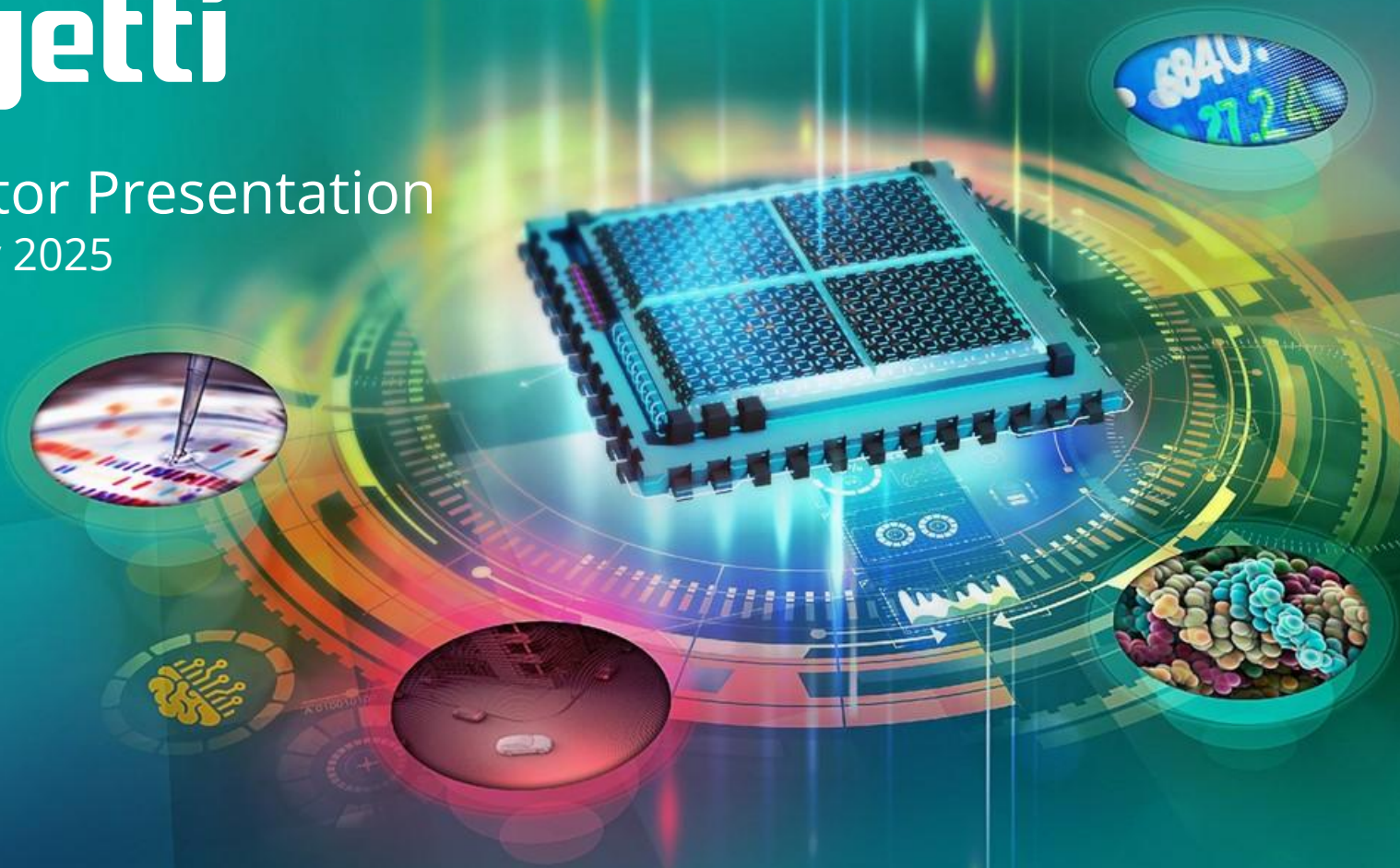


rigetti

Investor Presentation
January 2025



Cautionary Notes

Forward Looking Statements: Certain statements in this presentation may be considered forward-looking statements, including statements with respect to the Company's outlook and expectations, including expectations with respect to an anticipated Q2 2025 release of a 36-qubit system based on four 9-qubit chips tiled together with an anticipated 2Q gate fidelity with a 2X reduction in error rate from current levels and an anticipated Q4 2025 release of a 108-qubit system with an anticipated 2Q gate fidelity with a 2X reduction in error rate from current levels; an anticipated path for tiling 300+Q and 1,000+Q next generation multi-chip machines and the timing thereof, including these systems' potential performance; expectations relating to the Company's potential path to achieve nQA, revenue growth from achieving nQA and expectations that quantum computers have the potential to provide significant performance, power consumption, data representation, and price advantages over classical computation for select applications; expectations relating to the Company's commercialization and sales of QPUs, including Novera QPUs, and expectations of making similar additional sales of QPUs in the future; expectations relating to the Company's technology roadmap, the timing thereof and its ability to unlock quantum advantage and drive value creation and ability to apply to potentially commercially valuable problems; expectations and benefits with respect to the potential, opportunities, applications and impacts of quantum computing; expectations with respect to the capabilities of the Company's fab-1 facility, including its ability to accelerate research and development and innovation cycles, provide efficiencies, generate intellectual property, and provide competitive advantage; 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 advantage; expectations with respect to building the world's most powerful computers to help solve humanity's most important and pressing problems; expectations with respect to quantum markets and opportunities; expectations with respect to the competitive landscape and barriers to entry; statements with respect to the potential of quantum computing to transform many different industries for the better; expectations with respect to the Company's strategy to reach quantum advantage and become the industry's standard; expectations with respect to the anticipated stages of quantum technology maturation, including anticipated inflection points; expectations with respect to quantum computing industry trends and standards; the Company's ability to be at the forefront of superconducting computing and expectations with respect to the Company's belief that superconducting is the leading quantum computing modality and the Company's technology is superior; the Company's ability to build the world's most powerful computers; expectations regarding the potential power of quantum computers; expectations with respect to growth of the business, including with respect to future potential activities and expansion of QCaaS and growing revenue through high value partnerships; expectations relating to the Company's ability to achieve and demonstrate nQA and QA; expectations with respect to demonstrating reference applications, error mitigation, error correction, advantage-capable subroutines, and quantum advantage subroutines, including the timing thereof; expectations of needing between 300 and 3,000 qubits at 99.5+% for achieving nQA; and statements with respect to the Company's potential to deliver anticipated high-margin, recurring revenue growth and operating profit and be well-positioned to capture a significant share of the quantum computing opportunities.

Cautionary Notes

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,” “target,” “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 including those set forth in the section entitled “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2023 and Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, and other documents filed by the Company from time to time with the SEC. 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.

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. The Company 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.

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Rigetti's Mission:

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



Rigetti's Strategy:

