



IonQ Investor Updates

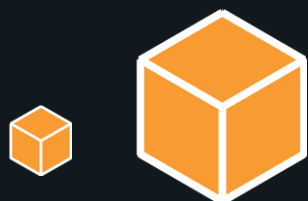
August 2023

The following presentation is subject to the legal disclaimer found on pages 17-18.

OUR MISSION

To build the world's best quantum computers to solve the world's most complex problems, transforming business, society, and the planet for the better.

Quantum Computing Is Now, and IonQ Is Leading the Way



**Met 2023 Technical
Scaling Goal Seven
Months Early**

\$65B

TAM By 2030 ²

**Large & Growing
Market Opportunity**

29 #AQ

**Algorithmic Qubits on
Industry Leading IonQ
Forte¹**



**Best error correction
overhead**

amazon NEA

Google



**World-Class Investor
Base**



**Only Quantum
Hardware Available
on All Major Clouds**

accenture

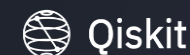


Goldman
Sachs

**Premier Partners &
Customers**



AIRBUS



ProjectQ

PENNYLANE

XACC

**Every Major Quantum
Language & SDK
Supported**

¹ Based on IonQ Forte data taken on March 26th, 2023

² Prescient & Strategic Intelligence Private Limited, February 2020

Led by Industry Pioneers



Peter Chapman
President & CEO

Career began at 16 in MIT AI Lab under Marvin Minsky
Led technology for Amazon's Prime division, 2014–2019
Innovator in financial, aviation, e-reader technology with several successful exits (Data Acquisition Systems, New Media Graphics, Boston Compliance Systems)



Christopher Monroe
Co-founder & Chief Scientist

Demonstrated first ever quantum logic gate with Nobel laureate David Wineland at NIST in 1995

Over 25 years in quantum computing. Developed many of the fundamental techniques for trapped-ion QC

Citations: 54984 h-index: 101¹



Jungsang Kim
Co-founder & CTO

In 2001, led a Bell Labs team to break the world record for what is still the world's largest optical switch

Over 20 years in quantum computing and related tech. Duke lab leads the world in miniaturization of quantum systems

Citations: 9581 h-index: 47¹



Bell Laboratories



Thomas Kramer
Chief Financial Officer

CFO at Opower, 2011–2016, taking company through IPO in 2014 and acquisition by Oracle in 2016

CFO and Co-Founder at Cvent, 2000–2011, taking company from zero revenue to 800 employees and market dominance



Rima Alameddine
Chief Revenue Officer

Served for four years as Vice President of Enterprise Sales for the Americas of NVIDIA

Worked at Cisco Systems for over 16 years, most recently leading New York Enterprise business



Tom Jones
Chief People Officer

Led Human Resources and Talent Development at Blue Origin during scale-up from 600 employees to 3000, ultimately enabling human spaceflight

Led and developed people teams at transformative technology companies including Honeywell and Microsoft



