#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### FORM 8-K

#### CURRENT REPORT

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

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

#### **RIGETTI COMPUTING, INC.**

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation)

775 Heinz Avenue, Berkeley, California

(Address of principal executive offices)

001-40140 (Commission File Number) 88-0950636 (I.R.S. Employer Identification No.)

94710 (Zip Code)

(510) 210-5550

(Registrant's telephone number, including area code)

N/A

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

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

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

D Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

D Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240-13e-4(c))

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

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

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

Emerging growth company  $\square$ 

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.  $\Box$ 

#### Item 7.01. Regulation FD Disclosure.

On September 16, 2022, Rigetti Computing Inc., (the "Company") issued a press release entitled "Rigetti Announces New Partnerships, Provides Business Updates at Inaugural Investor Day." A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K (the "Current Report") and incorporated herein by reference.

#### **Investor Presentation**

The Company has also made available on its website at investors.rigetti.com a slide presentation, which will be used in connection with the Company's inaugural investor day being held on September 16, 2022 and may be used in other presentations to investors and others from time to time. A copy of the slide presentation is furnished as Exhibit 99.2 to this Current Report and is incorporated herein by reference.

The Company's website and the information contained on, or that can be accessed through, the Company's website will not be deemed to be incorporated by reference in, and are not considered part of, this Current Report.

The information included in this Item 7.01 of this Current Report (including Exhibit 99.1 and Exhibit 99.2 hereto) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to liabilities of that section, unless the registrant specifically states that the information is to be considered "filed" under the Exchange Act or incorporates it by reference into a filing under the Exchange Act or the Securities Act.

#### Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release issued by the Company on September 16, 2022
99.2	Investor Presentation - September 2022
104	Cover Page Interactive Data File - the cover page XBRL tags are embedded within the Inline XBRL document

#### SIGNATURES

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

Dated: September 16, 2022

#### **RIGETTI COMPUTING, INC.**

By: /s/ Chad Rigetti

Chad Rigetti Chief Executive Officer

#### Rigetti Announces New Partnerships, Provides Business Updates at Inaugural Investor Day

FREMONT, Calif. (September 16, 2022) – Rigetti Computing, Inc. ("Rigetti" or the "Company") (Nasdaq: RGTI), a pioneer in hybrid quantumclassical computing, will share business developments, including updates regarding its partnerships, Fab-1 facility, and status of its technology roadmap, ahead of its previously announced inaugural investor day.

"As a trailblazer in quantum, Rigetti is focused on delivering performance at scale with the goal of becoming the industry standard," said Chad Rigetti, founder and CEO of the Company. "We are making strategic investments in quantum hardware, software, and partnerships that we believe will enable us to progress toward Quantum Advantage."

"In addition, we're excited to announce several key partnerships," Rigetti continued. "These include a partnership with Bluefors to develop new modular dilution fridges to support our planned 336Q, 1,000+ qubit, and 4,000+ qubit quantum processing units. Earlier this week, we announced the public preview of our current 80Q Aspen-M-2 and 40Q Aspen-11 systems on Microsoft's Azure Quantum. Rigetti quantum computers are now available on the world's two largest public cloud platforms."

#### Keysight True-Q Error Mitigation Tools on Rigetti Quantum Cloud Services (QCS™)

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

"Keysight's True-Q software brings a broad suite of capabilities that is expected to help Rigetti's user base achieve higher performance quantum computing," said Joseph Emerson, Director of Advanced Research, QES at Keysight Technologies. "We have worked together to streamline access for Rigetti customers to Keysight's advanced quantum compiler technologies. I am excited to see the results of the integration of Keysight software tools with the Rigetti platform."

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

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

"Addressing the challenges of an evolving climate is one of society's most important tasks, and improving our ability to model the climate is essential to making data-driven decisions," said Tim Costa, Director of HPC and Quantum Product at NVIDIA. "Working with Rigetti, we'll explore how combining the best of quantum and GPU-accelerated computing can help address this challenge."

#### Public Preview of Rigetti Quantum Processors on Microsoft Azure Quantum

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

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

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

#### **Editor's Note**

As previously announced, Rigetti's Investor Day takes place today at 8:30 a.m. to 11:00 a.m. PT (11:30 a.m. to 2:00 p.m. ET). Virtual participants can join the webcast and access the corresponding presentation materials here: <u>https://onlinexperiences.com/scripts/Server.nxp?</u> LASCmd=AI%3A4%3BF%3AQS%2110100&ShowKey=206179&Referrer=https%3A//onlinexperiences.com/scripts/Server.nxp

#### About Rigetti

Rigetti is a pioneer in full-stack quantum computing. The Company has operated quantum computers over the cloud since 2017 and serves global enterprise, government, and research clients through its Rigetti Quantum Cloud Services platform. The Company's proprietary quantum-classical infrastructure provides ultra-low latency integration with public and private clouds for high-performance practical quantum computing. Rigetti has developed the industry's first multi-chip quantum processor for scalable quantum computing systems. The Company designs and manufactures its chips in-house at Fab-1, the industry's first dedicated and integrated quantum device manufacturing facility. Rigetti has more than 150 patents awarded and pending. The Company was founded in 2013 by Chad Rigetti and today employs more than 180 people with offices in the United States, U.K. and Australia. Learn more at <a href="http://www.rigetti.com">www.rigetti.com</a>.

```
###
```

Media Contact: Rigetti Computing, Inc. Brad Williams press@rigetti.com

#### **Cautionary Language Concerning Forward-Looking Statements**

Certain statements in this communication may be considered forward-looking statements, including statements with respect to expectations for the anticipated launch of the Company's 84-qubit quantum computer, 336-qubit multi-chip processor, 1,000+ qubit system, and 4,000+ qubit system, including these systems' timing and potential performance; expectations relating to the Company's technology roadmap and the timing thereof; expectations with respect to its partnership with Bluefors, including the development of necessary refrigerators to support the Company's technology roadmap and the timing thereof; expectations with respect to leveraging fourth generation circuit architecture and introducing higher connectivity and tunable coupling, designed to ultimately deliver fidelities exceeding 99%; the timing, capabilities and capacity of the Company's fab-1 expansion; expectations with respect to the Company's partnership with NVIDA to evaluate the potential for narrow quantum advantage, including the potential to address climate challenges; expectations with respect to the anticipated release of Keysight's True-Q error mitigation software integrated into Rigetti QCS in the coming months; expectations with respect to the Company's goal of delivering performance at scale with the [goal/mission] of being the industry standard and the ability of its strategic investments in quantum hardware, software, and partnerships to enable progress toward Quantum Advantage; and expectations relating to growth of the business, including with respect to future potential government and commercial contracts, development activities and expansion of OCaaS. Forward-looking statements generally relate to future events and can be identified by terminology such as "pro forma," "may," "should," "could," "might," "plan," "possible," "project," "strive," "budget," "forecast," "expect," "intend," "will," "estimate," "believe," "predict," "potential," "pursue," "aim," "goal," "mission," "outlook," "anticipate" or "continue," or the negatives of these terms or variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not

limited to: Rigetti's ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCaaS business; the success of Rigetti's partnerships and collaborations; Rigetti's ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; the risk that the business combination disrupts current plans and operations of Rigetti; the ability to recognize the anticipated benefits of its recent business combination with Supernova, which may be affected by, among other things, competition, the ability of Rigetti to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; costs related to the business combination with Supernova and operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigetti's business; the expected use of proceeds from the Company's past and future financings or other capital; the sufficiency of Rigetti's cash resources; unfavorable conditions in Rigetti's industry, the global economy or global supply chain, including financial and credit market fluctuations and uncertainty, rising inflation, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; and other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in the registration on Form S-4, the Company's Form 8-K filed with the Securities and Exchange Commission (the "SEC") on March 7, 2022, and in the Company's Form 10-Q for the three months ended March 31, 2022, and other documents filed by the Company from time to time with the SEC, including the Company's Quarterly Report on Form 10-Q for the three months ended June 30, 2022. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. The Company does not give any assurance that it will achieve its expectations.

# rigetti

Investor & Analyst Day September 16, 2022

00

### **Cautionary Notes**

Forward Looking Statements: Certain statements in this presentation and accompanying videos may be considered forward-looking statements, including statements with respect to the Company's 84-qubit single chip quantum processor and 336-qubit next generation multi-chip machine and the timing thereof, as well as the anticipated launch of the Company's 84-qubit single chip quantum more system, including these systems' timing and potential performance; statements with respect to hybrid integration and co-processing, paired with cloud delivery, being the most practical approach to commercializing quantum computing; expectations with respect to the potential, opportunities, applications and impacts of quantum computing; expectations with respect to its partnership with Bluefors, including the development of necessary refrigerators to support the Company's tachnology roadmap and the timing thereof; expectations with respect to leveraging fourth generation circuit architecture and introducing higher connectivity and tunable coupling, designed to ultimately deliver fidelities exceeding 99%; the timing, capabilities and capacity of the Company's fab-1 expansion; the Company's ballity to achieve the highest possible performance; expectations with respect to the Company's partnership; expectations with respect to be overlaid or darkers; expectations with respect to building the potential to narrow quantum advantage, including the potential to address; compactions with respect to the Company's spantership with NVIDA to evaluate the potential for narrow quantum davantage, including the optical augments, including expectations with respect to the Company's goal of delivering performance at scale with the mission of being the industry standard and the ability of its strategic investments in quantum hardware, software, and partnerships to enable progress toward Quantum davantage and become the industry's standard; expectations with respect to the company's strategy to reach quantum advantage and become the industry's standard;

Copyright Rigetti Computing 2022

2

### **Cautionary Notes**

variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: Rigetti's ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCaaS business; the success of Rigett's partnerships and collaborations; Rigetti's ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; the risk that the business combination disrupts current plans and operations of Rigetti; the ability to recognize the anticipated benefits of its recent business combination with Supernova, which may be affected by, among other things, competition, the ability of Rigetti to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; costs related to the business combination with Supernova and operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigetti's business; the expected use of proceeds from the Company's past and future financings or other capital; the sufficiency of Rigetti's cash resources; unfavorable conditions in Rigetti's industry, the global economy or global supply chain, including financial and credit market fluctuations and uncertainty, rising inflation, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; and other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in the registration on Form S-4, the Company's Form 8-K filed with the Securities and Exchange Commission (the "SEC") on March 7, 2022, and in the Company's Form 10-Q for the three months ended March 31, 2022, and other documents filed by the Company from time to time with the SEC, including the Company's Quarterly Report on Form 10-Q for the three months ended June 30, 2022. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. The Company does not give any assurance that it will achieve its expectations.

