

Quantum Computing Inc.

Q1 reports initial revenue. We expect major acquisition of QPhoton and strong growth over the next year to be positive for stock. Lowering P/T to \$9.

COMPANY UPDATE

Rating: BUY

Ticker: QUBT

Price: \$2.51

Target: \$9.00 (from \$10.00)

Q1 initial revenue: Quantum recently (on May 23) reported its fiscal Q1 2022 (ending March) results. The company reported initial revenue of 0.03 million. EPS was 0.24, compared to our estimate of 0.16. 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 and has finally reported initial revenue. The company, having recently launched several of its initial products, is currently focusing on sales and marketing of its products. We believe investors should be focused on its commercialization of its software, which we believe within the next year, the company should grow revenue quickly.

Lowering estimates: We are lowering our 2022 estimates for revenue \$1.0 million, from \$1.5 million, and for EPS to\$(0.73) from \$(0.59). Our estimates do not reflect its pending acquisition.

To acquire QPhoton: In May, the company announced that it will be acquiring QPhoton, Inc. QPhoton is a privately held company that is a leading innovator in the quantum photonic technology space. Merger consideration will be paid in stock (~37 million shares). The deal is expected to close in 2H 2022.

Investment in QPhoton: In February, the company announced a marketing agreement with QPhoton, to merge QCI's quantum software solution, Qatalyst, with QPhoton's advanced photonic quantum technologies for its application to QCI-specific solutions. As part of this agreement, Quantum will invest \$2.5 million in QPhoton.

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.

Balance sheet: In Q4, the company raised \$8.5 million selling preferred stock. We believe the company has enough cash into 2023.

Positive high risks versus rewards: Overall, concerns outweighed by growth prospects and valuation. 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 \$10, 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 an early-stage software development company focused on classical and quantum software for complex optimization computations.

United States Technology

June 4, 2022

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Stock Data

Exchange:	NasdaqCM
52-week Range:	1.42 - 10.43
Shares Outstanding (million):	29
Market cap (\$million):	\$73
EV (\$million):	\$61
Debt (\$million):	\$0
Cash (\$million):	\$12
Avg. Daily Trading Vol. (\$million):	\$1
Float (million shares):	24
Short Interest (million shares):	0.3
Dividend, annual (yield):	\$0 (NA%)

Revenues (US\$ million)

	<u>2022E</u>	<u>2022E</u>	2023E	<u>2023</u> E
	<u>(Cur.)</u>	(Old)	<u>(Cur.)</u>	(Old
Q1 Mar	0.0A	0.0E	1.0E	
Q2 Jun	0.1E	0.2E	1.5E	
Q3 Sep	0.2E	0.4E	1.5E	
Q4 Dec	<u>0.7E</u>	<u>0.9E</u>	2.0E	
Total	1.0E	1.5E	6.0E	
EV/Revs	61x		10x	

Earnings per Share (pro forma)

	2022E	2022E	2023E	2023E
	(Cur.)	(Old)	(Cur.)	<u>(Old)</u>
Q1 Mar	(0.24)A	(0.16)E	(0.16)E	(0.13)E
Q2 Jun	(0.19)E	(0.15)E	(0.16)E	(0.13)E
Q3 Sep	(0.15)E		(0.16)E	(0.12)E
Q4 Dec	(0.14)E		(0.14)E	(0.12)E
Total	(0.73)E	(0.59)E	(0.63)E	(0.50)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 13.



Exhibit 1: Quantum Computing Inc. Overview



Key Takeaways



Breakthrough Technology

Quantum-enabled software that delivers business value *today*. Qatalyst can solve some of the most important and complex computing problems at record speed.

World Class Team

We have assembled a team of subject matter experts with decades of success in quantum computing, supercomputing, pharma, fintech, manufacturing and security.



Large Addressable Market

High-Growth Opportunity: 56% CAGR to \$65 billion by 2030. Diverse applications across multiple industries: finance, national defense, industry, healthcare and more.

Performance Revenue Model

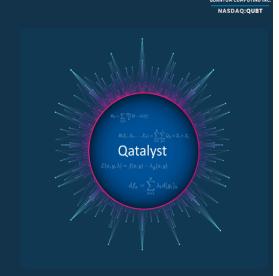
Opportunities for strategic partnerships with major enterprise, government agencies, and national labs to produce real-world performance advantages.



