Quantum Computing Inc.

QCi | Innovative Quantum Solutions Company

NASDAQ: QUBT

Investor Presentation
December 2023

FORWARD-LOOKING STATEMENTS

The statements contained in this presentation that are not purely historical are forward-looking statements within the meaning of applicable securities laws. Forward-looking statements include statements regarding our "expectations," "anticipation," "intentions," "beliefs," or "strategies" regarding the future, whether or not those words are used. Forward-looking statements also include statements regarding revenue, margins, expenses, anticipated levels of future revenues and earnings from operations, projected costs and expenses related to our operations, liquidity, capital resources, and availability of future equity capital on commercially reasonable terms. Forward-looking statements in this presentation are based upon a number of assumptions, some of which may not materialize, and unanticipated events may occur which could affect the actual results achieved by the Company during the periods covered by the forward-looking statements. All forward-looking statements included in this presentation are based on information available to us as of the date of the presentation, and we assume no obligation to update any such forward-looking statements. Our actual results could differ materially from the forward-looking statements.

Who We Are

Quantum Computing Inc. (“QCi”) is a ***nanophotonic*** quantum technology company delivering **ready-to-run** quantum systems - hardware and solutions.

Our Proprietary Core Technology

QCi leverages the power of quantum optic techniques to create, manipulate and measure single photons and their interaction (entanglement).

Benefits of Our Methodology

OCi delivers superior SWaP-C *(Size, Weight, Power and Cost)* resulting in optimal p**erformance –** superior speed, accuracy, and computing power at less cost and at ultra-low energy consumption in a small footprint, requiring no special environmental considerations.

Our Mission

To accelerate the value of quantum enabled hardware for real-world business solutions today.

Our approach is fast, simple integration into existing infrastructures with the goal to empower both experts and non-quantum professionals with cost-effective access to the advanced capabilities of quantum.

SNAPSHOT

Quantum Computing Inc. (QCi) is a first-to-market, full stack nanophotonic quantum technology company offering practical, cost-effective solutions and the most advanced computing capability available in the market today.

QCi's core proprietary IP is leveraged across 5 product platforms, offering advantages of scale into multiple large addressable markets without significant product modifications and investment.

Upcoming:

Quantum nanophotonic chips are a key component to future product development and will be leveraged across all 5 product platforms.

Incorporated: 2018

HQ: Leesburg, VA

Lab: Hoboken, NJ

Future Chip Foundry: Tempe, AZ

Subsidiary (wholly-owned): QI Solutions (Government Contracts)

Patents: 1 issued; 3 pending; 7 licensed (exclusive)

Blue-Chip Customer/Partners

VIPC Virginia Innovation Partnership Corporation; NASA; United States Special Operations Command; Stevens Institute of Technology (Per Aspera Ad Astra, A.D. 1870); Rabobank

As of 11/27/23

Market Capitalization:	*$69 million*
Common Shares Outstanding:	*75 million*
Series A Convertible Preferred:	*1.5 million shares*
Options / Warrants:	*13.6 million / 3.4 million*
Inside Ownership:	*50%*

Total Cash:	*$7.4 million (as of 9/30/23)*
Total Debt:	*$3.3 million (as of 11/27/23)*
Shareholder Equity:	*$81.2 million (as of 9/30/23)*
NOLs:	*$13.1 million (as of 9/30/23)*

EXPERIENCED AND PROVEN LEADERSHIP

Notable Experience:

Robert Liscouski
President, CEO & Chairman

- 35+ years of executive experience at public and private companies, as well as federal agencies
- Appointed by President George W. Bush as first D.H.S. Asst. Secretary for Infrastructure Protection
- Director of Information Assurance (cyber-security) – The Coca-Cola Co.
- Intelligence Science Board Member – Director of National Intelligence and Director Central Intelligence
- B.S. from John Jay College and Master's from Harvard University

Chris Boehmler
CFO

- 20+ years of experience in finance, consulting, and accounting operations
- Previously was Controller at Bridgewater Associates and Director of Accounting Operations at Intelsat; began career in investment banking at Credit Suisse
- B.A. from University of Chicago

William McGann, Ph.D.
CTO & COO

- 30+ years of experience in numerous areas of technology development
- Previously served as Chief Technology Officer for the Security, Detection, and Automation business at Leidos
- Ph.D. in Chemical Physics from University of Connecticut, with undergraduate degrees in chemistry and biology

