

Q.ANT Raises €62 Million to Transform the Future of Computing with Photonic Processing

Largest Series A funding for photonic computing in Europe will accelerate commercial rollout of light-based processors to address AI's escalating energy and scalability crisis

Stuttgart, Germany – July 17, 2025 – [Q.ANT](#), a pioneer in photonic processing, today announced a €62 million Series A financing round to accelerate the commercialization of its energy-efficient photonic processors for artificial intelligence (AI) and high-performance computing (HPC). The round is co-led by [Cherry Ventures](#), [UVC Partners](#) and [imec.xpand](#) with participation from additional deep tech investors, including [L-Bank](#), [Verve Ventures](#), [Grazia Equity](#), [EXF Alpha](#) of [Venionaire Capital](#), [LEA Partners](#), [Onsight Ventures](#), and [TRUMPF](#). This investment ranks among Europe's most significant deep tech funding rounds, laying the foundation for a fundamental shift in how AI is computed.

As AI infrastructure scales globally, traditional chip technology (CMOS) reaches its physical limits, performance stagnates, and electricity demand is reaching untenable levels. A report from the International Energy Agency (IEA) estimates that by 2026, data center energy use is expected to surpass the entire annual electricity consumption of Japan¹. Q.ANT is addressing this issue with a radically different paradigm: computing with light instead of electricity, which opens the door to significantly higher performance and energy savings.

From European Research Roots to Global Impact

In just five years, Q.ANT has brought to maturity what experts have pursued for decades: the world's first commercial photonic processor for real-world AI and HPC workloads – executing complex AI operations much faster while saving significant amounts of energy. Built on Thin-Film Lithium Niobate (TFLN), the Q.ANT Native Processing Server integrates seamlessly into today's data centers as a plug-in co-processor. Real-world tests promise up to 30 times energy efficiency, 50 times performance improvement, and the potential to increase data center capacity by 100 times – all without the need for complex active cooling systems. Q.ANT is the industry's first photonic processing company to offer this level of performance, accuracy, and industry integration in one sustainable solution.

"Q.ANT was founded with a bold vision: to redefine the way the world computes by using light instead of electricity," said Dr. Michael Förtsch, founder and CEO of Q.ANT. "This investment proves that Europe has both the ambition and the capital to lead – and gives us the strong partners we need to pursue our mission and help shape the future of computing." Q.ANT was founded by Michael Förtsch as a spin-off from TRUMPF in 2018, developing independently light-based data processing.

Strategic Alliance for International Expansion

This funding will enable Q.ANT to scale production, advance development of next-generation photonic processors, grow its team across disciplines, and expand to the US to support a growing number of customer deployments. In addition, Q.ANT strengthens its advisory board with two semiconductor experts: Hermann Hauser, founder of ARM and Hermann Eul former member of the Infineon Management Board and former CVP & GM of Intel, whose combined expertise in semiconductor scaling, industrialization and global commercialization will be instrumental in Q.ANT's next phase.

"Q.ANT's photonic chips stand to radically reduce data center operating costs while delivering the breakthrough performance demanded by next-generation AI and high-performance computing," said Christian Meermann, Founding Partner at Cherry Ventures. "With early commercial momentum and a world-class team of deep tech experts, Q.ANT is uniquely positioned to redefine the trillion-dollar data center semiconductor landscape. We're proud to back them in building the future of computing."

¹ <https://iea.blob.core.windows.net/assets/6b2fd954-2017-408e-bf08-952fdd62118a/Electricity2024-Analysisandforecastto2026.pdf>

"What impressed us about Q.ANT was the clarity of its vision and its ability to consistently deliver on it," said Andreas Unseld, General Partner at UVC Partners. "Q.ANT is not only pioneering a new computing architecture, but doing so in a way that addresses the urgent need for more sustainable AI infrastructure. That combination of deep tech capability and long-term relevance made this an easy decision for us."

"Classical CMOS processors are approaching their physical and architectural limits – where further gains through parallelization and smaller structures yield only marginal improvements. In contrast, photonic computing represents a fundamentally new paradigm with immense, largely untapped scaling potential. Q.ANT has solved the core challenges of this technology and is well positioned to define the future of high-performance computing," said Cyril Vancura, Partner at imec.xpand.

