



Reliable and Affordable Silicon Quantum Dot Devices for Researchers

Fast-track your
quantum research
with SemiQit



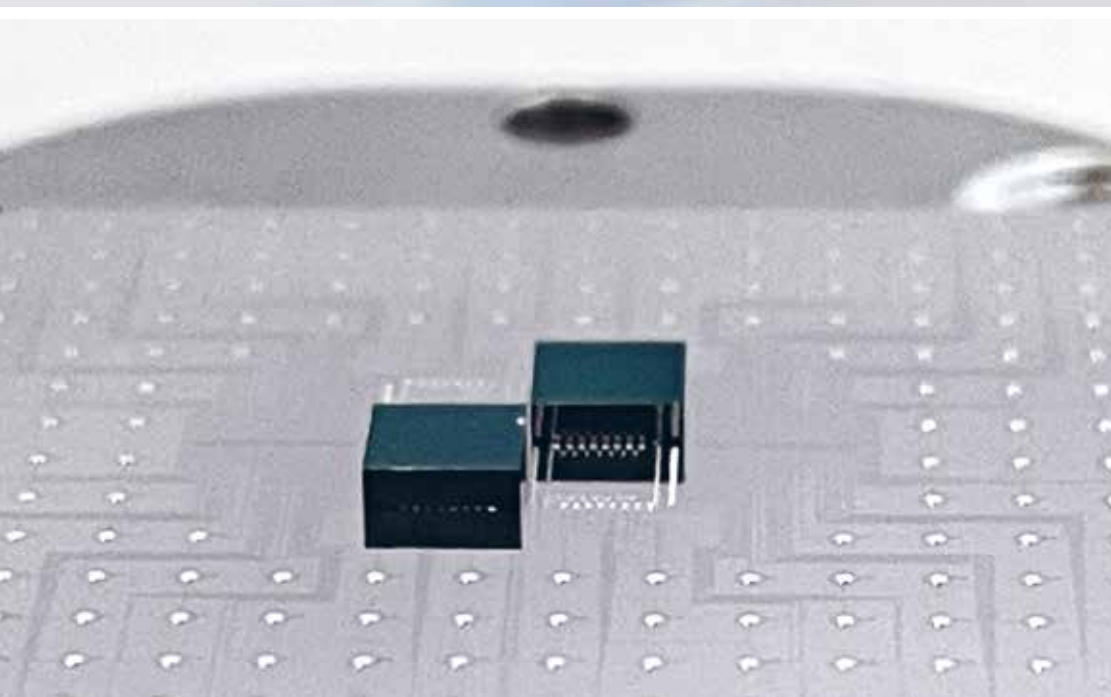
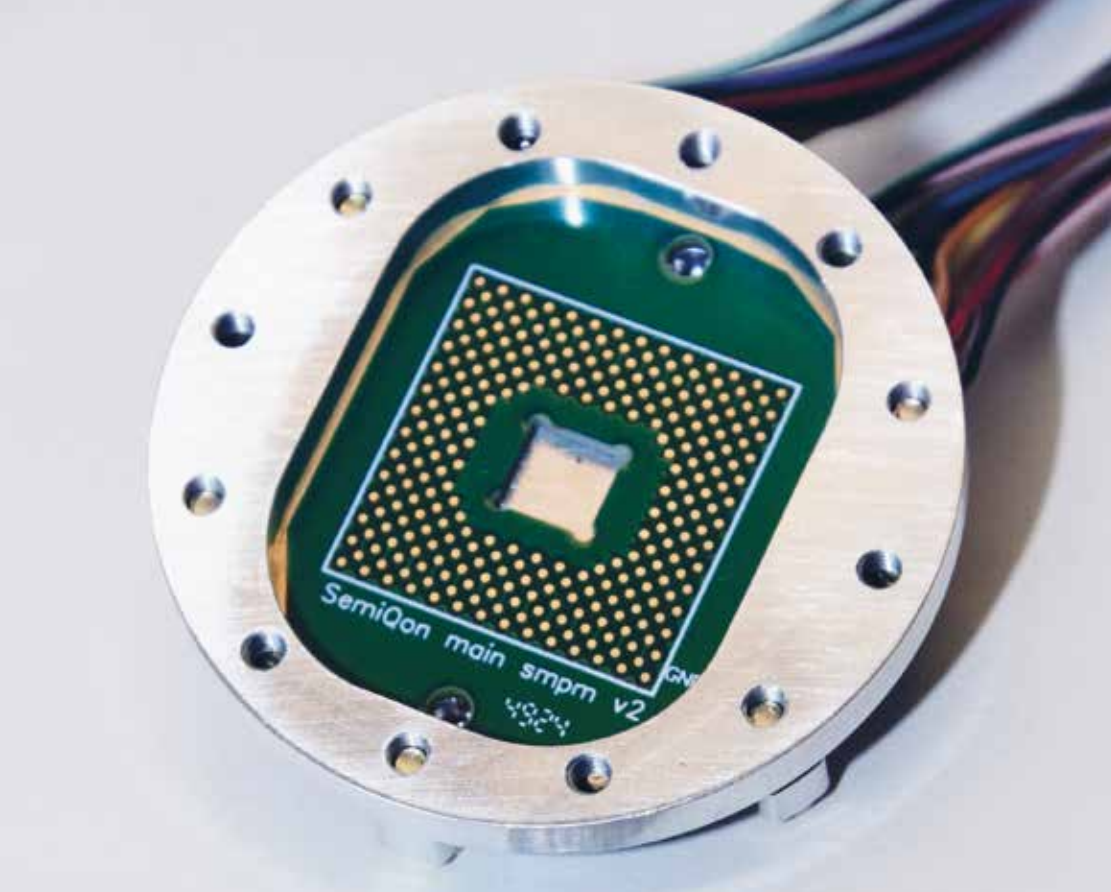
ABOUT SEMIQON

