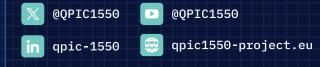
Join us in shaping the future of quantum technology. Explore the innovations of QPIC1550 today!



info@qpic1550-project.eu



CONSORTIUM

QPIC1550 brings together some of Europe's most prestigious research institutes and tech companies. This consortium combines expertise in quantum technologies, photonics and integrated circuits to deliver cutting-edge solutions for a quantum-secure future.



A DYNAMIC NETWORK OF NINE PARTNERS

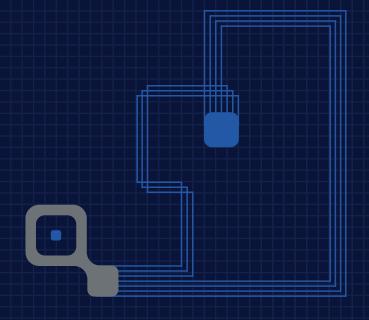






Transforming Quantum Photonic Integration

QPIC1550 stands at the forefront of a technological revolution, driving advancements in Quantum Photonic Integrated Circuits (QPICs) at the pivotal 1550 nm wavelength.



QPIC1550 is a pioneering Horizon Europe-funded research project focused on developing Quantum Photonic Integrated Circuits (QPICs) at the telecom C-band (1550nm). This innovative project aims to improve the performance, scalability and manufacturability of quantum technologies, driving advancements in secure communications, quantum computing, and sensing.

WHY OPIC1550

Quantum technology requires scalable and efficient solutions to address the growing demand for secure communication and advanced computing. QPIC1550, by operating in the telecom C-band, paves the way for real-world applications of quantum technology while ensuring compatibility with existing telecom infrastructure.

OUR INNOVATIONS AIM TO ADDRESS CRITICAL DEMANDS IN SECURE COMMUNICATIONS, QUANTUM COMPUTING AND SENSING, PAVING THE WAY FOR SCALABLE, HIGH-PERFOR-MANCE, AND COMMERCIALLY VIABLE QUANTUM SOLUTIONS AT THE 1550NM WAVELENGTH.

OBJECTIVES

PERFORMANCE

Develop high-performance, compact and scalable quantum photonic circuits tailored for Quantum Key Distribution (QKD) and quantum communication.



Demonstrate scalable QPIC solutions compatible with existing telecom networks, ensuring widespread adoption and integration.

MANUFACTURABILITY

Focus on designing QPICs that are commercially viable and easy to manufacture, lowering barriers for widespread implementation.



8

 Θ

PROJECT INNOVATIONS

TELECOM C-BAND INTEGRATION

Operating at 1550nm, the project aligns with the global telecom infrastructure, making it easier to deploy and integrate with existing networks.

OUANTUM LIGHT SOURCES & DETECTORS

Development of efficient quantum sources and single-photon detectors to boost secure communications.

SCALABLE INTEGRATION

Combining InP-based and SiN-based technology for high-performance, integrated quantum photonic circuits.

OUR MISSION IS TO DEVELOP A NOVEL PLATFORM FOR QUANTUM PHOTONIC INTEGRATION

