

I Got Rich Off NVIDIA. This Is Even Bigger.

21 MIN · YOUTUBE · [HTTPS://YOUTU.BE/9UMGBCYZ6C?SI=SD84NHJMLR2HIRNY](https://youtu.be/9UMGBCYZ6C?SI=SD84NHJMLR2HIRNY)

<https://youtu.be/9UMGBCYZ6C?si=Sd84nHJmLR2hiRny>

SUMMARY

The video discusses the recent breakthroughs in quantum computing and highlights three key companies: IonQ, Rigetti, and D-Wave, each with unique approaches to quantum technology. The speaker, Alex, emphasizes the potential for significant investment returns as the quantum computing market is expected to grow rapidly, similar to past tech booms.

- Investing in quantum computing is becoming viable as recent advancements have made it a market sector.*
- IonQ is leading with a significant revenue increase and a strong backlog, having linked two quantum chips together.*
- Rigetti is integrated with Nvidia's infrastructure but has lower revenue and is still pre-commercial.*
- D-Wave offers a specialized quantum annealing product and has paying customers, with a recent acquisition enhancing its capabilities.*
- The quantum computing market is projected to grow at a 36% CAGR over the next decade, outpacing traditional markets.*
- Each company has different strengths and risks, making diversification a wise strategy for investors.*
- Alex recommends owning all three stocks to hedge against the uncertainty of which approach will ultimately succeed.*

If you put \$10,000 into Apple at the start of the smartphone era, you'd have over half a million dollars today. If you invested that money in Nvidia when Chat GPT started the AI era just 3 years ago, you'd already have over 100 grand. Well, three big breakthroughs just kicked off the quantum computing era, and it's already something we can invest in. My name is Alex, and I spent 8 years as an electrical engineer and AI researcher at MIT, and I've never seen back-to-back breakthroughs this big. So, let me show you what just happened and how I'm investing in it. Your time is valuable, so let's get right into it. I want to start this video in an interesting place, CES 2025, the Consumer Electronics Show in Las Vegas.

I was there in person when during a press Q&A session, Jensen Huang told the world that useful quantum computers were 15 to 30 years away. The market reaction was instant, and it was brutal. IonQ dropped by about 39% in one day, Rigetti fell by 45% and D-Wave crashed by 36%. One sentence from one CEO cratered an entire class of stocks. And then, something strange happened. Two months later, when I was at Nvidia GTC 2025, I saw Jensen change his tune. He said that quantum computing was closer than he thought, and he hosted the first ever Nvidia Quantum Day. Three months after that in Paris, he said that quantum was reaching an inflection point and that it was going to solve some real problems in the coming years. Those comments ended up fueling the massive bubble in quantum computing stocks late last year. That bubble was so big that I decided not to cover quantum at all. Everything was already priced to perfection, but now the bubble is behind us, and something big just happened. Just 2 weeks ago, Nvidia shipped an open-source software stack called Ising,

which figures out how to split a problem between GPUs and quantum computers to get the best of both worlds, and they put IonQ on the short list of early adopters. In the 10 years that I've been investing in Nvidia, I've never seen Jensen change his stance on any technology so fast, but now I understand why. On the same day that Nvidia shipped IonQ announced the first photonic interconnect between two separate commercial quantum processors.

In English, that means that IonQ linked two quantum chips together and got them to act like one, kind of like how Nvidia's black GPUs get two compute dies to act like a single chip. That same day, DARPA picked IonQ for a two-year program called HARQ, effectively giving them federal funding to scale their quantum systems. And just 1 week before that, Rigetti made the first 100-plus qubit quantum computer generally available on AWS, which means you can now rent a state-of-the-art quantum computer the same way you'd rent a regular server. So, in just 1 week, Nvidia released software to control quantum computers along with GPUs, IonQ figured out how to connect theirs together, and Rigetti put theirs on the cloud. Quantum computing isn't science fiction anymore. It's an entire market sector that's finally worth investing in. And I'm not here to keep you hostage. So, here are the three stocks I'm going to use to explain the market: IonQ, ticker symbol IONQ, which uses photons to scale beyond single quantum chips; Rigetti Computing, ticker symbol RGTI, which has a 128 qubit processor you can already rent on AWS; and D-Wave, ticker symbol QBTS, a quantum company already solving big problems for even bigger customers. And of course, which of these three stocks I think is the best buy right now. I want to make the best use of your time. So, let's start with what these companies have in common. And uh what the heck a quantum computer even is. In classical computing, a bit can either be a zero or a one, Just like a coin can either be heads or tails. That's it. Every piece of software you've ever used, every app on your phone, every AI model, every spreadsheet runs on those two binary numbers, one or zero, heads or tails, flipped billions of times every second.

