

Quantum Computing Inc.

Q2 about inline. We expect strong growth over the next year to be positive for stock. Lowering P/T to \$9.00.

COMPANY UPDATE

Rating: BUY

Ticker: QUBT

Price: \$1.23

Target: \$9.00 (from \$9.50)

positive for stock. Lowering Р/Т to \$9.00.

Q2 about inline: Quantum recently (on August 14) reported its fiscal Q2 2023 (ending June) results. Revenue was 0.1, compared to our estimate of 0.2 million. EPS was 0.07, compared to our estimate of 0.11. There was no consensus estimates or company guidance.

Still very early stage: Quantum's recent financial performance is reflective of its developmental and early commercialization stage though it has commenced commercialization of its technology in Q1 2023. The company has recently launched several new products and is currently focusing on sales and marketing of them. We believe investors should be focused on its product commercialization, which we believe (and company's guidance) in 2023/2024 that revenue should grow quickly.

Adjusting estimates: We are adjusting our 2023 estimates for revenue to \$0.7 million, from \$1.1 million, and for EPS to \$(0.40) from \$(0.47).

Acquired QPhoton: In June 2022, the company acquired QPhoton, Inc., a privately held company that is a leading innovator in the quantum photonic technology space. QPhoton's quantum photonic system (QPS) operates at room temperature and maintains computational stability in a variety of application environments. This allows it to be easily deployed and at a substantially reduced cost relative to competing (quantum computers).

Focused on quantum computing: Quantum's flagship software solution, Qatalyst, is a ready-to-run quantum and classical software for optimization computations for faster, better, and more diverse business decisions. By being early in this rapidly growing industry, we believe Quantum is well-positioned to capture and drive a meaningful market share and industry growth.

The need for quantum computing: The rapid and widespread adoption of technologies such as the Internet, artificial intelligence, virtual and augmented reality, 3D imaging, and the Internet of Things (IoT), have served to exponentially increase the generation of data. This has driven up the demand for high-performance computing to process all this data.

Large market potential: As quantum computing hardware continues to advance, we expect a corresponding growth in demand for quantum software to run on these computers. The U.S. Government has committed \$1.3 billion to funding quantum information science programs, along with ~\$50 billion for onshoring domestic chip research and manufacturing.

New CFO: In June, Chris Boehmler was named as the company's new CFO, succeeding Chris Roberts who will continue to be the General Counsel.

Potential M&A: In May, the company signed a non-binding Letter of Intent (LOI) to acquire up to 100% of the AI firm, millionways, creator of the world's first emotionally-intelligent AI platform. Exact terms have not been disclosed.

Balance sheet: As of Q2, the company has \$7 million in cash and \$7 million in debt. We believe the company has enough cash into Q4 2023.

Positive high risks versus rewards: We believe the ~billion dollars market potentials presents high rewards for the risks.

Valuation attractive: We are maintaining our BUY rating, but lowering our 12-month price target to \$9.00 from \$9.50, based on a NPV analysis, representing significant upside from the current share price. We believe this valuation appropriately balances out the company's high risks with the company's high growth prospects and large upside opportunities.

Company Description

Based in Leesburg, VA, Quantum Computing is a software company focused on classical and quantum software for complex optimization computations.

United States Technology

August 25, 2023

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Stock Data

Exchange:	NasdaqCM
52-week Range:	1.04 - 3.49
Shares Outstanding (million):	74
Market cap (\$million):	\$91
EV (\$million):	\$91
Debt (\$million):	\$7
Cash (\$million):	\$7
Avg. Daily Trading Vol. (\$million):	\$3
Float (million shares):	46
Short Interest (million shares):	2
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	<u>2023E</u> (Cur.)	2023E (Old)	<u>2024E</u> (Cur.)	2024E (Old)
Q1 Mar	0.1A		0.5E	0.8E
Q2 Jun	0.1A	0.2E	0.6E	0.9E
Q3 Sep	0.2E	0.3E	0.7E	1.0E
Q4 Dec	<u>0.3E</u>	<u>0.5E</u>	<u>1.0E</u>	<u>1.3E</u>
Total	0.7E	1.1E	2.8E	4.0E
EV/Revs	130x		33x	

Earnings per Share (pro forma)

	2023E (Cur.)	2023E (Old)	2024E (Cur.)	2024E (Old)
Q1 Mar	(0.14)A		(0.10)E	(0.11)E
Q2 Jun	(0.07)A	(0.11)E	(0.10)E	
Q3 Sep	(0.10)E	(0.11)E	(0.10)E	(0.11)E
Q4 Dec	(0.10)E	(0.11)E	(0.09)E	(0.10)E
Total	(0.40)E	(0.47)E	(0.38)E	(0.42)E
P/E	N/A		N/A	

