum computing, in furtherance of its product roadmap, and Quanta has agreed it will invest at least $250.0 million in the field of quantum computing, and the investment by Quanta will be towards personnel and capital expenditures for developing products and services and manufacturing capability in furtherance of the Company's product roadmap.

Under the Collaboration Agreement, the Company will retain all rights, title and ownership to all QPU Technology (as defined in the Collaboration Agreement) and related intellectual property (IP) rights created in the course of activities specified in a statement of work under the Collaboration Agreement. Other than the QPU Technology and IP rights described above, to the extent there is any jointly created, invented or other developed technology in the course of the performance of activities specified in a statement of work under the Collaboration Agreement, the Company and Quanta will jointly own, and each party will hold a one-half undivided interest in, all such joint project technology and all newly-created or newly-arising IP rights with respect thereto.

In connection with the Collaboration Agreement, on February 27, 2025, the Company entered into a securities purchase agreement with Quanta, pursuant to which the Company agreed to sell and issue to Quanta in a private placement transaction 3,020,412 shares of its Common Stock at a price per share of approximately $11.59, for an aggregate value of approximately $35.0 million.

The closing of the securities purchase agreement and private placement transaction referred to above is subject to (i) the expiration of a 30-day waiting period after the Company's submission of a classification request to the Bureau of Industry and Security of the Department of Commerce (the "BIS Clearance"), (ii) the effectiveness of the Collaboration Agreement as of the closing, and (iii) the entry into a board observer and confidentiality agreement immediately prior to the private placement closing. Quanta will have the option and right to appoint a single representative to attend certain meetings of the board of directors of the Company, subject to exceptions, in a non-voting observer capacity. The securities purchase agreement also contains a lock-up provision prohibiting Quanta from selling any of the shares of the Company's Common Stock acquired in the private placement transaction for a three year period following the closing of the private placement transaction.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANT ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Background and Remediation of Material Weaknesses

As previously reported, in connection with the audit of our consolidated financial statements as of and for the year ended December 31, 2023, we identified two material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Our management concluded that the previously identified material weakness in our internal control over financial reporting related to complex financial instruments was remediated as of March 31, 2024.

Our management concluded that the previously identified material weakness in our internal control over financial reporting related to the design and operation of our overall closing and financial reporting processes, including the timely preparation of account reconciliations, effective segregation of duties, particularly with respect to IT systems, and a lack of timely review over the financial statement close process was due to the fact that the Company had limited resources and did not have the necessary business processes and related internal controls formally designed and implemented coupled with the appropriate resources with the appropriate level of experience and technical expertise to oversee our closing and financial reporting processes.

Remediation Plan

Our remediation plan related to the material weakness over our overall closing and financial reporting processes included:

- hiring sufficient personnel with technical accounting and financial reporting experience to augment our current staff, to achieve appropriate segregation of duties and to improve the effectiveness of our closing and financial reporting processes;
- addressing the lack of segregation of duties for change management and logical access over IT systems; and
- implementing improved accounting and financial reporting procedures and systems to improve the completeness, timeliness and accuracy of our financial reporting and disclosures, including the assessment of more judgmental areas of accounting.

These controls have been fully implemented and have been operating for a sufficient period of time, and management has concluded, through formal testing, that these controls are operating effectively. Based on this assessment, management concluded that, as of December 31, 2024, the material weakness was remediated.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report. Based on this evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2024.

Management's Annual Report on Internal Control Over Financial Reporting

Our management, with the participation of our chief executive officer and our chief financial officer, is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in “Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that, as of December 31, 2024, our internal control over financial reporting was effective.

Attestation of Independent Registered Public Accounting Firm

This Annual Report on Form 10-K does not include an attestation report of our independent registered accounting firm on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 due to the exemption for "emerging growth company" as defined in the JOBS Act.

Changes in Internal Control over Financial Reporting

Other than as described above regarding actions taken to remediate our material weakness, there have been no material changes in our internal control over financial that occurred during the three months ended December 31, 2024 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

During the three months ended December 31, 2024, none of the Company's executive officers or directors adopted, modified or terminated any contract, instruction or written plan for the purchase or sale of the Company's securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTION THAT PREVENT INSPECTIONS

Not applicable

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item will be included in our definitive proxy statement to be filed with the SEC with respect to our 2025 Annual Meeting of Stockholders within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates (our "Proxy Statement"), which information is incorporated by reference herein.

