



Investor Overview

November 2025

Important Information



Forward-Looking Statements and Other Information

This presentation contains forward-looking statements. All statements other than statements of historical fact are forward-looking statements, including but not limited to statements regarding our guidance for our financial performance, our quantum computing roadmap, the state of the global market for quantum in the future and expected growth in our employee base and R&D spend. In some cases, you can identify forward-looking statements because they contain certain words such as “anticipate,” “believe,” “close,” “confident,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or the negative of these words or other similar terms or expressions. Forward-looking statements are subject to various risks and uncertainties. Accordingly, there are important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. Moreover, new risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this presentation. The results, events and circumstances reflected in the forward-looking statements made herein may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements. Given these risks and uncertainties, you are cautioned not to place undue reliance on any forward-looking statements. For additional information on these and other factors that could cause our actual results to differ materially from those set forth in the forward-looking statements contained in this presentation, please see our Annual Report on Form 10-K for the year ended December 31, 2024 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2025, June 30, 2025 and September 30, 2025 filed with the Securities and Exchange Commission.

All information contained herein speaks only as of the date of this presentation, except where otherwise stated. Except as required by law, we undertake no duty to update or revise the information contained herein, publicly or otherwise, including any forward-looking statements.

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Industry and Market Data

Unless otherwise indicated, market data and industry information used in this presentation is based on management’s knowledge of the industry and its good faith estimates. We have also relied, to the extent available, on management’s review of independent industry surveys and publications and other publicly available information. All of the market data and industry information used in this presentation involves a number of assumptions and limitations and you are cautioned not to give undue weight to such estimates. Although we believe that our sources are reliable, we cannot guarantee the accuracy or completeness of the information nor have we independently verified it. Projections, assumptions and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors.

The World's Leading Quantum Company

Computing, Networking,
Sensing and Security



01

The Only Quantum Platform Company in the World

Real-World Applications And National Security Priorities Are Accelerating Quantum Adoption

Industries

Example use cases



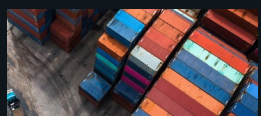
Oil & gas

Reservoir simulation, drilling strategies, and molecular modeling



Mining & minerals

Mineral exploration, ore body modeling, and material simulations



Logistics

Route planning, warehouse operations, and cargo loading



Finance

Portfolio optimization, risk assessment, pricing models, and fraud detection



Cybersecurity

Encryption through QKD, quantum-resistant cryptography, quantum-enhanced anomaly detection

Global Quantum Computing economic value estimated to

\$1-2T

by 2035

Global Quantum-related workforce needs estimated to

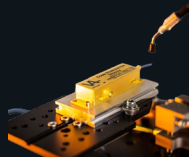
840k

by 2035

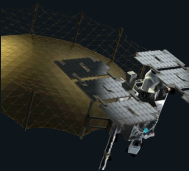
Total public funding for quantum announced globally

~\$55B

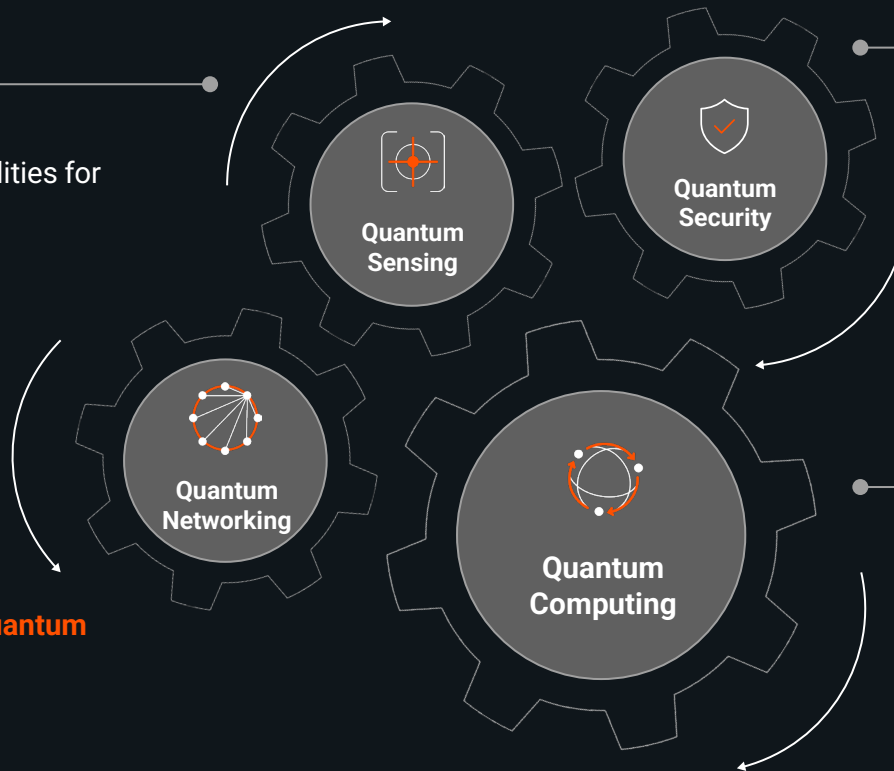
The World's **Most Complete** Quantum Platform



