

From Quantum Promise to Portfolio Construction: The Evolution of WQTM's May 2026 Rebalance

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Christopher Gannatti, CFA

Global Head of Research

Elvira Kuramshina

Associate Director, Quantitative Research

Key Takeaways

- The May 2026 rebalance increases [WisdomTree Quantum Computing Fund's \(WQTM\)](#) direct pure-player signal, with Xanadu Quantum Technologies Ltd. put into a materially larger allocation while maintaining exposure to D-Wave, IonQ and Rigetti as the largest pure-player positions.
- The rebalance is not simply a “more quantum chips” story. It expands the investable map across photonic quantum computing, quantum networking and communications, post-quantum cryptography, satellite-based quantum key distribution (QKD), materials, components and enabling infrastructure.
- The resulting portfolio remains intentionally balanced: 29.30% pure-player exposure, 70.70% diversified exposure and 39.24% in the highest relevancy score bucket, reflecting the reality that quantum is advancing quickly but commercial maturity remains uneven.

Quantum Investing Is Moving from Concept to Ecosystem

Artificial intelligence taught investors that the most compelling thematic opportunities often appear first in the bottlenecks. Before every application monetizes, capital moves toward the infrastructure that makes the application possible. Quantum computing may be earlier, noisier and more technically uncertain than AI, but the logic is similar:

Find the constraints, then find the companies attempting to solve them.

Of course for quantum, the constraints are different than they are for AI. The primary issues concern qubit modality, error correction, coherence, photonic interconnects, control systems, cryogenics, quantum-safe encryption, quantum networking and software that can translate classical problems into quantum circuits.¹ The investable universe is therefore not one industry. It is a stack.

That is the lens through which we approached the May 2026 rebalance. Our strategy does not attempt to declare a single winner in quantum. It broadens the portfolio around the companies and technologies that could matter as quantum moves from research milestone to commercial architecture.

Xanadu as a Signal

This is a notable addition at 2.93%. It signals that photonic quantum computing is becoming a more explicit part of the portfolio's quantum hardware thesis. The importance of diversification across qubit modalities is increasingly recognized even at the government level. In April 2026, the Defense Advanced Research Projects Agency (DARPA)² launched its Heterogeneous Architectures for Quantum (HARQ) program, which draws a direct parallel to classical computing's multi-processor architecture, arguing that just as central processing units (CPUs), graphics processing units (GPUs), and application specific integrated circuits (ASICs) each serve distinct roles, future quantum systems will likely need to combine trapped ions, neutral atoms, superconducting qubits, and other modalities into integrated architectures rather than betting on a single technology.³

Photonic quantum computing is conceptually attractive because photons:

- Naturally carry information at the speed of light, making them ideal carriers of quantum states
- Interact weakly with their environment, reducing the decoherence that plagues many other qubit technologies
- Exhibit longer coherence times as a result, allowing quantum states to be maintained more reliably
- Show strong compatibility with existing fiber-optic networking architectures, easing the path toward quantum communication and distributed systems
- Support modular approaches to scaling, since photonic interconnects can link separate processors without the fragility of direct physical coupling

The practical challenge, as always in quantum, is turning an elegant physics concept into a reliable, manufacturable, fault-tolerant system. The [WisdomTree Quantum Computing Fund's \(WQTM\)](#) rebalance does not need that outcome to be guaranteed, and as we sit in May 2026, it isn't. It needs the public-market exposure to better represent the range of credible paths being pursued.

Figure 1: May 2026 Strategy Additions

Company Name	Quantum ecosystem classification	Relevancy Score	Purity Classification	Weight
Xanadu Quantum Technologies Ltd	Quantum chips and qubit technology providers	1	Pure	2.93%
Corning Inc	Providers of tools, infrastructure, semiconductors, materials, and components	1	Diversified	1.58%
Quantum Emotion Corp	Post-quantum cryptography providers	1	Pure	0.71%
Aeluma Inc	Providers of tools, infrastructure, semiconductors, materials, and components	1	Diversified	0.56%
SES SA	Quantum networking and communications providers	1	Diversified	0.88%
Creotech Quantum SA	Quantum networking and communications providers	1	Pure	0.31%

Sources: WisdomTree, Bloomberg, FactSet and individual company websites and filings. Data is as of the May 2026 quarterly rebalance for the WisdomTree Classiq Quantum Computing Index. **Holdings subject to change.**

Pure Players: More Signal, but Still a Balanced Portfolio

Quantum pure players give investors the most direct sensitivity to the theme, but also the greatest volatility. Many are still pre-scale, research-heavy businesses. Revenue visibility can be limited, operating losses are common, and market prices can move more on technical milestones than on conventional earnings progression.