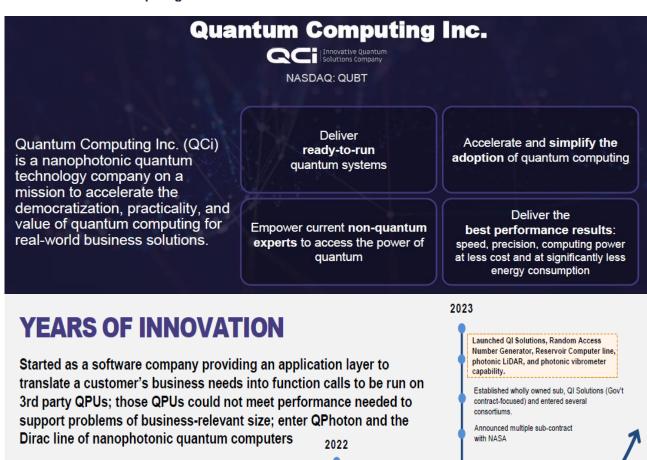
Important Disclosures

Ascendiant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 16.



Exhibit 1: Quantum Computing Inc. Overview



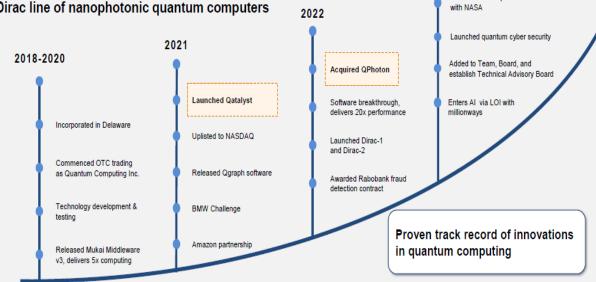




Exhibit 2: Quantum Computing Investment Highlights

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 group 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 will realize EBITDA breakeven at ~\$30M in annual revenue and anticipates reaching cash flow breakeven in less than two years



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

Source: Company reports.

Exhibit 3: Quantum Computer Reality Check

The Quantum Reality Check

The Good

- Huge investments by major players are driving quantum momentum.
- Quantum has the potential to deliver faster, better solutions for many critical, real-world enterprise problems.
- QPUs are constantly improving and expanding
- Every day we're learning more about quantum programming, the challenges, and what we really need to think about.

The Bad, i.e., What Needs Work

Hardware

- Quantum processors are still in their infancy.
- Cannot scale to process the large volumes of data and variables created by today real-world problems
- No standard quantum computer architecture.
- Proprietary, unique low-level code required for each vendor

Software

- Requires complex programming with SDK (software development kits)
- SDKs require quantum expertise to understand and use
- Long lead time and costs required to train and develop the skills needed to create quantum programs



Exhibit 4: Quantum Computing's Solutions

QCI'S BREAKTHROUGH TECHNOLOGY SOLVES FOR INDUSTRY CONCERNS

Quantum Computing Myths	QCi Solutions
Too expensive	Cost of a departmental server
Quantum is 5-10 years away	Available today - Already solving complex problems
Not practical to operate and energy intensive	Slots into a common server rack at room temperature and consumes a fraction of the power
Limited applications	Solving multi-variable optimization use cases today as well as predictive capabilities
Scalability	Connects all available qubits regardless of superposition for unprecedented and hyper-scalable processing power
Unstable and no solution for error correction	Actually utilizes the noise that creates those errors rather than avoiding it and having to correct for them

QCI OFFERS READY-TO-USE QUANTUM TECHNOLOGY, ACCESSIBLE TO BUSINESS TEAMS

Our Quantum Nanophotonics Systems delivers quantum nanophotonic power at room temperature, in a highly stable, coherent system

We enable full connectivity of all qubits to accelerate and scale processing power

The result is a suite of highly scalable systems and technologies that can be deployed and used virtually anywhere, by anyone

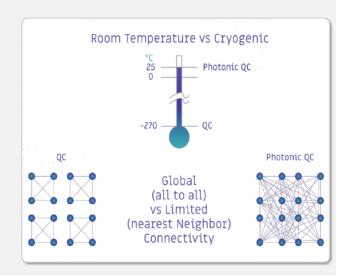




Exhibit 5: Quantum Computing's Solutions

MARKET LEADING SOFTWARE

QATALYST: Cloud-based service that allows users to solve different types of optimization problems on a variety of

quantum computers or quantum simulators.

- Users formulate their problem once and submit that problem to different quantum systems without needing to re-formulate their problem specifically for each different quantum system.
- Allows focus on their optimization problem domain, rather than the detailed and machine-specific programming needed to allow their optimization problem to run on different quantum machines.



- EXAMPLE PROBLEMS
- ✓ GRAPH PARTITIONING✓ COMMUNITY DETECTION
- ✓ OPTIMIZATION PROBLEMS



SOLUTION-LED PROFESSIONAL SERVICES

QUANTUM SOLUTIONS

QCI's Quantum Solutions team helps clients solve high-value business problems using quantum hardware and software technologies.

