

IBM and the University of Tokyo Unveil Japan's Most Powerful Quantum Computer

An IBM Quantum System One will serve Japan's growing quantum community in industrial and scientific research

IBM leads the development of a global quantum ecosystem with IBM Quantum System One systems on three continents

TOKYO, July 26, 2021 /PRNewswire/ -- IBM (NYSE: [IBM](#)) and the University of Tokyo today unveiled Japan's most powerful quantum computer as part of their [ongoing collaboration](#) to advance Japan's exploration of quantum science, business and education.

"IBM is committed to the growth of the global quantum ecosystem," said Dr. Dario Gil, Director of IBM Research.

The IBM Quantum System One is now operational for researchers at both scientific institutions and businesses in Japan, with access administered by the University of Tokyo. The IBM Quantum System One offers users access to repeatable and predictable performance from high-quality qubits

and high precision control electronics, with quantum resources tightly coupled with classical processing so that users can securely run algorithms requiring repetition of quantum circuits on the cloud. For more details on the latest advances in IBM's quantum computation, please go to <https://research.ibm.com/blog/120x-quantum-speedup>

In 2020, IBM and the University of Tokyo launched the [Quantum Innovation Initiative Consortium](#), with the goal of strategically accelerating quantum computing research and development activities in Japan by bringing together academic talent from across the country's universities and prominent research associations and large-scale industry. Besides IBM and the University of Tokyo, members include DIC, Hitachi, JSR, Keio University, Mitsubishi Chemical, Mizuho, MUFG, Sony, Sumitomo Mitsui Trust Bank, Toshiba, Toyota, and Yokogawa. The QIIC followed the formation of the Japan-IBM Quantum Partnership by IBM and the University of Tokyo in 2019.

It is the second system to be built outside the United States, following the recent [unveiling of an IBM Quantum System One in Germany](#), administered by Fraunhofer Gesellschaft, Germany's premier scientific research institution.

"IBM is committed to the growth of the global quantum ecosystem and fostering collaboration between

different research communities," said Dr. Dario Gil, Senior Vice President and Director of IBM Research. "As part of this global effort, I am proud to be unveiling Japan's most powerful quantum computer and excited to see the contributions to research that will be made by Japan's world-class academic, private sector and government institutions. Together, we can take major steps to accelerate scientific progress in a variety of fields."

"In the rapidly changing field of quantum technology, it is extremely important not only to develop quantum technology-related elements and systems, but also to foster the next generation of human resources in order to achieve advanced social implementation on a global scale," said Teruo Fujii, President of the University of Tokyo. "Our university has a broad base of research talents and has been always promoting high-level quantum education from the undergraduate level. Now, we will further refine the development of the next generation of quantum native skillsets by utilizing IBM Quantum System One."

In addition to the installation of the IBM Quantum System One devices in Germany and Japan, in the last year IBM has announced recent partnerships with the [Cleveland Clinic](#), the [UK's Science and Technologies Facilities Council](#) and the [University of Illinois Urbana-Champaign](#), all of which include a focus on quantum information science and technology.

IBM is a leader in the business and research and development of quantum computing. Through scientific research, geographic expansion and partnerships with academic, government and private sector players, IBM Quantum is helping advance the industry and develop a skilled quantum workforce worldwide. To learn more about IBM Quantum, visit <https://www.ibm.com/quantum-computing/>.

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