Exhibit 2: Quantum Computing Investment Highlights

Who We Are

- Only public pure-play quantum software company in the highgrowth, multi-billion-dollar quantum computing space.
- Innovative delivery of quantum-powered optimization solutions for the enterprise.
- We apply quantum techniques to classical computing today to better solve high-value enterprise computational problems, with a seamless bridge to quantum computing.
- We deliver solutions with unmatched speed and quality of results using quantum techniques — and not someday, but today.
- Highly experienced and accomplished management team: industry pioneers from Cray, Silicon Graphics, D-Wave, and other major IT firms.
- Our flagship quantum software accelerator, Qatalyst™, recently launched as a software-as-a-service (SaaS) on Amazon Web Services (AWS) and Amazon Braket.



Our flagship software solution, **Qatalyst**, is the industry's only quantum application accelerator, empowering today's Subject Matter Experts (SMEs) to immediately leverage the power of quantum techniques for faster, better, and more diverse business decisions - with no need for quantum expertise or training.

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

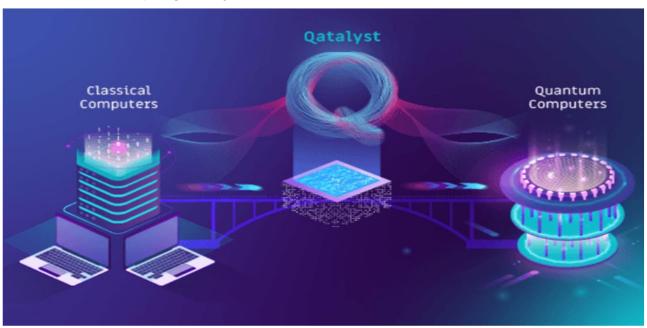
- Quantum processors are still in their infancy.
- Cannot scale to process the large volumes of data and variables created by today real-world problems
- No standard quantum computer architecture.
- Proprietary, unique low-level code required for each vendor

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 Qatalyst Software Solutions



What is Qatalyst? NASDAO:OUBT • Quantum-ready constrained optimization software for classic & Quantum-ready techniques applied to classic computing enhances the quality and performance of classical computations Returns a diversity of excellent results faster for better decisions · SME driven, no quantum expertise required SMEs, workflows and applications submit familiar programs **Oatalyst** Qatalyst does the rest via six simple API calls SMEs empowered right now vs being left behind No hardware lock-in; Use the best QPU for the problem Immediately access the power of quantum across diverse QPU vendors, in No need for low-level coding, no on-premise requirements. Submit the same program on CPUs or QPUs using the same Qatalyst APIs Qatalyst controls and adjusts to the hardware; no need for low level programming or reprogramming when changing QPUs Ready-for-Results Quantum Software



Exhibit 5: Quantum's Market Opportunity





Exhibit 6: Qatalyst Market Opportunities

QCI Market Opportunities Markets QCI is Addressing Today Transportation/Logistics Retail Ecommerce shift changes entire retail Airlines/Cargo routing, crew scheduling, supply chain (inbound and gate assignments distribution logistics), demanding Ground transportation routing per complex optimizations. traffic & emergency scenarios. Supply chain routing & logistics **Government & Security** Manufacturing Improved disaster response, Raw Materials optimization and faster detection of fraud and bad planning, discrete manufacturing actors, stronger cyber security and line optimization.,, national security, intercept-proof communications (\$) **Material Sciences & Pharma** Finance & Investment Improved chemistry simulations for Faster and better portfolio discovering novel materials. optimization, risk modeling, and Fast drug discovery, better clinical trial design, molecular modeling. derivatives creation.

Qatalyst Near-term Addressable Markets – Examples



Application	Markets		Addressable Market Size
Supply Chain & Logistics Optimization	Retail Aerospace Chemical/Materials Utilities Manufacturing		\$22 Billion+ 1
Transportation Optimization	Airlines Delivery		\$5 Billion+ ²
Community Detection	Cyber Security Biotech Government		\$156 Billion+ ³
Other potential revenue sources: • Government or Commercial R&D contracts	To	otal	\$157 Billion+
Consulting		Typical 6	Pross Margins of 60% - 70%



Exhibit 7: Qatalyst Applications Examples

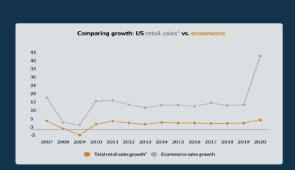
Example QC Application Retail Supply Chain Optimization

QQ I

Ecommerce shift complicates everything.