To be at the forefront
of Superconducting
Quantum Computing

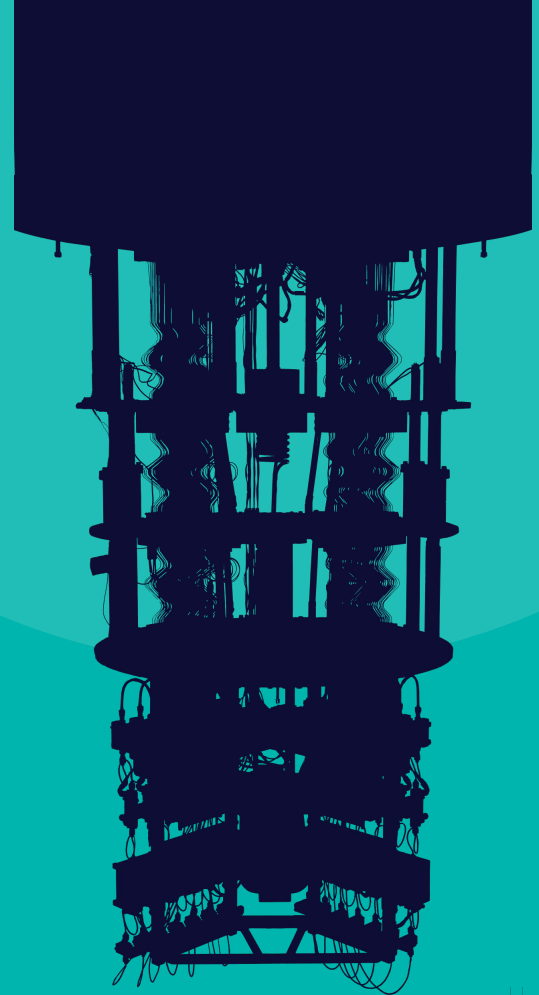
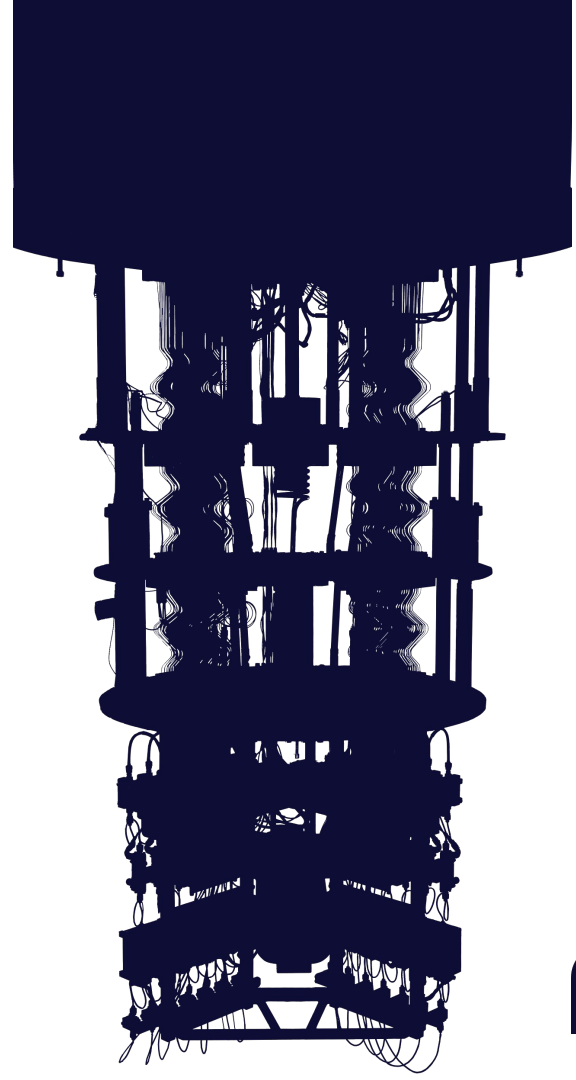


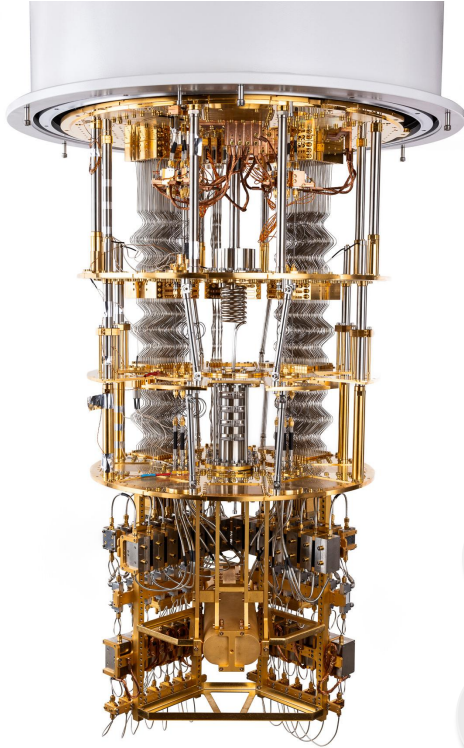
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Executive Summary



A Global Leader in Quantum Computing



Pioneer in full-stack quantum computing systems from chip to cloud access



Quantum computing projected to create \$450B - \$850B of economic value, sustaining a \$90B - \$170B market for hardware and software providers by 2040¹



Robust IP portfolio with 237 issued and pending patents across quantum engineering, fabrication, and algorithms



Gaining commercial traction with multiple, first-ever on-prem QPU sales and 20+ multi-year partnerships across government, academia and private industry



Exceptional, visionary management team with ~100 years of combined expertise

¹"Quantum Computing On Track to Create Up to \$850 Billion of Economic Value By 2040," BCG, July 18, 2024

Leading Industry Position 10+ Years in the Making

Rigetti-at-a-Glance

2013

Founded

17

Deployed quantum systems to-date

70K

Combined sq. ft. of facilities

140

Employees

49

PhDs

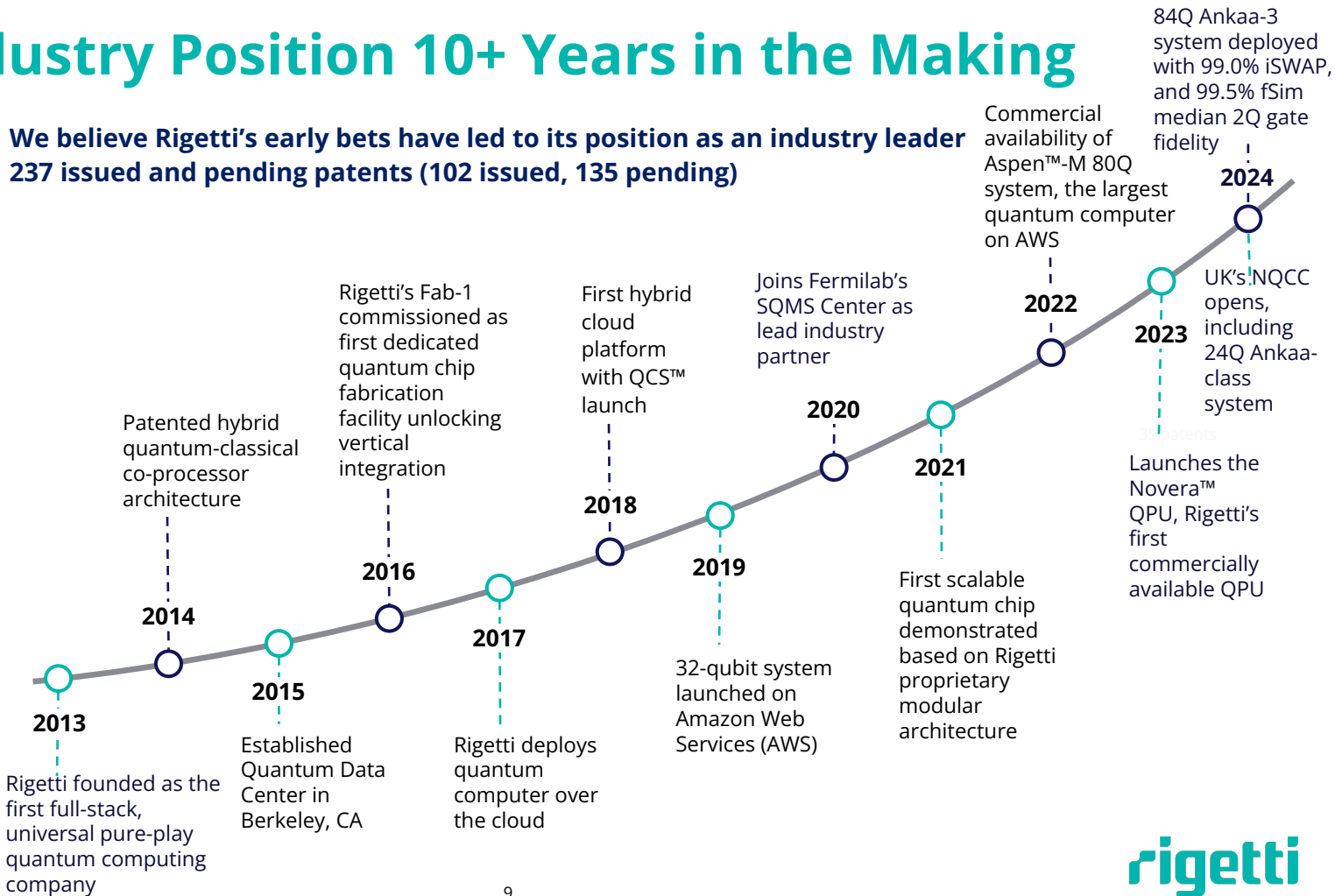
95% - 99.5+%

2-qubit gate fidelity ramp 2022-2025E

16 - 108

Qubit count ramp 2018 - 2025E

We believe Rigetti's early bets have led to its position as an industry leader
237 issued and pending patents (102 issued, 135 pending)



Classical Computers are Plateauing

Moore's Law Has Slowed



Costs have ballooned tremendously to reach 3nm process nodes



Companies face decisions between cost and speed and are slowing rollout of new generations



Increased reliance on specialized chip technology (GPU, FPGA, etc.) rather than further miniaturization

Diminishing Returns for Parallelization



Marginal benefits from parallel computing decrease as processors are added



Increase in processors leads to substantial increase in resource consumption



Numerous problems are not parallelizable

Energy Requirements Can't Keep Up



Classical supercomputers need significant megawatts of electricity to operate

1:1

Power increases at a 1:1 relationship with the number of transistors added

Critical Problems Are Out of Reach



Optimization, data analysis and simulation involve huge degrees of complexity with many interacting variables