Yuping Huang, Ph.D.
Chief Quantum Scientist & Board Member

- 20+ years of pioneering R&D experience in quantum physics and technology
- Founded QPhoton, which focused on commercializing quantum devices and technology
- Associate Professor of Physics and founding director of the Center for Quantum Science & Engineering at Stevens Institute of Technology

Mike Keymer
Vice President of Quantum Solutions

- 15+ years of experience in software technologies
- Founder of Origent Data Sciences, a life sciences analytics company that utilizes AI and predictive modeling to optimize pharmaceutical human clinical trials for neurodegenerative diseases
- M.B.A. from Northwestern University, Masters from MIT

Sean Gabeler
President of QI Solutions

- 30+ years of experience as a Special Operations officer
- Highly decorated multi-war combat veteran with a deep level of understanding of government operational requirements uncommon in the business community

WORLD-CLASS BOARD & ADVISORS

Notable Experience:

Carl Weimer, Ph.D.
Independent Director

- 25+ years of experience in the aerospace industry as a Chief Technologist and Team Leader
- Currently Ball Aerospace – Civil Space Chief Technologist, and the Principal Investigator for the NASA Earth Science Technology Office (ESTO); received the NASA Distinguished Public Service Medal in 2008 for advancing LiDAR for satellite remote sensing. Granted multiple patents and awards
- B.S. from Harvey Mudd College, and an M.S. and Ph.D. in Physics from Colorado State University

Robert Fagenson
Independent Director

- Previously served as Executive Chairman of National Holdings Corp. and as President and CEO at Fagenson & Co., a family investment company
- Began his career as a member of the NYSE and was elected to serve on the NYSE Board of Directors in 1993, eventually becoming Vice Chairman in 1998

Michael Turmelle
Independent Director

- Currently serves as Managing Director of Hayward Tyler, a manufacturer of electric motors and pumps
- Previously served as CFO and COO at SatCon, an energy company, and also ran his own consulting firm working with startups in renewable energy, medicine, and other advanced technologies
- B.A. in Economics from Amherst College

Jim Simon
Chairman, Tech Advisory Board

- Seasoned US intelligence community leader and technology strategist with extensive experience
- Former senior Central Intelligence Agency Assistant Director and executive at Microsoft

Brian LaMacchia
Technical Advisory Board Member

- 40+ years expertise in computer science & engineering.
- Distinguished Engineer and head of the Security and Cryptography team within Microsoft Research
- Co-founder Microsoft Cryptography Review Board
- S.B., S.M., and Ph.D. from MIT in Electrical Engineering and Computer Science.

Lewis Shepherd
Technical Advisory Board Member

- 30+ years Silicon Valley and government service addressing R&D innovation with specific focus on AI, ML, AR / VR, data visualization, quantum computing, encryption, and cybersecurity.
- Currently the Senior Director, Research & Emerging Technologies Strategy at Vmware

Javad Shabani
Technical Advisory Board Member

- Director of Center for quantum Information Physics at NYU. Expertise in novel quantum materials and computing projects – wafer-scale epitaxial superconductor-semiconductor platforms.
- Ph.D. Princeton, post-doctoral Harvard and Univ of CA, Santa Barbara. (Electrical engineering and Physics)

DEEP ROSTER OF TECHNOLOGY TALENT

60+ | 24
Employees | Hardware team

Degrees In…
Physics, Computer Science, Applied AI, Quantum Physics, Mathematics, Mechanical & Electrical Engineering, Cybersecurity, Computer Graphics Technology, Information Networking, Physical Chemistry