Covid accelerated that shift.

- Shopping baskets. From single basket with lots of items to many baskets with few items.
- Supply Chain availability. Shifting demand and Covid lockdowns/delays mean raw materials and product availability is a dynamic and ever-changing target.
- Consumer expectations. Customers expect unlimited product selection and availability at the lowest price. The emerging differentiator is becoming delivery time.
 - As many as 96% of customers consider faster delivery synonymous with same-day delivery
 - In a study by McKinsey & Company, the primary aspect of customer service mentioned by customers? Delivery time.



Qatalyst Solves These Highly Complex Computations to Fuel Retail Markets

Example QC Application Transportation Optimization



- Increases in delivery demands drive more complex computations to optimize logistics.
- Uncertainty of availability of critical supply chain elements mean production is ever-changing. How to optimize delivery under these circumstances.
 - For example, how to deliver automobiles globally with confirmed schedules for production and delivery.
- Scale of transportation as Covid lockdowns are removed offer opportunity for better optimization as we reboot airlines, trains and infrastructure.





Example of Qatalyst Quantum-Ready Application

Community Detection Application



- Community detection is a broadly useful technique across domains for identifying similarities/.commonalities across diverse groups or profiles.(not just humans)
- Ready-to-run community detection is part of Qatalyst optimization.
- SMEs simply submit their graph problem, QGraph converts, Qatalyst Core solves and QGraph returns results in requested format.



Sales & Marketing

Social Network Analysis for accurate market segmentation and targeting.



Biotechnology

Improved epidemiology models for epidemics. Cohort segmentation and analysis for improved clinical trial design.



Government/Security

Improved anomaly detection for earlier detection of criminal activity, fraud and cyber bots.



Exhibit 8: Quantum to Acquire QPhoton (announced May 24, 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

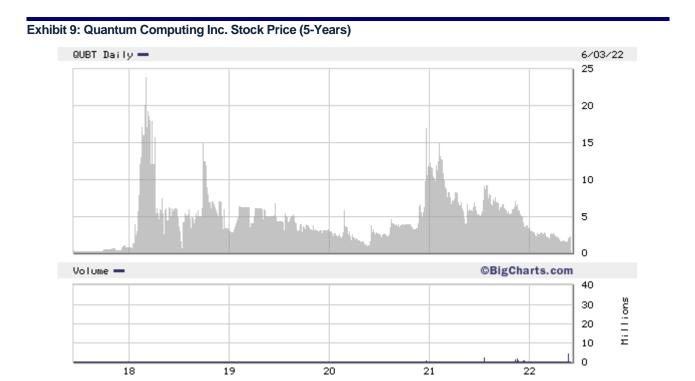
LEESBURG, VA. - May 24, 2022 - Quantum Computing Inc. ("QCI" or the "Company") (NASDAQ: QUBT), a leader in accessible quantum computing software, today announced that it has entered into a definitive agreement to acquire QPhoton, a quantum photonics innovation company that has developed a series of quantum 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.





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



FINANCIAL MODEL

Quantum Computing Inc.