The statements and commentary of third parties included in this presentation and accompanying videos of certain of Rigetti's partners and customers are strictly the views, opinions and expectations of such third parties and are not the responsibility of Rigetti.

Copyright Rigetti Computing 2022

3



### **Cautionary Notes**

Non-GAAP Financial Measures – To supplement Rigetti's financial results and guidance presented in accordance with U.S. generally accepted accounting principles (GAAP), the Company uses certain items as detailed in the reconciliation table at the end of this presentation, and non-GAAP perating expenses, which excludes from GAAP reported operating expenses cara in items as detailed in the reconciliation table at the end of this presentation. The Company believes that Adjusted EBITDA and non-GAAP pinancial measures to their most comparable GAAP financial measures cannot be provided because the Company cannot do so without unreasonable efforts due to the unavailability of information needed to calculate reconciling items and due to the variability, complexity and limited visibility of comparable GAAP measures and the reconciling items that would be excluded from the non-GAAP financial measures in the future. Specifically, reconciliation of the components of projected Adjusted EBITDA to its most comparable GAAP financial measures in the future. Specifically, reconciliation of the components of projected Adjusted EBITDA to its most comparable GAAP financial measures is not provided because the quantification of projected stock-based compensation and change in fair value of assumed forward contract obligations are outside the Company control and facilitates additional analysis by, investors and analysts and that each of these non-GAAP financial measures, when considered together with the Company's business and to make operating decisions. Because the condancy with GAAP, can enhance investors' and analysts' ability to meaningfully compare the Company's results from period to period and to its forward-looking guidance and to identify operating trends in the Company's business. The Company's management also regularly uses these non-GAAP financial measures, when considered toge

Use of Data - Industry and market data used in this presentation have been obtained from third-party industry publications and sources as well as from research reports prepared for other purposes. Rigetti has not independently verified the data obtained from these sources and cannot assure you of the data's accuracy or completeness. This data is subject to change. References in this presentation to our "partners" or "partnerships" with technology companies, governmental entities, universities or others do not denote that our relationship with any such party is in a legal partnership form, but rather is a generic reference to our contractual relationship with such party. Trademarks - This presentation contains trademarks, service marks, trade names and copyrights of other companies, which are property of their respective owners.

Copyright Rigetti Computing 2022

4





## Why Quantum Computing?

We believe quantum computing holds the potential to ...

**unlock** exponential computing power at scale, magnitudes beyond today's classical systems

**decouple** computing power from energy consumption

**create** opportunities for profound new knowledge and accomplishments for humanity

**drive** a paradigm shift for governments, tech leaders, and research organizations



rigetti

Copyright Rigetti Computing 2022

## Quantum Computing is Today's Space Race

- **Geopolitical implications:** US, EU, UK, China & Australia dedicated \$20+ billion from 2019-2021 to quantum\*
- **Technical challenges:** Requires deep, interdisciplinary technical expertise and systems engineering
- Fundamental human endeavor
- **Partnerships** between industry and government are critical to success

## **Rigetti's Mission:**

Build the world's most powerful computers to help solve humanity's most important and pressing problems.



#### Rigetti Perspective: Quantum Holds the Potential to Unlock New Possibilities

for example:



Drug Discovery

Cures to currently untreatable diseases by simulating molecular structures



Efficient Transportation

Reduce fuel consumption by optimizing transportation routes



Climate Simulation

Conduct more accurate weather modeling to improve forecasting and emergency response decision-making



Risk Management

Increase economic prosperity by optimizing returns and risks for financial portfolios

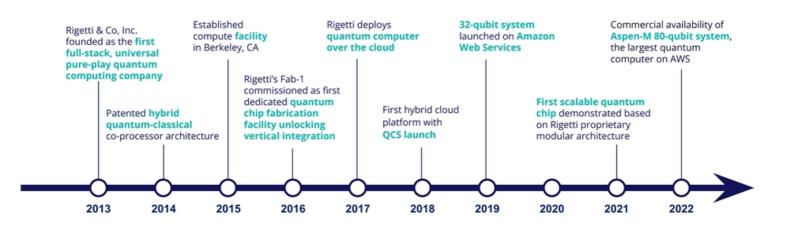
rigetti

Copyright Rigetti Computing 2022

9

#### **Competitive Moat Nearly 10 years in the Making**

We believe Rigetti's early bets have led to its position as an industry leader



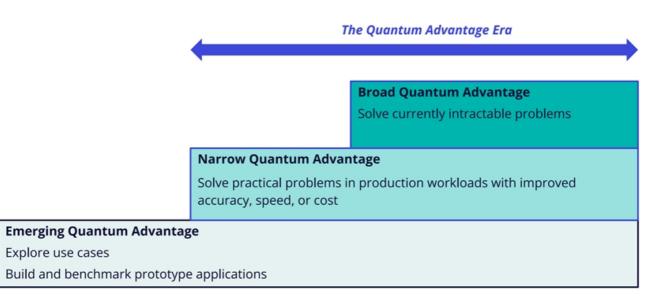
Copyright Rigetti Computing 2022

10

Laser-focused on Quantum Advantage We believe Rigetti has developed the right strategy to reach advantage and ultimately be the standard in quantum.

11

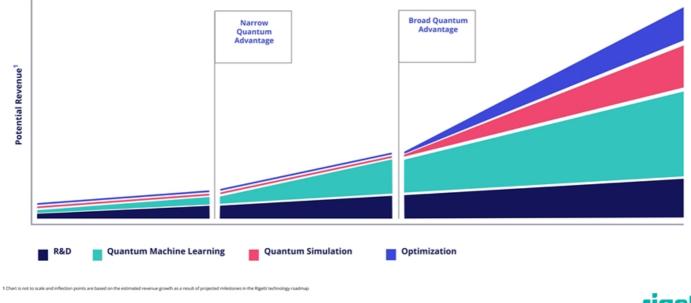
## **Stages of Quantum Technology Maturation**



Copyright Rigetti Computing 2022

12

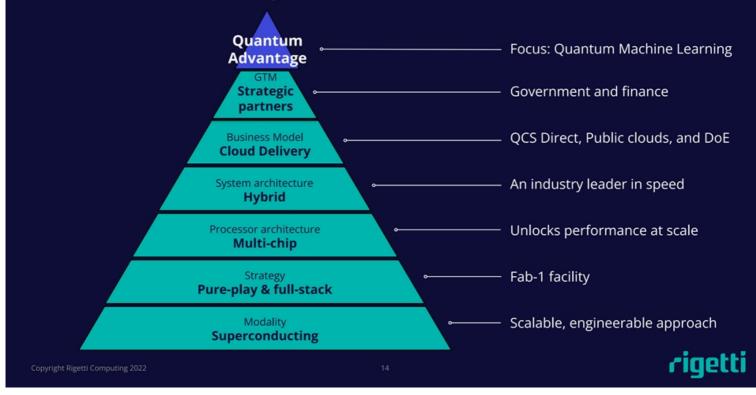
## We View nQA and bQA as the Critical Inflection Points



Copyright Rigetti Computing 2022

13

## **Quantum Advantage: Our Central Focus**





**Power of the Cloud** 





**Power of the Cloud** 

Heterogenous

17







Power of the Cloud

Heterogenous

**Customer-centric Workflow** 





# Large untapped opportunity for quantum computers that meet requirements for practical workloads

\$850B	®	1	1	<b>\$</b>	\$	-	1	®	(B)
\$	-	-	-	۲	-	-	-	-	100
\$	\$	\$	\$	\$	\$	٢	\$	\$	\$
\$	<b>\$</b>	\$	\$	-		1	-	\$	- III
\$	-	-	-	-	-	-	-	-	<b>1</b> (3)
\$	\$	\$	\$	\$	\$	-	\$	\$	(B)
	- ÷	\$	<b>®</b>	\$	\$	<b>:</b>	-	-	- 18 <sup>3</sup>
٢	\$	\$	\$	\$	\$	i©;	:0:	0	9 \$120B
٥	Ö	Ō	Ö	۰	Ö	۰	Ö	Ö	© \$40B
۲	Ö								

**Requirements for practical workloads** 

Scale: 100s to 1000s of qubits	Next gen
Error Rates: < 0.5%	Next gen
Clock Speed: >1 MHz	$\checkmark$
Fully Programmable & Universal (run general quantum algorithms)	$\checkmark$
Manufacturable	<ul> <li>Image: A second s</li></ul>
<b>Co-processor</b> (can be used alongside traditional compute	ers)
Delivered over the cloud	$\checkmark$

rigetti

Forecasted Quantum Computing Generated Operating Income<sup>1,2</sup> Current Cloud HW Market<sup>3</sup> Current HPC Market<sup>4</sup>