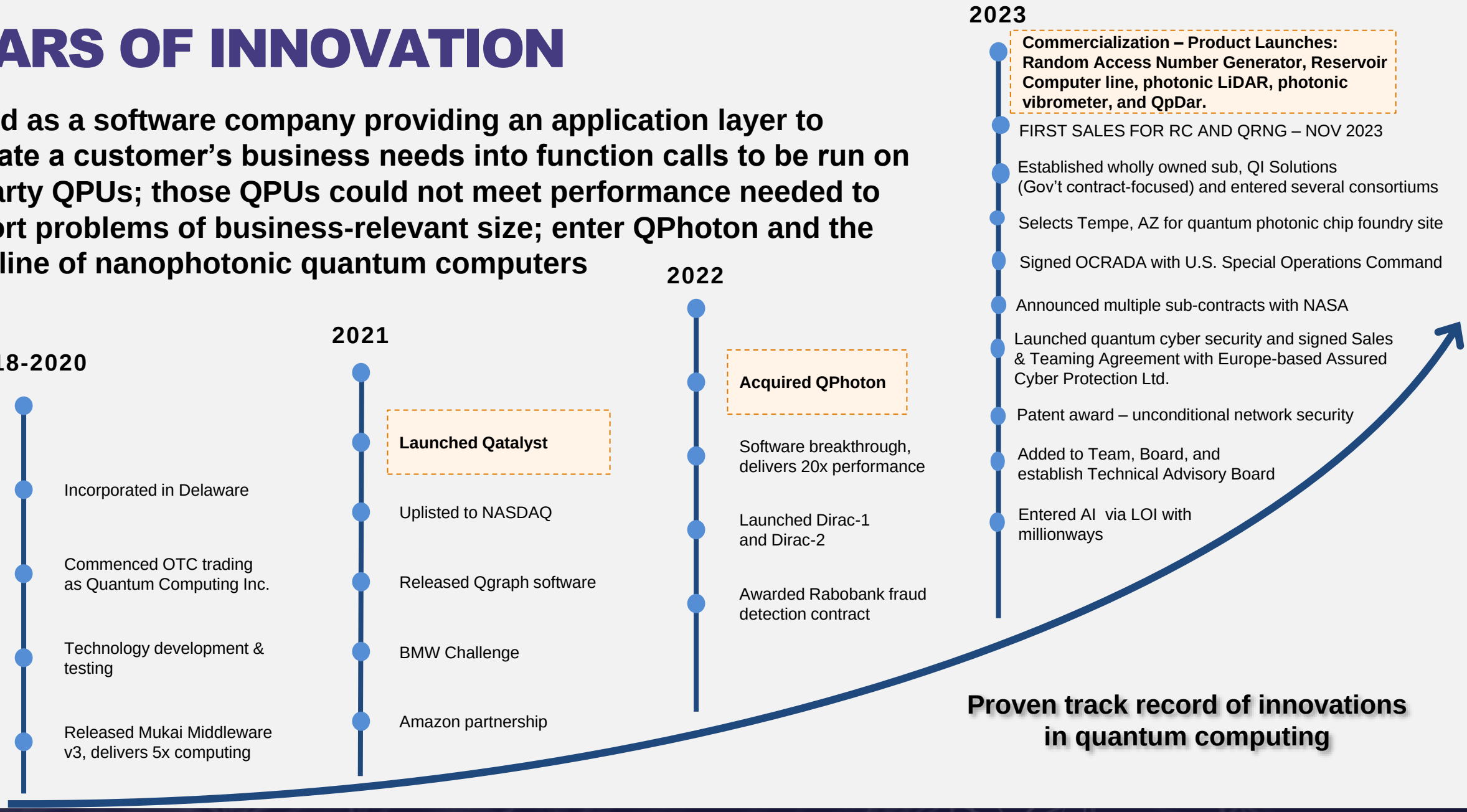
52%
Have Postgraduate Degrees

Quantum Computing Inc.
QCi | Innovative Quantum Solutions Company

NASDAQ:QUBT

YEARS OF INNOVATION

Started as a software company providing an application layer to translate a customer's business needs into function calls to be run on 3rd party QPUs; those QPUs could not meet performance needed to support problems of business-relevant size; enter QPhoton and the Dirac line of nanophotonic quantum computers



Proven track record of innovations in quantum computing

QCI PLATFORM TECHNOLOGIES

Quantum Computing
Dirac 1 & 2

$1B
TAM[1]

Description:

- Nanophotonic quantum information processing system

Use Cases:

- Optimization problems
- Complex financial modeling
- Quantum simulations

Advantages:

- ✓ Solves larger and more complex problems
- ✓ Eliminates need for error correction
- ✓ Operates at room temperature
- ✓ Rack-mountable, requiring no special infrastructure

Q Intelligence (AI)
Reservoir Computer

$208B
TAM[2]

Description:

- Predictive modeling and partial differential equations

Use Cases:

- Improve ML models
- Predictive analyses
- Material science

Advantages:

- ✓ Able to solve complex problems that are currently intractable using classical algorithms
- ✓ Much faster
- ✓ Improves accuracy
- ✓ Can solve problems that scale exponentially with data size

Q Cybersecurity
Quantum Random Number Generator

$249B
TAM[2]

Description:

- Gives system-wide, zero-trust protections

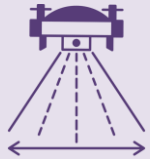
Use Cases:

- Quantum network security
- Cryptography and encryption
- Random number generation