Quantum Computing											_										_					
Income Statement (\$ mils)	2018		Jun-19			2019	Mar-20			Dec-20	2020		Jun-21			2021	Mar-22					Mar-23				2023
Fiscal Year End: December 31	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2E	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Total Revenue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.10	0.20	0.67	1.00	1.00	1.00	1.00	2.00	5.00
Cost of Revenues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.10	0.34	0.50	0.50	0.50	0.50	1.00	2.50
Gross Profit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.10	0.34	0.50	0.50	0.50	0.50	1.00	2.50
Salaries	0.52	0.12	0.12	0.12	0.14	0.50	0.16	0.13	0.12	0.22	0.64	0.25	0.51	0.66	1.08	2.49	1.12	1.12	0.55	0.55	3.33	0.60	0.60	1.00	1.00	3.20
Consulting	0.32	0.08	0.09	0.08	0.12	0.36	0.08	0.06	0.28	1.26	1.68	0.30	0.23	0.30	0.24	1.08	0.37	0.37	0.37	0.37	1.48	0.30	0.30	0.30	0.30	1.20
Research & Development	0.25	0.15	0.15	0.26	0.34	0.89	0.34	0.34	0.29	0.57	1.54	0.63	0.57	0.61	0.78	2.59	1.02	1.02	0.65	0.65	3.35	1.00	1.00	0.65	0.65	3.30
Stock Based Compensation	4.18	0.07	1.49	(1.34)	0.00	0.21	1.01	0.23	6.56 0.10	3.38 0.04	11.18 0.14	1.98	2.55	2.58	2.29	9.40	3.08	2.10	2.10	2.10	9.38	2.50	2.50	2.50	2.50	10.00
Related Party Marketing Selling General & Administrat	0.52	0.17	0.15	0.10	0.17	0.00	0.14	0.16	1.32	0.04		0.24	0.48	0.63	0.23		1 14	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	4.00
Restructuring and other	0.52	0.17	0.15	0.10	0.17	0.59	0.14	0.16	1.32	0.54	2.16 0.00	0.24	0.46	0.63	0.23	1.58	1.14	1.00	1.00	1.00	4.14 0.00	1.00	1.00	1.00	1.00	0.00
Total operating expenses	5.80	0.58	1.98	(0.78)	0.77	2.55	1.74	0.92	8.68	6.01	17.34	3.39	4.33	4.78	4.63	17.13	6.73	5.61	4.67	4.67	21.68	5.40	5.40	5.45	5.45	21.70
Operating income (loss)	(5.80)	(0.58)	(1.98)	0.78	(0.77)	(2.55)	(1.74)	(0.92)	(8.68)	(6.01)	(17.34)	(3.39)	(4.33)	(4.78)	(4.63)	(17.13)	(6.71)	(5.56)	(4.57)	(4.34)	(21.18)	(4.90)	(4.90)	(4.95)	(4.45)	(19.20)
Interest income (expense)	(4.08)	(0.05)	(0.05)	(0.01)	(5.72)	(5.83)	(0.13)	(1.62)	(2.98)	(3.11)	(7.83)	0.00	0.00	0.00	0.00	0.01	(0.42)	0.00	0.00	0.00	(0.42)	0.00	0.00	0.00	0.00	0.00
Other income (expense)	(0.63)	(5.55)	(0.00)	(5.5.)	()	0.00	1.17	0.75	(=:00)	(1.48)	0.44		0.22		(10.99)	(10.78)	(51.12)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income before income taxes	(10.51)	(0.64)	(2.03)	0.77	(6.48)	(8.38)	(0.70)	(1.78)	(11.66)	(10.60)	(24.73)	(3.39)	(4.11)	(4.78)	(15.62)	(27.90)	(7.13)	(5.56)	(4.57)	(4.34)	(21.60)	(4.90)	(4.90)	(4.95)	(4.45)	(19.20)