PHASE 1

Identify Expectations

- Goals
- Needs
- PoC Process

Evaluate Current

- · Applications
- Use Cases
- · New Opportunities

Define Quantum Opportunities

PHASE 2

Explore Quantum Options

- · QPU Hardware
- Quantum-Ready Classical
- Software Development
- Compare to Qatalyst or other ready-to-run quantum software

Define Quantum Infrastructure

PHASE 3

Quantum Testing

1st use cases

- Evaluate hybrid
- Evaluate pure quantum
- Evaluate quantum classical
- Tune problems
- Identify plan and first production steps

Measure Quantum
Potential

PHASE 4

Initial Quantum

Appropriate use cases applied to best approach

- 1st hybrid runs
- Pure quantum runs (if practical)
- ID potential for quantum advantage/value

First Production
Quantum Results



Exhibit 6: Quantum's Market Opportunity



...SEEING INCREASING SUPPORT FROM NATIONAL GOVERNMENTS AND POLICYMAKERS

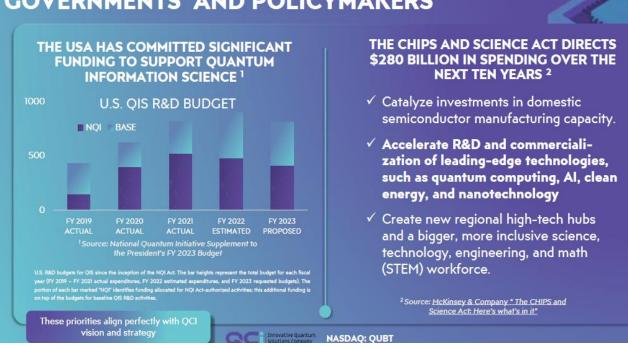




Exhibit 7: Quantum's Product Solutions

HARDWARE MAKING QUANTUM PRACTICAL TODAY



QCi's Dirac™ Entropy Quantum Computer 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, rackmountable server requiring low power levels and no special infrastructure
- · Solves larger and more complex problems

SOLUTIONS & COMMERCIALIZATION

Legen

Green = Currently Available Purple = Prototype Built Blue = Lab Demonstrated

Entropy Quantum Computer

Dirac 1 & 2



\$1B TAM¹

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 TAM²

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 TAM²

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 fiberbased communication infrastructure and satellitebased networks

Q Remote Sensing



\$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 TAM⁴

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



Exhibit 8: Quantum Case Studies & Partnerships

ROBUST SET OF CASE STUDIES & PARTNERSHIPS



Objective: Vehicle sensor placement

Use quantum computing to optimize quantity and location of vehicle sensors

2,004 binary-encoded slack variables;

3,854 binary variables as qubits



EQC result provided a configuration of 15 sensors yielding 96% coverage of the

criticality spaces

6-minute quantum optimization run time





Objective: Remotely measure snowpacks

Use LiDAR to measure density, particle size, and depth

Results used to calculate how much water could be released when snow melts

Results:

In progress





Objective: Bank fraud detection

Demonstrate the use of entropy quantum computing for improving bank fraud detection techniques

Results:

QCi successfully demonstrated 4 separate quantum machine learning classification applications using Dirac-1 and Rabobank's fraud detection dataset





Objective: Drone flight trajectories

Develop flight paths that minimize risk & optimize flight time

As this problem size n grows linearly, the classical computational time complexity increases factorially making it impractical

Results:

Found solutions for problems as large as 11,000 variables

As the problem size n increased, the quantum time to solution increased on the order of only n³, less than factorially of classical computing





Objective: Detect and predict compromises to their IT environment

Utilized 4 months of anonymized network change requests and application error records with which QCi explored two approaches to detect changes in Progressive's IT systems using QCi's proprietary technology and methodology

Results:

Running a Quantum-based Support Vector Machine (QSVM) on Dirac-1™
heightened potential error protection by approximately 30 percent over other
classical computing methods currently used by Progressive





Objective: Using audio files to produce an emotional scoring capability

Process audio files and enable the emotional intelligence to directly process a new medium of voice, creating applications that will expand Al into useful business and personal consumer uses

Results:

In progress





Exhibit 9: Quantum Acquisition of QPhoton (announced May 24, 2022, closed June 16, 2022)

Quantum Computing Inc. Announces Agreement to Acquire QPhoton Delivering First Commercially Available, Ready-to-Run Full-Stack Quantum Solutions

QPhoton's Design for Affordable and Accessible QPS in Combination with QCI's Ready-to-Run Qatalyst Software Positions QCI as the Only Quantum Provider for Non-Quantum Experts

LEESBURG, VA. - May 24, 2022 - Quantum Computing Inc. ("QCI" or the "Company") (NASDAQ: QUBT), a leader in accessible quantum computing software, today announced that it has entered into a definitive agreement to acquire QPhoton, a quantum photonics innovation company that has developed a series of quantum photonic systems (QPS). The acquisition of QPhoton extends QCI's offerings to accelerate the accessibility of quantum computing, and other powerful technologies, into easily deployable solutions today, and advances QCI into a full-spectrum quantum software and hardware company.