A qubit is like a weighted coin where you can choose the weight. Before you flip it, it has some probability of heads and tails at the same time. You only know which way it landed once you flip the coin and you look at it. So, until you see the result by measuring a qubit, it still has the probabilities of both one and zero, heads and tails. Now, take a bunch of those quantum coins and link them all together so that when you check one, you instantly know how all the other coins could land. They follow a shared pattern instead of flipping independently.

That's quantum entanglement, or at least it's my best attempt at understanding it. And when you entangle a system of qubits together, the math gets wild really fast. A single qubit has two possible states, zero or one, heads or tails. A system of two qubits has four states, 00, 01, 10, or 11. A system of three qubits has eight states. Eight is two to the third power. That means a system of 300 entangled qubits has two raised to the 300 different possible states, which is more possibilities than there are atoms in the observable universe. That's why quantum computers are exponentially more powerful than classical ones, at least for certain kinds of problems, like optimization, simulation, cryptography, and certain kinds of machine learning. But there's a catch. Qubits are insanely fragile, and things like heat, vibration, or even a single stray photon can knock them out of their shared pattern, turning them back into regular ones and zeros. That's called decoherence. Keeping a qubit stable long enough to actually run a useful calculation is the entire name of the game, and every company in this video is making a different massive bet on the best way to do it. At the start of this video, I pointed out that Apple and

Nvidia made investors rich by being the cornerstone companies of the mobile and AI computing eras. Well, the global quantum computing market is expected to more than 20x in size over the next 10 years and could become a \$40 billion market by 2035. That's almost as fast as the growth of the AI market itself.

According to Market US, the global artificial intelligence market is expected to almost 19x in size over the next 9 years, which is a compound annual growth rate of 38.5% through 2034. But, many of the companies building next-generation AI applications are not publicly traded. Think about the '90s and early 2000s. Companies like Amazon and Google went public very early in their growth cycle. But today, they're waiting an average of 10 years or longer to go public. That means investors like us can miss out on most of the returns from the next Amazon, the next Google, the next Nvidia. That's where VCX comes in, the sponsor of this video. VCX is the public ticker for private tech. Venture capital is usually only for the ultra-wealthy, but VCX by Fundrise gives everyday investors access to some of the top private pre-IPO companies on Earth. They have an impressive track record, already investing over \$500 million in some of the largest, most in-demand AI infrastructure and space launch companies. So, if you want access to some of the best late-stage companies before they IPO, check out VCX by Fundrise with my link below today. All right. So, the quantum computing market is expected to grow at a 36% compound annual growth rate for the next decade, over two times faster growth than the S&P 500. And that's before NVIDIA started building infrastructure to support it, which will obviously increase adoption. And that brings us to NVIDIA themselves. NVIDIA isn't building a quantum chip. They're building the infrastructure between everyone else's quantum chips and their own GPUs. Late last year at NVIDIA's GTC DC conference, they announced something called NVQ link, a super fast connection that lets GPUs send instructions and read results in just a few millionths of a second. That's fast enough for GPUs to watch the qubits, correct their errors, and adjust things along the fly before the system decoheres. And then, just a couple weeks ago, they released Ice Nine. That's an open-source AI toolkit that helps quantum chips fix their own errors in real time. Ice Nine also speeds up quantum calibration, which is a process that took days, but now takes just hours. As an investor, this made one thing crystal clear for me. NVIDIA doesn't think quantum computers are going to replace GPUs, or else they obviously wouldn't build systems to support them. Instead, they see quantum computers plugging into our current data center infrastructure to help with very specific kinds of workloads. So, the future will be about hybrid computing, a mix of CPUs, GPUs, and QPU's all working together. But, even if that happens, these companies still have some serious risks that you need to know about.