Leveraging precise measurement capabilities for **ultra high precision and accuracy**



Building the **global quantum internet** for secure communications



Establishing real-world **quantum security** with **deployable PQC and QKD** solutions



Most powerful systems for **commercial deployment**



Quantum Computing: Leading Commercial Product Portfolio



Selling

Harmony
2019

Aria
2021

Forte
2023

Forte Enterprise
2024

Tempo
2025

256 Qubit System
2026

Planned

10K - 2M+ Qubit Systems
2027 - 2030+



Quantum Networking: Distributed Computing and Secure Quantum Communications

A diagram of the Earth from space, showing the Americas and parts of Europe and Africa. Several white dots representing quantum network nodes are positioned across the globe, connected by glowing blue arcs that represent quantum communication links. The arcs connect nodes across continents and over the ocean, illustrating a global network.

Delivering a **Comprehensive Suite** of Quantum Safe Communications

- Ultra-secure communication, even in remote, highly-sensitive settings
- Hybrid PQC and QKD solutions deployable today for long-term security in the face of harvest now, decrypt later

Modular, Scalable Architecture for **Distributed Quantum Computing**

- Data center scale through linked systems and remote entanglement
- Compute across modalities and via existing fiber optic and satellite infrastructure

Ultra-Secure and **Blind Quantum Computing**

- Securely run algorithms, even on centralized hardware
- Eliminate threats of compromised privacy and integrity of compute

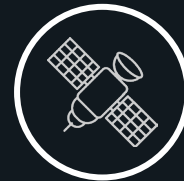
Quantum Sensing: Ultrahigh Precision and Accuracy for Position, Navigation and Timing



Gravimeters prevent naval vessels from going off course by locking onto Earth's unique gravity fingerprint



Atomic clocks ensure all onboard systems are perfectly synchronized, critical for communication, data linking, and coordinating with other aircraft



Atomic gyroscopes enable precise navigation and orientation for space vehicles



Navigation



Communications



Radar



Oil & Gas



Mining



Climate

IonQ Full Stack Solutions For Quantum Innovation



Applications Development

Commercial Applications



HYUNDAI

AIRBUS



Thompson CAT

AFRL

Oak Ridge
National Laboratory



On-Prem or Cloud Access



IonQ Quantum Software

IonQ Hybrid Services

SDKs, APIs, Compilers,
Cross-Platform Libraries

IonQ Quantum OS

IonQ Quantum Hardware

Aria



Forte



Forte Enterprise



Tempo



Future Systems



Quantum Networking & Security

End-to-end
Quantum Networks

Distributed, Scaled
Quantum Computing

Quantum Security, QKD
and PQC

Quantum Internet
(Ground and Space
Communications)



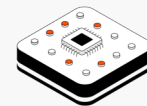
Quantum Sensing

Quantum Inertial
Navigation

Quantum Gravimetry

Atomic Clocks for
Next-gen GPS

Ultraprecise Network
Synchronization



02

IonQ Leads Across Business Metrics

Unprecedented Momentum and Scale

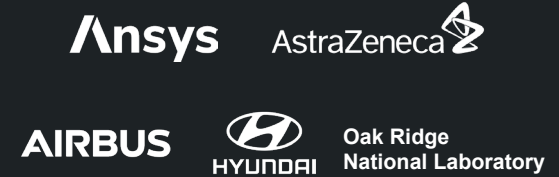
The Quantum Leader in Every Metric That Matters