That is why we think that the pure-player block should be read as an exposure engine, not the entire portfolio. In Figure 2, D-Wave, IonQ and Rigetti remain the largest pure players at 5.45% each, Quantum Computing Inc. sits at 3.57%, and Infleqtion and Xanadu are each shown at 2.93%. This creates a portfolio that is meaningfully exposed to multiple qubit modalities rather than overly dependent on a single approach.

Figure 2: Overview of the Pure Players

Company Name	Quantum Ecosystem Classification	Relevancy Score	Purity Classification	Weight
D-Wave Quantum Inc	Quantum annealing and simulation providers	3	Pure	5.45%
IonQ Inc	Quantum chips and qubit technology providers	3	Pure	5.45%
Rigetti Computing Inc	Quantum chips and qubit technology providers	3	Pure	5.45%
Quantum Computing Inc	Quantum chips and qubit technology providers	2	Pure	3.57%
Infleqtion Inc	Quantum chips and qubit technology providers	1	Pure	2.93%
Xanadu Quantum Technologies Ltd	Quantum chips and qubit technology providers	1	Pure	2.93%
SEALSQ Corp	Post-quantum cryptography providers	1	Pure	1.25%
BTQ Technologies Corp	Post-quantum cryptography providers	1	Pure	0.80%
Quantum Emotion Corp	Post-quantum cryptography providers	1	Pure	0.71%
Arqit Quantum Inc	Post-quantum cryptography providers	1	Pure	0.45%
Creotech Quantum SA	Quantum networking and communications providers	1	Pure	0.31%
Total weight				29.30%

Sources: WisdomTree, Bloomberg, FactSet and individual company websites and filings. Data is as of the May 2026 quarterly rebalance for the WisdomTree Classiq Quantum Computing Index. **Holdings subject to change.**

Not All Quantum Exposure Is the Same

A diversified technology company with a quantum research effort is not the same as a pure-play quantum hardware company. A quantum-safe encryption provider is not the same as a trapped-ion developer. A satellite QKD company is not the same as a semiconductor materials supplier. WisdomTree's quantum ecosystem breakdown helps clarify the portfolio's center of gravity.

In Figure 3, we see:

- Quantum chips and qubit technology providers at 42.45%
- Providers of tools, infrastructure, semiconductors, materials and components at 24.25%
- Quantum networking and communications represents 14.76%
- Quantum annealing and simulation represents 12.89%
- Post-quantum cryptography is smaller at 2.49%, but its strategic importance may exceed its current portfolio weight because Q Day is a security preparedness problem before it is a revenue scale problem

One interesting feature is the zero weight in quantum software and algorithm providers and Quantum-as-a-Service providers. That should not be interpreted as a statement that software is unimportant, rather, it reflects how the index classifies companies by primary business activity. In practice, many of the hardware-focused names held in the portfolio are deeply involved in software as well. IBM, for example, developed Qiskit, one of the most widely used open-source quantum programming platforms in the world. IonQ, Quantinuum, and other hardware pure-plays similarly offer cloud access, SDKs, and algorithm

libraries alongside their physical systems. The zero weight in dedicated software firms is a feature of the current public-market universe, not a signal about where value in the quantum stack ultimately resides.

Figure 3: Exposure by Specialized Quantum Function

Quantum Ecosystem Classification	Weight
Quantum chips and qubit technology providers	42.45%
Quantum software and algorithm providers	0.00%
Quantum annealing and simulation providers	12.89%
Quantum-as-a-Service providers	0.00%
Post-quantum cryptography providers	3.21%
Quantum networking and communications providers	14.05%
Advanced computing providers	3.16%
Providers of tools, infrastructure, semiconductors, materials, and components	24.25%

Sources: WisdomTree, Bloomberg, FactSet and individual company websites and filings. Data is as of the May 2026 quarterly rebalance for the WisdomTree Classiq Quantum Computing Index. **Holdings subject to change.**

The Three Stories Embedded in the Rebalance

1. The Qubit Modality Race Is Still Open

The portfolio does not require knowing whether the winning path is trapped ions, superconducting qubits, photonics, neutral atoms, annealing or a hybrid architecture. At this stage, that humility is a feature. Quantum has not converged around a single technical architecture in the way classical computing converged around silicon complimentary metal-oxide semiconductors (CMOS). The rebalance therefore keeps exposure to several credible modalities and lets progress, not prediction, determine the next set of winners.

