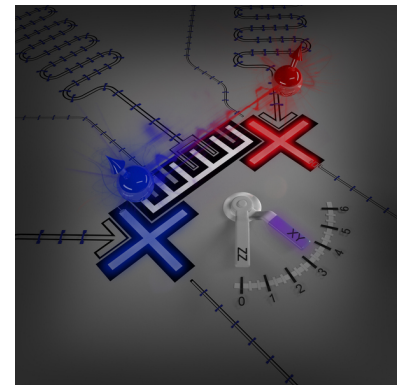


NTU Q

CLEARING THE WAY TOWARD ROBUST QUANTUM COMPUTING

MIT researchers demonstrating a new way that eliminates common errors in the most essential operation of Controlled-Z gates and iSWAP gates. In previous work, they proposed that using tunable couplers to turn two-qubit interactions on and off to control their operations while preserving the fragile qubits. However, the two-qubit gates were still prone to errors. Now, the team harnessed higher energy levels of the tunable coupler to cancel out the unwanted interactions between the two qubits and between the qubits and the coupler. The result demonstrated near 99.9 percent fidelity for the this two types of two-qubit gates.

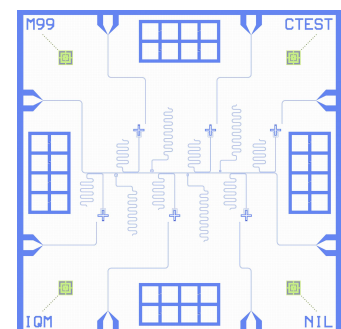


source: MIT

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IQM ANNOUNCES KQCIRCUITS - AN OPEN-SOURCE SOFTWARE TO DESIGN SUPERCONDUCTING QUANTUM PROCESSORS

IQM, the European leader in superconducting quantum computers, announced its open-source software tool [KQCircuits](#) to automate the design of superconducting quantum processors. Designing quantum processors is a arduous task and multi-step process that takes significant time and effort. With KQCircuits, quantum engineers and physicists can generate chip designs very cleverly. Moreover, they can also check the signal routing before the device fabrication process to avoid making expensive mistakes.



source: IQM

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STRANGWORKS NOW OFFERS IBM'S QUANTUM COMPUTERS ON ITS OPEN PLATFORM

IBM announced that they marks the beginning of technical integration of IBM Quantum as a service into the [Strangeworks](#) platform. Moreover, users can use their IBM Quantum account via [quantumcomputing.com](#), a free quantum computing ecosystem that allows users to create quantum computing projects with various quantum code libraries.

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SONORA ANNOUNCES LOI TO ACQUIRE BTQ AG

Sonora announced that it has entered into a letter of intent dated June 14, 2021 to complete a business combination with [BTQ AG](#). BTQ was incorporated by a group of experienced post-quantum cryptographers with an interest in addressing the urgent security threat that a large-scale universal quantum computer poses to the Bitcoin network.

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COMPACT QUANTUM COMPUTERS FOR SERVER CENTERS

Researchers of the University of Innsbruck have built a prototype of an ion trap quantum computer that can be fits into two 19-inch server racks. Now, this quantum computers have 24 fully functional qubits, and hope to provide a device with up to 50 individually controllable quantum bits next year.

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