QPhoton's QPS, including those for AI and optimization, operate at room temperature and maintain computational stability in a variety of application environments. These unique approaches eliminate the cost and complexity required by the hyper-cooled, tightly controlled environments required by other technology. QPhoton's QPS is designed to be easily deployed and used at a substantially reduced total cost of ownership relative to competing offerings, while providing substantial quantum advantages.

The QPS for optimization work effectively with QCI's Qatalyst™ software, which is designed to eliminate the need for complex quantum programming and runs seamlessly across a variety of quantum computers. This combination sets QCI on a path to delivering a broadly accessible and affordable solution that can be used by non-quantum experts, anywhere, for real-world industry applications.

QPhoton will be a wholly-owned subsidiary of QCI, and Dr. Huang is expected to join QCI as a director and officer. Under the definitive agreement, at the closing of the proposed transaction, QCI will issue to QPhoton's stockholders aggregate merger consideration consisting of: 5,802,206 shares of QCI's common stock, 2,377,028 shares of a new series of QCI's preferred stock, convertible into 23,770,280 shares of common stock (subject to receipt of the approval of QCI's stockholders), and warrants exercisable, at a purchase price of \$0.0001 per share, to purchase up to 7,028,337 shares of common stock (subject to receipt of the approval of QCI's stockholders). The merger consideration is subject to adjustment under certain circumstances, such that it will represent in total approximately 49% of the total capital stock of QCI outstanding immediately following the closing. The transaction is expected to close during the third or fourth quarter of 2022 and is subject to customary and other closing conditions, including QCI obtaining a final order from the Court of Chancery of the State of Delaware pursuant to Section 205 of the General Corporation Law of the State of Delaware.

Quantum Computing Inc. Closes Acquisition of QPhoton

- The combination of QPhoton QPS and QCI's Qatalyst software represents a major milestone in the quantum computing industry.
- The acquisition enables QCI to launch ready-to-run, full-stack quantum systems and extend its solutions in key markets such as supply chain and portfolio optimization, fraud detection, underwriting and government defense and security projects.
- The technology operates seamlessly alongside today's classical technology.

LEESBURG, VA. – June 16, 2022 – Quantum Computing Inc. ("QCI" or the "Company") (NASDAQ: QUBT) a leader in accessible quantum computing, today announced the successful completion of its previously announced merger agreement to acquire QPhoton, Inc., a quantum photonics innovation company that has developed a quantum photonic system (QPS). The closing of this transaction will enable QCI to deliver the first ready-to-run, broadly accessible and affordable full-stack QPS that can be used by non-quantum experts, anywhere, for real-world business applications. QCI expects to release initial quantum solutions leveraging QPhoton's QPS in Q4 2022.



Exhibit 10: Quantum's QPhoton

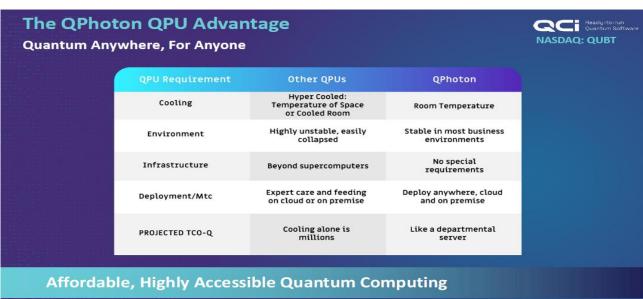








Exhibit 11: Q2 2023 and Recent Highlights

Quantum Computing Inc. initiates commercialization during first half of 2023 and commenced multiple product launches year-to-date, including:

- · Dirac Series Entropy Quantum computer.
- Zero-Trust Cyber Security Protection solution.
- Non-repeatable Quantum Random Number Generator.
- Reservoir Photonics computing (machine learning/predictive) Al enhancing.
- Quantum Sensing products including QLiDAR and the Photonic Vibrometer first to market to discern highly obscured and non-line-of-sight objects.

Source: Company reports.

Exhibit 12: Company Guidance (as of August 14, 2023)

Guidance:

• The Company has transitioned to commercializing applications through its various product lines, while seamlessly completing the integration of its QPhoton acquisition and greatly expanding the scope of its business. During the first half of 2023, the Company has released several products, secured initial testing contracts with Government agencies, and has engaged in a growing number of proof of concepts that it believes will potentially evolve into contracts in the coming months. The Company anticipates a gradual revenue increase during the remainder of the year, developing into heightened growth towards late 2023 and beyond as management expects to achieve positive results from several early testing engagements in addition to other initiatives the Company is pursuing in distribution partnerships as well as government grants.