¹ Citations and h-indices as of Aug 2023

IonQ is Winning The Quantum Space Race

Expected Phases of Quantum Computing Maturity

Boston Consulting Group Analysis

Phase I

Estimated Impact (Operating Income):
\$2-5 Billion

Technical Barrier To Entry
Error Reduction



Phase II

Estimated Impact (Operating Income):
\$25-50 Billion

Technical Barrier To Entry
Error Correction

Phase III

Estimated Impact (Operating Income):
\$450-850 Billion

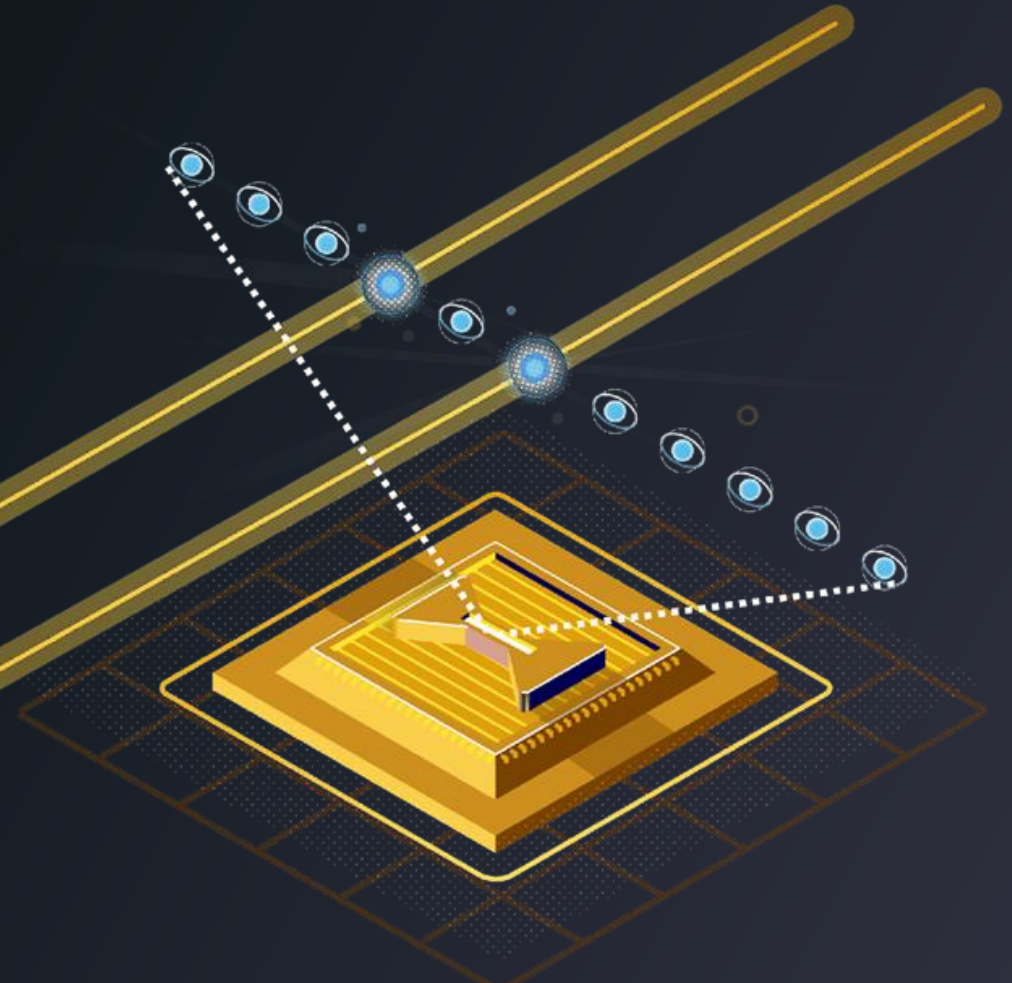
Technical Barrier To Entry
Modular Architecture

Empowered by Unique Technological Advantages

Phase I

Individual **atomic ion qubits** in an ion trap are superior to competing qubit platforms, **creating the ability for IonQ to move farther, faster than the competition.**

- Identical and naturally quantum
- Perfectly isolated from environmental influences
- Capable of running at room temperature
- Reconfigurable and highly-connected
- Unparalleled inherent performance
- Longest qubit lifetime



IonQ Leads in Error Correction Overhead

Phase II



16:1¹

1000:1 – 1,000,000:1²

Other Approaches

¹ Estimate based on IonQ technical roadmap and [experimental results](#) published by IonQ founder Chris Monroe, advisor Ken Brown, and collaborators

² 1000:1 based on overhead for surface codes on a 2-D lattice. 1,000,000:1 based on linear connectivity systems.

IonQ's Leading Modular Architecture

Phase III

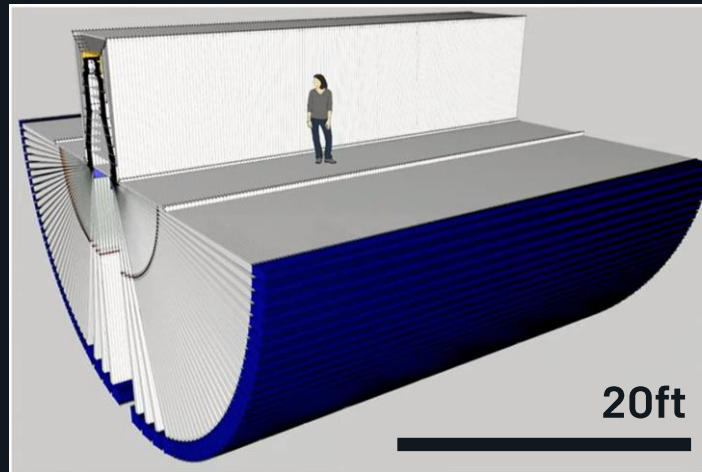
Each Generation of IonQ Hardware is Getting Smaller & Cheaper to Build