2. Quantum Readiness Is Becoming a Commercial Theme Before Fault Tolerance Arrives

The market often focuses on the dream of a fully fault-tolerant quantum computer. That is understandable, but it may miss the nearer-term business pressure. Organizations do not need to wait for Q Day to begin preparing for quantum-safe encryption. NIST's finalized post-quantum standards create a concrete migration framework, and "harvest-now, decrypt-later" risk makes the timeline relevant today rather than only after quantum machines are mature.

3. Quantum Infrastructure Extends Beyond the Chip

The additions of Corning and SES, alongside names such as Creotech and Quantum Emotion, emphasize that quantum is also a networking, materials, timing, photonics and security infrastructure theme. The chip may attract the most attention, but the system has to be controlled, connected, protected and scaled. The same investor mistake repeats across technology cycles: focusing only on the glamorous endpoint and ignoring the less visible infrastructure that allows it to function.

The 2026 Horizon: Milestones Before Mass Commercialization

One risk in quantum investing is demanding AI-like monetization from a technology that is not yet in the same commercial phase. We think that is the wrong yardstick. Quantum should be evaluated by milestone density, ecosystem expansion, public-market availability, funding momentum, standards adoption and evidence that technical roadmaps are becoming more credible.

In that sense, this is not a portfolio built only for the day quantum computing becomes fully mainstream. It is a portfolio built for the transition period, and we think of that as the years in which the market begins to price the possibility that quantum moves from laboratory breakthrough to strategic capability. The investable opportunity is likely to arrive in waves:

- Pure-player volatility
- Diversified platform investment
- Quantum-safe security adoption
- Photonic and networking infrastructure
- Commercial workloads that justify larger-scale deployment.

The rebalance therefore tells a disciplined story. It raises exposure to a newly public photonic quantum pure player. It retains the largest public pure-play quantum hardware names. It keeps diversified technology and infrastructure providers in the portfolio. It acknowledges that software matters, continuing to evaluate the publicly-listed players. And it positions quantum-safe security and communications as part of the opportunity set, not as an afterthought.

Conclusion: Invest in the Stack, Not the Hype

Quantum computing is still early. That is not a weakness of the theme; it is the definition of the opportunity and the source of the risk. The most important mistake would be to treat quantum as one company, one architecture or one catalyst. The better framing is that quantum is becoming an ecosystem.

The May 2026 rebalance reflects that ecosystem view. It recognizes the pure players pushing the frontier, the diversified firms funding the infrastructure, the security providers preparing for a post-quantum world and the enabling companies supplying materials, photonics, communications and components. If quantum succeeds, it will not be because one stock was interesting. It will be because a full stack became investable.

1 **Qubit modality** = the type of technology used to build quantum bits (qubits), such as superconducting circuits, trapped ions or photons; **error correction** = methods used to detect and fix mistakes caused by noise and instability in quantum systems; **coherence** = the amount of time a qubit can maintain its quantum state before information is lost; **photonic interconnects** = light-based connections that transfer quantum information between chips or systems; **control systems** = the hardware and software that manage, calibrate and operate quantum computers; **cryogenics** = ultra-low-temperature cooling systems required for many quantum computers to function properly; **quantum-safe encryption** = cybersecurity methods designed to remain secure against future quantum computing attacks; **quantum networking** = technologies that allow quantum computers and devices to communicate with one another.

2 The Defense Advanced Research Projects Agency (DARPA) is a research and development agency of the United States Department of Defense responsible for the development of emerging technologies for use by the military.

3 Source: Defense Advanced Research Projects Agency. (2026, April 14). *For quantum computing, different qubits are better together*. DARPA.

Important Risks Related to this Article

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