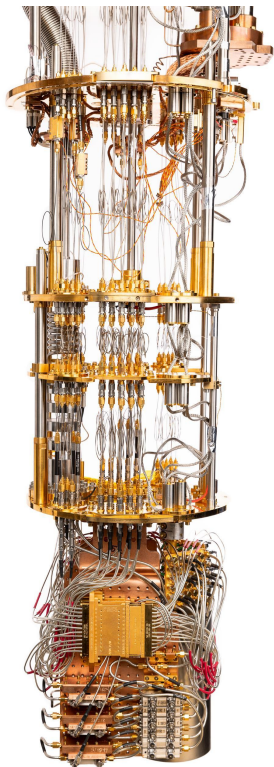
Molecular simulation of a system of 50 particles is described by 10^{15} coefficients, requiring multiple petabytes of classical memory



Factoring Large Numbers would take million of years on a classical computer

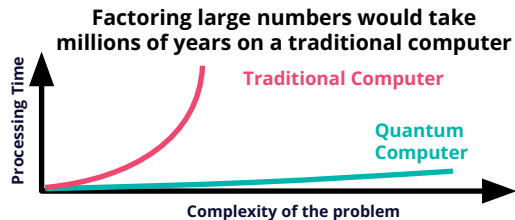
Today's Computing Solutions Are Reaching Their Limits, Paving the Way for a Disruptive Technological Advance

We Believe Quantum Computing is the Answer



ORDERS OF MAGNITUDE FASTER

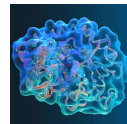
Compute time could be reduced from decades to seconds



EASILY REPRESENTS COMPLEX DATA

Enhanced data representations will need fewer physical resources

Molecular Simulation

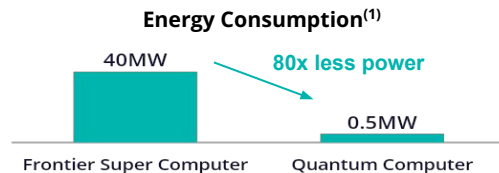


10^{15} coefficients required by classical computer
vs.
50 qubits required by quantum computer



GROUND-BREAKING POWER EFFICIENCY

Significantly less power consumption

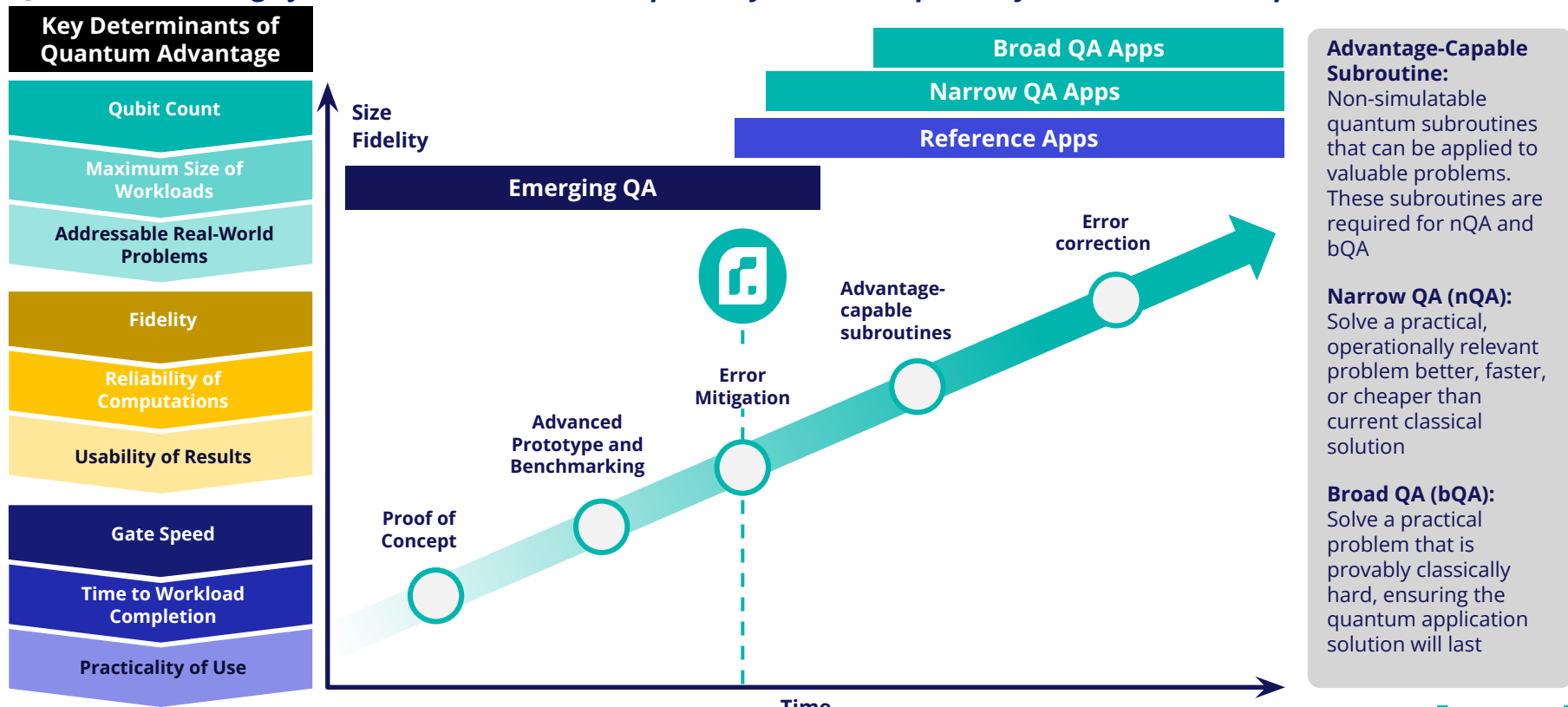


Source: Company materials.

⁽¹⁾For processing 1M physical qubit (MW)




Rigetti Positioned to Deliver Quantum Advantage

Quantum advantage framework outlines a clear pathway towards superiority over classical computers

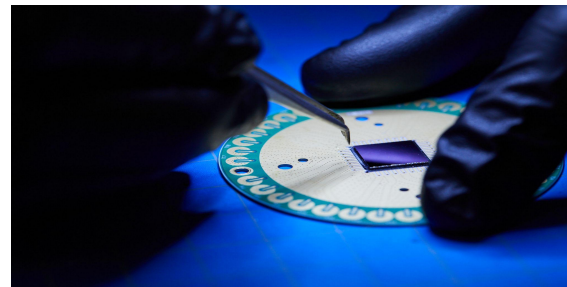


We Believe Superconducting is the Leading Modality

Quantum Computing Modalities

Figures of Merit	Superconducting Rigetti, IBM, Google, Amazon, Fujitsu, IQM, Govt. of China	Trapped Ions IonQ, Quantinuum, Oxford Ionics	Neutral Atoms QuEra, Atom Computing	Photonics PsiQuantum, Xanadu, Govt. of China
 Qubit Count	100+ Multi-die	25+	25+	<10
 Fidelity⁽¹⁾	99% - 99.7%	99.4%+	99.5%+	99%+
 Gate Speed	50-100 ns	300-500 us	300-500 us	

⁽¹⁾ 2-qubit fidelity



Highly developed modality.

Superconducting quantum computing chips leverage mainstream semiconductor fabrication techniques such as optical lithography, sputter deposition, and plasma etching.

Necessity for captive foundry.

Synchronized design → fabrication → test flywheel is critical to enable performance improvement necessitating either a captive fab or a close foundry relationship.

We Believe We Have Superior Technology and Manufacturing Capabilities

Key Quantum Computing Technology Value Chain

Rigetti Differentiation

Chip Design & Fabrication



- Creation of the architecture and layout of quantum circuits
- Precise manufacturing and production to maintain qubit functionality and performance

Best-in-Class Design & Fabrication

- World's first dedicated quantum integrated circuit foundry
- Delivering high performance quantum circuit wafer and dies and qubit count scaling technology

Quantum Processors



- Superconducting quantum processors are the heart of the system providing high performing qubits
- Between 300 and 3,000 qubits at 99.5+% is our target for nQA.