Advantages:

- ✓ Protects information on the entire network at all points of slippage
- ✓ Compatible with existing fiber-based communication infrastructure and satellite-based networks

Q Remote Sensing
Q LiDAR & Vibrometer
QpDar



$22B
TAM[1,3]

Description:

- Ability to measure at improved resolution and distances

Use Cases:

- Precision agriculture
- Environmental monitoring
- Autonomous vehicles

Advantages:

- ✓ See around corners, without line of sight
- ✓ See miles of depth into waterways and oceans
- ✓ See into the molecular level of the human body
- ✓ See though infrastructure

Q Imaging

$518B
TAM[4]

Description:

- Counts single photons and filters to obtain optical imaging

Use Cases:

- Low-light microscopy
- Covert imaging
- Medical diagnostics

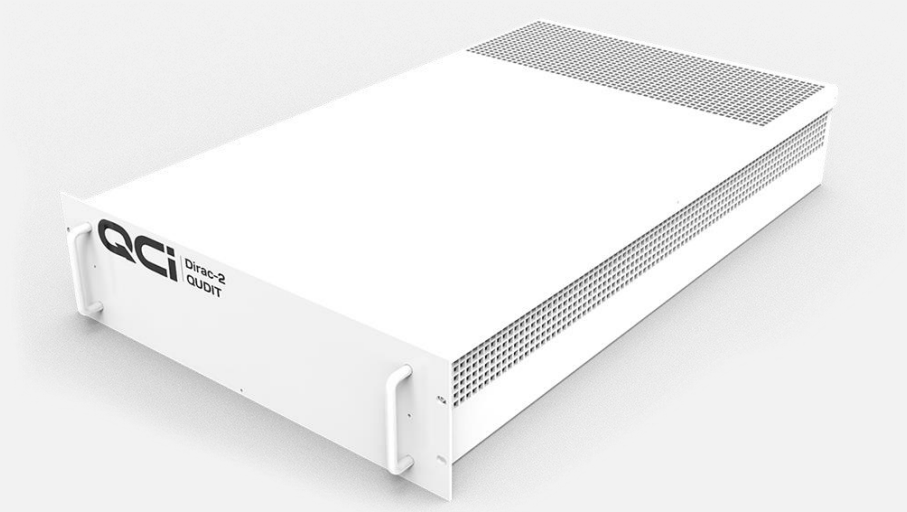
Advantages:

- ✓ Powerful supplement to traditional imaging approaches
- ✓ Images through otherwise opaque and dense materials

1. MarketsandMarkets
2. Next Move Strategy Consulting
3. Precedence Research
4. The Business Research Company

Legends: **Currently Available** | **Prototype Built** | **Lab Demonstrated**

QUANTUM COMPUTING - MAKING QUANTUM PRACTICAL TODAY



Dirac Series:

Dirac-1 - Delivers solutions for binary optimization problems capable of using over 11,000 qubit.

Dirac-2 - Solves integer-based optimization problems using over 1000 (n=64) qudits

COMING NEXT: Dirac-3 – Hybrid

Revenue Pipeline: Multiple international universities

QCi's Dirac™ Entropy Quantum Computer is a photonic Ising / XY machine family built for quickly solving both binary and integer optimization problems. The Dirac hardware is capable of optimizing problems with 11,000 qubits or 1000 64- state qudits and features native all-to-all connectivity. Dirac™ operates on an **open quantum system rather than a closed system like other providers**, carefully coupling a quantum system to an engineered environment, so that its quantum state is collapsed to represent a problem's desirable solution.

As a result, Dirac™:

- Allows large scale design
- Excellent reliability and eliminates errors
- Deploys as a ready-to-run, room temperature, rack-mountable server requiring low power levels and no special infrastructure

Solves larger and more complex optimization problems with sub-50Watt power consumption

QUANTUM INTELLIGENCE – EMPOWERING AI

Quantum Reservoir Computer

Launched June 2023

USES:

The QCi's reservoir computer can address complex problems in fields such as natural language processing (speech recognition), weather prediction, financial analysis, drug discovery, optimization, autonomous driving, enhancement of LiDAR capabilities, robotics, etc.

COMING NEXT:

The QCi Hybrid Reservoir Computer - Combines electronic and photonic to achieve 100x the speed of digital reservoir computer

Revenue Pipeline: NASA – monitoring climate change – pertaining to de-noise and improve readability

Assured Cyber Protection, Ltd and millionways purchased multiple units in November 2023

QCi's first in a series of reservoir computing products is an **edge device** that is photonic-inspired, FPGA-based, and optimized for recurrent neural network applications. Purpose built for supervised learning, the reservoir computer natively implements **AI** models for time series analysis, prediction, function fitting and classification.