Income taxes						0.00					0.00	, ,				0.00	, ,	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net income (loss)	(10.51)	(0.64)	(2.03)	0.77	(6.48)	(8.38)	(0.70)	(1.78)	(11.66)	(10.60)	(24.73)	(3.39)	(4.11)	(4.78)	(15.62)	(27.90)	(7.13)	(5.56)	(4.57)	(4.34)	(21.60)	(4.90)	(4.90)	(4.95)	(4.45)	(19.20)
Nonrecurring/noncash adjustme Net income (pro forma)	nts (10.51)	(0.64)	(2.03)	0.77	(6.48)	0.00 (8.38)	(0.70)	(1.78)	(11.66)	(10.60)	0.00 (24.73)	(3.39)	(4.11)	(4.78)	(15.62)	0.00 (27.90)	(7.13)	(5.56)	(4.57)	(4.34)	<u>0.00</u> (21.60)	(4.90)	(4.90)	(4.95)	(4.45)	0.00 (19.20)
EBITDA	(1.77)	(0.51)	(0.50)	(0.56)	(0.76)	(2.33)	(0.72)	(2.02)	(0.79)	(2.63)	(6.16)	(1.16)	(1.86)	(1.79)	(2.10)	(6.92)	(3.72)	(2.57)	(1.58)	(1.35)	(9.22)	(1.91)	(1.91)	(1.96)	(1.46)	(7.25)
Shares, Basic Shares, Diluted	4.7 4.7	4.7 4.7	5.3 5.3	7.4 7.4	7.4 7.4	7.4 7.4	7.8 7.8	8.6 8.6	17.2 17.2	28.0 28.0	28.0 28.0	28.7 28.7	29.1 29.1	29.2 29.2	29.2 29.2	29.2 29.2	29.2 29.2	29.4 29.4	29.7 29.7	30.0 30.0	29.5 29.5	30.3 30.3	30.6 30.6	30.9 30.9	31.2 31.2	30.7 30.7
EPS Basic (pro forma) EPS Diluted (pro forma)	(\$2.22) (\$2.22)	(\$0.13) (\$0.13)	(\$0.38) (\$0.38)	\$0.10 \$0.10	(\$0.88) (\$0.88)	(\$1.14) (\$1.14)	**	(\$0.21) (\$0.21)	(\$0.68) (\$0.68)	(\$0.38) (\$0.38)	(\$0.88) (\$0.88)				(\$0.54) (\$0.54)		**	(\$0.19) (\$0.19)			(\$0.73) (\$0.73)	(\$0.16) (\$0.16)		(\$0.16) (\$0.16)	* .	(\$0.63) (\$0.63)
Margins Gross margin Salaries Consulting Research and development																		50%	50%	50%	50%	50%	50%	50%	50%	50%
General and administrative Operating margin Tax rate, GAAP Net margin																										
Y/Y % change Total Revenue Gross margin Salaries						-5%	43%	15%	1%	55%	30%	49%	279%	444%	383%	287%	355%	120%	-16%	-49%	34%	-46%	-46%	82%	82%	-4%
Consulting Research and development General and administrative						12% 256% 12%	-1% 128% -16%	-26% 131% 8%	251% 12% 1197%	985% 69% 219%	366% 73% 269%	298% 81% 72%	257% 69% 201%	6% 114% -53%	-81% 37% -57%	-36% 68% -27%	22% 64% 371%	62% 81% 109%	23% 6% 60%	52% -17% 331%	38% 30% 162%	-19% -2% -12%	-19% -2% 0%	-19% 0% 0%	-19% 0% 0%	-19% -1% -3%
Operating income (loss) Net income (loss) EPS Diluted (pro forma)						-56% -20% -49%	198% 10% -33%	-54% -13% -46%	-1206% -1613% -748%	685% 64% -57%	581% 195% -22%	95% 386% 31%	372% 131% -32%	-45% -59% -76%	-23% 47% 42%	-1% 13% 8%	98% 110% 107%	28% 35% 34%	-4% -4% -6%	-6% -72% -73%	24% -23% -24%	-27% -31% -34%	-12% -12% -15%	8% 8% 4%	3% 3% -1%	-9% -11% -15%