Highly Competitive Performance

- Achieved a median 99.0% iSWAP gate fidelity, and demonstrated 99.5% median fidelity fSim gates;
- 9Q at 99.9% 1Q fidelity and 99.4% median iSWAP 2Q fidelity
- Anticipated path to go from 36Q → 100+Q → 300+Q → 1,000+Q
- 80 ns gate speed
- 40 us T1 coherence time

Interconnect



- 1st quantum multi chip interconnection
- High-density flexible circuits, replacing traditional coaxial cable: higher signal density, low loss, and low thermal heat load

Only Multi-Chip in the Industry

- Demonstrated 2 x 40Q and 2x9Q without performance deterioration
- Can confidently tile to achieve 1000+Q

Control System



- Hardware required to generate microwave signal to perform quantum operations
- Integration with classical compute and HPC

Industry Leading Control Systems

- High performance - HPC ready
- Very high price-performance \$10K/qubit vs. \$35K/qubit

Software & Quantum Cloud Services



- Required operating system and tools for hybrid computation
- Open source interfaces, libraries and compilers
- High performance software providing cloud-delivered hybrid compute capabilities

Comprehensive Quantum OS and Cloud Platform

- Integrated for highest performance on Rigetti hardware
- Supports industry standard quantum development, on prem deployments and environments and the public clouds



Rigetti Superconducting Technology is Trusted by World-leading Organizations and Governments

National Labs & Centers



National Quantum Computing Centre



- Quantum **hardware provider of choice** by the UK's National Quantum Computing Centre, Air Force Research Lab, and Fermilab's SQMS Center

Financial Leaders



MOODY'S

- Collaborating with HSBC, Standard Chartered Bank, ADIA Lab, and Moody's Analytics to develop **practical quantum computing uses cases for finance**

Research Centers



- Pursuing foundational research funded by DARPA to develop **benchmarks for quantum computing performance** and to develop quantum computers capable of solving complex optimization problems

Hyperscalers



- QPUs from Rigetti data centers **integrated into public cloud providers** like AWS, Microsoft Azure, and service providers like Strangeworks and Qbraid

Aerospace & Defense Agencies



- Rigetti's **QCS[®] Direct cloud service** used by DOE, DOD, and enterprise customers like Fermilab, ADIA Lab, USRA, and NASA.

Exceptional, Visionary Management Team and Board of Directors

Management Team



Dr. Subodh Kulkarni
 President and CEO
 Prior Experience:



Jackie Kaweck
 SVP, Human Resources
 Prior Experience:



Jeffrey Bertelsen
 CFO
 Prior Experience:



David Rivas
 CTO
 Prior Experience:

Board of Directors



Thomas J. Iannotti
 Chairman of the Board



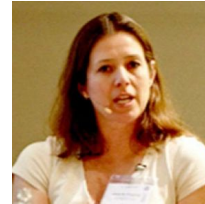
Cathy McCarthy
 Director



Michael Clifton
 Director



Dr. Subodh Kulkarni
 Director



Alissa M. Fitzgerald
 Director



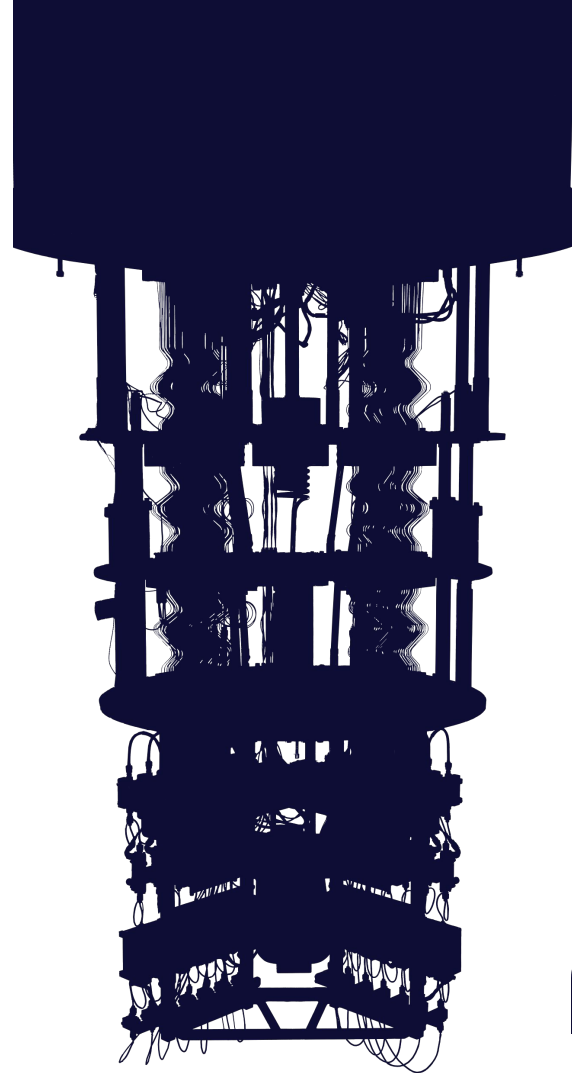
Dr. Ray O. Johnson
 Director



H. Gail Sandford
 Director



Market Opportunity



Annual Value for Quantum Computing Providers¹

Before 2030

\$1-2 billion

Demand driven by public sector, including government labs

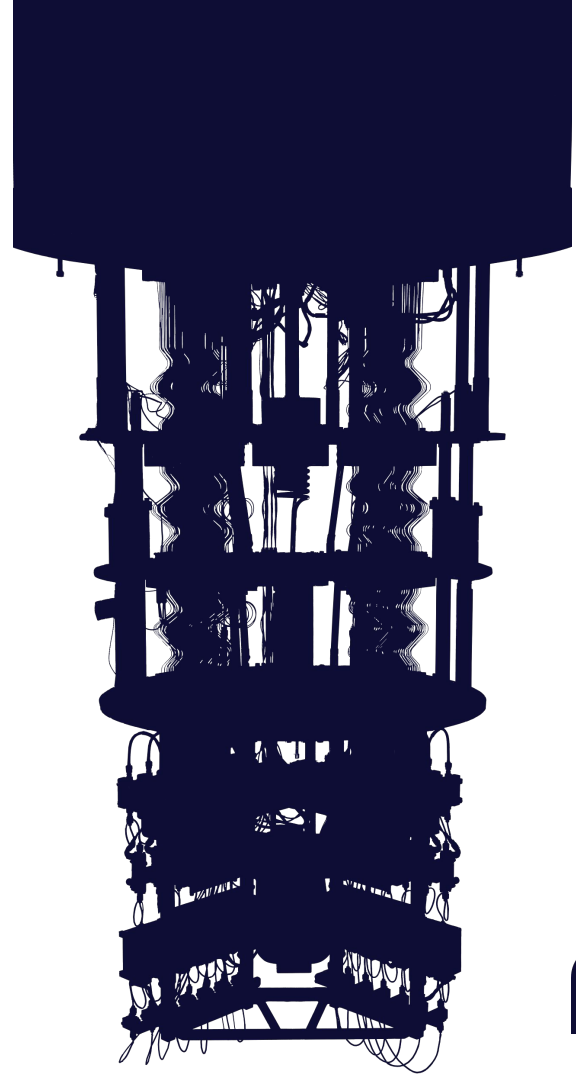
2030 - 2040

\$15-30 billion

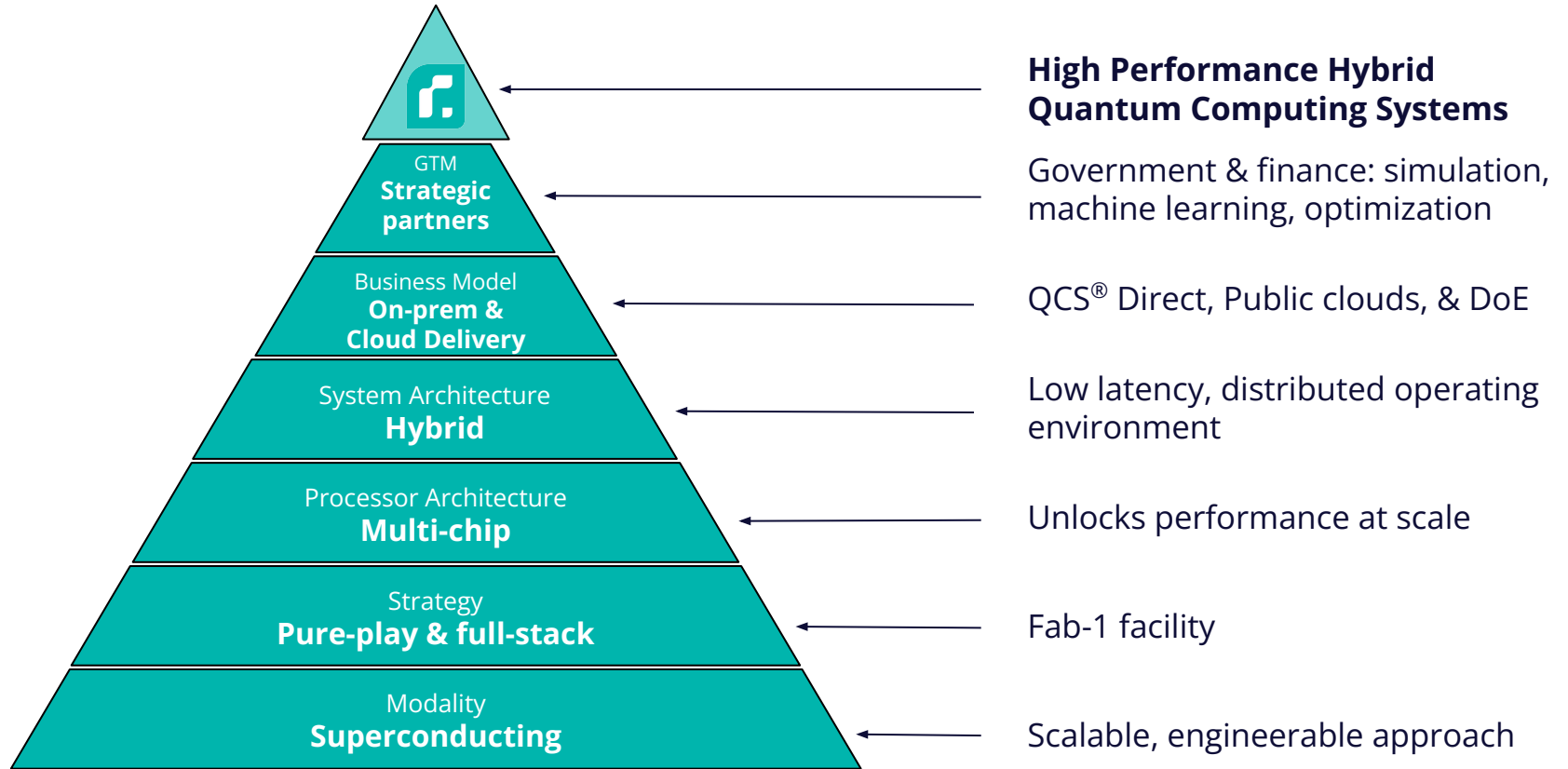
Broader industry adoption after reaching quantum advantage

¹“Quantum Computing On Track to Create Up to \$850 Billion of Economic Value By 2040,” BCG, July 18, 2024

Products & Technology



Our Mission: Build the World's Most Powerful Computers



Rigetti Solution Overview

Chips manufacturing with the ability to design high-quality quantum-coherent superconducting microwave devices

Design linear and nonlinear chip components in Fab-1 quantum integrated circuit foundry

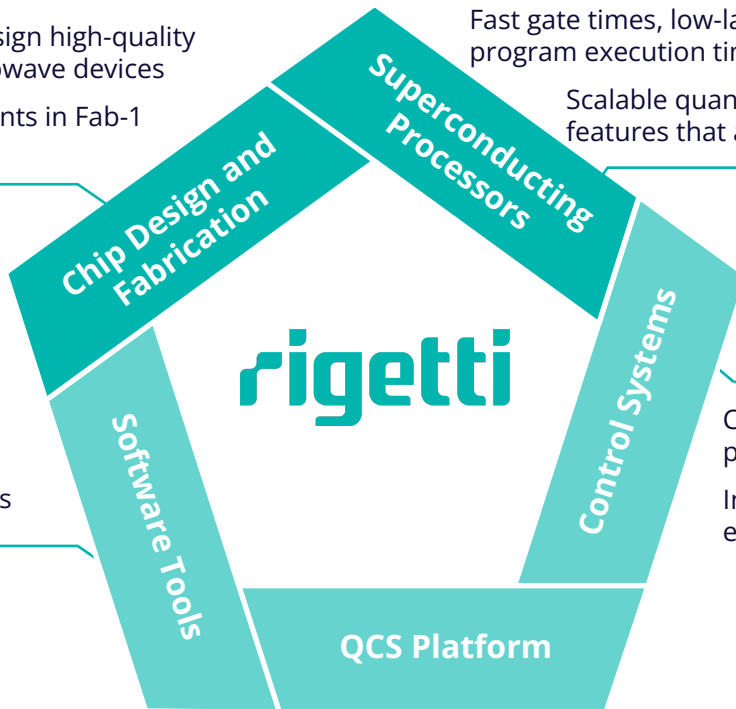
Fast gate times, low-latency conditional logic and fast program execution times processors

Scalable quantum processors with on-chip design features that allow plurality of qubits

Suite of open-source tools for writing, simulating and running quantum programs

Control qubits in a reliable and programmable way

Integrated high-density flexible circuits to enhance scale and protect qubits from noise



QPU



Quantum System Technologies

Source: Company's website

Quantum Cloud Services platform (QCS[®]), which has evolved to support ultra-low latency connectivity between a customer's high-performance classical hardware and Rigetti QPUs



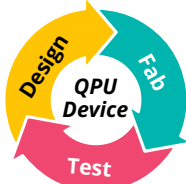
Rigetti's Fab-1: Industry's First Dedicated and Integrated Quantum Foundry

Accelerates R&D, Drives Innovation, and Provides Competitive Advantage



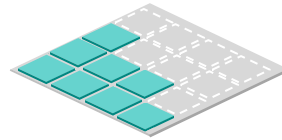
Addresses Supply Chain Risk

Helps mitigate unfavorable macro- economic conditions.



Accelerates Innovation Cycles

Rapid design, build, test flywheel driving rapid innovation & technology advantages at scale



Capital Efficiency

Enables scaling large systems to achieve Advantage and beyond



IP Generation

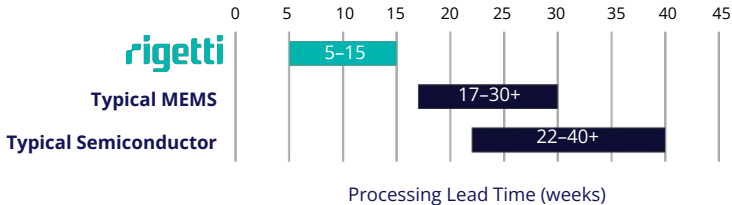
45 patents issued and pending (20 issued, 25 pending) covering processor chip design, fabrication and assembly, including multi-chip processors



Asset for R&D Partnerships

Fab-1 facilitates external partnership with our Foundry services business. We also believe Fab-1 is an asset to US quantum leadership as a of unique US-based quantum first foundry.

Cycle Time⁽¹⁾



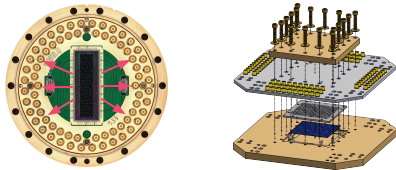
(1) Cycle time chart based on internal estimates of development cycle time for chip design and manufacture.

Fab-1 serves as a barrier to entry, putting Rigetti in an enviable position on the experience and capability curve.



Proprietary Scaling Technology Unlocked by 6+ Years of Fab-Driven Innovation

Vertical Signaling



2D

Signals routed laterally

vs

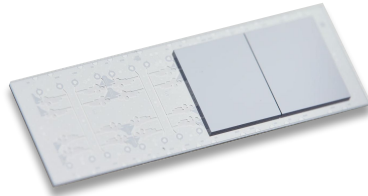
3D

Signals routed vertically

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

+

Quantum Chiplet Technology

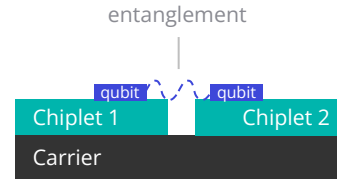


Modular assembly onto a carrier device enables:

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

+

Inter-Module Connectivity

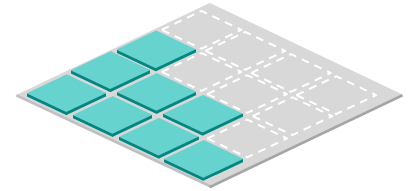


(Cross section)

Low-latency connections provide high fidelity quantum entanglement between modules

=

Rigetti's Scalable Architecture

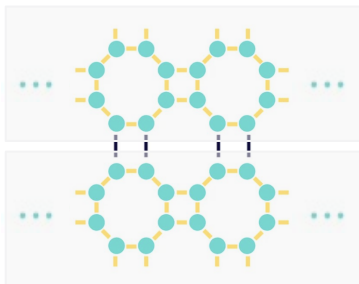


Large-scale processors built from identical tiles provide a directly scalable architecture