IBM



An IBM engineer working on the custom-built dilution refrigerator casing for a single QPU

Google



Google rendering of a planned million-physical-qubit system

IonQ



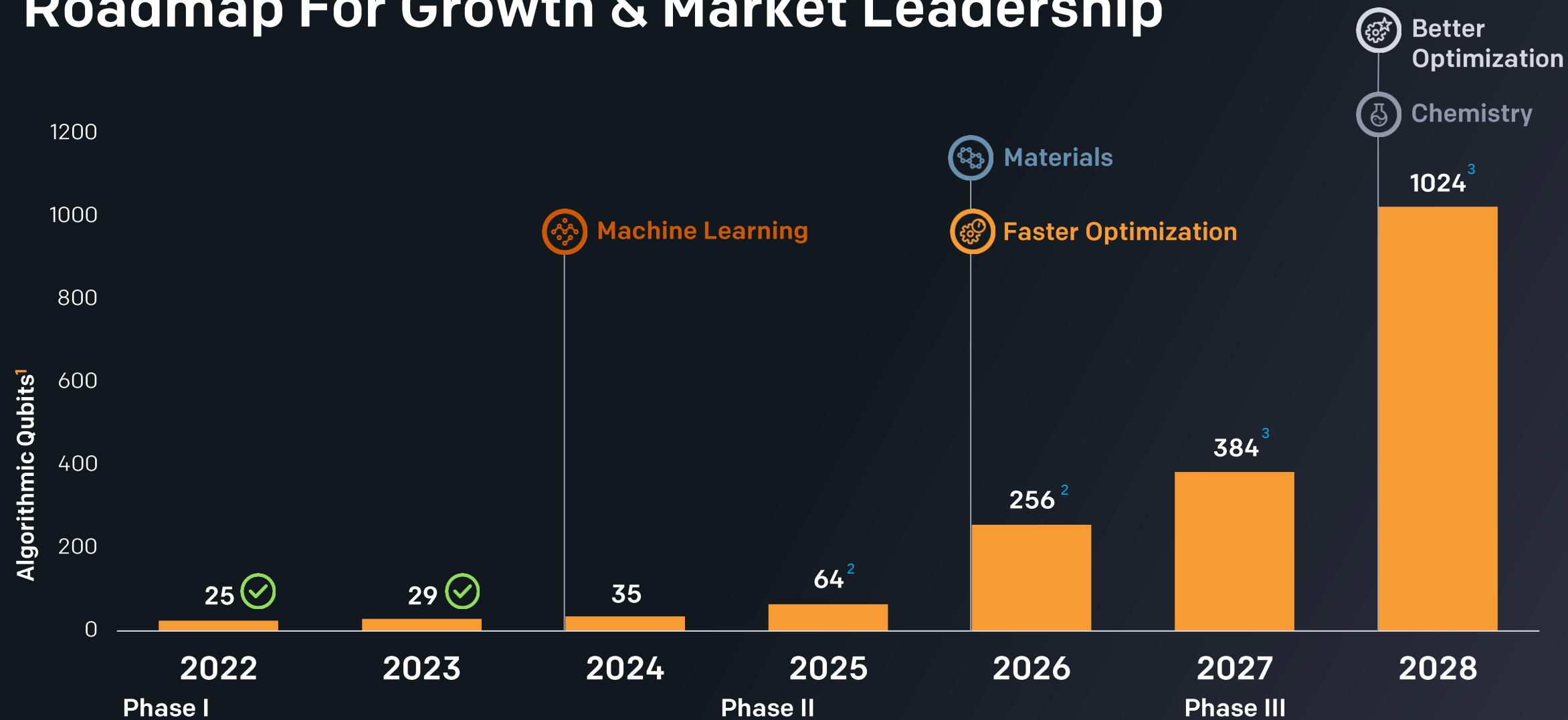
IonQ ion trap and vacuum chamber in a single, minuscule package¹

¹ The package pictured is a prototype developed at IonQ founder Jungsang Kim's Duke University lab.



Investor Updates

Roadmap For Growth & Market Leadership



Note Prepared on the basis of certain technical, market, competitive and other assumptions to be subsequently described in further detail, and 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 time-frames described or at all.