Advantages over a PC (personal computer) implementation include:

- Significantly faster processing speeds, accuracy, and data processing volume
- Robust against RF interference
- Ability to handle big data challenges
- Consumes 80% - 95% less energy
- Portable, about the size of a power bank
- Affordable, standalone edge computing from anywhere
- Significantly less training time
- Edge Device - allows data analysis to occur at the sensors or collection point, reducing latency, dependency on network connections, and allows for more real-time processing of data

CYBERSECURITY – QUANTUM AUTHENTICATION APPROACHING ZERO TRUST

Quantum Random Number Generator
(Launched April 2023)

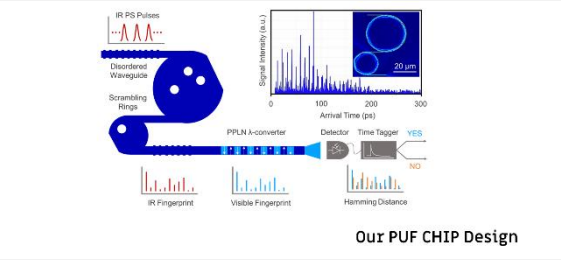
Our patented QRNG is photonic based, capable of generating non-repeating number sequences, can generate truly random numbers of various probability densities and correlation properties to serve many different applications including security, modeling, and finance.

Quantum Key Exchange/Distribution

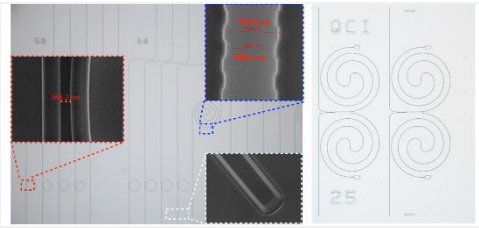
dQKD is QCi's high dimensional quantum key distribution protocol. dQKD is an entanglement-based quantum key exchange method which uses multi-dimensional quantum keys and can be easily integrated with existing telecommunications networks. d-QKD has the added benefit of not requiring quantum error correction.

Quantum Authentication

Our qAP is quantum authentication protocol that utilizes zero-knowledge proofs. Using pre-shared symmetric keys, qAp-0 enables authentication between communicating parties without revealing full or partial keys to the possibility-not-trustworthy third parties while eliminating the need for complex computation.



Our PUF CHIP Design



QCi offers several solutions to the cybersecurity market.

In collaboration with partners, QCi is developing custom quantum cybersecurity hardware as well as proprietary networking and security protocols for:

1. Quantum Networks / Quantum Internet
2. Quantum Key Distribution
3. Hardware-based user / party authentication
4. Quantum Zero Knowledge proof protocol
5. Physical Uncloanable Function Chip
6. Entanglement based Quantum Authentication
7. Quantum Random Number Generator

Quantum Physical Unclonable Functions (PUF) Chips
(COMING NEXT)

Our quantum authentication protocol utilizes physical unclonable chips. qAP-PUF provides a means to verify device integrity thereby ensuring the authenticity of transmitted information. Security, in our case, is enabled by the infeasibility of cloning PUFs, quantum superposition, and quantum entanglement properties.

Revenue Opportunity: Assured Cyber Protection, Ltd. – sales and teaming agreement signed September 2023. ***The first QRNG was purchased in November 2023.***

REMOTE SENSING – UNPRECEDENTED CAPABILITY

Vibrometer

One basic device – calibrated for multiple remote sensing uses

COMING NEXT: Subsequent versions will be able to detect at greater distances, minimize device footprint and weight, and optimize data gathering in increasingly challenging environmental conditions (underground, underwater and at high altitudes affixed to a drone, plane or space-based platforms).

Revenue Opportunity: Government Agencies (DoD; NASA)

Our quantum remote sensing family of products includes single photon vibrometers and QpDAR, video rate LiDaR and instruments particle analysis. **This technology delivers significant advancements in sensitivity, speed, and resolution - capable of long-range measurement, penetrating through obscured media (such as deep foliage or camouflage), non-line-of-sight objects, and sensing up to 2 1/5 feet below dense underground surface.**

LiDAR systems can be greatly enhanced in their ability to measure at improved resolution and distances as well as extend these photonic signals to applications in vibrometry for material stress analysis, particle size analysis, and potential remote sensing from aircraft, drones and even satellites.