Ankaa™ Architecture for Performance & Scaling

Multi Die Aspen-M-X

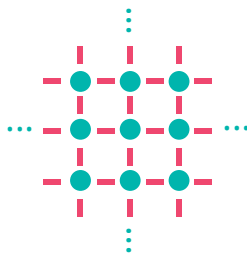
80Q



Octagon

Single Die Ankaa-1

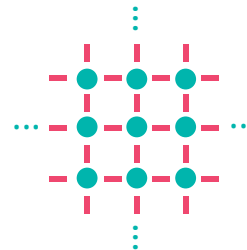
84Q



Square + TC

Single Die Ankaa-2

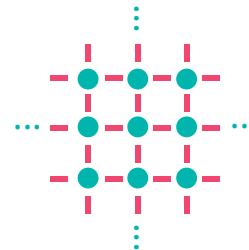
84Q



Square + TC

Single Die Ankaa-3

84Q



Square + TC

● = qubit
— = tunable coupler

● = qubit
— = fixed coupler
| = interchip coupler

Topology

Median 2Q Fidelity

Gate Speed

Technology Themes

Deployment

95%

95%

98%

99.0%

150+ ns

< 100 ns

< 90 ns

< 80 ns

Interchip Coupling
3D signals

Tunable Couplers
Higher Connectivity

JJ Process: TLS Reduction
Superconducting PCB

Improved frequency tuning
Chip layout optimization

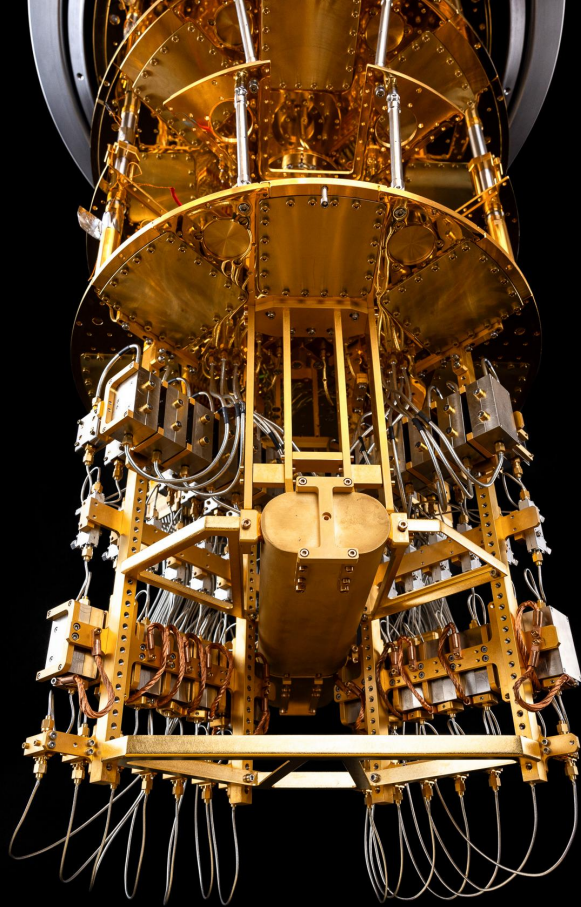
Q4 2022

Q2 2023

Q4 2023

Q4 2024

rigetti



Introducing Ankaa-3

Rigetti's newest 84-qubit flagship quantum system achieves milestone 2-qubit gate fidelities

Broad re-design with new technology for superior efficiency and performance

- Innovative new tower design and fridge build → increased efficiency and highly scalable
- Enhanced qubit chip design → improved coherence
- Josephson junction fabrication with Alternating-Bias Assisted Annealing (ABAA) → precise qubit frequency tuning
- **Achieves a median 99.0% iSWAP gate fidelity, and demonstrates 99.5% median fidelity fSim gates**

Modular System Architecture Foundation of 2025 Roadmap

2025 System Milestone Roadmap

Qubit count	36	108
Anticipated 2Q Fidelity	2X reduction in error rate from current levels	2X reduction in error rate from current levels
Scaling	4 x 9Q	
Deployment	Anticipated Q2 2025	Anticipated Q4 2025

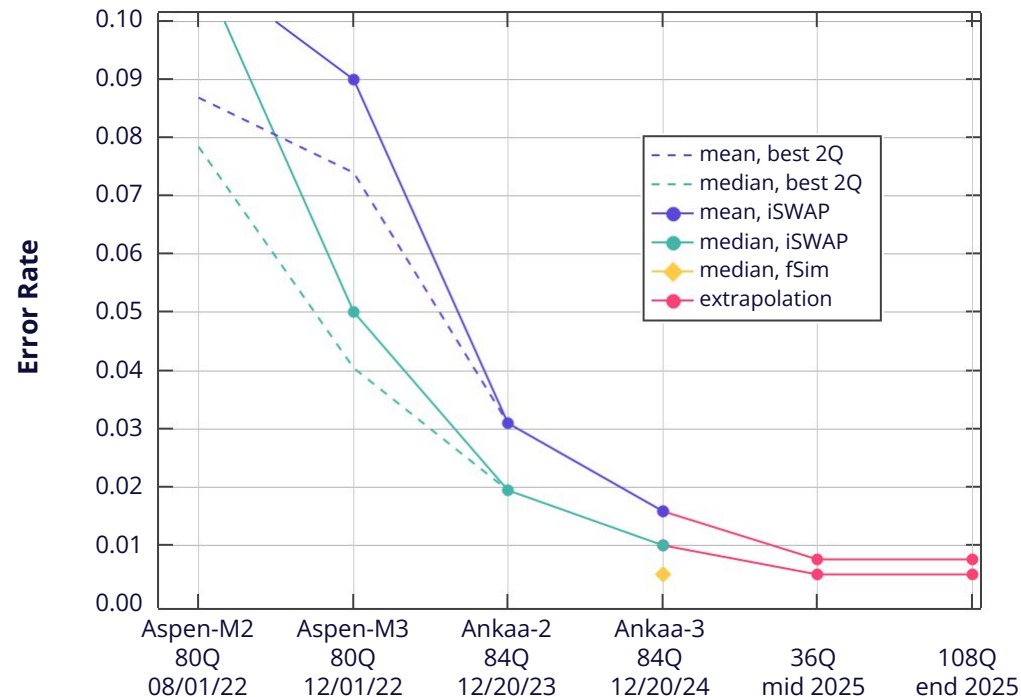
“We believe the anticipated 4-chip 36-qubit system will be **the most ambitious multi-chip QPU architecture in the market**, and a significant milestone for the company and the quantum computing industry.”

- Dr. Subodh Kulkarni
Rigetti CEO



Foundation For Larger, Higher Performing QPUs

Milestone System Performance



Rigetti QPU deployment date and qubit count

Transitioning from the Aspen to Ankaa architecture enabled consistent performance improvement. With Ankaa-3, we **halved error rates in 2024** — achieving a median 99.0% iSWAP gate fidelity and demonstrating 99.5% median fidelity fSim gates

The Ankaa architecture will be the **foundation of our 2025 modular roadmap**. Underpinned by the critical technology that has proven to demonstrate increasingly higher fidelities:

- Inter-module chip coupling
- 3D signal delivery
- Tunable couplers
- Square lattice for all-to-all connectivity
- Rapid iterations with Fab-1

Enabling On-Premises Quantum Computing



Superior Performance

High-fidelity 2-qubit operations

Control Over Tech Stack

Deeper access to the tech stack

Flexible Configuration

Easily rewired and customized

24/7 System Access

No schedule snafus or resource-sharing

Future-Proof

Continuous upgrade and improvement of hardware as technology evolves

Across Broad Downstream Applications



Government Programs



Quantum Research Labs



Quantum R&D Solutions

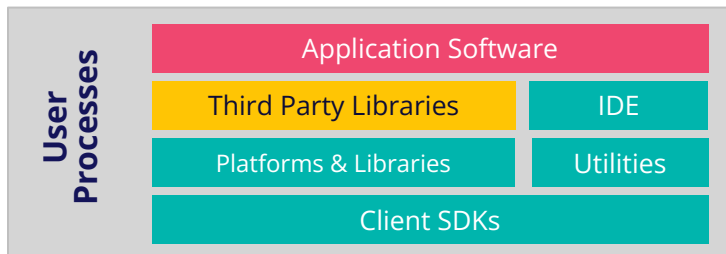


Quantum Professional Consulting

The QCS[®] Stack

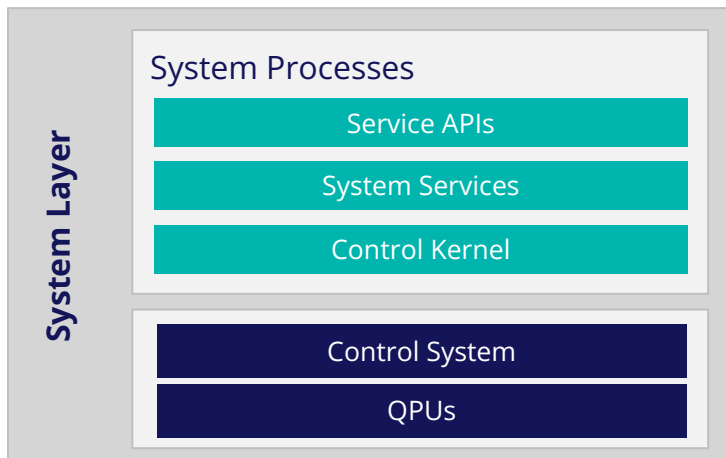


Tools to support high performance QPU integration and application development



Developer Tools

- Integrated Developer Environment (IDE)
- Quantum Software Libraries
- Client Software Development Kit (SDKs)
- Compiler
- Simulators
- Command Line Interface