"The Next Tech Revolution: Quantum Computing" McKiney & Company, March 2020. 3 "Gattree Says Four Trends Are Shaping the Future of Public Cloud." Press Res buckbased. On-oremised. By Apolication Healthcare, samine: Retail BFG Government. Manufacturine: Education. Transportation. Others) and by Resion. Forecast

1 Langione et al., "Where Will Quantum computers Create Gartner, Inc., August 2, 2021. 4 "High-Performance comput-Emergen Research, April 2021. Copyright Rigetti Computing 2022

20

## **On Track to Deliver our 2023 Systems**

#### Ankaa™

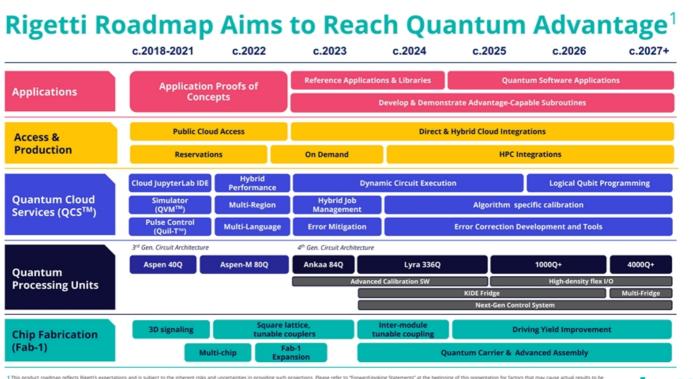
#### Expected in Early 2023

**84-qubit single chip processor:** fourth generation chip designed for higher fidelities and increased qubit connectivity.

## Lyra™

#### Late 2023

**336-qubit multi-chip processor** leveraging 84Q Ankaa single-chip processor as tiling unit to accelerate our aims to deliver quantum advantage performance.



1 This product readmap reflects Rigetts's expectations and is subject to the inherent risks and uncertainties in providing such projections. Please refer to "Forward-looking Statements" at the beginning of this presentation for factors that may cause actual results to be materially different than expectations. This product roadmap is prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, the events set forth above are subject to a high degree of uncertainty and may not be achieved within the timeframe description of at all.

Copyright Rigetti Computing 2022



Copyright Rigetti Computing 2022



1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all.

Copyright Rigetti Computing 2022

	DARPA OARPA PHASECRA Lawrence Livermu National Laborato		tasdaq standard
Access & Production	A Azure		d 80-qubit Aspen-M-2 ailable to all Microsof
Quantum Cloud Services (QCS™)	AMPERE	ZAPA"	
Quantum Processing Units	DARPA OXFORD	<b>‡</b> Fermilab ≪S <b>@</b> M`S≫	UK Research and Innovation
Chip Fabrication (Fab-1)	AFRL	PURDUE	<b>⇔ Fermilab</b> ≪S <b>@</b> ∭S≫

1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all.

Copyright Rigetti Computing 2022



1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all.

Copyright Rigetti Computing 2022



1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all.

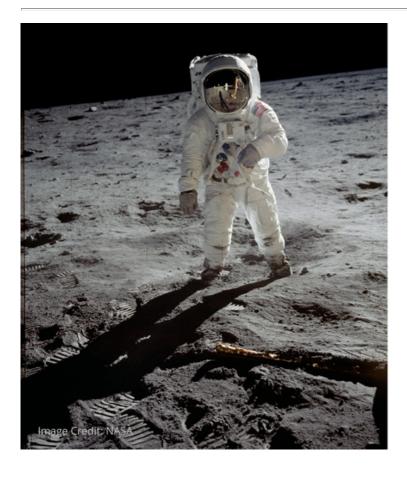
Copyright Rigetti Computing 2022



1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all.

Copyright Rigetti Computing 2022

#### 28



"We choose to go to the moon in this decade and do the other things, **not because they are easy, but because they are hard,** because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win..."

> **President John F. Kennedy,** *Rice University, 1962*

## Today's Agenda

Presentation Title	Speaker	Approximate Time
Strategic Overview	Chad Rigetti, CEO	8:30am
Go to Market & Strategic Partnerships	<b>Greg Peters, CRO</b> <ul> <li>Despina Milathanaki, Sr. Dir. DOE</li> <li>Marco Paini, Dir. Tech Partnerships</li> </ul>	9:00am
Product Roadmap	Eric Ostby, VP Product	9:30am
Quantum Cloud Services Platform	David Rivas, SVP Quantum Cloud Services	9:45am
Rigetti Quantum Processing Units	Mike Harburn, CTO <ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Alysson Gold, Sr. Mgr., Quantum Engineering</li> </ul>	10:15am
Financials	Brian Sereda, CFO	10:45am
Tour of Fab-1	<ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Yuvraj Mohan, Sr. Quantum Engineer</li> <li>Mark Field, Principal Engineer</li> </ul>	After Lunch
yright Rigetti Computing 2022	30	riget



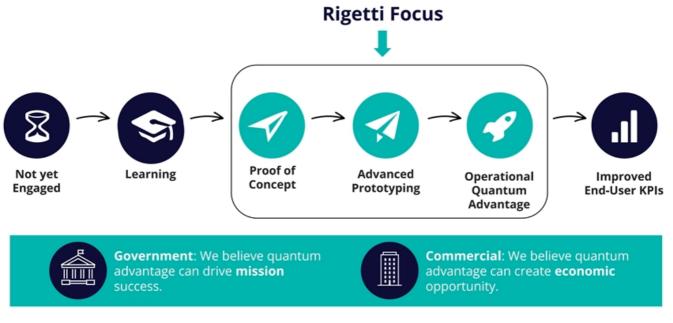


## 2. Go to Market & Strategic Partnerships

#### **Focused Go-To-Market Strategy**

Rigetti is building strategic partnerships in the public and private sectors to prove out use cases, advance its technology, and strengthen its growth foundation.

## **Rigetti Perspective: User Path to Quantum Advantage**



Copyright Rigetti Computing 2022

33

## **Engaging Top-Tier Organizations**

#### Our engagements are aligned with our roadmap and the goals of the customer



#### Government

#### Example characteristics of government contracts:

Duration: 18 months to 60 months per program Engagement Model: 70% Consulting, 30% QCaaS

Funding: Long flow-down time follows bill passage

**Outcomes:** Advancing basic research; use case proof of concepts; shaping the future of the quantum ecosystem



#### Commercial

#### Example characteristics of commercial contracts:

Duration: 12 months to 18 months per stage

Engagement Model: 70% Consulting, 30% QCaaS

Funding: Requires executive sponsorship

**Outcomes:** Use case Proof-of-Concepts and initial prototyping; work with market makers & early adopters

Copyright Rigetti Computing 2022



## **Quantum Computing Industry Trends**



We believe that while the majority of the spend for quantum computing is in government-funded research today, it will begin to transition to commercial revenue as the industry approaches Quantum Advantage.



We believe that a larger percentage of customer spend will become QCaaS as the industry approaches Quantum Advantage.

Copyright Rigetti Computing 2022

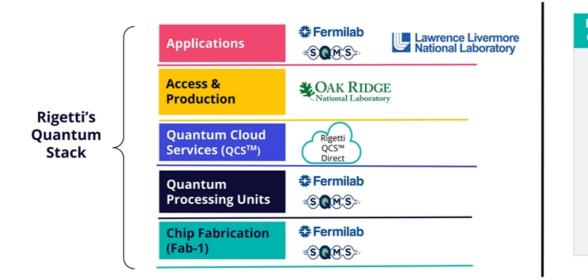
35

#### **Top-Tier Government Partners**

We work with renowned public organizations in pursuit of advancing quantum technologies and solving real-world problems.

#### **Trusted Partner in the DoE Ecosystem**

Mutual value creation opportunities for our DoE partners and Rigetti



Copyright Rigetti Computing 2022

37



Quantum Computing Summer School

rigetti

### Lead Industry Partner in a US National Quantum R&D Center

#### **Our Goals:**

## Advance the state-of-the-art in superconducting quantum technology

• Extend qubit coherence through a deep understanding of critical materials science problems

#### Accelerate discovery in high-energy physics

• Quantum advantage in select high-energy physics problems through QPU co-design

#### Deploy new quantum computing testbeds

• Next-generation quantum computing testbeds by 2025

#### Train the quantum workforce of the future

 Train and engage through fellowships, summer internships, national career fairs

38

Copyright Rigetti Computing 2022





#### Early QCaaS Partner of the Oak Ridge Leadership Computing Facility



- Partnering with ORNL's leading computing experts to deploy quantum computing capabilities
- Supporting a growing quantum computing community: academia, other national labs, industry

#### Enabling the acceleration of scientific applications

- Supporting diverse scientific applications as a trusted QCUP QCaaS provider
- ORNL demonstrated the first chemically accurate simulation on a Rigetti quantum computer<sup>1</sup>

1) McCaskey, A.J., Parks, Z.P., Jakowski, J. et al. Quantum chemistry as a benchmark for near-term quantum computers. npj Quantum Inf 5, 99 (2019). mage Credits: https://www.flickr.com/photos/oakridgelab/9220496989/in/album-72157618833000582 https://www.flickr.com/photos/oakridgelab/52280905284/

Copyright Rigetti Computing 2022

Title: Aerial view of ORNL's main campus

Title: The Frontier supercomputer at the OLCF





## **Rigetti Perspective**

Quantum Machine Learning for finance is poised to be an early domain of quantum advantage.