Note Market inflection points are estimated based on alignment of IonQ technical roadmap with publicly documented quantum research problems in each market

¹ Algorithmic qubit number defined as the effective number of qubits for typical algorithms, limited by the 2Q fidelity

² Employs 16:1 error-correction encoding

³ Employs 32:1 error-correction encoding

IonQ Partners with Switzerland's Quantum Basel **Agreement will establish EU Quantum Data Center**



Deal endeavors to bring two IonQ future quantum systems with #AQ 35 and #AQ 64 to Switzerland. Systems aim to serve European industry, government entities, and research institutes with local access to IonQ's most powerful quantum systems. IonQ will establish a quantum innovation center for the entire EMEA region at uptownBasel campus in Arlesheim, Switzerland

IonQ to Partner with South Korean Leadership

IonQ Signs Memorandum of Understanding with South Korea's Ministry of Science and ICT

IonQ signs MoU to educate quantum science and technology professionals in the nation of South Korea. IonQ also had the honor to meet with South Korea's president, Yoon Suk Yeol, to discuss how IonQ quantum computing can help accelerate the nation's economy



Korean Minister of Science and ICT Jong Ho Lee and IonQ Co-Founder and CTO Dr. Jungsang Kim

IonQ Forte Launched for Commercial Use

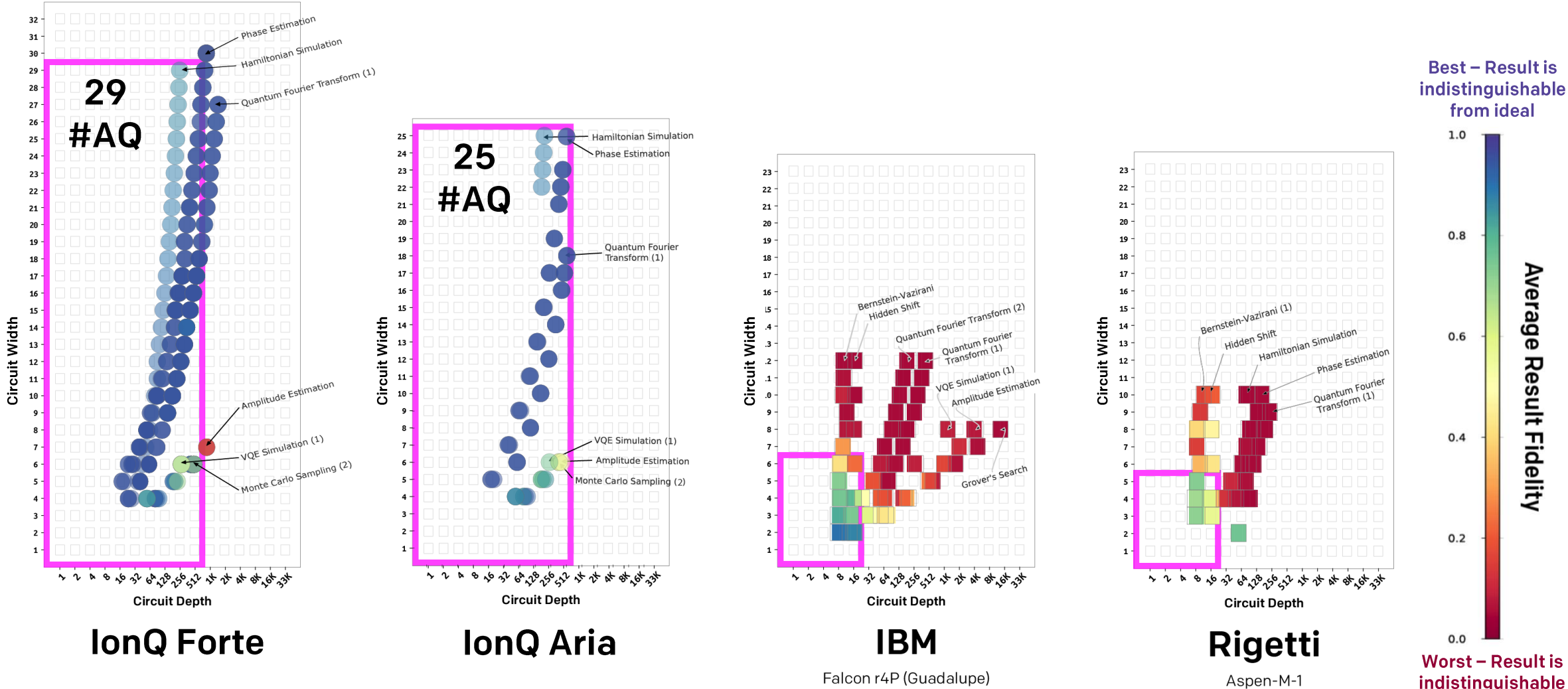
#AQ 29 Available for Customers Worldwide



First made available in 2022 to select partners, the system is now available to customers from around the world, enabling applications that can lead to solutions for today's most complex problems. With #AQ 29 and the latest hardware integrations, IonQ Forte is advancing performance for new possibilities

IonQ Forte Achieves 29 Algorithmic Qubits (#AQ)

IonQ achieved its 2023 Technical Roadmap Milestone seven months ahead of schedule.