Source: https://bigcharts.marketwatch.com/



FINANCIAL MODEL

Quantum Computing Income Statement (\$ mils)	Mar-21	lun 24	Sep-21	Dec-21	2021	Mar 22	lun 22	Sep-22	Doc 22	2022	Mar 22	Jun-23	Sep-23	Dec-23	2023	Mar 24	lun 24	Sep-24	Dog 24	2024
iscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
scar fear End: December 31	QIA	Q2A	QSA	Q4A	FT-A	QIA	Q2A	QSA	Q4A	FT-A	QIA	Q2A	Ų3E	Q4E	FI-E	QIE	Q2E	Q3E	Q4E	FI-E
Total Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.7	0.5	0.6	0.7	1.0	2.8
Cost of Revenues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.2	0.3	0.4	1.1
Gross Profit	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	(0.0)	0.1	0.1	0.1	0.1	0.2	0.4	0.3	0.4	0.4	0.6	1.7
Salaries	0.2	0.5	0.7	1.1	2.5	1.1	1.4	1.3	0.6	4.3	1.5	0.5	1.2	1.2	4.4	1.2	1.2	1.2	1.2	4.8
Consulting	0.3	0.2	0.3	0.2	1.1	0.4	0.3	0.3	0.4	1.3	0.2	0.2	0.2	0.2	0.8	0.3	0.3	0.3	0.3	1.2
Research & Development	0.6	0.6	0.6	0.8	2.6	1.0	0.9	1.3	1.4	4.6	1.5	1.6	1.6	1.6	6.3	1.6	1.6	1.6	1.6	6.4
Stock Based Compensation	2.0	2.5	2.6	2.3	9.4	3.1	0.3	1.3	13.1	17.8	2.0	1.9	1.9	1.9	7.7	1.9	1.9	1.9	1.9	7.6
Related Party Marketing					0.0	١				0.0		(0.0)			0.0					0.0
Selling General & Administrat	0.2	0.5	0.6	0.2	1.6	1.1	2.1	2.7	2.8	8.7	2.7	(0.3)	2.5	2.5	7.3	2.5	2.5	2.5	2.5	10.0
Restructuring and other		4.0	4.0	4.0	0.0		4.0	0.0	40.0	0.0	7.0	0.0	7.4	7.4	0.0	7.5	7.5	7.5	7.5	0.0
Total operating expenses	3.4	4.3	4.8	4.6	17.1	6.7	4.9	6.8	18.2	36.7	7.9	3.9	7.4	7.4	26.5	7.5	7.5	7.5	7.5	30.0
Operating income (loss)	(3.4)	(4.3)	(4.8)	(4.6)	(17.1)	(6.7)	(4.8)	(6.8)	(18.2)	(36.6)	(7.8)	(3.9)	(7.3)	(7.2)	(26.2)	(7.2)	(7.1)	(7.1)	(6.9)	(28.3)
Interest income (expense)	0.0	0.0	0.0	0.0	0.0	(0.4)	(0.3)	(0.7)	(0.6)	(2.0)	(0.7)	(0.8)	(0.1)	(0.1)	(1.7)	(0.1)	(0.1)	(0.1)	(0.1)	(0.4)
Other income (expense)		0.2		(11.0)	(10.8)	(,	()	(-)	(/	0.0	(,	()	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income before income taxes	(3.4)	(4.1)	(4.8)	(15.6)	(27.9)	(7.1)	(5.1)	(7.6)	(18.8)	(38.6)	(8.5)	(4.6)	(7.4)	(7.3)	(27.9)	(7.3)	(7.2)	(7.2)	(7.0)	(28.7)
Income taxes					0.0					0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income (loss)	(3.4)	(4.1)	(4.8)	(15.6)	(27.9)	(7.1)	(5.1)	(7.6)	(18.8)	(38.6)	(8.5)	(4.6)	(7.4)	(7.3)	(27.9)	(7.3)	(7.2)	(7.2)	(7.0)	(28.7)
Nonrecurring/noncash adjustme	nts				0.0					0.0					0.0					0.0
Net income (pro forma)	(3.4)	(4.1)	(4.8)	(15.6)	(27.9)	(7.1)	(5.1)	(7.6)	(18.8)	(38.6)	(8.5)	(4.6)	(7.4)	(7.3)	(27.9)	(7.3)	(7.2)	(7.2)	(7.0)	(28.7)
EBITDA	(1.2)	(1.9)	(1.8)	(2.1)	(6.9)	(3.7)	(4.6)	(5.7)	(8.7)	(22.6)	(3.7)	(3.7)	(7.1)	(7.1)	(21.7)	(7.0)	(7.0)	(6.9)	(6.7)	(27.7)
Shares, Basic	28.7	29.1	29.2	29.2	29.2	29.2	29.2	33.9	56.0	56.0	60.5	67.2	74.3	74.6	69.2	74.7	75.0	75.3	75.6	75.2
Shares, Diluted	28.7	29.1	29.2	29.2	29.2	29.2	29.2	33.9	56.0	56.0	60.5	67.2	74.3	74.6	69.2	74.7	75.0	75.3	75.6	75.2
EPS Basic (pro forma)	(\$0.12)	(\$0.14)	(\$0.16)	(\$0.54)	(\$0.96)	(\$0.24)	(\$0.17)	(\$0.22)	(\$0.34)	(\$0.69)	(\$0.14)	(\$0.07)	(\$0.10)	(\$0.10)	(\$0.40)	(\$0.10)	(\$0.10)	(\$0.10)	(\$0.09)	(\$0.38)
EPS Diluted (pro forma)	(\$0.12)	(\$0.14)	(\$0.16)	(\$0.54)	(\$0.96)	(\$0.24)	(\$0.17)	(\$0.22)	(\$0.34)	(\$0.69)	(\$0.14)	(\$0.07)	(\$0.10)	(\$0.10)	(\$0.40)	(\$0.10)	(\$0.10)	(\$0.10)	(\$0.09)	(\$0.38)
Margins																				
Gross margin						63%	92%	34%	-1406%	55%	53%	54%	50%	50%	51%	60%	60%	60%	60%	60%
Salaries																				
Consulting																				
Research and development																				
General and administrative																				
Operating margin																				
Tax rate, GAAP																				
Net margin																				
Y/Y % change																				
Total Revenue																				
Gross margin																				
Salaries	49%	279%	444%	383%	287%	355%	167%	98%	-49%	74%	30%	-61%	-8%	117%	1%	-17%	126%	0%	0%	9%
Consulting	298%	257%	6%	-81%	-36%	22%	12%	-2%	46%	19%	-39%	-28%	-38%	-48%	-39%	33%	64%	64%	64%	55%
Research and development	81%	69%		37%	68%	64%	50%	107%	82%	76%	50%	86%	26%	13%	39%	4%	1%	0%	0%	1%
General and administrative	72%	201%		-57%	-27%	371%	335%	335%	1100%	453%	135%	-116%	-8%	-10%	-16%	-6%		0%	0%	36%
Operating income (loss)	95%	372%	-45%	-23%	-1%	98%	11%	43%	294%	114%	16%	-20%	7%	-60%	-28%	-8%	85%	-3%	-5%	8%
Net income (loss)	386%	131%		47%	13%	110%	24%	58%	20%	38%	19%	-9%	-2%	-61%	-28%	-14%	56%	-3%	-5%	3%
EPS Diluted (pro forma)	31%	-32%	-76%	42%	8%	107%	24%	36%	-37%	-28%	-43%	-60%	-55%	-71%	-42%	-30%	40%	-4%	-6%	-5%
										1	1				I	1				