## **Quantum Computing for Finance**

#### We believe quantum computing can address many use cases

#### Finance industry opportunity<sup>1</sup>

- Many hard computational problems
- Potential significant economic benefits from incremental improvements
- Potential rapid value capture from quick integration
- Potential first mover advantage

#### **Rigetti opportunity**

- Potentially large market opportunity<sup>1</sup>
- Interest in quantum computing and resourcing are increasing

\*Langione et al., "Where Will Quantum computers Create Value - and When?" Boston Consulting Group, May 2019; "What Happens When 'If' Turns to 'When' in Quantum Computing, Boston Consulting Group, July 2021.

Copyright Rigetti Computing 2022

41



## **Pursuing Value Creation for the Finance Industry**

42

#### Taking a differentiated approach

#### People

- Internal financial markets expertise enables deep understanding of customer needs
- Track record with financial clients

#### **Core Technology**

- Colocation accelerates hybrid algorithms
- Leveraging of multi-chip scalability
- Full stack optimization of applications

#### **Software Libraries**

- Algorithms that scale efficiently to real-world size applications
- Applicable to multiple use cases (e.g. classification, regression, unsupervised learning, PDEs)

Copyright Rigetti Computing 2022



# Real-world application partnerships using Quantum Machine Learning (QML)



The **Standard Chartered and Rigetti partnership** has generated enhancements across the Rigetti stack, while providing Standard Chartered with a **deeper understanding of QML** capabilities and of the **value** of their **datasets**.



#### Run on Rigetti QCS

- · Access Rigetti QPU via the cloud
- Measure real-world performance of quantum algorithms and hardware
- Analyze application's strengths and weaknesses



- Adapt hybrid algorithms
- Scalable error mitigation and QML model
- Changes at lower levels in the stack



- Standard Chartered provides data sets
- Investigate data set characteristics which lead to quantum advantage
- Leverage quantum features

Copyright Rigetti Computing 2022



#### **Expansion Focus**

Our expansion strategies include growing our government business while expanding into commercial opportunities and extending our geographic footprint

## **Quantum Information Science Spending is on the Rise**



**CHIPS<sup>1</sup> and Science Act: \$280B** bill to boost technological competitiveness includes \$160M QUEST<sup>2</sup> and \$52B foundry support program

Quantum Technologies Challenge: \$198M<sup>3</sup> in grants for quantum computing startups National Quantum Technologies Program: \$107M<sup>4</sup> for National Quantum Computing Center

Quantum Commercialization Hub: \$70M<sup>5</sup> 10 Year funding in 2021

National Quantum Strategy: \$360M<sup>6</sup> in 2021 QC Tech: \$120M<sup>7</sup> investment in 2021 for hardware and software

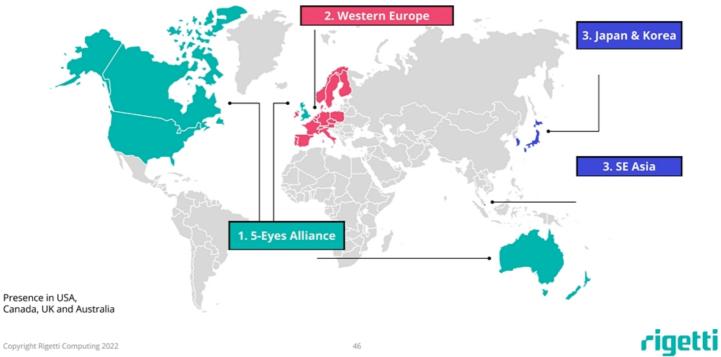
National Quantum Strategy: \$2B 5-year investment in quantum R&D

NATO Center for Quantum Tec: \$1B VC fund for dual-use quantum startups

Copyright Rigetti Computing 2022



# Plan to Expand Our Customer and Partner Base



Copyright Rigetti Computing 2022

## **Focused Strategy to Drive Growth**



## **Question & Answer**



## Today's Agenda

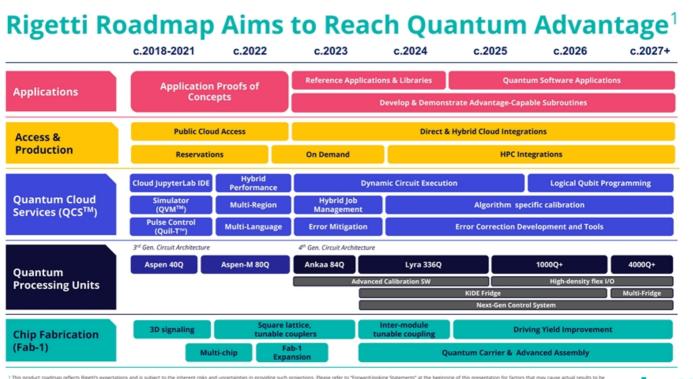
Presentation Title	Speaker	Approximate Time
Strategic Overview	Chad Rigetti, CEO	8:30am
Go to Market & Strategic Partnerships	Greg Peters, CRO <ul> <li>Despina Milathanaki, Sr. Dir. DOE</li> <li>Marco Paini, Dir. Tech Partnerships</li> </ul>	9:00am
Product Roadmap	Eric Ostby, VP Product	9:30am
Quantum Cloud Services Platform	David Rivas, SVP Quantum Cloud Services	9:45am
Rigetti Quantum Processing Units	Mike Harburn, CTO <ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Alysson Gold, Sr. Mgr., Quantum Engineering</li> </ul>	10:15am
Financials	Brian Sereda, CFO	10:45am
Tour of Fab-1	<ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Yuvraj Mohan, Sr. Quantum Engineer</li> <li>Mark Field, Principal Engineer</li> </ul>	After Lunch
yright Rigetti Computing 2022	49	riget

# rigetti



## 3. Product Roadmap

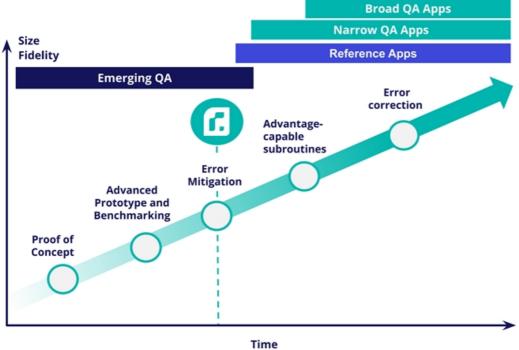
## Integrated Full-Stack Roadmap Our product and technology roadmap is focused on accelerating towards quantum advantage.



1 This product readmap reflects Rigetts's expectations and is subject to the inherent risks and uncertainties in providing such projections. Please refer to "Forward-looking Statements" at the beginning of this presentation for factors that may cause actual results to be materially different than expectations. This product roadmap is prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, the events set forth above are subject to a high degree of uncertainty and may not be actively difficult with the satisfied or at all.

Copyright Rigetti Computing 2022

### Application Driven Approach to Quantum Advantage (QA)



Copyright Rigetti Computing 2022

53

#### Advantage-Capable Subroutine:

Non-simulatable quantum subroutines that can be applied to valuable problems. These subroutines are required for nQA and bQA

#### Narrow QA (nQA):

Solve a practical, operationally relevant problem better, faster, or cheaper than current classical solution

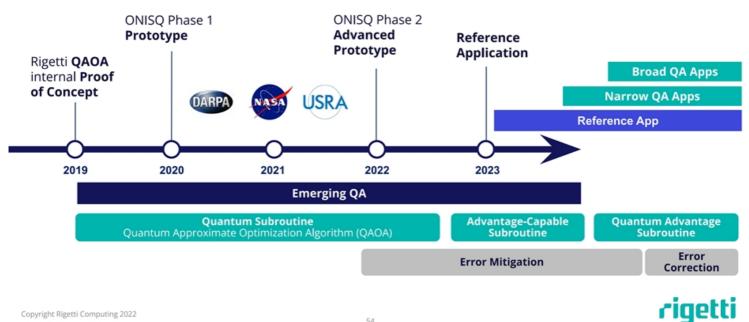
#### Broad QA (bQA):

Solve a practical problem that is provably classically hard, ensuring the quantum application solution will last

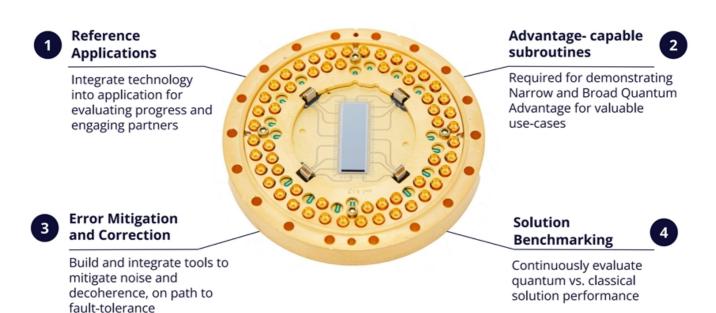


## **Optimization Illustrates Rigetti's Approach**

#### DARPA Program: Optimization with Noisy Intermediate Scale Quantum devices (ONISQ)



### **Quantum Advantage Strategy**

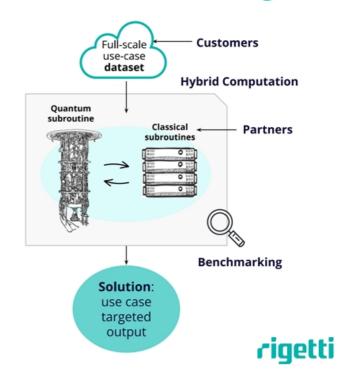


Copyright Rigetti Computing 2022



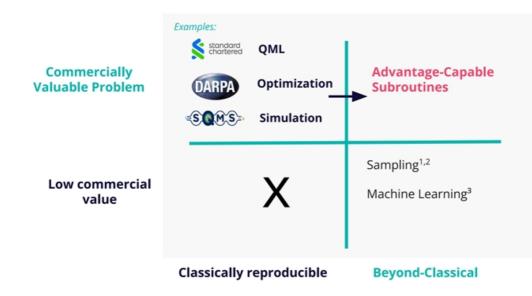
## **Building Reference Applications to Accelerate Progress**