IBM data adapted from *Application-Oriented Performance Benchmarks for Quantum Computing (2022)* <https://arxiv.org/abs/2110.3137>. Rigetti data taken using Braket between February 18th and 20th, 2022. IonQ Forte and IonQ Aria data taken on March 26th, 2023, and November 13th, 2022, respectively.

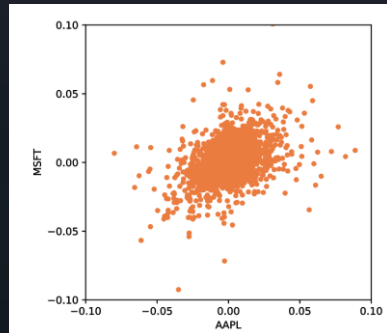
IonQ and Fidelity

Optimizing Asset Allocation, Electronic Trading and Pricing

IonQ quantum computers are being used to explore multivariate machine learning techniques that could provide faster-to-train, more accurate models for portfolio management, electronic trading, asset pricing and more

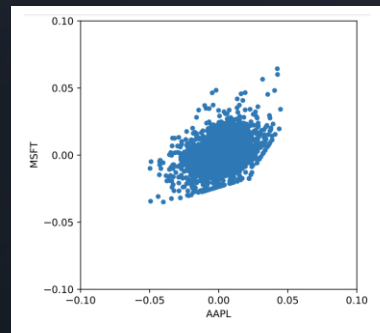


Target Distribution



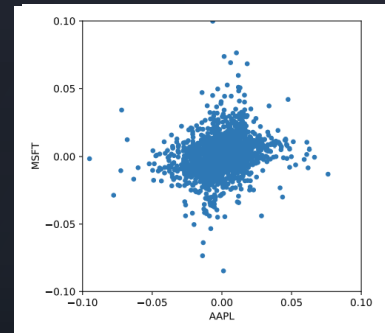
From training data

Classical GAN



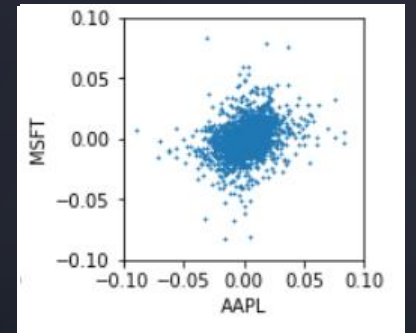
After 20,000 Iterations

Quantum GAN



After 1,000 Iterations

Quantum CBM



After 26 Iterations

For additional details: <https://arxiv.org/abs/2109.06315>

Cautionary Notes

This presentation (“Presentation”) is for informational purposes only. This Presentation shall not constitute an offer to sell, or the solicitation of an offer to buy, any securities, nor shall there be any sale of securities in any states or jurisdictions in which such offer, solicitation or sale would be unlawful. This Presentation has been prepared to assist interested parties in making their own evaluation with respect to a potential business combination between IonQ, Inc. (“IonQ”) and dMY Technology Group, Inc. III (“dMY”) and the related transactions (the “Proposed Business Combination”) and for no other purpose. These materials are exclusively for the use of the party or the parties to whom they have been provided by representatives of IonQ and dMY. By accepting these materials, the recipient acknowledges and agrees that he, she or it (a) will maintain the information and data contained herein in the strictest of confidence and will not, under any circumstances whatsoever, reproduce these materials, in whole or in part, or disclose any of the contents hereof or the information and data contained herein to any other person without the prior written consent of IonQ or dMY, (b) is not subject to any contractual or other obligation to disclose these materials to any other person or entity, (c) will return these materials, and any other materials that the recipient may have received in the course of considering an investment in dMY and IonQ and (d) will promptly notify IonQ and dMY and their respective representatives of any unauthorized release, disclosure or use of these materials or the information and data contained herein. Furthermore, all or a portion of the information contained in these materials may constitute material non-public information of IonQ, dMY and their affiliates, and other parties that may be referred to in the context of those discussions. By your acceptance of this Presentation, you acknowledge that applicable securities laws restrict a person from purchasing or selling securities of a person with tradeable securities from communicating such information to any other person under circumstances in which it is reasonably foreseeable that such person is likely to purchase or sell such securities.