SemiQon — Powering the scale-up of quantum computers with silicon-based quantum processors

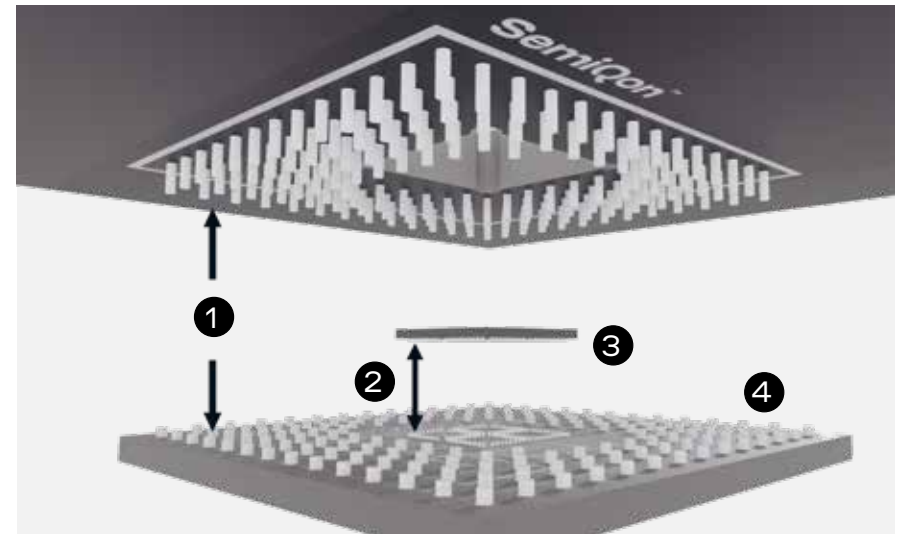
We are on a mission to realize the promise of quantum computing by delivering scalability through powerful, resilient, and cost-effective silicon-based quantum processors.