- Integrate all components necessary to achieve Quantum Advantage
- Broaden insights from prototype developments
- Continuously benchmarking progress
- Optimize beyond-classical capable subroutines
- Inspire partners to build their own with Rigetti QCS



Copyright Rigetti Computing 2022

## **Focused on Useful Advantage-Capable Subroutines**



<sup>1</sup>Arute, Frank, et al. "Quantum supremacy using a programmable superconducting processor." *Nature*: doi.org/10.1038/s41586-019-1666-5 <sup>3</sup>Madsen, Lars, et al. "Quantum computational advantage with a programmable photonic processor." *Nature*: doi.org/10.1038/s41586-022-04725-x <sup>3</sup>Huang, Hsin-Yuan, et al. "Quantum advantage in learning from experiments." *Science*: <u>DOI: 10.1126/science.abn7293</u>

Copyright Rigetti Computing 2022

## **Improving Performance Using Error Mitigation**

# rigetti

- Quantum algorithms must mitigate the impact of noise, even in fault-tolerance
- Superconducting qubit platforms strongly benefit from error mitigation due to high data rates and scalability
- Rigetti QCS users achieving higher performance towards Quantum Advantage with pulse-level control using Quil-T<sup>™</sup>
- Integrating Keysight TrueQ<sup>™</sup> into QCS (beta)

Copyright Rigetti Computing 2022



- First 3rd party product integration with QCS
- TrueQ uses "randomized compiling" to reduce coherent errors
- Supports logical qubit allocation, swap network insertion, and readout symmetrization
- Benchmarking shows performance improvement

### **Cautionary Notes**

Forward Looking Statements: Certain statements in this video may be considered forward-looking statements, including statements with respect to Rigetti's partnership with Ampere Computing, including the potential benefits to customers, the ability to bring the hybrid classical quantum approach to market, the ability to bring to market sustainable cloud empowered with quantum computing, the ability of end-users to take advantage of fundamentally new approaches to solving machine learning problems, and statements with respect to the practical approach to bringing technologies to market. Forward-looking statements generally relate to future events and can be identified by terminology such as "pro forma," "may," "should," "could," "might," "plan," "possible," "project," "strive," "budget," "forecast," "expect," "intend," "will," "estimate," "believe," "predict," "potential," "pursue," "aim," "goal," "mission," "outlook," "anticipate" or "continue," or the negatives of these terms or variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: Rigetti's ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCaaS business; the success of Rigetti's partnerships and collaborations; Rigetti's ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; the risk that the business combination disrupts current plans and operations of Rigetti; the ability to recognize the anticipated benefits of its recent business combination with Supernova, which may be affected by, among other things, competition, the ability of Rigetti to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; costs related to the business combination with Supernova and operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigetti's business; the expected use of proceeds from Rigetti's past and future financings or other capital; the sufficiency of Rigetti's cash resources; unfavorable conditions in Rigetti's industry, the global economy or global supply chain, including financial and credit market fluctuations and uncertainty, rising inflation, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; and other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in the registration on Form S-4, Rigetti's Form 8-K filed with the Securities and Exchange Commission (the "SEC") on March 7, 2022, and in Rigetti's Form 10-Q for the three months ended March 31, 2022, and other documents filed by Rigetti from time to time with the SEC, including Rigetti's Quarterly Report on Form 10-Q for the three months ended June 30, 2022. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Rigetti assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. Rigetti does not give any assurance that it will achieve its expectations.

The statements and commentary included in this video are strictly the views, opinions and expectations of Ampere Computing and are not the responsibility of Rigetti.



#### Scalability Expected to Unlock High Performance Error Correction

- Improve performance by using additional qubits to measure errors, then corrected through software
- Scaling driven by superconducting qubit architecture, multi-chip, and Fab-1 capabilities
- Developing hardware, software, and tools for quantum error correction
- Running error correction codes on each new chip generation





Correct errors that occurred in logical qubit state



Check logical qubit state for potential errors



Perform two-logical qubit gates

Copyright Rigetti Computing 2022



## **Track Progress By Continuous Benchmarking**

#### Going beyond core system performance metrics to solution specific KPIs

# Measuring progress towards Quantum Advantage

- Customers need to know how close they are to Quantum Advantage
- Select and operate their classical solution
- Focus on solution-specific benchmarks
- Core capability of Reference Applications

#### **Engaging Partners**

- DARPA Quantum Benchmarking program
- 3rd party organizations
- Platform

Copyright Rigetti Computing 2022







#### Rigetti's Integrated Roadmap Focused on Quantum Advantage

- Building infrastructure and technology to achieve Quantum Advantage
- Offering products and services to help partners and customers in the same pursuit
- Integrated into the fabric of the cloud with QCS<sup>™</sup>
- Foundation built on Fab-1 and QPU systems



## Today's Agenda

Presentation Title	Speaker	Approximate Time
Strategic Overview	Chad Rigetti, CEO	8:30am
Go to Market & Strategic Partnerships	Greg Peters, CRO <ul> <li>Despina Milathanaki, Sr. Dir. DOE</li> <li>Marco Paini, Dir. Tech Partnerships</li> </ul>	9:00am
Product Roadmap	Eric Ostby, VP Product	9:30am
Quantum Cloud Services Platform	David Rivas, SVP Quantum Cloud Services	9:45am
Rigetti Quantum Processing Units	Mike Harburn, CTO <ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Alysson Gold, Sr. Mgr., Quantum Engineering</li> </ul>	10:15am
Financials	Brian Sereda, CFO	10:45am
Tour of Fab-1	<ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Yuvraj Mohan, Sr. Quantum Engineer</li> <li>Mark Field, Principal Engineer</li> </ul>	After Lunch
nuriaht Bianti Computing 2022	62	cinett

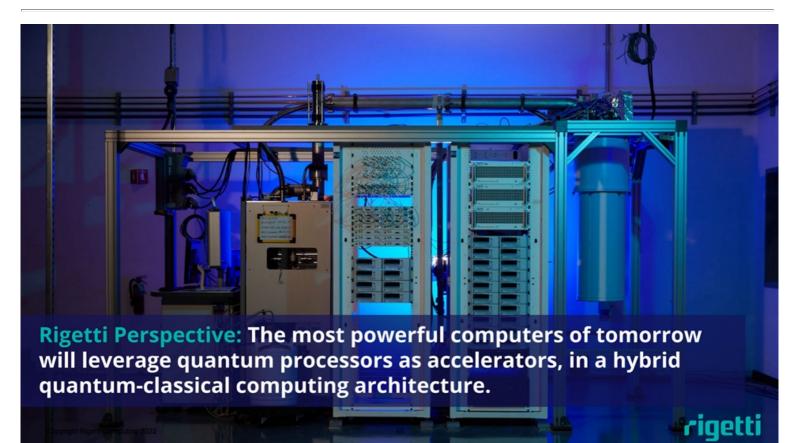
Copyright Rigetti Computing 2022



# rigetti



## 4. Quantum Cloud Services



#### **QCS<sup>™</sup> in Action: A Hybrid Application**

POC: Medical Image Recognition using Quantum Convolutional Neural Networks (QCNN)



#### Powered by QCS™

High velocity development integrated with real world data

- Integrated hybrid development
- · High performance quantum
- · Fast development cycles
- · Leverages existing customer resources



Off-line Machine Learning image processing

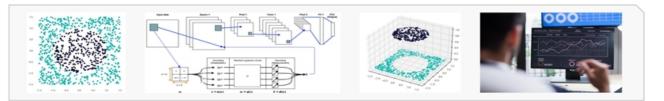
- Real world data
- Hybrid: CNN accelerated by quantum
- Augmented standard solution
- Enhanced by quantum subroutine



#### Internal Results

Demonstrate higher accuracy for medical diagnostic images

- On a well known classical model:<sup>1</sup>
   75% fewer parameters than classical
   Test recall +1.28% fewer false negatives
- Less data for similar results faster training
- Potential for increased speed to diagnosis

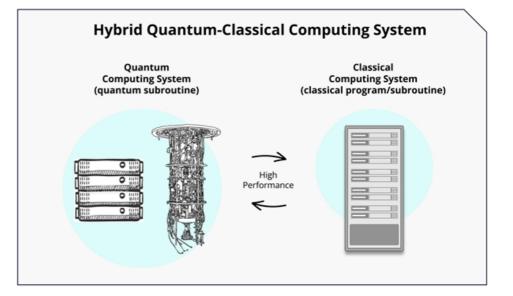


1 Results obtained from an internal analysis Copyright Rigetti Computing 2022

66

# What is Quantum-Classical Hybrid Computing?

- A classical program or subroutine accelerated by a quantum subroutine
- Performance is dependent on the integration between the two systems