Certain information included herein describes or assumes the expected terms that will be included in the agreements to be entered into by the parties to the Proposed Business Combination. Such agreements are under negotiation and subject to change. The consummation of the Proposed Business Combination is also subject to other various risks and contingencies, including customary closing conditions. There can be no assurance that the Proposed Business Combination will be consummated with the terms described herein or otherwise. As such, the subject matter of these materials is evolving and is subject to further change by IonQ and dMY in their joint and absolute discretion.

Neither the Securities and Exchange Commission nor any securities commission of any other U.S. or non-U.S. jurisdiction has approved or disapproved of the Proposed Business Combination presented herein, or determined that this Presentation is truthful or complete. No representations or warranties, express or implied, are given in, or in respect of, this Presentation. To the fullest extent permitted by law in no circumstances will dMY, IonQ or any of their respective subsidiaries, stockholders, affiliates, representatives, directors, officers, employees, advisers or agents be responsible or liable for a direct, indirect or consequential loss or loss of profit arising from the use of this Presentation, its contents, its omissions, reliance on the information contained within it, or on opinions communicated in relation thereto or otherwise arising in connection therewith. 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. Neither dMY nor IonQ has 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. In addition, this Presentation does not purport to be all-inclusive or to contain all of the information that may be required to make a full analysis of IonQ or the Proposed Business Combination. Viewers of this Presentation should each make their own evaluation of IonQ and of the relevance and adequacy of the information and should make such other investigations as they deem necessary. 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.

Cautionary Notes

Forward Looking Statements

This press release contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Some of the forward-looking statements can be identified by the use of forward-looking words. Statements that are not historical in nature, including the words “anticipate,” “expect,” “suggests,” “plan,” “believe,” “intend,” “estimates,” “targets,” “projects,” “should,” “could,” “would,” “may,” “will,” “forecast” and other similar expressions are intended to identify forward-looking statements. These statements include those related to the Company’s ability to further develop and advance its quantum computers and achieve scale, including by continuing to improve its algorithmic qubits to 29, or at all; the sufficiency of the Company’s cash reserves and future profitability without the need to raise additional funds; the potential benefits of quantum computing and IonQ’s collaborations and partnerships; IonQ’s market opportunity, anticipated growth, and future financial performance, including management’s financial outlook for the first quarter and full year 2023; continued customer demand for IonQ’s products; contributions to IonQ’s business by new hires and members of the board; IonQ’s ability to open a quantum computing manufacturing facility; and the prospect of QML becoming one of the most practical and powerful applications of quantum computing in years to come. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including but not limited to: market adoption of quantum computing solutions and the Company’s products, services and solutions; the ability of the Company to protect its intellectual property; changes in the competitive industries in which the Company operates; changes in laws and regulations affecting the Company’s business; the Company’s ability to implement its business plans, forecasts and other expectations, and identify and realize additional partnerships and opportunities; and the risk of downturns in the market and the technology industry including, but not limited to, as a result of public health crises and/or increased inflationary pressures. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the “Risk Factors” section of IonQ’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 and other documents filed by the Company from time to time with the Securities and Exchange Commission. 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, whether as a result of new information, future events, or otherwise. The Company does not give any assurance that it will achieve its expectations.

Use of Projections

This Presentation contains projected financial information. Such projected financial information constitutes forward-looking information, and is for illustrative purposes only and should not be relied upon as necessarily being indicative of future results. The assumptions and estimates underling such financial forecast information are inherently uncertain and are subject to a wide variety of significant business, economic, competitive, and other risks and uncertainties. See “Forward-Looking Statements” above. Actual results may differ materially from the results contemplated by the financial forecast information contained in this Presentation, and the inclusion of such information in this Presentation should not be regarded as a representation by any person that the results reflected in such forecasts will be achieved.

Use of Data

The data contained herein is derived from various internal and external sources. No representation is made as to the reasonableness of the assumptions made within or the accuracy or completeness of any projections or modeling or any other information contained herein. Any data on past performance or modeling contained herein is not an indication as to future performance. IonQ assumes no obligation to update the information in this presentation.

