QSIP Innovation Intelligence Digest – March 2024

Quantum Sweden Innovation Intelligence Digest (QSIID) is a curated monthly newsletter with external quantum innovation business news from around the globe.

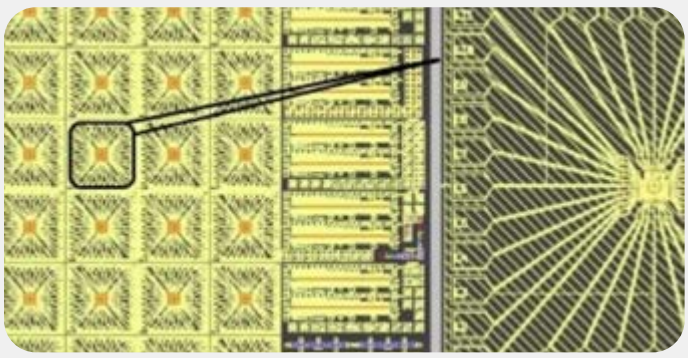
In a recent interview between founder and chairman of Globalive, Anthony Lacavera, and Himadri Majumdar, co-founder and CEO of SemiQon on Beyond Innovation TV, Majumdar emphasized the challenges of achieving ultra-low temperatures for quantum computing. However, the main topic was his company's approach to reshape the quantum landscape with its silicon-based quantum processors; that and being a finalist (representing Finland) in the prestigious @kpmg Private Enterprise Global Tech Innovator 2023 Competition.
Read more here.

The UK government is going all in on quantum technology's potential to "overhaul healthcare, energy, transport, and more" with a total investment of £45 million in the country's quantum sector; with £30 million going directly to the development and delivery of "world-leading prototype quantum computers" to provide "scientists and engineers with a controlled environment for experimentation."

Winners of the £15 million Quantum Catalyst Fund will "accelerate the adoption of quantum solutions in the public sector, on projects from optimising power grids through to improving diagnosis of dementia".
Read more here.

An exclusive, Quantum Industry Explained, comes with background on its various applications, impacts on industries, challenges and limitations, in addition to a list of the key players in the industry.
Read more here.

Infleqtion, the world's leading quantum information company, announced its 5-year quantum computing roadmap and the next phase of its program: Sqorpius. "This new initiative encompasses substantial investments in both hardware and software and is dedicated to creating error-corrected logical qubits tailored for commercial applications." Infleqtion is also involved in a testbed initative in the UK and with key investments in Texas to develop next generation quantum technologies.
Read more here.



SemiQon (Finland) and CMC Microsystems (Canada) offer complimentary expertise and announced a collaboration agreement to advance silicon-based quantum processor technology. Both companies have committed to publicly disseminating the results obtained from this collaboration.
Read more here.

D-Wave Quantum and Zapata Computing, industry leaders in quantum computing and generative AI, have announced a multi-year strategic partnership centering on "joint technical development and commercial deployment of applications for customers faced with computationally complex problems." The new partners believe that by joining forces they will be able to accelerate quantum plus AI development for customer ready applications.
Read more here.

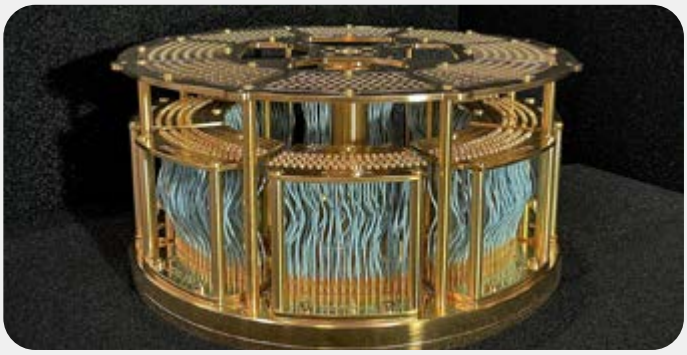
This article offers a roadmap and guide to CISOs and technical teams for the quantum era, as they are often relied upon to provide responses to threats and advice on the opportunties of new technologies. Becoming aware of the steps to take to be "responsible quantum advocates" will be essential for businesses and organizations.
Read more here.

The Quantum Flagship unveils a roadmap calling for Europe to reduce dependancies on outside nations to develop components and hardware, thus positioning Europe as the "Quantum Valley." This new strategy, published by the Quantum Flagship, depicts Europe as an "autonomous ecosystem" with the highest levels of public funding and thousands of researchers contributing to a burgeoning workforce.
Read more here.

IQM Quantum Computers recently announced its latest benchmarks measured on its 20-qubit computer and said that the results will drive "large-scale commercial quantum adoption." The chip developed is based on IQM's tunable-coupler concept, which enables "fast two-gate speed and state-of-the-art fidelity." The Head of Engineering and Development at IQM stated that with the increase in interest and investment from both private and public sectors the advances in technology performance are expected to accelerate.
Read more here.

In a recent MIT study on graphene, researchers found that an exotic electronic state (known as the – fractional quantum anomalous Hall effect) could lead to advances in quantum computing.
Read more here.

French Minister of Economy, Finance and Industrial and Digital Socereignty recently enacted a comprehensive national control list which reponds directly to the "disruptive potential of quantum computing and is in adherence to the EU's Regulation 2021/821 from May 20, 2021. Regulatory measures like this, will play an increasingly important role in forming reponsible international trade and development of this rapidly growing technology sector.
Read more here.



Gothenburg-based, quantum computing hardware company, SCALINQ has announced the release of a large-scale packaging solution capable of controlling quantum devices with hundreds of qubits. It is the biggest commercially available and marks a shift in accessibility of large-scale quantum computing systems.

"This is one of the many exciting projects that I am particularly proud of finally sharing with the community. It truly underscores our engineers' and researchers' restless efforts and endless creativity to drive collaborative innovation and solve the hardware bottlenecks for scaling up quantum computing. It also showcases the industry's rapid development and ever-growing needs for collaborative R&D." – Zaid Saeed, CEO, SCALINQ.
Read more here.

Google and XPRIZE have opened a 3-year competition to find a practical, real-life applications for quantum technology; the prize $5 million.
Read more here.

QSIP – Empowering Sweden's Quantum Innovation Future