Historic strategic acquisitions fueling
1,100+ patent portfolio moat



World-class employees and domain experts
1,100+ and growing



Leading demonstrations of **commercial advantage with world-renowned customers**



First pure-play public quantum business to
guide to **triple-digit revenue for FY25**









Strongest financial position with
\$3.5Bn in Cash and Investments¹



Accelerating innovation with over
\$200M annual R&D spend and growing

Large and Growing **Intellectual Property** Portfolio



	<u>Granted</u>	<u>Pending</u>
 IONQ	230	330
 IDQ	229	69
 Qubitekk	117	1
 LIGHTSYNQ	12	18
 oxford ionics	5	71
 VA	17	29

Total IonQ
1,128

*Includes licensed, owned, or controlled granted patents and pending patent applications as of October 2025

Led by Distinguished **Industry Veterans**



Niccolo de Masi

Chairman & CEO
dMY Technology Group | Glu | Siemens
Genius Sports | Resideo | Planet



Rima Alameddine

Chief Revenue Officer
Nvidia | Cisco | Sun Microsystems



Chris Ballance

President, Quantum Computing
Oxford Ionics | Oxford University



Paul Dacier

Chief Administrative Officer, Chief Legal
Officer & Corporate Secretary
EMC | AerCap Holdings | Quinn Emanuel



Dave Mehuys

SVP, Manufacturing & Operations
PsiQuantum | Infinera



Inder Singh

Chief Operating Officer &
Chief Financial Officer
Arm | Unisys | Cisco



Margaret Arakawa

Chief Marketing Officer
Microsoft | Intel | Fastly



Ariel Braunstein

Chief Product Officer
Google | Cisco



Tom Jones

Chief People Officer
Microsoft | Honeywell | Blue Origin



Chris Monroe

Chief Scientific Advisor &
IonQ Co-Founder
Duke University | NIST | University of
Maryland



Dean Acosta

Chief Corporate Affairs &
Government Relations Officer
Lockheed Martin | NASA | Honeywell



Frank Backes

President, Space Infrastructure
Kratos Defense | Braxton



Robert Cardillo

Executive Chairman, IonQ Federal
National Geospatial-Intelligence Agency



Dean Kassmann

EVP, Global Engineering
Amazon | Blue Origin



Jordan Shapiro

President, Quantum Networking,
Sensing, & Security
NEA | Samsung

IonQ Federal: Powering Global Quantum Strategy



Mission

Established to **accelerate government adoption of quantum technology**

Strengthening global presence across defense, research, and public-sector to **advance the world's quantum infrastructure**

Groundbreaking Initiatives

DARPA

Selected by DARPA for **Quantum Benchmarking Initiative**



National Quantum
Computing Centre

Strengthening UK's **national research muscle**

AFRL

\$100M+ AFRL deals pioneering enterprise-grade quantum networking



Quantum

Created the first **commercial US QC and networking hub**

World-Class Team



Robert Cardillo

Executive Chairman,
IonQ Federal
National Geospatial-
Intelligence Agency (NGA)



Rick Muller

VP, Quantum Systems
IARPA | Sandia National
Labs



General John W. Raymond

Former Chief of Space Operations
United States Air Force | United States Space
Force

Delivering Early Quantum Advantage **Today**



FINANCE

World's Largest
Financial Institution

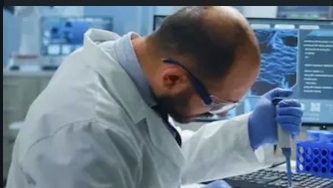


Financial Services

100 Gbps IPsec VPN
using Quantum Key
Distribution —
**demonstrating a
quantum-secure
network at scale**

PHARMA

AstraZeneca 



Drug Discovery

**656x faster time-to-
solution** vs AWS's
best published
implementation

AUTOMOTIVE


HYUNDAI



QML and Chemistry

Image recognition
and **largest QC
battery chemistry
model** for improved
performance