Source: Company reports and Ascendiant Capital Markets estimates.



Quantum Computing Inc.																
** *	Mar-21		•				•				•		Mar-24		•	
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Access																
Assets													(2.2)			
Cash and cash equivalents	13.8	12.6	10.4	16.7	11.5	6.7	10.4	5.3	6.8	7.2	5.4	(2.0)	(9.3)	(17.6)	(24.8)	(32.8)
Short term investments											0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable, net					0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Inventory											0.0	0.0	0.0	0.0	0.0	0.0
Deferred income taxes				0.5		0.4	0.0				0.0	0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other	0.3	0.2	0.6	<u>0.5</u>	1.7	0.4	0.3	0.3	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total current assets	14.1	12.9	11.0	17.2	13.2	7.3	10.8	5.6	7.1	8.0	6.1	(1.3)	(8.6)	(16.8)	(24.1)	(32.1)
Property and equipment, net	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.0	1.3	1.5	1.8	1.9	2.1	3.2	3.3	4.4
Intangibles, net						84.3	82.8	81.3	79.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
Deferred income tax											0.0	0.0	0.0	0.0	0.0	0.0
<u>Other</u>					0.0	0.1	1.4	1.4	1.3	1.2	1.0	1.0	1.0	1.0	1.0	1.0
Total assets	14.1	12.9	11.1	17.3	13.3	91.9	95.3	89.3	89.5	88.6	86.8	79.6	72.4	65.2	58.1	51.2
Liabilities and stockholders' equity																
Accounts payable	0.2	0.6	0.5	0.5	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Accrued expenses	0.2	0.0	0.3	0.5	0.0	0.3	0.5	3.6	1.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Deferred revenue	0.1	0.2	0.5	0.5	0.0	0.5	0.7	5.0	1.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred income tax											0.0	0.0	0.0	0.0	0.0	0.0
Warrant liabilities											0.0	0.0	0.0	0.0	0.0	0.0
Other		0.0	0.0	0.1	0.2	0.2	1.5	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Short term debt	0.2	0.0	0.0	0.1	0.2	0.2	0.5	0.5	8.3	6.5	5.0	5.0	5.0	5.0	5.0	5.0
Total current liabilities	0.6	0.8	0.8	1.1	1.0	1.3	3.6	6.5	12.6	11.7	10.2	10.2	10.2	10.2	10.2	10.2
Deferred income taxes											0.0	0.0	0.0	0.0	0.0	0.0
Warrant liabilities											0.0	0.0	0.0	0.0	0.0	0.0
Other long term liabilities							0.0	0.2	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Deferred revenue											0.0	0.0	0.0	0.0	0.0	0.0
Long term debt							<u>7.5</u>	<u>7.6</u>	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total other liabilities	0.0	0.0	0.0	0.0	0.0	0.0	7.5	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preferred stock				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6
Additional paid-in capital	70.4	73.1	76.1	97.6	100.8	184.2	185.4	194.9	205.4	210.0	210.0	210.0	210.0	210.0	210.0	210.0
Retained earnings	(56.9)	(61.0)	(65.8)	(81.4)	(88.5)	(93.6)	(101.2)	(120.0)	(128.5)		(140.5)		l .		(169.6)	(176.6)
Accumulated other comprehensive in			` -/	` ′	/	, -,	, ,	/	,	,	0.0	0.0	0.0	0.0	0.0	0.0
<u>Other</u>	1										7.0	7.0	7.0	7.0	7.0	7.0
Total stockholders' equity	13.5	12.1	10.3	16.2	12.3	90.6	84.2	74.9	76.9	76.9	76.6	69.4	62.2	55.0	47.9	41.0
Total etockholdere' equity and liabil	14.1	12.9	11.1	17.3	13.3	91.9	95.3	89.3	89.527	88.6	86.8	79.6	72.4	65.2	58.1	51.2
Total stockholders' equity and liabil	14.1	12.9	11.1	17.3	13.3	91.9	30.3	05.3	09.027	00.0	00.0	19.0	12.4	05.2	JO. I	31.2