We have adopted an Insider Trading Policy governing the purchase, sale and/or other dispositions of our securities by our directors, officers and employees that we believe is reasonably designed to promote compliance with insider trading laws, rules and regulations, and any applicable listing standards. A copy of our Insider Trading Policy is filed as Exhibit 19 to this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item will be included in our Proxy Statement, which information is incorporated by reference herein.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item will be included in our Proxy Statement, which information is incorporated by reference herein.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be included in our Proxy Statement, which information is incorporated by reference herein.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item will be included in our Proxy Statement, which information is incorporated by reference herein.

PART IV

ITEM 15. EXHIBITS. FINANCIALSTATEMENT SCHEDULES

The Following documents are filed as a part of this Annual Report on Form 10-K:

(a) Financial Statements

The information concerning our financial statements, and Report of Independent Registered Public Accounting Firm required by this Item is incorporated by reference herein to the section of this Annual Report on Form 10-K in Item 8, entitled "Consolidated Financial Statements and Supplementary Data."

(b) Financial Statement Schedules

All schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedules, or because the information required is included in Item 8, entitled the "Consolidated Financial Statements and Supplementary Data."

(c) Exhibits

The list of exhibits filed with this report is set forth in the Exhibit Index following the signature pages and is incorporated herein by reference.

ITEM 16. FORM 10-K SUMMARY

None.

EXHIBIT INDEX

		Incorporated by Reference			
Exhibit No.	Description	Schedule/ Form	File No.	Exhibit	Filing Date
2.1+	Agreement and Plan of Merger, dated as of October 6, 2021, by and among Supernova Partners Acquisition Company II, Ltd., Supernova Merger Sub, Inc., Supernova Romeo Merger Sub, LLC and Rigetti Holdings, Inc.	8-K	001-40140	2.1	October 6, 2021
2.2	First Amendment to Agreement and Plan of Merger, dated as of December 23, 2021, by and among Supernova Partners Acquisition Company II, Ltd., Supernova Merger Sub, Inc., Supernova Romeo Merger Sub, LLC and Rigetti Holdings, Inc.	8-K	001-40140	2.1	December 23, 2021
2.3	Second Amendment to Agreement and Plan of Merger, dated as of January 10, 2022, by and among Supernova Partners Acquisition Company II, Ltd., Supernova Merger Sub, Inc., Supernova Romeo Merger Sub, LLC and Rigetti Holdings, Inc.	8-K	001-40140	2.1	January 10, 2022
3.1	Certificate of Incorporation of Rigetti Computing, Inc.	8-K	001-40140	3.1	March 7, 2022
3.2	Amended and Restated Bylaws of Rigetti Computing, Inc.	8-K	001-40140	3.1	November 14, 2022
4.1	Specimen Common Stock Certificate.	8-K	001-40140	4.1	March 7, 2022
4.2	Specimen Warrant Certificate.	8-K	001-40140	4.2	March 7, 2022
4.3	Warrant Agreement between American Stock Transfer & Trust Company, LLC and Supernova Partners Acquisition Company II, Ltd., dated March 1, 2021.	8-K	001-40140	4.1	March 4, 2021
4.4	Description of the Registrant's Securities	10-K	001-40140	4.4	March 27, 2023
10.1	Amended and Restated Registration Rights Agreement, dated March 2, 2022, by and among New Rigetti, the Sponsor and the other holders party thereto.	8-K	001-40140	10.1	March 7, 2022
10.2	Form of Subscription Agreement for PIPE Financing.	8-K	001-40140	10.2	October 6, 2021
10.3	Sponsor Support Agreement, dated as of October 6, 2021, by and among Supernova Partners Acquisition Company II, Ltd., Rigetti Holdings, Inc., Supernova Partners II LLC and certain other parties thereto.	8-K	001-40140	10.3	October 6, 2021
10.4	Rigetti Holders Support Agreement, dated as of October 6, 2021, by and among Supernova Partners Acquisition Company II, Ltd., Rigetti Holdings, Inc. and certain other parties thereto.	8-K	001-40140	10.4	October 6, 2021
10.5	Letter Agreement, dated as of March 1, 2021, among Supernova, the Sponsor and Supernova's officers and directors.	8-K	001-40140	10.1	March 4, 2021
10.6	Manufacturing Agreement dated May 28, 2020, by and between Rigetti and Sparqtron Corporation.	S-4/A	333-260692	10.17	December 20, 2021
10.7#	Rigetti & Co, Inc. 2013 Equity Incentive Plan, as amended.	10-Q	001-40140	10.21	May 16, 2022
10.8#	Form of Stock Option Grant Notice and Form of Stock Option Agreement under Rigetti & Co, Inc. 2013 Equity Incentive Plan.	S-4/A	333-260692	10.20	January 14, 2022