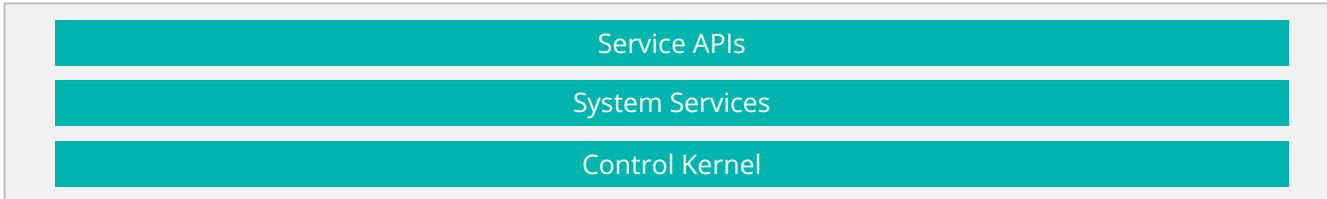
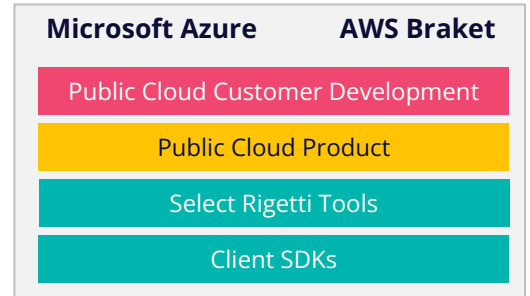
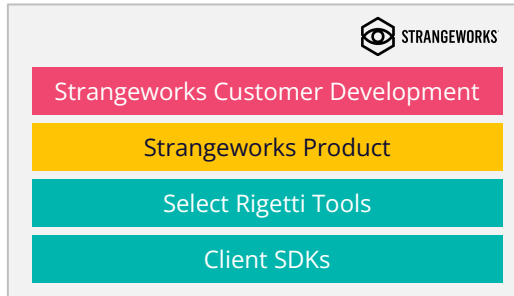
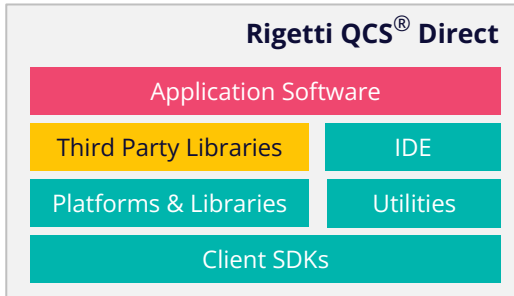
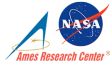
User & Systems Management

- QPU Systems Dashboard
- Reservations
- Billing & Reporting
- User Account Management

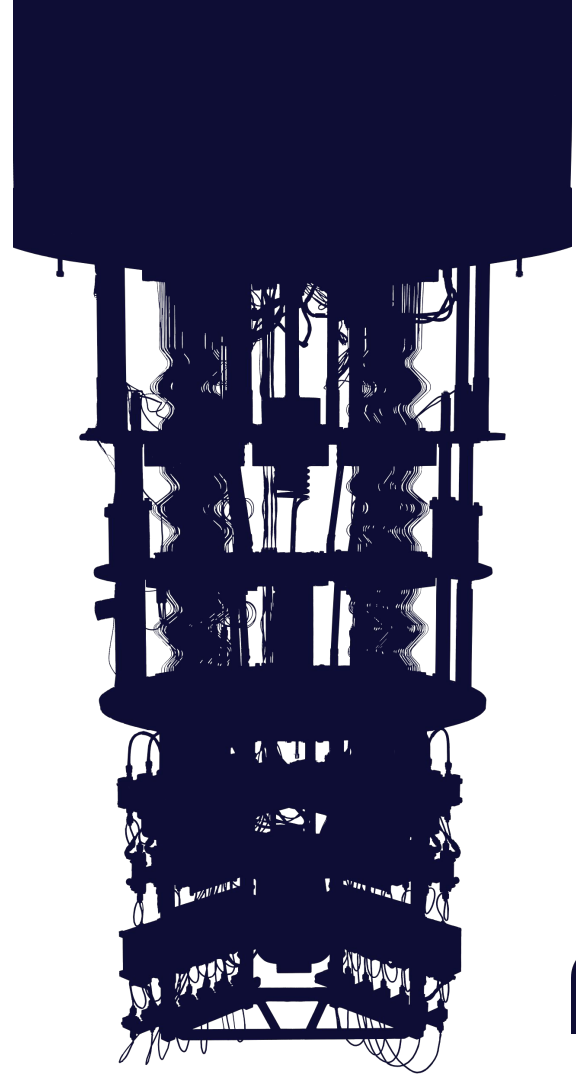
Quantum System Management

- Translation
- Admissions
- Program/Circuit Scheduling

QCS[®] One Stack for All Our Customers & Partners



Customers & GTM



Partnerships Help Accelerate Our Path

Applications



PHASECRAFT



ADIA Lab



MOODY'S



Access



Quantum Error Correction and Mitigation

river lane



BLUE FORS

Systems & Deployments



Chip Fabrication (Fab-1)



Quantum Error Correction Development

Real-time, low latency QEC on a Rigetti QPU

Problem: A challenge in improving the utility of decoders is addressing the backlog of computations that accumulates as the decoder processes data. To avoid this, the decoding needs to occur at the same speed as the quantum circuit.

Relevance: To realize the full potential of quantum computers, we must have QEC technology integrated with our hardware. As we scale to higher qubit counts, we need to understand how classical QEC resources will operate in tandem with quantum algorithms.

Experiment: We integrated Riverlane's decoder with our 84Q Ankaa-2 system and perform an 8Q stability experiment with up to 25 decoding rounds.

Results: We demonstrated decoding times faster than the $1\mu\text{s}$ threshold for generating measurement data on a superconducting qubit device -- ensuring that the backlog problem is avoided and showcasing that low-latency feedback can be maintained during QEC operations.

Demonstrating real-time and low-latency quantum error correction with superconducting qubits

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²Rigetti Computing, 775 Heinz Avenue, Berkeley, California 94710, USA

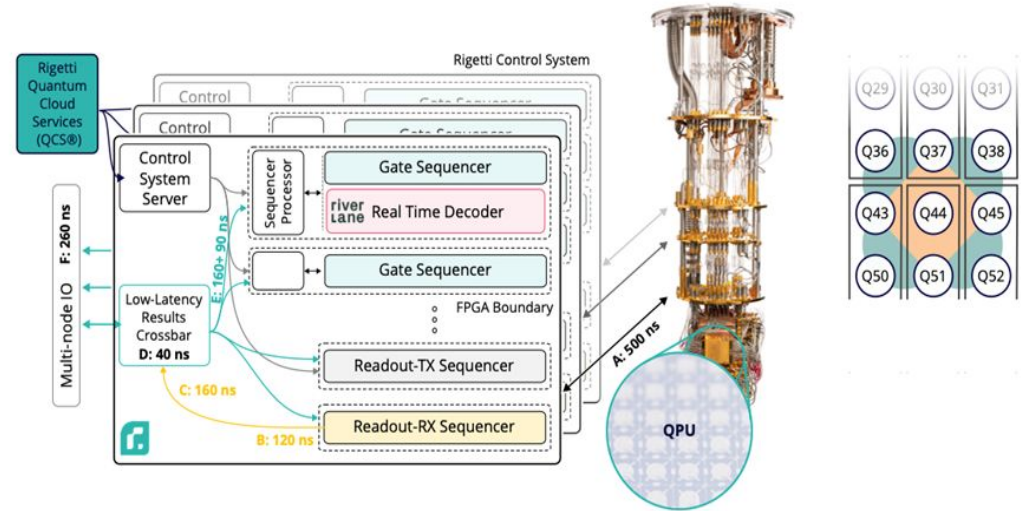
³Rigetti UK Ltd, 138 Holborn, London, EC1N 2SW, UK

