"Laying the Foundation for a Sustainable AI Chip Industry" – Robert Habeck Explores the Potential of Photonic Computing at Q.ANT

Stuttgart, Germany - January 27, 2025. What role will Germany play in the global chip industry? Robert Habeck sought answers to this question during his visit to Q.ANT last weekend. The German Vice Chancellor and Federal Minister for Economic Affairs and Climate Action learned about the future of sustainable AI computing in Germany at the Stuttgart-based startup. The visit once again underscored the importance attributed to Q.ANT in developing a photonic AI chip industry in Germany.

The Federal Minister of Economics was accompanied by Anna Christmann, Federal Government Commissioner for the Digital Economy and Start-ups, as well as Baden-Württemberg's Science Minister Petra Olschowski and Transport Minister Winfried Herrmann. Q.ANT, a pioneer in the field of energy-efficient high-performance processors, presented the world's first commercial processor generation based on photonics, which is produced at Q.ANT in Stuttgart from wafer to integrated server solution.

In a live demonstration, the visitors could see for themselves the potential of the technology, which can improve a 30-fold improvement in energy efficiency and a 50-fold increase in computing power. Commercial use can significantly reduce manufacturing costs, as existing chip factories from the 1990s can be upgraded and reused. This not only creates technological advantages, but also opens up opportunities for greater national independence in chip production, as the infrastructure is available worldwide.

"We are laying the foundation for a sustainable next-generation AI chip industry in Germany with global reach," said Dr. Michael Förtsch, CEO of Q.ANT. "Our technology addresses two crucial challenges: the increasing energy demand of AI and the need to efficiently compute complex tasks."

Förtsch emphasized how these processors will replace the graphics cards currently used for complex AI tasks in the future and become an integral part of future computing systems. "The future of data processing requires a harmonious interplay of various chip technologies," Förtsch added. "That's why our photonic processor solutions are designed to seamlessly integrate into existing high-performance computing centers and play an important role alongside classical digital semiconductors - CPUs, GPUs, and ASICs."

With photonic chip technology, Q.ANT is entering a billion-dollar market. Analysts predict significant growth for AI chips, AI accelerators in servers, and photonic integrated circuits. Q.ANT reaffirms its commitment to developing solutions that align innovation with ecological responsibility.

For more information about Q.ANT and its Photonic Computing solutions, visit https://qant.com/photonic-computing/.

About Q.ANT
Q.ANT aims to merge the digital with the real world. To achieve this, the deep-tech startup develops quantum sensors in the Native Sensing business unit that can directly capture and process subtle and finest electrical and magnetic fields. In the Native Computing business unit, photonic processors are being created that can natively process information from nature. Q.ANT's Native Sensing and Native Computing technology is based on the Q.ANT Para.Digm Framework for generating, processing, and detecting light. With this, Q.ANT overcomes the limitations of existing technologies and opens up new application fields in various industries such as High Performance Computing (HPC), Artificial Intelligence, Medical Technology, Aerospace, Mechanical Engineering, and Process Industry. Q.ANT was spun off as an independent startup from TRUMPF's research laboratories in 2018 and is headquartered in Stuttgart, Germany.

Media Contact
Edith Laga
Fellow, PR and Public Affairs
edith.laga@qant.gmbh

Q.ANT GmbH
Handwerkstr 29
70565 Stuttgart
www.qant.com