ENERGY

Oak Ridge
National Laboratory

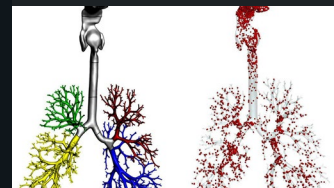


Grid Optimization

Novel QITE algorithm
enables massive
scale on range of
problems like unit
commitment

SIMULATION

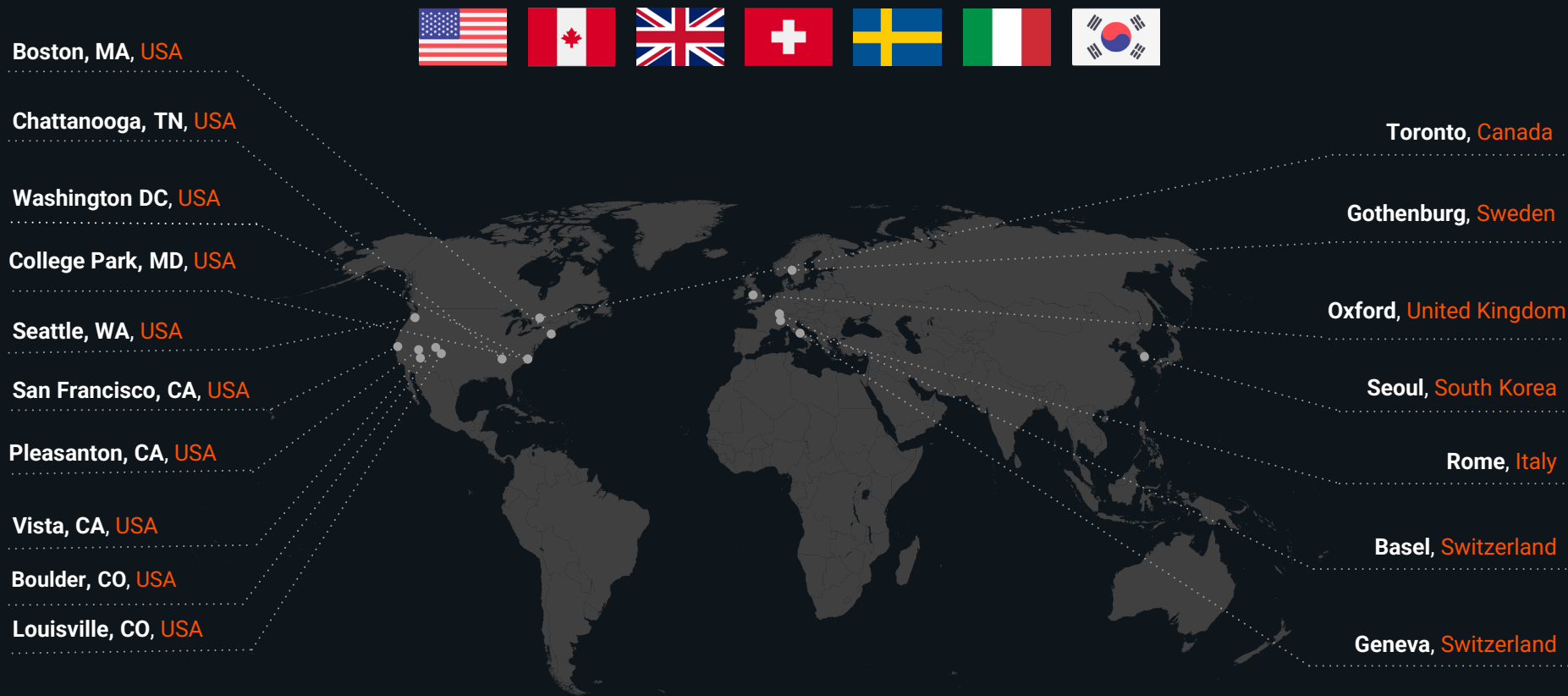
Ansys



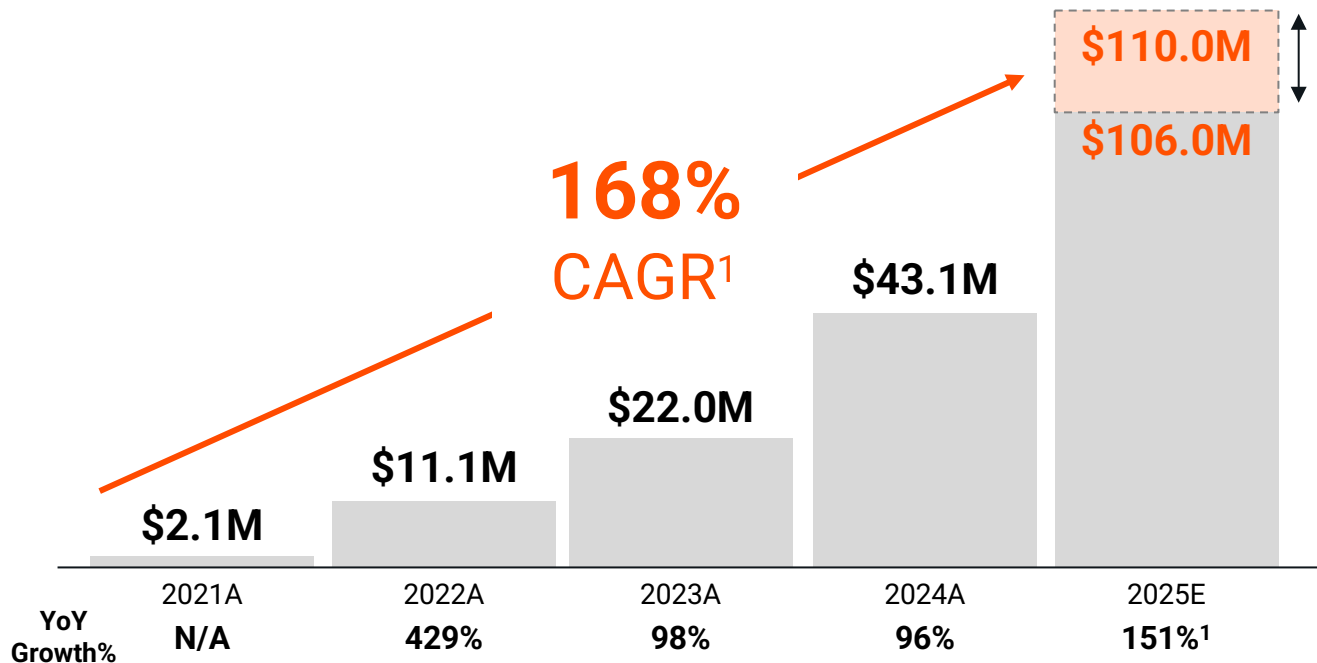
Computational
Engineering

**Up to 12%
improvement over
classical methods**
in medical device
modeling

IonQ's Expanding Global Footprint



Strong Adoption and Expanded Opportunity Set **Driving Growth**