⁴Riverlane, Cambridge, Massachusetts 02142, USA

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(Date: October 8, 2024)

Quantum error correction (QEC) will be essential to achieve the accuracy needed for quantum computers to realize their full potential. The field has seen promising progress with demonstrations of early QEC and real-time decoded experiments. As quantum computers advance towards demonstrating a universal fault-tolerant logical gate set, implementing scalable and low-latency real-time decoding will be crucial to prevent the backlog problem, avoiding an exponential slowdown and maintaining a fast logical clock rate. Here, we demonstrate low-latency feedback with a scalable FPGA decoder integrated into the control system of a superconducting quantum processor. We



Delivering On-Premises Quantum Computing to the UK



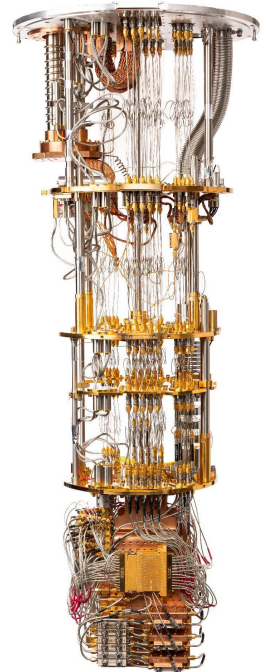
The NQCC has been formally opened by the Science Minister, Lord Vallance

We are delighted to announce that the NQCC's facility was inaugurated this morning by the Science Minister, joined by representatives from leading quantum companies, academia, the National Quantum Technologies Programme (NQTP), and government, including officials from the Office for Quantum. Many of the NQCC's key partners and collaborators were in attendance.



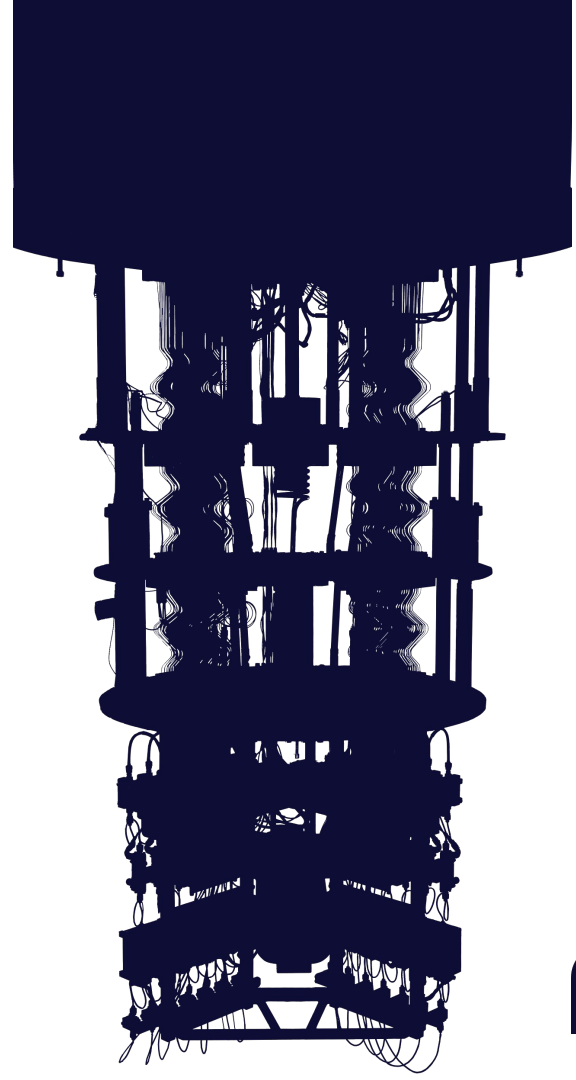
National Quantum
Computing Centre
Oct 25 - 1 min read time

- Fully operational **24-qubit quantum computing system** included in the recently opened National Quantum Computing Centre (NQCC) in the UK
- The system will feature the hallmarks of Rigetti's 84-qubit Ankaa-2 system
- Will be deployed with Rigetti's software development tools
- System will be made available to NQCC researchers for testing, benchmarking, and application development



rigetti

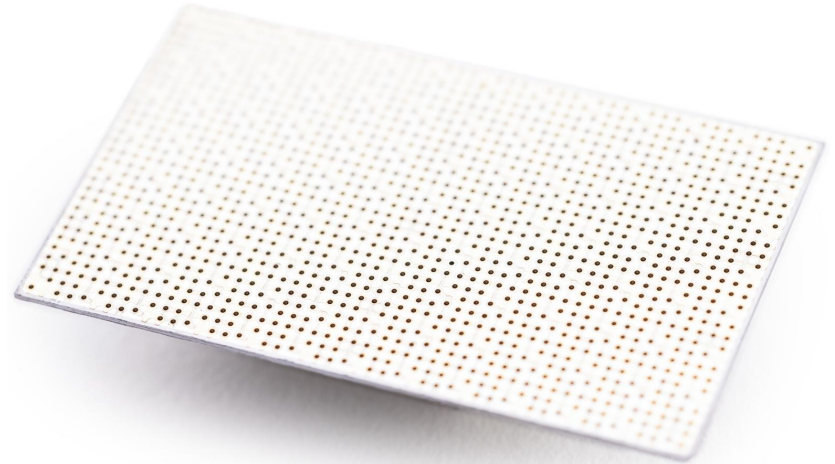
Growth Strategy



Path to Leadership

On-premises system through early nQA to cloud services deployments with hyperscalers

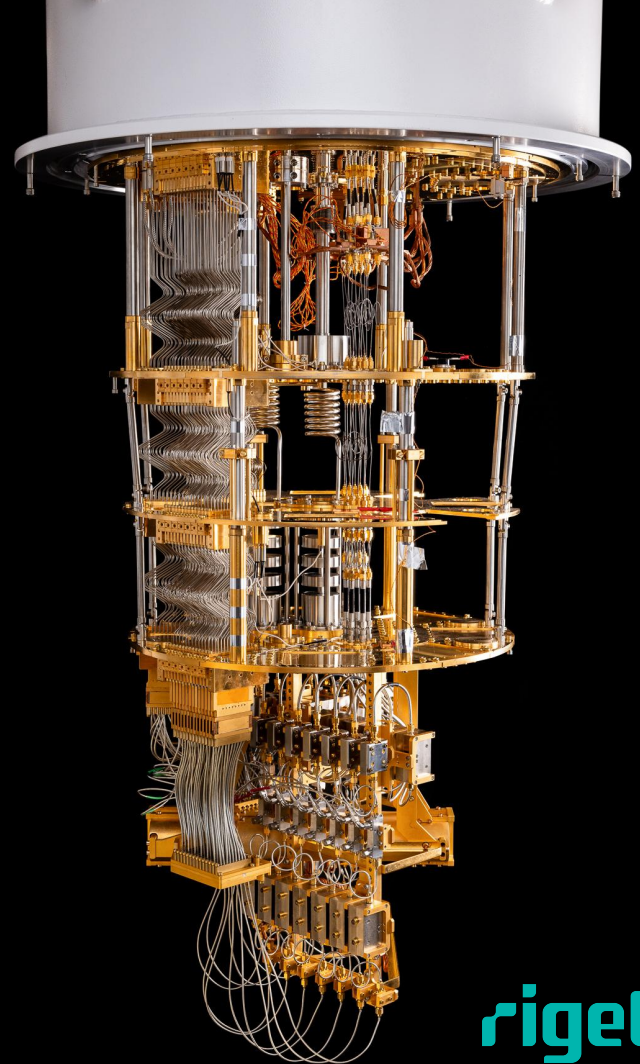
- Government sponsored deployments driving technology development to nQA
- Application development partners focused on clear nQA wins to first applications
- Integration with HPC on first integrations into supercomputing
- Continue our lead with integration with hyperscalers evolving into QCaaS as the dominant mode of deployment



Significant Growth Potential

We believe that we have the **winning technology**, **expertise**, and **product offerings** to grow our business and leadership in the superconducting quantum computing market.

- **Strong financial position.** Approximately \$225 million of cash, cash equivalents and available for sale investments (as of Dec. 23, 2024)
- **Achieving technology milestones.** Deploying Ankaa-3 at median 99.0% iSWAP gate fidelity and median 99.5% fSim gate fidelity demonstrates our ability to deliver lower error rates and enhancements across our technology stack
- **Superconducting modality.** We benefit from the many advantages of superconducting qubits, including fast gate speeds and ability to leverage well-established chip manufacturing processes



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Thank you