First, their revenues are still small. IonQ is the only one over a hundred million dollars in revenue. Rigetti made just seven million dollars last fiscal year, and D-Wave made around 25 million. That's why their stocks can move by 30, 40, even 50% in a single day in either direction, just like we saw over the last year. Second, they have serious customer concentration. Most of their money today comes from government and defense contractors, so any budget cuts would hit all three at once. And third, like I'm about to explain, well, explain, all three companies have fundamentally different approaches to quantum computing. That means today's winners could be tomorrow's losers, and you need to know that going in. All right, IonQ is the current frontrunner in public quantum hardware. If I had to boil them down to a single sentence, IonQ is the closest thing to being the Nvidia of quantum computing, if their approach ends up being the right way to go. IonQ uses something called trapped ion systems, which uses charged atoms as the qubits, the coins we talked about before. It holds them in place with electromagnetic fields, and it controls them with lasers. This trapped ion approach gives IonQ some of the highest quality qubits in the industry. They run slower, but they also have fewer errors, which means you can

run them longer before the decoherence kicks in. And importantly, trapped ion systems are the easiest kinds to network multiple chips together. Here's why that matters. The hard part about scaling quantum computers is that a single chip tops out at a few hundred qubits, but it takes tens of thousands of qubits to do things like certain kinds of cryptography, simulate real chemistry, and optimize global supply chains. So, how do you scale from 100 to 10,000? You can try to build one giant chip, but nobody's figured out how to do that. Or, you can network multiple chips together. That's exactly what IonQ just did last week, when they announced the first photonic interconnect between two quantum processors. Proving this could even be done is a serious milestone the entire industry has been chasing since the 1990s. The path from 100 qubits to 10,000 is no longer science fiction.

It's just a matter of time, money, and engineering. On the same exact day, DARPA added them to a program called HARQ, Harnessing Quantum Computing at Scale, which basically means the US Department of Defense is willing to bet real money on IonQ's solutions. And speaking of money, IonQ reported \$62 million in revenue last quarter, which is up a massive 429% year over year. They made \$130 million for the full year, which is more than triple their year before, making them the only public quantum computing company to cross the \$100 million mark.

But the special thing about IonQ isn't just their revenue, it's their backlog, which grew to about \$370 million, or almost three times their last year's revenue. And they're guiding for \$235 million this year, which would imply around 80% revenue growth for 2026. One thing to be careful with, they reported a net income of \$754 million, but that number was driven by a non-cash warrant reevaluation gain of \$950 million. That means they actually had an operating loss for the quarter, and their management actually expects larger losses in 2026 as they keep investing in their systems. On the balance sheet, IonQ has roughly \$3.3 billion in cash and short-term investments. That's a massive war chest for a company this small, and exactly what you want to offset so much execution risk. For investors, the takeaway here is simple.

IonQ has the biggest backlog and the strongest balance sheet in quantum computing, but you're still betting on an unprofitable, highly volatile stock where the core technology has real risks, and the market is still very small. That's what I mean when I say get in early. But getting in early is a double-edged sword. All right, let's talk about Rigetti Computing next. If Jensen Huang is right that quantum computers will work with GPUs instead of replacing them, then Rigetti is set up to win big. It's already plugged directly into Nvidia's NVQ link and CUDA-Q stack for hybrid workloads. So, any enterprise that wants Nvidia stack and quantum computing will be running on Rigetti's hardware. Quantum computers from Google, IBM, and Rigetti all rely on superconducting systems, which use tiny electrical circuits that are cooled so close to absolute zero that they behave like artificial atoms. They run around 4,000 times faster than the trapped ion qubits from IonQ, but their errors are so much harder to control that they only end up being something like 10 times faster in practice. Those errors also make superconducting systems much harder to scale, but unlike IBM or Google, Rigetti is the only way to invest directly in this technology without investing in all the other much bigger business units as well. Rigetti also has the first 100-plus qubit processor available on AWS. AWS is the default cloud computing infrastructure for millions of developers around the world, and they all just got access to Rigetti's quantum computer. Now, here's where Rigetti looks very different from a company like IonQ. Their Q4 2025 revenue was just \$1.9 million, and it was down 18% year over year.

Their full-year 2025 revenue was just \$7.1 million. So, Rigetti is still a pre-commercial company, and valuing them based on revenue won't get you very far. Instead, I'm watching their cash position and their milestones. Are they increasing the number of qubits in their systems? Are more AWS customers using their chips? And are they getting more partnerships with hyperscalers in general? With government agencies? And are they getting more integrated with Nvidia? Rigetti finished the year with about \$590 million in cash, and they're burning about \$20 million a quarter.