1. CAGR and year-over-year growth represented based on midpoint of 2025 revenue guidance range (\$108M)

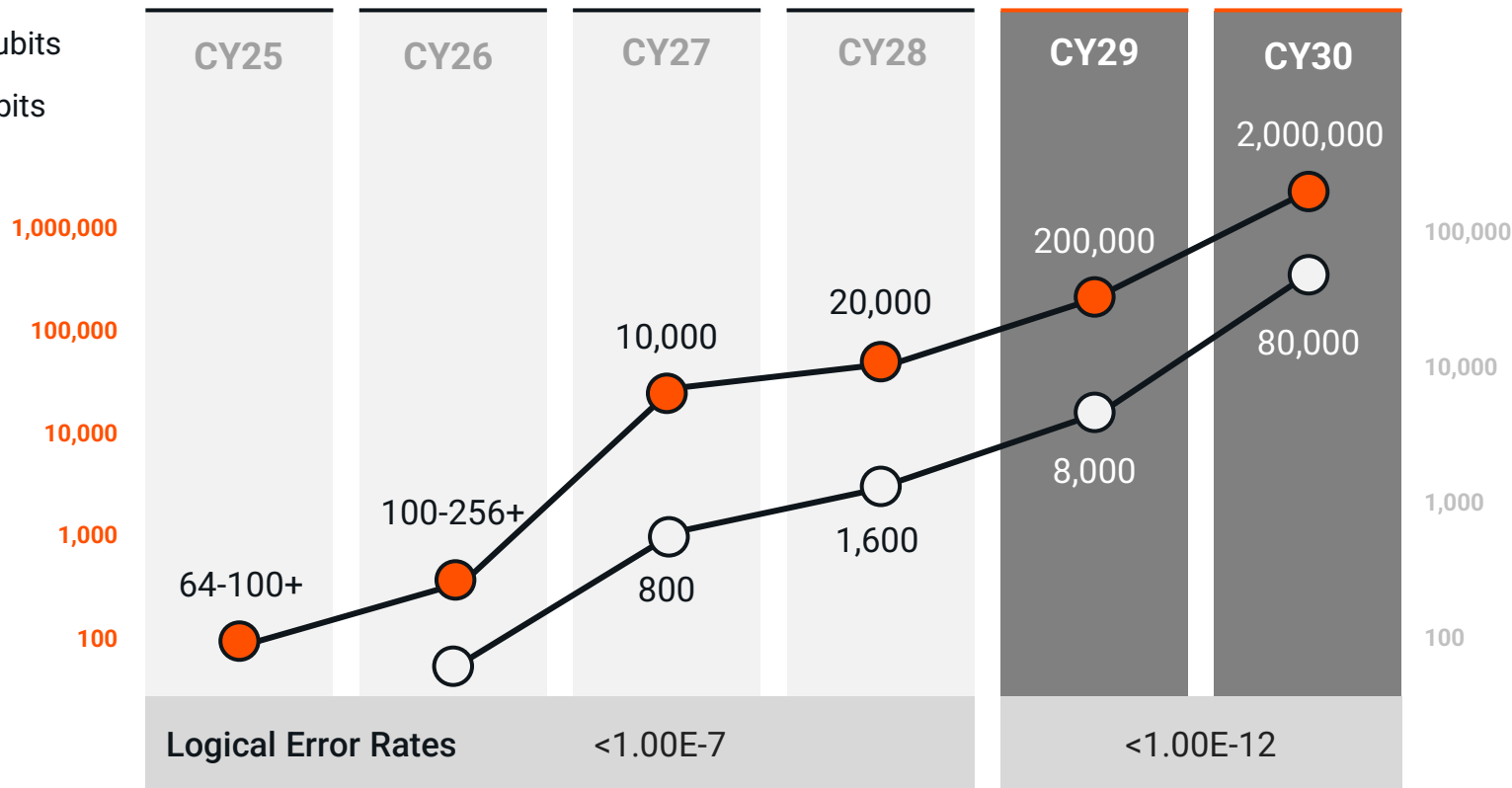
2. At September 30, 2025, pro forma for \$1.98 billion net proceeds from equity issuance on October 14, 2025

- 1 Growing customer adoption
- 2 Complete platform offering (compute, networking, sensing)
- 3 Broader opportunity set than ever before
- 4 \$3.5Bn of net cash to fuel growth²

03