Balance Sheet Drivers

Dalance Sheet Drivers																
	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev																
Accounts payable as % of total rev																
Accrued expenses as % of total rev																
Activity Ratios																
A/R Days Sales Outstanding																
Book & Cash Value (per share)																
Book Value per Share (diluted)	\$0.47	\$0.42	\$0.35	\$0.56	\$0.42	\$3.10	\$2.48	\$1.34	\$1.27	\$1.14	\$1.03	\$0.93	\$0.83	\$0.73	\$0.64	\$0.54
Cash per Share (diluted)	\$0.48	\$0.43	\$0.36	\$0.57	\$0.39	\$0.23	\$0.31	\$0.09	\$0.11	\$0.11	\$0.07	-\$0.03	-\$0.12	-\$0.23	-\$0.33	-\$0.43
Net cash per Share (diluted)	\$0.47	\$0.43	\$0.36	\$0.57	\$0.39	\$0.23	\$0.07	-\$0.05	-\$0.03	\$0.01	\$0.01	-\$0.09	-\$0.19	-\$0.30	-\$0.40	-\$0.50

Source: Company reports and Ascendiant Capital Markets estimates



Quantum Computing Inc.

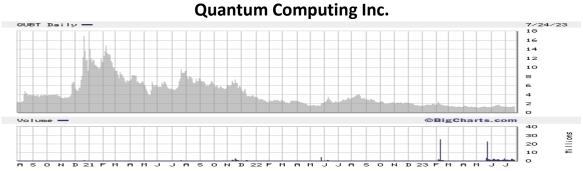
**			Sep-21			Mar-22		•		2022			Sep-23		2023		Jun-24	-		
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-
Cash flow from operating activit	ioc																			
Net income	(3.4)	(4.1)	(4.8)	(15.6)	(27.9)	(7.1)	(5.1)	(7.6)	(18.8)	(38.6)	(8.5)	(4.6)	(7.4)	(7.3)	(27.9)	(7.3)	(7.2)	(7.2)	(7.0)	(28.
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.
Amortization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	3.2	1.5	(1.7)	0.1	0.1	(0.2)	0.1	0.1	0.1	0.1	0
Debt related amortization expens					0.0		0.2	1.5	0.1	0.1	0.1	0.1								0
Stock comp	2.2	2.5	3.0	2.5	10.2	3.0	0.2	1.2	9.5	13.9	4.0	0.1	0.1	0.1	0.2 4.3	0.1	0.1	0.1	0.1	
•	2.2	2.5	3.0	2.5	0.0	3.0	0.2	1.2	9.5		4.0	0.1	0.0	- 1		0.1	0.0	0.0	0.0	
Deferred income taxes				40.7						0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	1 1
Change in fair value of warrant li	ability			10.7	10.7					0.0					0.0					
Writedowns and impairments					0.0					0.0					0.0					0
Other gains/losses					0.0					0.0					0.0					0
Other				0.0	0.0	0.1	(0.1)	(0.0)	0.0	0.0					0.0					0
Changes in operating assets and li	abilities:																			
Accounts receivable					0.0	(0.0)	(0.1)	(0.0)	0.1	(0.0)	(0.1)	(0.1)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	(
Inventory					0.0					0.0					0.0					(
Prepaid expenses & other curre	(0.3)	0.1	(0.4)	0.1	(0.4)	0.0	0.0	0.1	0.1	0.3	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(
Income tax					0.0					0.0					0.0					(
Other assets					0.0					0.0			0.2	0.0	0.2	0.0	0.0	0.0	0.0	(
Accounts payable	(0.1)	0.3	(0.1)	0.0	0.1	0.3	(0.0)	0.1	(0.2)	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	(
Accrued expenses	0.0	0.1	0.1	0.3	0.5	(0.5)	0.3	0.4	3.0	3.2	(1.9)	0.9	0.0	0.0	(0.9)	0.0	0.0	0.0	0.0	(
Deferred revenue					0.0					0.0					0.0					0