That means they have about 30 quarters of cash runway, or about 7.5 years. So, don't mistake their lack of revenue for a lack of funding. And that brings us to D-Wave, the only company with a commercial product that customers actually pay for today. Not pilots and not research partnerships. Quantum annealing, like the kind in D-Wave's Advantage line of systems, isn't really a general-purpose computer. It's a specialized machine built to solve optimization problems like scheduling, routing, and materials design. The important thing for investors to know about this one is that companies like Volkswagen, Google, NASA, and Lockheed Martin already pay to run workloads on D-Wave's systems today. And in January of this year, D-Wave closed a \$550 million acquisition of Quantum Circuits Inc., which gives them a gate-based quantum platform on top of their existing annealing business. Gate-based superconducting is more of a general-purpose quantum computer, which complements D-Wave's more specialized quantum annealing systems. For investors, that means that D-Wave has two different quantum architectures under one roof. So, D-Wave doesn't have to win the war to survive it. They only need one of them to work out long-term.

That optionality is the unique thing about D-Wave. Last quarter, D-Wave's revenue came in at \$2.8 million, up 19% year-over-year. But their business is still spiky and driven by big deals. Full year 2025 revenue came in at \$24.6 million, which was actually up 179% year-over-year. In January and February of this year alone, they reported \$32.8 million in new bookings, already more than their entire 2025 revenue in just 2 months. On April 14th at the Semaphore World Economy Summit, D-Wave's CEO said that Nvidia should be shaking in their boots when it comes to quantum. That line landed on the same day that Nvidia launched I-Sing, and D-Wave stock skyrocketed by around 50% that week.

D-Wave has around \$630 million on their balance sheet, and that's after acquiring Quantum Circuits Inc. They're currently burning around \$70 million a year, which gives them almost a 9-year cash runway. So, as an investor, I like that D-Wave has all the funding they need until they can become profitable themselves. All right, before we can decide which of these three stocks is the best buy right now, here's a table summarizing everything I covered. As you read through it, just keep a few things in mind. I built this table myself by pulling numbers from each company's latest earnings call, and I tried to make each row as apples-to-apples as possible. But, IonQ, Rigetti, and D-Wave all have different customers, different contract lengths, and fundamentally different approaches to quantum computing. So, take this table as a good way to compare them, but not as official audited numbers. And now that we have all that context, we can answer the big question: Which quantum computing company is the best investment right now? And if you feel I've earned it, consider hitting the like button and subscribing to the channel. That really helps me out, and it lets me know to make more content like this. Thanks.

Now, let's talk about IonQ, Rigetti, and D-Wave stock. IonQ is the clear leader of the quantum computing pack. Their revenue grew by 428% year-over-year. They have a backlog of \$370 million, and they're the only public company to link two commercial quantum computing chips together. So, if you're the kind of growth investor who waits for a company to prove its product-market fit at scale before risking your own money, IonQ is probably for you. If you believe that the future of quantum computing isn't overtaking CPUs and GPUs, but but working alongside them, then Rigetti is the company connected to Nvidia's stack with NVQ link and CUDA-Q. And they already have a quantum processor that any AWS customer can rent. Just remember, this is the smallest company with the smallest revenue and cash position of the three. So, if you can stomach some execution risk and volatility in exchange for a shot at owning Nvidia's quantum future, Rigetti may be the stock for you. And D-Wave is for investors who like having their cake and eating it, too. They already have paying customers today, and you get exposure to two different quantum architectures instead of betting on one, quantum annealing and the gate-based superconducting architecture from their quantum circuits acquisition. D-Wave is growing almost as fast as IonQ, but from a much smaller base, which isn't that big of a deal since they already have enough cash to last for almost nine years. Personally, I want to own all three stocks for one simple reason. All three companies have fundamentally different approaches to building quantum computers at scale, and I don't know enough about the space to reliably pick a winner. So, this is one of those times where I'd rather own the entire market than bet on a single stock. If I had to pick a winner based purely on market cap versus revenue, backlog, and growth potential, I'd pick IonQ because they're already over \$100 million in annual revenue, they have a \$370 million backlog, and they're still growing by over 200% per year. So, to me, they have the best risk-to-reward ratio of the three. But, one thing's for sure, quantum computing is quickly moving from science fiction to a future worth investing in. Let me know which stock you're buying below. All three companies report earnings in early May. So, let me know if you want me to follow up with a deep dive video on any one of them. And if you want to see more science behind the stocks, check out this video next.

Either way, thanks for watching and until next time, this is ticker symbol U. My name is Alex reminding you that the best investment you can make is in you.