World-Record Technology Underpins Our Path to Commercial Advantage

Leading Quantum Computing Technology Roadmap

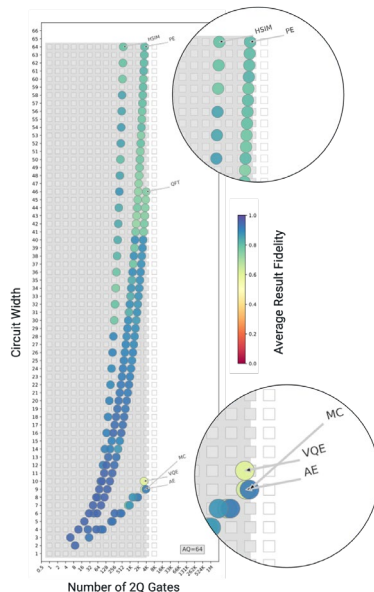


36 Quadrillion Times Larger Computational Space

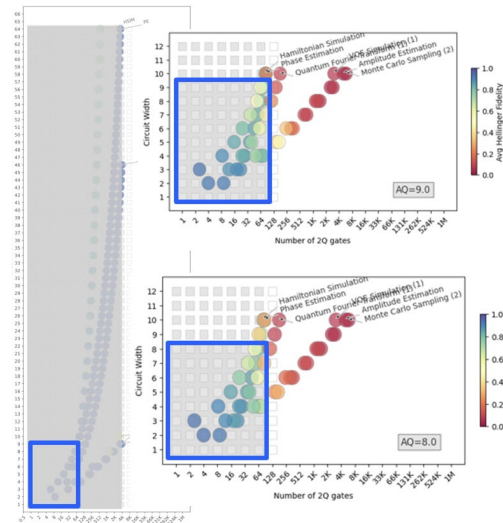


IonQ Achieves Record Breaking Quantum Performance Milestone of #AQ 64

IonQ #AQ 64 developmental system has a computational space **36 quadrillion times larger than IBM's current highest performing quantum system**