10.9#	Form of Restricted Stock Unit Grant Notice and Form of Restricted Stock Unit Agreement under Rigetti & Co, Inc. 2013 Equity Incentive Plan.	S-4/A	333-260692	10.21	January 14, 2022
10.10#	Rigetti Computing, Inc. 2022 Equity Incentive Plan.	8-K	001-40140	10.16	March 7, 2022
10.11#	Form of Stock Option Grant Package under 2022 Equity Incentive Plan.	8-K	001-40140	10.17	March 7, 2022
10.12#	Form of RSU Grant Package under 2022 Equity Incentive Plan.	8-K	001-40140	10.18	March 7, 2022
10.13#	Form of Stock Award Grant Package under 2022 Equity Incentive Plan.	8-K	001-40140	10.19	March 7, 2022
10.14#	Rigetti Computing, Inc. 2022 Employee Stock Purchase Plan.	8-K	001-40140	10.20	March 7, 2022
10.15#	Form of Indemnification Agreement by and between the Company and its directors and officers.	8-K	001-40140	10.21	March 7, 2022
10.16	Non-Employee Director Compensation Policy	10-Q	001-40140	10.2	May 9, 2024
10.17	Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.	S-4/A	333-260692	10.12	December 20, 2021
10.18*	First Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
10.19*	Second Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
10.20*	Fourth Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
10.21*	Fifth Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
10.22*	Sixth Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
10.23	Seventh Amendment to Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.	10-Q	001-40140	10.2	August 8, 2024
10.24	Lease Agreement dated April 15, 2015, by and among Rigetti, Temescal, LP and Contra Costa Industrial Park, Ltd.	S-4/A	333-260692	10.13	December 20, 2021
10.25*	Amendment No. 1 to the Lease Agreement dated April 15, 2015, by and among Rigetti, Temescal, LP and Contra Costa Industrial Park, Ltd.				
10.26*	Amendment No. 2 to the Lease Agreement dated April 15, 2015, by and among Rigetti, Temescal, LP and Contra Costa Industrial Park, Ltd.				
10.27*	Notice of Option to Extend Lease Term to the Lease Agreement dated April 15, 2015, by and among Rigetti, Temescal, LP and Contra Costa Industrial Park, Ltd.				
10.28#	Executive Employment Agreement, dated December 7, 2022, by and between Rigetti Computing, Inc. and Dr. Subodh Kulkarni.	8-K	001-40140	10.1	December 8, 2022
10.29#	Executive Employment Agreement, dated February 9, 2023, by and between Rigetti Computing, Inc. and Jeffrey Bertelsen.	8-K	001-40140	10.1	February 10, 2023