Copyright Rigetti Computing 2022

67

### **QCS<sup>™</sup> Delivering Hybrid Quantum Computing**

#### **The Production Environment** Hybrid Quantum Computing with QCS™ A distributed cloud hybrid • **Customer Cloud** Hybrid Quantum-Classical computing system **Computing System** Customer resources located where • the customer needs • High performance integration of 11 ligh 111 QPU with key classical resources System Processes Powered by QCS™ integrating QPUs • System Layer and distributed classical resources rigetti

Copyright Rigetti Computing 2022

#### **Quantum Cloud Services (QCS<sup>™</sup>)**

#### Integrating Rigetti QPUs into the fabric of the cloud





Copyright Rigetti Computing 2022

#### The QCS<sup>™</sup> Stack



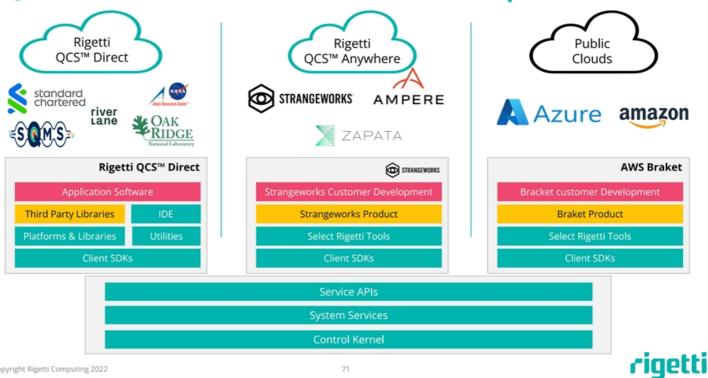
#### Tools to support high performance QPU integration and application development

User Processes	Application SoftwareThird Party LibrariesIDEPlatforms & LibrariesUtilitiesClient SDKsVertical Software	Developer Tools	<ul> <li>Integrated Developer Environment (IDE)</li> <li>Quantum Software Libraries</li> <li>Client Software Development Kit (SDKs)</li> <li>Compiler</li> <li>Simulators</li> <li>Command Line Interface</li> </ul>
System Layer	System Processes Service APIs System Services Control Kernel	User & Systems Management Quantum System Management	<ul> <li>QPU Systems Dashboard</li> <li>Reservations</li> <li>Billing &amp; Reporting</li> <li>User Account Management</li> <li>Translation</li> <li>Admissions</li> <li>Program/Circuit Scheduling</li> </ul>
	Control System QPUs		

Copyright Rigetti Computing 2022

70

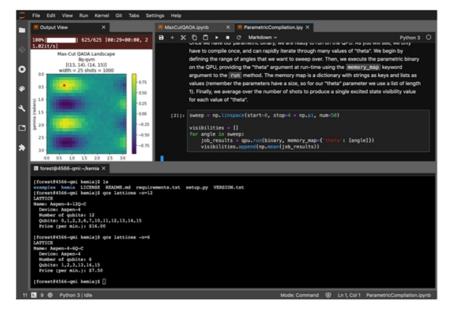
#### QCS<sup>™</sup> One stack for all our customers & partners



Copyright Rigetti Computing 2022

### **QCS<sup>™</sup> for Application Developers**

**The Development Platform** 



Copyright Rigetti Computing 2022

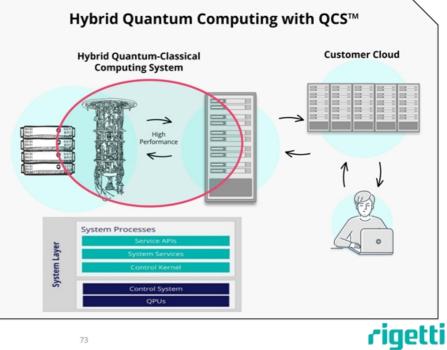
72

- Fully featured and familiar IDE Visual IDE based on Jupyterlab Notebooks
- QCS Direct Cloud Based Delivered over the cloud, as a service, to the developer
- **Tools quantum developers use** Supports PyQuil<sup>®</sup>, Cirq, and Qiskit
- Supporting platform evolution in a robust software development ecosystem
   SDKs in Python, C, & Rust

### **QCS<sup>™</sup> Delivering High Performance**

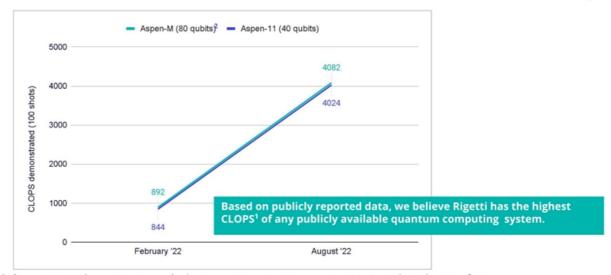
#### **Performance Matters**

- Hybrid by design •
- Deep integration with each • component of the system
- High performance integration ٠ between classical and quantum resources utilized in a hybrid computation



Copyright Rigetti Computing 2022

#### **QCS<sup>™</sup> Achieved 4.5x increase on CLOPs<sup>1</sup> since February**

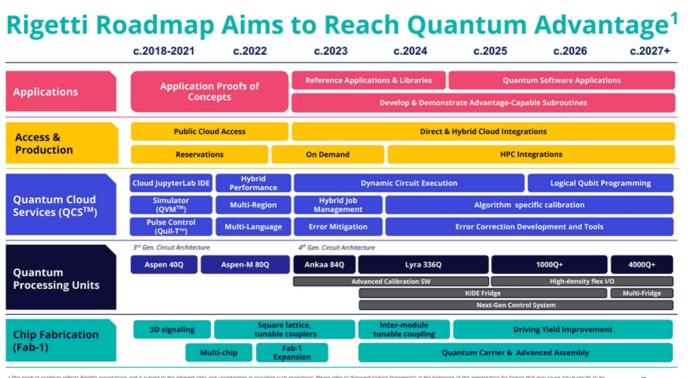


**CLOPS**<sup>1</sup>, **or circuit layer operations per second**, characterizes quantum processing speeds inclusive of gate speeds, reprogrammability, and co-processing capabilities, among other factors.

1.CLOPS is calculated as M × S > D / time taken where: M = number of templates = 100, X = number of shots = 100, and B = number of Shots = 200, and B = number of shots = 100, and B = number of shots = number of shots = 100, and B = number of shots

Copyright Rigetti Computing 2022





s This product readmap reflects Rigetta's expectations and is subject to the inherent risks and uncertainties in providing such projections. Please refer to "Forward-looking Statements" at the beginning of this presentation for factors that may cause actual results to be materially different than expectations. This product readmap is prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, the events set forth above are subject to a high degree of uncertainty and may not be activitied within the timeframe description of at all.

Copyright Rigetti Computing 2022

#### Partnerships Help Accelerate our Path<sup>1</sup>



1 Prepared on the basis of certain technical, market, competitive and other assumptions which may not be satisfied. As a result, these, projections are subject to a high degree of uncertainty and may not be achieved within the timeframes described or at all. 76

Copyright Rigetti Computing 2022

#### **Cautionary Notes**

Forward Looking Statements: Certain statements in this video may be considered forward-looking statements, including statements with respect to the collaboration of Rigetti and Keysight, including expectations with respect to benefits to the user base, achievement of better and higher performance quantum computing outcomes, delivery of advanced error mitigation to help engineers on the path towards quantum advantage, and Keysight and Rigetti working together at the forefront of the race towards quantum advantage. Forward-looking statements generally relate to future events and can be identified by terminology such as "pro forma," "may," "should," "could," "might," "plan," "possible," "project," "strive," "budget," "forecast," "expect," "intend," "will," "estimate," "believe," "predict," "potential," "pursue," "aim," "goal," "mission," "outlook," and the factors "continue," or the negatives of these terms or variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: Rigetti's ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCaaS business; the success of Rigetti's partnerships and collaborations; Rigetti's ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; the risk that the business combination disrupts current plans and operations of Rigetti; the ability to recognize the anticipated benefits of its recent business combination with Supernova, which may be affected by, among other things, competition, the ability of Rigetti to grow and manage growth profitably, maintain relationships with customers and suppliers and retain its management and key employees; costs related to the business combination with Supernova and operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigett's business; the expected use of proceeds from Rigett's past and future financings or other capital; the sufficiency of Rigett's cash resources; unfavorable conditions in Rigett's industry, the global economy or global supply chain, including financial and credit market fluctuations and uncertainty, rising inflation, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; and other risks and uncertainties set forth in the section entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in the registration on Form S-4, Rigetti's Form 8-K filed with the Securities and Exchange Commission (the "SEC") on March 7, 2022, and in Rigetti's Form 10-Q for the three months ended March 31, 2022, and other documents filed by Rigetti from time to time with the SEC, including Rigetti's Quarterly Report on Form 10-Q for the three months ended June 30, 2022. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Rigetti assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. Rigetti does not give any assurance that it will achieve its expectations.

The statements and commentary included in this video are strictly the views, opinions and expectations of Keysight Technologies and are not the responsibility of Rigetti.