Source: Company reports and Ascendiant Capital Markets estimates.



Quantum Computing Inc.

Balance Sheet (\$ mils)	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21				Mar-22		Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	
Fiscal Year End: December 31	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Assets																					
Cash and cash equivalents	1.77	1.33	0.81	0.31	0.10	0.20	0.50	3.98	15.20	13.77	12.63	10.43	16.74	11.51	8.96	7.38	6.03	4.11	2.19	0.22	(1.2
Short term investments															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Accounts receivable, net														0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Inventory															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Deferred income taxes															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Prepaid expenses and other	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.04	0.29	0.24	0.61	0.50	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.7
Total current assets	1.79	1.35	0.82	0.32	0.12	0.21	0.51	3.98	15.24	14.06	12.87	11.05	17.24	13.25	10.67	9.09	7.74	5.82	3.90	1.93	0.4
Property and equipment, net	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.0
Intangibles, net															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Deferred income tax															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other														0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0
Total assets	1.80	1.35	0.82	0.33	0.15	0.24	0.53	4.01	15.27	14.09	12.90	11.08	17.28	13.30	10.73	9.14	7.79	5.88	3.96	2.00	0.5
Liabilities and stockholders' equity																					
Accounts payable	0.05	0.11	0.10	0.16	0.22	0.21	0.29	0.17	0.37	0.25	0.59	0.46	0.46	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.
Accrued expenses	0.09	0.16	0.21	0.10	0.15	0.21	0.29	0.26	0.11	0.13	0.19	0.30	0.48	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0
Deferred revenue															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Deferred income tax															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Warrant liabilities					0.98	0.48	0.92	1.15							0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other		0.00									0.03	0.02	0.14	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.2
Short term debt	3.17	3.17	3.12	1.11	1.61	1.55	2.03	1.81	0.22	0.22					0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total current liabilities	3.31	3.44	3.43	1.37	2.96	2.45	3.52	3.39	0.69	0.60	0.80	0.78	1.08	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.0
Deferred income taxes															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Warrant liabilities															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other long term liabilities															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Deferred revenue															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Long term debt															0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total other liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Preferred stock													0.00	0.00							
Common stock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	5.97	8.96	11.94	14.93	17.92	20.9
Additional paid-in capital	18.86	18.93	20.44	21.24	25.95	27.25	28.24	43.51	68.07	70.37	73.09	76.07	97.59	100.79	100.79	100.79	100.79	100.79	100.79	100.79	100.7
Retained earnings	(20.38)	(21.02)	(23.05)	(22.28)	(28.76)	(29.46)	(31.24)	(42.90)	(53.50)	(56.89)	(61.00)	(65.77)	(81.39)	(88.53)	(94.09)	(98.66)	(103.00)	(107.90)	,	(117.75)	
Accumulated other comprehensive in	comé														0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other	(4.50)	(2.00)	(2.64)	(4.04)	(2.04)	(2.20)	(2.00)	0.62	44.57	12.40	12.10	10.20	46.20	12.27	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total stockholders' equity	(1.52)	(2.08)	(2.61)	(1.04)	(2.81)	(2.20)	(2.99)	0.62	14.57	13.49	12.10	10.30	16.20	12.27	9.69	8.10	6.75	4.84	2.92	0.96	(0.5
Total stockholders' equity and liabil	i 1.80	1.35	0.82	0.33	0.15	0.24	0.53	4.01	15.27	14.09	12.90	11.08	17.28	13.30	10.73	9.14	7.79	5.88	3.96	2.00	0.5

Balance	e Sheet	Drivers

Dalance Sheet Drivers																					
	Dec-18	Mar-19	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev																					
Accounts payable as % of total rev																		i			
Accrued expenses as % of total rev																		<u> </u>			
Activity Ratios																					
A/R Days Sales Outstanding																					
Book & Cash Value (per share)																					
Book Value per Share (diluted)	-\$0.32	-\$0.44	-\$0.49	-\$0.14	-\$0.38	-\$0.28	-\$0.35	\$0.04	\$0.52	\$0.47	\$0.42	\$0.35	\$0.56	\$0.42	\$0.33	\$0.27	\$0.23	\$0.16	\$0.10	\$0.03	-\$0.02
Cash per Share (diluted)	\$0.37	\$0.28	\$0.15	\$0.04	\$0.01	\$0.03	\$0.06	\$0.23	\$0.54	\$0.48	\$0.43	\$0.36	\$0.57	\$0.39	\$0.31	\$0.25	\$0.20	\$0.14	\$0.07	\$0.01	-\$0.04
Net cash per Share (diluted)	-\$0.30	-\$0.39	-\$0.44	-\$0.11	-\$0.20	-\$0.17	-\$0.18	\$0.13	\$0.53	\$0.47	\$0.43	\$0.36	\$0.57	\$0.39	\$0.31	\$0.25	\$0.20	\$0.14	\$0.07	\$0.01	-\$0.04

Source: Company reports and Ascendiant Capital Markets estimates



Quantum Computing Inc.
Cash Flow Statement (\$ mils)
Fiscal Year End: December 31 2018 Mar-19 Jun-19 Sep-19 Dec-19 FY-A Q1A Q2A Q3A Q4A
 2020
 Mar-21
 Jun-21
 Sep-21
 Dec-21
 2021
 Mar-22
 Jun-22
 Sep-22
 Dec-22
 2022