10.30#	Amended and Restated Employment Agreement, dated as of March 2, 2023, between Rigetti Computing, Inc. and David Rivas	POS-AM	333-263798	10.30	April 5, 2023
10.31	Amendment No.3, dated as of September 20, 2024, to Standard Industrial/Commercial Multi-Tenant Lease-Gross dated as of April 15, 2015, by and between Rigetti & Co. LLC, Temescal, LP, Costa Industrial Park, II	8-K	001-40140	10.1	September 24, 2024
10.32#	Amended & Restated Employment Agreement, dated February 2, 2022, between Rigetti Holdings, Inc. and Rick Danis.	S-4/A	333-260692	10.29	February 8, 2022
10.33#	Transition Services Agreement, by and between Rick Danis and Rigetti Computing, Inc. , dated as of November 6, 2024.	8-K	001-40140	10.1	November 8, 2024
10.34*	Third Amendment to the Lease Agreement dated August 9, 2016 by and between Rigetti and Prologis Limited Partnership I.				
19.1*	Insider Trading Policy				
21.1*	List of Subsidiaries of Rigetti Computing, Inc.				
23.1*	Consent of BDO USA P.C.				
24.1*	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).				
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
97.1	Incentive Compensation Recoupment Policy	10-K	001-40140	97.1	March 14, 2024
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.				
101.SCH	Inline XBRL Taxonomy Extension Schema Document				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document				
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)				

* Filed herewith.

** Furnished herewith and not deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

+ The schedules and exhibits to this agreement have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

# Indicates management contract or compensatory plan or arrangement.

The agreements and other documents filed as exhibits to this Annual Report on Form 10-K are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of 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.

RIGETTI COMPUTING, INC.

Date: March 7, 2025

By: /s/ Dr. Subodh Kulkarni
Dr. Subodh Kulkarni
Chief Executive Officer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby authorizes and appoints Dr. Subodh Kulkarni and Jeffrey Bertelsen, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this report on Form 10-K, 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, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ Subodh Kulkarni Subodh Kulkarni	Chief Executive Officer and Director (Principal Executive Officer)	March 7, 2025
/s/ Jeffrey Bertelsen Jeffrey Bertelsen	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 7, 2025
/s/ Thomas J. Iannoti Thomas J. Iannoti	Chair of the Board of Directors	March 7, 2025
/s/ Michael Clifton Michael Clifton	Director	March 7, 2025
/s/ Alissa Fitzgerald Alissa Fitzgerald	Director	March 7, 2025
/s/ Ray Johnson Ray Johnson	Director	March 7, 2025
/s/ Cathy McCarthy Cathy McCarthy	Director	March 7, 2025
/s/ H. Gail Sandford H. Gail Sandford	Director	March 7, 2025

EXECUTIVE OFFICERS

Dr. Subodh Kulkarni
President, Chief Executive Officer and Director

Jeffery Bertelsen
Chief Financial Officer

David Rivas
Chief Technology Officer

BOARD OF DIRECTORS

Michael Clifton
Partner
Falfurrias Management Partners

Dr. Alissa M. Fitzgerald
Chief Executive Officer and Managing Member
A.M. Fitzgerald & Associates, LLC

Thomas J. Iannotti
Chairman of the Board
Applied Materials

Dr. Ray Johnson
Former Chief Executive Officer
Technology Innovation Institute

Dr. Subodh Kulkarni
President and Chief Executive Officer
Rigetti Computing, Inc.

Cathy McCarthy
President and Chief Executive Officer
Cross Tack Consulting

H. Gail Sandford
Former Principal Director, Business Transformation Office The Aerospace Corporation

LISTING

Our common stock and public warrants are listed on Nasdaq under the ticker symbols “RGTI” and “RGTIW,” respectively.

TRANSFER AGENT AND REGISTRAR

Equiniti Trust Company, LLC
48 Wall Street, Floor 23
New York, NY 10005
www.equiniti.com
helpAST@equiniti.com

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

BDO USA, P.C.

LEGAL COUNSEL

Hogan Lovells US LLP

ANNUAL MEETING

June 10, 2025, at 9:00 a.m. Pacific Time
Virtual Meeting Only:
www.virtualshareholdermeeting.com/RGTI2025

FORM 10-K

A copy of our Form 10-K filed with the Securities and Exchange Commission (SEC) will be made available to all stockholders at no charge.

The Form 10-K also can be accessed through the SEC website at **www.sec.gov**, or through our Investor website at **https://investors.rigetti.com**.

To receive a copy by mail please contact:

Investor Relations
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Berkeley, California 94710
IR@rigetti.com