# **Question & Answer**



#### Today's Agenda

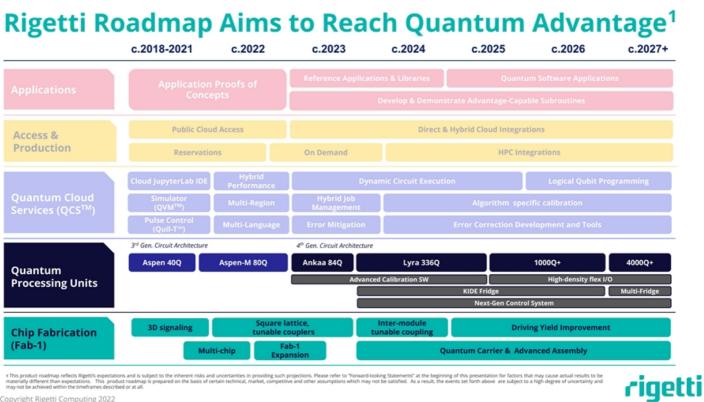
Presentation Title	Speaker	Approximate Time
Strategic Overview	Chad Rigetti, CEO	8:30am
Go to Market & Strategic Partnerships	Greg Peters, CRO <ul> <li>Despina Milathanaki, Sr. Dir. DOE</li> <li>Marco Paini, Dir. Tech Partnerships</li> </ul>	9:00am
Product Roadmap	Eric Ostby, VP Product	9:30am
Quantum Cloud Services Platform	David Rivas, SVP Quantum Cloud Services	9:45am
Rigetti Quantum Processing Units	Mike Harburn, CTO <ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Alysson Gold, Sr. Mgr., Quantum Engineering</li> </ul>	10:15am
Financials	Brian Sereda, CFO	10:45am
Tour of Fab-1	<ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Yuvraj Mohan, Sr. Quantum Engineer</li> <li>Mark Field, Principal Engineer</li> </ul>	After Lunch
		cinett

Copyright Rigetti Computing 2022





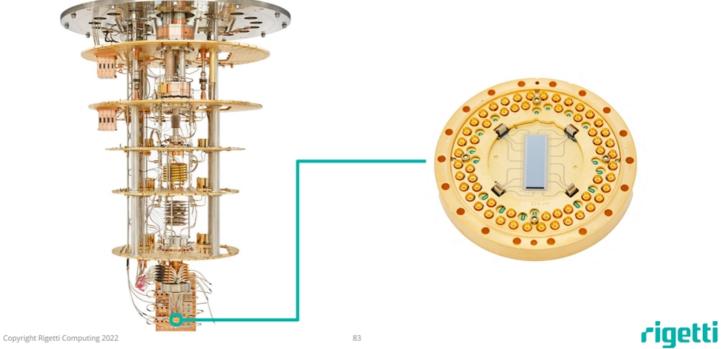
#### Quantum Processor Trailblazers: Rigetti's strategic investments at the chip level underpin our pioneering roadmap in QPU performance at scale.

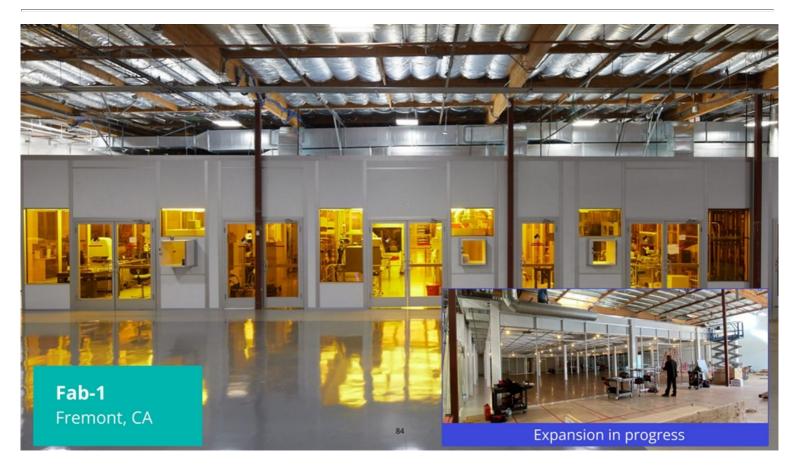


I This product roadmap reflects Rigetti's expectations and is subject to the inheren materially different than expectations. This product roadmap is prepared on the may not be achieved within the timeframes described or at all. Sing such projections. Please refer to "Forward-looking Statements" at the beginning of this presentation for factors that may cause actual results to be competitive and other assumptions which may not be satisfied. As a result, the events set forth above are subject to a high degree of uncertainty and ties in provis ical, market,

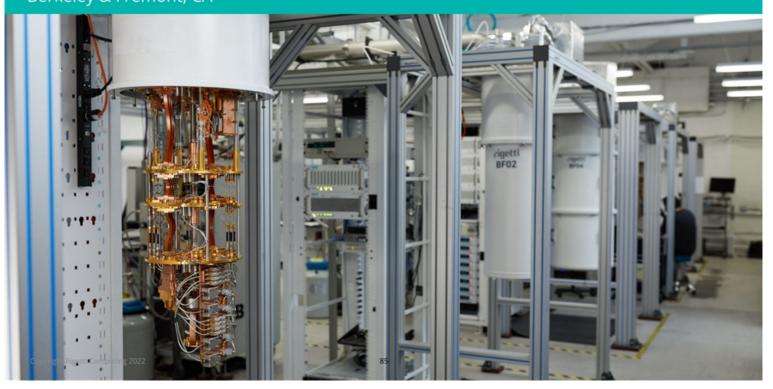
Copyright Rigetti Computing 2022

# The Chip is the Heart of the Quantum Computer

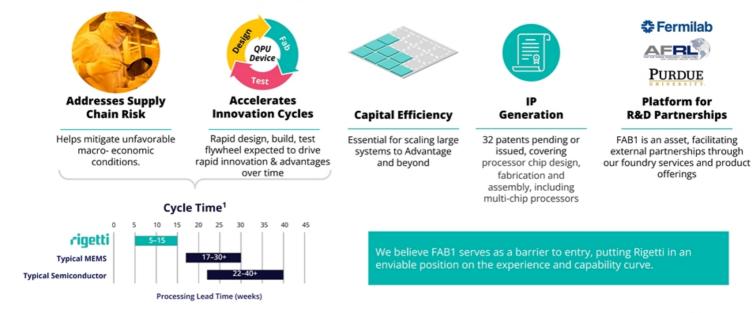




#### **Quantum Data Center and Test Facility** Berkeley & Fremont, CA



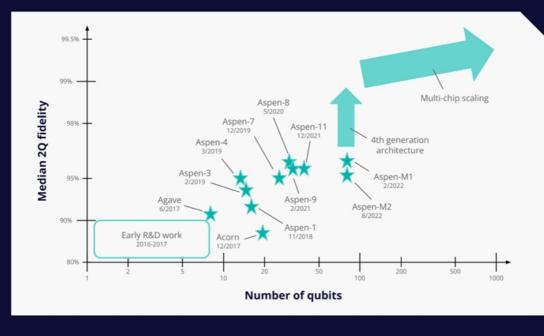
#### Rigetti Perspective: FAB1 Accelerates R&D and Provides Competitive Advantage



[1] Cycle time chart based on internal estimates Copyright Rigetti Computing 2022

86

# **Driving QPU Development: Performance at Scale**

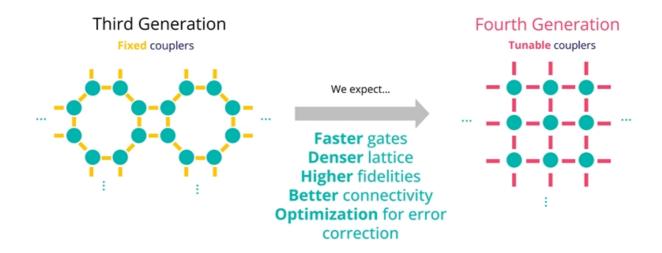


Copyright Rigetti Computing 2022

87

#### 4th Gen Architecture: Designed for Quantum Advantage

Demonstrated 2Q gate fidelities as high as 99.5% on intermediate-scale prototypes<sup>1</sup>

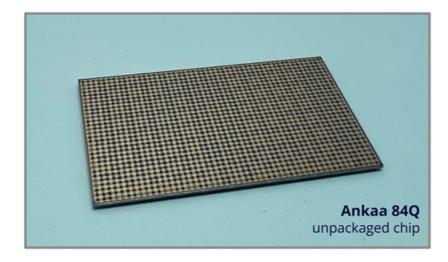


1 GlobalNewswire. February 17, 2022. Rigetti Computing Reports Fidelities as High as 99.5% on Next-Generation Chip Architecture

Copyright Rigetti Computing 2022

88

#### **Progress to Ankaa 84Q**



Prototype 84Q chips being manufactured in Fab-1

Characterization and design optimization underway

On track for early 2023 deployment to customers

Copyright Rigetti Computing 2022

89

# Proprietary scaling technology unlocked by 6+ years of fab-driven innovation

#### Vertical Signaling

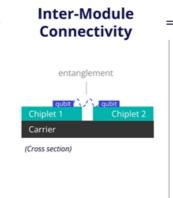
2D Signals routed laterally

3D signal delivery enables high density, modular processor I/O and removes the need to redesign each new generation to accommodate signal line routing



Modular assembly onto a carrier device enables:

- High fabrication yield, improved processor performance
- Potential for heterogeneous integration (specialized chips for processing, memory and networking)



Low-latency connections provide high fidelity quantum entanglement between modules