 FY-A
 Q1A
 Q2A
 Q3A
 Q4A
 FY-A
 Q1A
 Q2E
 Q3E
 Q4E
 FY-E
 2019 FY-A Mar-20 Jun-20 Sep-20 Dec-20 Q1A Q2A Q3A Q4A Mar-23 Jun-23 Sep-23 Dec-23 2023 Q1E Q2E Q3E Q4E FY-E Cash flow from operating activit 0.77 Net income
Depreciation
Amortization
Debt related amortization exper
Stock comp
Deferred income taxes
Change in fair value of warrant
Wittedsware and inspirements 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.01 0.01 3.38 2.53 0.20 11.94 0.00 11.94 0.00 0.87 4.00 5.69 5.69 (0.64)0.58 1.12 1.93 10.72 10.72 0.00 0.00 Writedowns and impairments 0.00 0.00 0.00 0.00 Other gains/losses Other 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.02 0.02 0.08 0.08 Other
Changes in operating assets and if
Accounts receivable
Inventory
Prepaid expenses & other curre
Income tax
Other assets
Accounts payable 0.00 (0.03) 0.03 0.00 0.00 (0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.01 0.00 Accounts payable 0.33 0.05 0.05 0.06 0.20 0.15 0.01 0.10 0.00 0.00 0.00 0.33 0.00 0.00 0.00 0.00 0.00 Accrued expenses 0.09 0.07 0.05 (0.10) 0.05 0.06 0.06 0.07 (0.03) 0.03 0.05 0.11 0.30 0.49 (0.47) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Deferred revenue 0.00 0.00 0.00 0.00 0.00 Other liabilities 0.00 0.00 0.00 0.00 (4.19) (2.55) (1.58) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Net cash (used in) provided by (0.27) (2.14) (1.51) (1.17) (2.19) (1.9 (1.91) (1.91) (1.96) (0.43) (0.50) (0.61) Cash flow from investing activitie Purchases of property and equil Purchases of short-term investme Acquisitions (0.01) (0.01 (0.00) (0.00) (0.00) (0.0 (0.00) (0.00) (0.00) (0.00 (0.00) (0.01) (0.00) (0.01 0.00 Other 0.00 0.00 0.00 Net cash used in investing active (0.01 0.00 0.00 (0.01) (0.01 (0.00) 0.00 0.00 (0.00) (0.00) (0.00) (0.03 (1.24) (0.00) (0.00) (0.00 (1.2 (0.00) (0.01) (0.00) (0.01 Cash flow from financing activ Issuance of debt 3.07 0.04 0.02 0.22 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Repayment of debt (0.03) (2.04) 0.50 0.32 0.00 0.00 0.00 Issuance of stock 1.06 2.16 0.43 1.95 6.74 18.91 28.04 0.08 0.25 (0.00) 8.28 8.61 0.21 0.00 0.00 0.00 0.21 0.00 0.00 0.00 0.00 0.00 Proceeds from stock option e 0.00 0.00 Other 0.00 0.00 Cash provided by (used in) fin 0.00 (0.03) 0.13 0.60 26.65 8.39 0.21 0.00 Effect of exchange rate on cash 0.00 0.00 1.54 (5.23) (2.55) 15.20 16.74 11.51 16.74 11.51 8.96 Net increase (decrease) in cash Beginning cash and equivalents Ending cash and equivalents (0.50) 0.81 0.31 (1.43) 15.20 13.77 (1.14) (2.19) 6.31 13.77 12.63 10.43 12.63 10.43 16.74 (1.59) (1.35) 8.96 7.38 7.38 6.03 (1.93) (1.96) (1.48) 4.11 2.19 0.22 2.19 0.22 (1.25) (<mark>0.43)</mark> 1.77 1.33 (0.53) 1.33 0.81 (<mark>0.21</mark> 0.31 (7.28) 6.03



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Quantum Computing Inc.

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BUY: We expect the stock to provide a total return of 15% or more within a 12-month period.

HOLD: We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

SELL: We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

Ascendiant Capital Markets, LLC Rating System

Prior to January 31, 2014, ASCM used the following rating system:

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Neutral: We expect the stock to provide a total return of between minus 10% and plus 10% within a 12-month period.

Sell: We expect the stock to provide a total return of minus 10% or worse within a 12-month period.

Speculative Buy: This rating is reserved for companies we believe have tremendous potential, but whose stocks are illiquid or

whose equity market capitalizations are very small, often in the definition of a nano cap (below \$50 million in market cap). In general, for stocks ranked in this category, we expect the stock to provide a total return of 50% or more within a 12-month period. However, because of the illiquid nature of the stock's trading and/or the nano

cap nature of the investment, we caution that these investments may not be suitable for all parties.

Total return is defined as price appreciation plus dividend yield.

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Investment Banking Services

			Past 1	.2 monus
Rating	Count	Percent	Count	Percent
Buy	41	98%	13	32%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	42	100%	13	31%

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