

Quobly and Absolut System strengthen their cooperation to support the scaling of spin-qubit quantum computers

QCube® 100-Class 3: a first high-cooling-power cryogenic platform supporting Quobly's industrial roadmap

Grenoble, September 9, 2026 – Quobly and Absolut System today announce the signing of an Industrial Partnership Declaration to support the development and scaling of Quobly's spin-qubit quantum computers.

The signing comes as the two companies reach a first major milestone in the **QCube® 100-Class 3** program, a high-cooling-power cryogenic platform developed by Absolut System to meet the requirements of Quobly's quantum processors. This first project lays the foundation for a cooperation designed to evolve alongside the different generations of **Alloy**, Quobly's quantum computer product family.

Cryogenic infrastructure designed to support the scaling of Quobly's quantum computers

As the number of qubits increases and control electronics become increasingly integrated into the quantum system, cooling and integration requirements evolve accordingly. Cryogenics is therefore becoming a key element of the architecture and industrialization of future quantum computers.

QCube® 100-Class 3 is designed to provide 100 mW of cooling power at 500 mK and integrates the thermal, mechanical, electrical and RF interfaces required to integrate and operate Quobly's quantum computers. Developed as part of the French program Cryonext, it represents the transition from R&D to a first cryogenic solution adapted to the requirements of a quantum computing product.

The development of the platform relies on close collaboration between the two companies' teams: Quobly provides the requirements driven by its processors and product roadmap, while Absolut System contributes its expertise in cryogenic systems and thermal engineering to develop a platform tailored to these needs.

From QCube® 100-Class 3 to next-generation cryogenic infrastructure

The cooperation is structured around a four-phase roadmap, progressively supporting the scaling of Quobly's quantum computers:

- Phase 1 – Development and qualification of QCube® 100-Class 3
- Phase 2 – Industrialization and replication of this first generation, with twice the thermal dissipation capacity
- Phase 3 – Development of a new generation of cryogenic platforms addressing the requirements of Quobly's future quantum computers
- Phase 4 – Volume production of cryogenic platforms capable of supporting the scale-up to 100,000 physical qubits and beyond

This roadmap is aligned with Quobly's Alloy quantum computer roadmap, with a first generation of systems targeting up to 100,000 physical qubits between 2027 and 2029, followed by further scaling steps from 2030 onwards, towards systems ultimately capable of reaching one million qubits and supporting fault-tolerant quantum computing.

The shared objective is to progressively increase cryogenic power, integration, reliability and industrial readiness so that cryogenic infrastructure can keep pace with the scaling of quantum computers.

Nicolas Daval, Chief Engineering Officer at Quobly: *"As the capabilities of our quantum computers increase, so do their cooling and integration requirements. Today's cryogenic platforms need to evolve to meet these new requirements. With Absolut System, we are developing tailored solutions designed around*

the needs of our Alloy roadmap, with the objective of supporting the progressive scaling of our quantum computers without making cryogenics a limiting factor.”

Julien Tanchon, CEO of Absolut System: “QCube® 100-Class 3 is a first concrete step in a cooperation that we intend to develop over the long term. Our objective is to evolve cryogenic capabilities alongside each generation of Quobly’s quantum computers, with greater cooling power and integration, while also designing for reliability and industrialization. We believe cryogenics must become an infrastructure that enables the scaling of quantum computing.”

A partnership rooted in the Grenoble ecosystem

The cooperation highlights the complementary expertise brought together within the Grenoble ecosystem, at the intersection of quantum technologies, semiconductors and cryogenics.

Based in the Grenoble region, Quobly and Absolut System each contribute, in their respective fields, to the development of technologies needed for the next generations of quantum computers.

About Quobly

Quobly is building the first industrially scalable quantum computer by combining silicon spin qubits with advanced semiconductor manufacturing. Founded in 2022 in Grenoble, France, the company has developed a unique co-design approach with STMicroelectronics, bringing quantum processors and cryogenic control electronics onto a proven 300mm FD-SOI manufacturing platform and enabling an approach in which the quantum-computing capacity can scale through semiconductor-style integration and manufacturing.

Quobly’s Alloy product family combines a commercial product roadmap with a long-term scaling strategy: first cloud access from the end of 2026 for high-performance computing and research users, and a target of one million qubits by 2032. This roadmap applies the same VLSI (Very Large-Scale Integration) principle that transformed classical computing: increasing computational capacity through semiconductor integration rather than increases in physical infrastructure. This creates a path toward predictable system footprint, energy requirements, manufacturing economics and customer ROI as quantum computing scales.

The company leverages Europe’s industrial semiconductor ecosystem, building and securing a Si-28 value chain with strategic partners including Air Liquide, Soitec and Orano to accelerate the industrialization of its quantum processors, reduce deployment risk and support long-term scalability.

In June 2026, Quobly raised a €115 million Series A led by Bpifrance, STMicroelectronics and SEALSQ, with participation from leading industrial and deeptech investors, to accelerate the commercialization of its Alloy product family. With more than 100 employees, Quobly is headquartered in Grenoble, France, with subsidiaries in Singapore and Canada.

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About Absolut System

Founded in 2010, Absolut System has been designing and manufacturing complex, custom cryogenic equipment for more than 15 years, capable of operating at extreme temperatures, down to the limits of absolute zero. Based in the heart of the French Alps, near Grenoble, a European hub for research and innovation, the company has established itself as a leading player in high-performance cryogenics.

Combining industrial manufacturing capabilities with specialist engineering expertise, Absolut System manages the entire development cycle, from design and industrialization to manufacturing, integration and installation, as well as ongoing service and support. This rare combination of capabilities enables the company to turn complex challenges into concrete, reliable and fit-for-purpose solutions, where every kelvin matters.

Today, its technologies support space and defense programs, quantum computers, liquid hydrogen value chains and major research infrastructures.

In the quantum computing sector, Absolut System aims to become a preferred partner for quantum chip developers by providing turnkey cryogenic platforms tailored to their requirements, helping ensure that cryogenics does not become a barrier to scaling quantum technologies.

Absolut System is the historic subsidiary of the Absolut Group. VOL-V, a leading player in the energy and environmental transition, acquired a stake in the company in 2022 to support its industrial scale-up.

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