Future made tangible – Native Processing Server ready for Data Center Integration

Q.ANT is on a mission to redefine the future of AI infrastructure. By 2030, the company aims to make its photonic processing technology a foundational pillar of global AI systems, radically enhancing scalability and energy efficiency. With a focus on seamless market integration, Q.ANT's Photonic Native Processing Server (NPS) is now available for early access evaluation and delivered in an easy-to-deploy, industry-standard format that is natively compatible with today's programming languages and AI software ecosystems. The Q.ANT NPS uses less energy, eliminates on-chip heat and delivers higher compute density, paving the way for a new era of high-performance, sustainable computing.

Further support and statements from politics and industry

Bob Sorensen, Senior VP for Research and Chief Analyst at Hyperion Research: "Q.ANT is attacking two of the biggest challenges in photonic computing: integration and precision – while addressing the promise of computational and energy efficiency," said Bob Sorensen, Senior VP for Research and Chief Analyst for Quantum Computing at Hyperion Research. "Q.ANT is offering an innovative alternative to digital processors with an analog counterpart that can excel at nonlinear and mathematical operations, particularly in AI inference operations, physics simulations, and image analysis, all while demonstrating 99.7% accuracy on the photonic chip across complex computational tasks—proving that analog computing can be accurate, performant and deployable."

Johannes Heinloth, Executive Board at L-Bank: "By investing in Q.ANT, we're supporting the next generation of innovations from Baden-Württemberg. We believe it will be at the heart of a vibrant new computing ecosystem, providing significant opportunities for sustainable growth, job creation, and enhanced international competitiveness of this innovative region. Q.ANT is far ahead of the global curve within photonic computing, radically transforming the way we process data. This will shape tomorrow's economy and create lasting value. As the development bank of Baden-Württemberg, we support bold entrepreneurs in turning cutting-edge ideas into real impact."

Berthold Schmidt, CTO at TRUMPF: "Deep Tech disruption demands courage, foresight and decisive action. Q.ANT set out to redefine the way we compute and we believed in their vision from day one. We backed Q.ANT's mission with early investment, robust infrastructure, and technical support enabling Q.ANT to develop its breakthrough photonic chip architecture. Now as Q.ANT enters full commercialization, their photonic processors are set to transform performance and energy-efficiency for AI and HPC workloads and we are moving forward alongside a world-class group of partners - united with a shared vision to shape the next level of computing."

Manfred Rauhmeier, Chairman of the acatech Foundation and Secretary of the acatech Coordination Committee: "Q.ANT is an example of how real innovation in Europe is driven with courage, innovative strength, and a common will to create. We are proud that our team of [MISSION KI](#) have played a central role in connecting the right partners for this pivotal phase. With exceptional partners at their side, Q.ANT continues to take Europe's technology to a new level - responsibly, future-oriented and with real impact."

About Q.ANT

Q.ANT is a photonic deep-tech scale-up developing photonic processing solutions that compute natively with light and deliver a scalable alternative to transistor-based systems. Its Light Empowered Native Arithmetics (LENA) architecture delivers analog co-processing power optimised for complex computation and enabling energy-efficient performance for next-generation AI and HPC applications. Q.ANT operates its own Thin-Film Lithium Niobate (TFLN) chip pilot line in collaboration with the Institute for Microelectronics Stuttgart, IMS CHIPS, and is currently shipping its Native Processing Servers to selected partners. Q.ANT was founded by Michael Förtsch in 2018 and is headquartered in Stuttgart, Germany.

###

Images and captions *** Please note higher resolution images and headshots are available by request or can be downloaded from here: [20250717 Q.ANT Series A IMAGES](https://www.qant.com/20250717-Q.ANT-Series-A-IMAGES)*



"Photonic computing will transform the future of data processing," Dr. Michael Förtsch, founder and CEO of Q.ANT. (Image: Q.ANT GmbH)



New power for AI - photonics processor from Q.ANT can deliver more performance with less energy consumption. (Image: Q.ANT GmbH)



The Q.ANT leadership team (left to right): Andreas Abt, SVP Native Computing; Dr. Michael Förtsch, CEO and founder; Tim Stiegler, CFO. (Image: Q.ANT GmbH)

Media Contacts:

USA: Toni Sottak —
Wired Island International
toni@wiredislandpr.com | +1 843 530 4442

EUROPE: Edith Laga —
Q.ANT PR
edith.laga@qant.gmbh | +49 157 830 407 51