#### Rigetti's Scalable Architecture



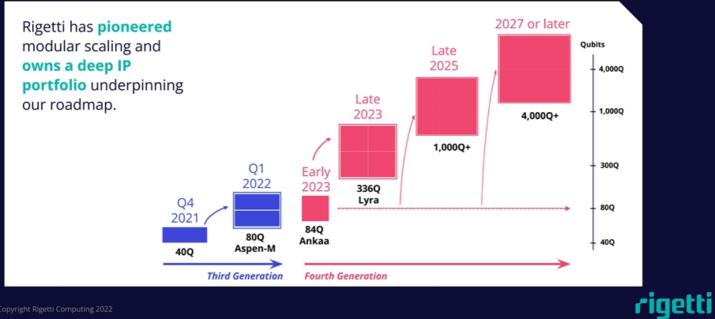
Large-scale processors built from identical tiles provide a directly scalable architecture

rigetti

Copyright Rigetti Computing 2022

### Leveraging Multi-Chip for Predictable Scaling

Proprietary technology unlocked by 6+ years of fab-driven innovation



### Fridges for Lyra 336Q, 1,000Q+ and 4,000Q+ QPUs



Rigetti is excited to announce that it has entered into a strategic partnership with Bluefors, a leader in cryogenic refrigeration, to develop the KIDE fridge. Copyright Rigetti Computing 2022

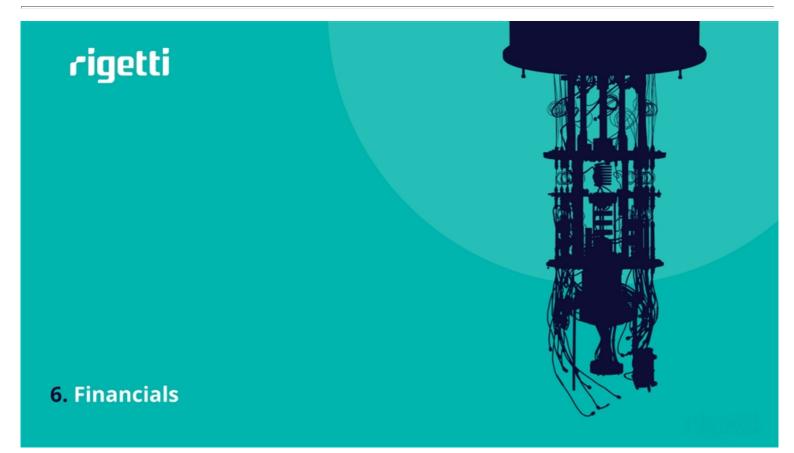
# **Question & Answer**



#### Today's Agenda

Presentation Title	Speaker	Approximate Time
Strategic Overview	Chad Rigetti, CEO	8:30am
Go to Market & Strategic Partnerships	Greg Peters, CRO <ul> <li>Despina Milathanaki, Sr. Dir. DOE</li> <li>Marco Paini, Dir. Tech Partnerships</li> </ul>	9:00am
Product Roadmap	Eric Ostby, VP Product	9:30am
Quantum Cloud Services Platform	David Rivas, SVP Quantum Cloud Services	9:45am
Rigetti Quantum Processing Units	Mike Harburn, CTO <ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Alysson Gold, Sr. Mgr., Quantum Engineering</li> </ul>	10:15am
Financials	Brian Sereda, CFO	10:45am
Tour of Fab-1	<ul> <li>Andrew Bestwick, VP Quantum Device Architecture</li> <li>Yuvraj Mohan, Sr. Quantum Engineer</li> <li>Mark Field, Principal Engineer</li> </ul>	After Lunch
yright Rigetti Computing 2022	94	riget





**Financial Strategy** Enabling value creation through progress against our roadmap.

**Rigetti** is focused on driving what we believe are high-value use cases through a differentiated **full-stack**, **hybrid approach** to advance towards Quantum Advantage.

We believe our **long-term QCaaS business** model will deliver anticipated high-margin, recurring revenue growth and operating profit.

We expect Rigetti to be well-positioned to capture a significant share of the quantum market.



Copyright Rigetti Computing 2022

#### Early Strategic Investments Fuel Roadmap Progress

- Recruit and build world-class global quantum engineering teams
- Advance our QCS platform, enabling customers to become sophisticated quantum users and advance application development
- Grow revenue through high-value partnerships & use cases
- Expand gross profit and operating margin profile as we work toward QA



Copyright Rigetti Computing 2022

98

#### 1H22 Financial Snapshot - Year 1<sup>1</sup>

# Access to capital markets has allowed us to make necessary investments to accelerate development in core engineering talent, Fab-1 and facilities

\$4.2 million 1H22 Revenue	\$3.0 million 1H22 total gross profit	~70.0% 1H22 Gross Margin
\$52.4 million 1H22 GAAP Operating Expenses	\$32.0 million 1H22 Non-GAAP Operating Expenses <sup>2</sup>	\$(29.0) million 1H22 Adjusted EBITDA <sup>2</sup>
\$184.0 million Cash & Cash Equivalents <sup>1</sup>	Committed Equity Facility up to \$75 million	\$(0.24) EPS 1H22

1 As of June 30, 2022

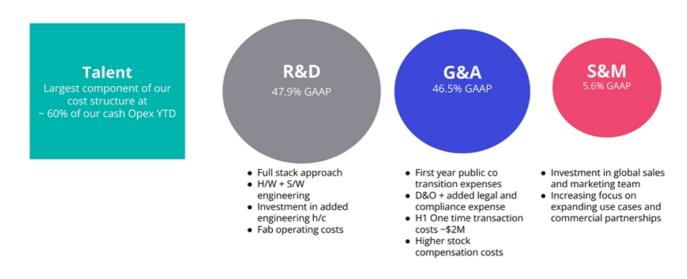
2 Please see appendix for a reconciliation of GAAP to non-GAAP financial measures.

Copyright Rigetti Computing 2022

99

#### Year One Expense Profile - Total OPEX - H122

We expect that our current expense profile will transition to an **operating profile** as we **work toward QA and beyond.** 



Copyright Rigetti Computing 2022

100

#### FY22 Outlook Long term business model - QCaaS

2022	
Revenue: \$12-\$13 million	Progress being made against potential ~\$4M revenue deferral due to ongoing contract discussions with existing customer - major US gov agency
Adjusted EBITDA <sup>1</sup> : (\$50)- (\$53) million	Ongoing supply constraints, higher headcount costs and public transition costs expected to persist in FY22
CapEx: \$33 - 35M	Critical investments post public in Fab1, dilution fridges and facilities expansion

1 Please see appendix for a reconciliation of GAAP to non-GAAP financial measures.

Copyright Rigetti Computing 2022



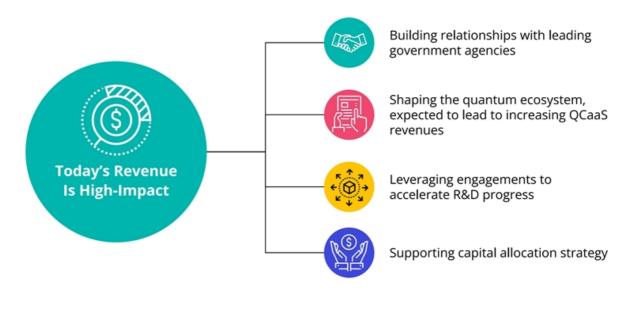
#### **Committed Equity Facility (CEF) Provides Several Strategic Benefits**

- Announced in August Up to **\$75M equity facility**
- We believe this is a prudent response to macro uncertainty and vote of confidence from capital markets
- Allows us to remain focused on key priorities and roadmap
- Structure allows discretionary access to capital markets



#### 102

#### **Strategically Focused on High-Impact Revenue**



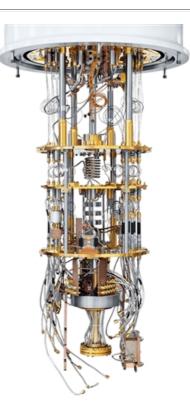
Copyright Rigetti Computing 2022



#### Pioneers and Innovators in Quantum

#### **Investment Highlights**

- Proprietary fab and full-stack pure play
- Leading-edge technology
- Extensive patent portfolio
- Strong leadership
- Top-tier commercial and technology partners
- Industry transformative potential



rigetti

Copyright Rigetti Computing 2022

# **Question & Answer**



### Poised to Solve Humanity's Most Important Problems



# Appendix

#### Rigetti Computing, Inc. Reconciliation of Net Loss to Adjusted EBITDA (in thousands)

(Millions)	6 Months Ended	6 Months Ended
	June 30,	June 30,
	2022	2021
Net loss	\$ (20,444)	\$ (17,861)
Excluding:		
Depreciation	\$ 2,978	\$ 2,362
Stock compensation	22,522	1,118
Interest expense (net)	2,244	481
Change in fair value of derivative warrant liabilities	(14,509)	
Change in fair value of forward contract agreement liability	(5,077)	
Change in fair value of earn out liability	(17,658)	
Merger-related transaction costs*	927	
Adjusted EBITDA	\$ (29,017)	\$ (13,900)

\* Merger-related transaction costs are comprised of the allocation of certain legal, accounting and other costs related to the assets and liabilities acquired in the business combination with Supernova.

Copyright Rigetti Computing 2022

108

#### Rigetti Computing, Inc. Reconciliation of Operating Expenses to Non-GAAP Operating Expenses (in thousands)

(Millions)	6 Months Ended	6 Months Ended
	June 30,	June 30,
	2022	2021
Operating Expenses	\$ 52,391	\$ 20,620
Excluding:		
Depreciation	\$ (2,978)	\$ (2,362)
Stock compensation	(22,522)	(1,118)
Change in fair value of forward contract agreement		
liability	5,077	-
Non-GAAP Operating Expenses	\$ 31,968	\$ 17,140

\* Non-GAAP operating expenses include an aggregate of \$2.0 million in one-time bonuses to certain employees for the successful completion of the business combination.

Copyright Rigetti Computing 2022

109