Applications: remote landmine detection, audio surveillance and remote voice retrieval, archeological mapping, material recognition from specific metals to plastics, metal fatigue and structural integrity of bridges, buildings, power plants, airplanes, and transportation fleets.

Product Features

- The versatility of material measurement in any environment
- Safe, non-contact long range detection
- Portable and easy-to-use
- Customizable for specific detection needs

IMAGING – IMPRESSIVE APPLICATION AND FUTURE LAUNCH

QCi offers One of the most exciting opportunities in development leverages the ability to count single photons and filter their associated wave functions precisely to obtain optical imaging through otherwise opaque and dense materials. Our core technology efficiently generates, conditions and measures single photons enabling us to create high-resolution, low-cost devices for biomedical imaging.

Targeting both the commercial and defense industries, our imaging platform is able to extract a multitude of information from single and few photon light using temporal gating. With the aid of single-photon sensitive cameras and mode-selective image conversion, we are able to obtain optical tomograms and 2D Raman images from deep inside human tissue. The ability to rapidly analyze these images with high sensitivity adds new, highly sought after, diagnostic capabilities.

A prototype quantum imaging system has been built and is currently undergoing internal testing

NEAR-TERM ROADMAP – MILESTONES

Growth

- Expand deployment of quantum solutions to Federal and State government clients, with an emphasis on DoD agencies (Qi Solutions)
- Expand partnerships to demonstrate use cases for AI applications using reservoir nanophotonic and quantum solutions (Q Intelligence)
- Launch quantum networking solution (Q Cybersecurity)
- Accelerate Quantum LiDAR + vibrometer deployment through prototype hardening with defense contractor partners (Q Remote Sensing)
- Launch Q Imaging Platform
- Expand distribution by adding sector/industry vertical specific technology partners with robust sales networks globally
- Expand marketing efforts (e.g., website, social media, events, PR)
- Strengthen in-house capabilities by expanding technical & bus dev teams as well as Technical Advisory Board and Board of Directors
- Continued progress and expansion of paid-for proof of concepts and testing with large agencies and corporations
- First hardware sales and sales pipeline expansion

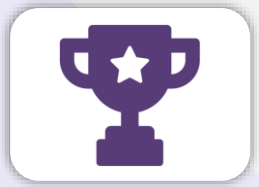
Hardware

- Launch Dirac-3 for commercial and government clients (Q Computing)
- Begin to manufacture thin film lithium niobate quantum photonic chips in Tempe, AZ foundry with initial production focused on PUF chips
- Continue R&D enhancements to subsequent product series – integration of quantum chips

HIGHLIGHTS

Large Addressable Market with Favorable Tailwinds

- Massive $48B+ global addressable market for high-performance computing in 2022, forecasted to grow at 8%
- Little to no competition has commercialized quantum offerings – the majority of industry participants are focused on large university research projects, while QCi is focused on practical immediate uses and democratizing quantum computing



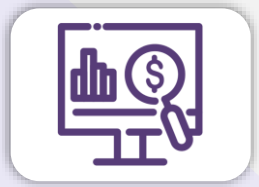
Best-in-Class Platform

- Proprietary quantum capabilities, built from the ground up with Nobel Prize winning concepts
- Approach allows for faster processing with boundless data inputs to solve the most complex problems in a cost-effective infrastructure environment with no special temperature controls

Visionary Management Team with Proven Track Record

- Validated by solid relationships with governments, military, tech-focused universities, and state consortiums
- Founder and Board are incentivized, having invested significantly themselves

First-to-market, nanophotonic quantum technology computing company



Multiple Revenue Levers & Operating Leverage

- Leverages a core technology to address a large number of real-world applications
- QCi expect to realize EBITDA breakeven at ~$50M in annual revenue with a clear plan to achieve profitability

Defensible Barriers to Entry

- Have already invested heavily in R&D
- Numerous international patents, trademarks, registrations, and trade secrets
- Technology requires Ph.D.- level expertise to continue developing

QUANTUM COMPUTING INC.

Robert Liscouski | co-Founder & CEO
rlisk@quantumcomputinginc.com

Chris Boehmler | CFO
cboehmler@quantumcomputinginc.com

Investor Contact

Yvonne Zappulla
(845) 680-0300
Yvonne@Sawyer-Dickinson.com

Thank You for Your Time and Consideration