At SemiQon, we build quantum processors for the million-qubit era. Our semiconductor-based solution responds three major challenges slowing down the development of quantum computers globally:

- Scalability — Our fabrication process supports efficient large-scale manufacturing
- Price — Silicon-based quantum processors significantly reduce costs
- Sustainability — Our chips enable operating quantum computers at warmer temperatures, cutting energy consumption



SEMIQON PACKAGED CHIP SCHEMATICS



- 1 Press-connected cryogenic metal interconnects, superior to conventional wire-bonds in both electrical and thermal conductivity
- 2, 3 Qubit chiplets bonded with flip-chip technology
- 4 Si motherboard with embedded cryo-CMOS ICs

Located at the Micronova Center for Applied Micro and Nanotechnology in Espoo, Finland, we have access to state-of-the-art fabrication facilities, allowing us to carry out fast design and fabrication cycles.

Instead of taking on the work to build entire quantum computers, our focus is on building the best possible processors, collaborating with partners who excel in other aspects of quantum technology.



OUR STORY

From startup to scaleup

A spin-out from VTT, SemiQon was founded by a team of experienced researchers who recognized that scaling quantum computers from research devices to millions of qubits required new approaches.

We started operations in 2022, and set out to develop cost-effective, scalable solutions based on silicon.

In early 2023, we launched independent operations and secured €2 million in funding, led by Voima Ventures, with backing from Lunar Ventures, Dhyan Ventures, Tiny Supercomputer VC, and Atomico Angel Programme.

In early 2025, SemiQon transitioned from startup to scaleup, securing €17.5 million in funding through the European Innovation Council (EIC) Accelerator program—including a €2.5M competitive, non-dilutive grant and €15M in earmarked equity funding.

PRODUCT OVERVIEW

SemiQit — A ready-to-use quantum research solution

Fast-track your entry into quantum research without the complexity of device fabrication and packaging. The SemiQit equips universities and research groups with ready-to-use spin-qubit chips, enabling faster experimentation and discovery.

WHAT'S INSIDE?

- Selected spin-qubit chip variants for R&D
- Devices shipped fully packaged – plug-and-play without tedious bonding on R&D side
- Quality control – devices pre-tested and shipped with datasheets and operational instructions
- Technical support from SemiQon experts
- Designed for universities and research groups

Starting price: €15,000



BACKED BY PIONEERING QUANTUM COMPUTING RESEARCHERS

SemiQon's technology is driving early-stage innovation and accelerating experimental breakthroughs

"SemiQon's prototype devices and their proposed fast iteration of the new generation of devices are beneficial and necessary for the research community to experiment on and push the boundary of public research."

PROF. DOMINIK ZUMBÜHL · UNIVERSITY OF BASEL, SWITZERLAND

"Having a supply of chips that constantly improves with every iteration of design and process that SemiQon does every 6 months or so is a great way to get the latest and best chips for research. This also eliminates the worry of destroying chips during experiment and having to wait long for getting a fresh batch."

PROF. SAMARESH DAS · INDIAN INSTITUTE OF TECHNOLOGY DELHI, INDIA

"SemiQon's devices are crucial for our research. Without their ability to supply us with these key components, our only option would have been to embark on a multi-year, multi-PhD student project to produce these detectors in house. It would have slowed down our research work – and likely involved a lot of desperation."

PROF. JUHA MUHONEN · UNIVERSITY OF JYVÄSKYLÄ, FINLAND

TRUSTED BY LEADING QUANTUM RESEARCH INSTITUTIONS



서울대학교
SEOUL NATIONAL UNIVERSITY

UCLA



Unlock the potential of scalable quantum research with SemiQit

GET IN TOUCH FOR DETAILS, PRICING,
AND EXPERT SUPPORT

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AT SEMIQON WE ARE DETERMINED TO WORK WITH THE BEST PARTNERS AND TO PROVIDE OUR PARTNERS WITH ACCESS TO THE BEST TECHNOLOGY AVAILABLE. ONLY WHEN WE GET OUR TECHNOLOGY IN THE HANDS OF THE BEST RESEARCHERS, WE CAN TRULY START EXPLORING ITS FULL POTENTIAL.

SEMIQON.TECH