Other liabilities					0.0		0.1	1.3	(1.4)	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Net cash (used in) provided by	(1.5)	(1.2)	(2.2)	(1.9)	(6.8)	(4.2)	(4.4)	(3.0)	(6.0)	(17.6)	(4.7)	(5.1)	(6.9)	(7.2)	(23.9)	(7.1)	(7.1)	(7.0)	(6.8)	(28
Cash flow from investing activiti	ies																			
Purchases of property and equil	(0.0)		(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.2)	(0.6)	(0.9)	(0.4)	(0.2)	(0.4)	(0.2)	(1.2)	(0.2)	(1.2)	(0.2)	(1.2)	(2
Purchases of short-term investm	ents				0.0					0.0					0.0					0
Acquisitions					0.0		(84.6)	0.0	83.2	(1.4)					0.0					0
<u>Other</u>		(0.0)		(0.0)	(0.0)	(1.2)	<u>1.1</u>	(1.3)	1.4	(0.0)		(0.5)			(0.5)					<u>C</u>
Net cash used in investing activ	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.2)	(83.6)	(1.4)	84.0	(2.2)	(0.4)	(0.7)	(0.4)	(0.2)	(1.7)	(0.2)	(1.2)	(0.2)	(1.2)	(2
Cash flow from financing activiti	ioc																			
Issuance of debt	103				0.0			8.0	(0.0)	8.0			(1.5)	0.0	(1.5)	0.0	0.0	0.0	0.0	
Repayment of debt		(0.2)		0.0	(0.2)			6.0	0.0	0.0		(1.9)	(1.5)	0.0	(1.9)	0.0	0.0	0.0	0.0	
	0.1		(0.0)			0.2	0.4						0.0				0.0	0.0	0.0	1 -
Issuance of stock		0.3	(0.0)	8.3	8.6	0.2	0.1		(0.0)	0.3	6.6	8.1	0.0	0.0	14.7	0.0	0.0	0.0	0.0	0
Proceeds from stock option exer	rcises				0.0					0.0					0.0					0
Other					0.0		83.1	0.0	(83.1)	0.0			7.0		7.0					0
Cash provided by (used in) fina	0.1	0.0	(0.0)	8.3	8.4	0.2	83.2	8.0	(83.1)	8.4	6.6	6.2	5.5	0.0	18.3	0.0	0.0	0.0	0.0	0
Effect of exchange rate on cash					0.0					0.0					0.0					0
Net increase (decrease) in cash	(1.4)	(1.1)	(2.2)	6.3	1.5	(5.2)	(4.8)	3.6	(5.1)	(11.4)	1.5	0.4	(1.8)	(7.4)	(7.3)	(7.3)	(8.2)	(7.2)	(8.0)	(30
Beginning cash and equivalents	15.2	13.8	12.6	10.4	15.2	16.7	11.5	6.7	10.4	16.7	5.3	6.8	7.2	5.4	5.3	(2.0)	(9.3)	(17.6)	(24.8)	1,
Ending cash and equivalents	13.8	12.6	10.4	16.7	16.7	11.5	6.7	10.4	5.3	5.3	6.8	7.2	5.4	(2.0)	(2.0)	(9.3)	(17.6)	(24.8)	(32.8)	

Source: Company reports and Ascendiant Capital Markets estimates



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Source: https://bigcharts.marketwatch.com/

	Report Date		Price
Report	Date	Rating	Target
1	11/1/2021	Buy	11.00
2	11/14/2021	Buy	11.50
3	3/16/2022	Buy	10.00
4	6/4/2022	Buy	9.00
5	8/22/2022	Buy	9.50
6	11/16/2022	Buy	9.00
7	4/4/2023	Buy	9.25
8	5/19/2023	Buy	9.50

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Total return is defined as price appreciation plus dividend yield.

Ascendiant Capital Markets, LLC Distribution of Investment Ratings (as of July 14, 2023)

Investment Banking Services
Past 12 months

			1 031 1	.2 1110111113
Rating	Count	Percent	Count	Percent
Buy	51	98%	16	31%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	52	100%	16	31%

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