Tempo System



IBM Kingston
Heron r2

IBM Pittsburgh
Heron r3

Electronic Qubit Control

4-9s of fidelity: the key enabler of our leading technology roadmap



99.99%

world record 2 qubit gate fidelity

**Most Scalable
Architecture**

1

**faster time
to solution**

2

**fewer errors per
operation**

3

**smaller devices the
size of standard
server racks**

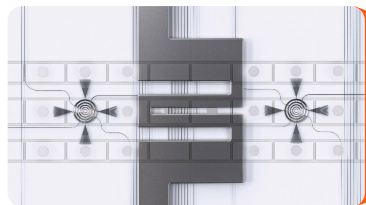
4

**less energy
required**

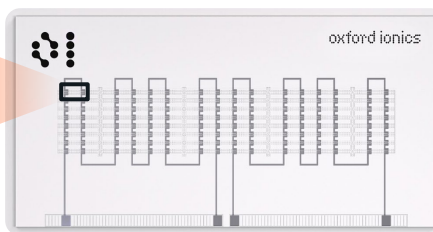
Scaling Quantum the Semiconductor Way

Simple, scalable and mass manufacturable

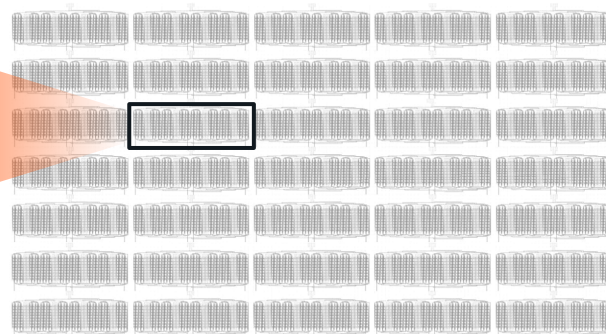
8-qubit
unit cell



256-qubit
quantum computer



10,000-qubit
quantum computer



Resilient, De-Risked Supply Chain

Protecting Quantum Leadership

Secure, Resilient, and Allied-Nation Based



- Manufacturing footprint and supply chain concentrated in **stable allied markets**
- >99% sourced from U.S. & allies; **no PRC reliance**
- **No Helium-3, dilution refrigeration**, or significant rare-earth dependence

Security Built into the Supply Chain



- Dedicated supply chain **security**
- **Strong IP protection** with federal partnerships
- **Dual-sourcing + Zero-Trust** & CTPAT enhancements

Supplier Strategy Accelerates Innovation



- **Global suppliers aligned** to tech roadmap
- **Performance-driven:** tech, quality, delivery & cost
- **Strategic near/on-shoring** with controlled inventory buffers for resilience

The Best Solution Across Every Unit Economic Vector



Superconducting

Business Impact

**Third Party Validated
Cost per System**
(2 million physical qubits)

<\$30M
BOM Cost

>\$1B
BOM Cost

Others have no public plans to reach 2M physical qubits. Their estimated **BOM costs are >30X more expensive vs. IonQ's**

Power



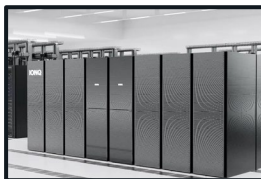
Wall Socket
Minimal Cooling



Dilution Refrigerators / Cryostats
Nuclear Reactors

Other systems require massive, specialized infrastructure **driving up energy costs and limiting deployment**

Footprint



Standard Datacenter Racks



Football Field

Other systems demand room-sized or football field-scale facilities, **blocking datacenter integration and slowing adoption**

Source: IonQ BOM cost estimates by Kearney; Superconducting data taken from publicly available information using reasonable extrapolation assumptions

