Quantinuum and RIKEN Expand Partnership to Accelerate the Commercialization of Quantum-AI Hybrid Supercomputing in Japan

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- Completed upgrade of Quantinuum's Reimei quantum computer to its H2 system establishes RIKEN's hybrid quantum-supercomputing platform as the most capable of its kind in the world and creates a pathway to expand research across electronics, energy and life sciences.
- Quantinuum and RIKEN will build upon this pioneering computing architecture to develop a fault-tolerant "Made with Japan" quantum computer to extend Japan's long-term quantum leadership.
- To further accelerate commercial adoption of quantum-AI hybrid supercomputing in Japan, the partners will collaborate with SoftBank Corp. to develop a path to connect quantum computers directly with AI data centers.

TOKYO, Nov. 10, 2026 /PRNewswire/ -- Quantinuum (NASDAQ: QNT), a leading full-stack quantum computing company, and RIKEN, Japan's leading national comprehensive research institute, today announced an expanded partnership to advance quantum-AI hybrid supercomputing in Japan. Following a significant upgrade to Quantinuum's Reimei quantum computer at RIKEN, the partners will pursue more advanced scientific and industrial applications, work with Japanese universities and suppliers toward the development of a "Made with Japan" fault-tolerant quantum computer, and collaborate with SoftBank Corp. to explore the connection of quantum computer with AI data centers in Japan.

Quantinuum's quantum computer, Reimei, installed at RIKEN, has successfully completed its upgrade to System Model H2. Reimei is operated as part of the JHPC-quantum project, funded by NEDO. This upgrade further enhances the capabilities of the project's quantum–HPC hybrid computing platform and enables researchers to investigate more complex quantum systems that are increasingly difficult to simulate using classical computing alone, broadening the scientific problems they can explore.

Quantinuum and RIKEN will use the upgraded platform to combine quantum computing, supercomputing and AI in support of use case development across electronics, energy and life sciences. Building on their years-long collaboration, the partners will also draw on their experience integrating and operating Reimei to inform the development of a fault-tolerant "Made with Japan" quantum computer.

"Japan's quantum ambitions require advanced capabilities today and a sustained commitment to developing what comes next," said Dr. Rajeeb Hazra, Quantinuum CEO. "The upgrade to Reimei expands what we can explore with RIKEN across electronics, energy and life sciences. Together, we are building on this work to develop a fault-tolerant quantum computer with Japanese universities and suppliers, while exploring with SoftBank how these capabilities can become accessible to industry through Japan's AI data centers."

Two research projects that have begun operations on Reimei before the public launch of its services illustrate how Quantinuum and RIKEN are leveraging the hybrid platforms upgraded capabilities to push the frontiers of scientific discovery:

- Quantum-AI for materials simulation: The partners are using RIKEN's JHPC-quantum GPU supercomputer, ROQUO, to train an AI model on Reimei-generated quantum data for magnetism simulations. Preliminary results suggest the model can make more accurate predictions than AI models trained on classical simulations alone and more precise predictions than the quantum computer itself. Understanding magnetism at the atomic level could inform the development of materials for next-generation technologies such as ultra-high-field MRI and smart power grids.
- Quantum-AI for biomolecular simulation: The partners are combining Reimei, RIKEN's Fugaku supercomputer, and

NVIDIA's evolutionary AI agent running on ROQUO to simulate a complex photoactive biomolecule, targeting unprecedented scale and detail. Better understanding of how biomolecules respond to light could inform the design of more efficient solar cells among other industrial opportunities that could arise from advances in biomolecular engineering.

This research supports RIKEN's AI for Science initiative and aligns with U.S.-Japan efforts to advance AI-driven discovery, including a planned $1 billion partnership under the U.S. Genesis Mission.

"With the upgraded Reimei quantum computer, we will be able to tackle more complex and larger-scale scientific problems that were difficult to address with the previous H1 system, further advancing quantum–HPC hybrid computing through our ongoing JHPC-quantum project," said Dr. Mitsuhisa Sato, Division Director, Quantum-HPC Hybrid Platform Division, RIKEN Center for Computational Science (R-CCS). "Furthermore, the newly signed Memorandum of Understanding will pave the way for expanding our research into the use of quantum computing for AI for Science, a key initiative being promoted by RIKEN."

The partners' joint research and development toward a "Made with Japan" fault-tolerant quantum computer will involve Japanese universities and domestic components suppliers. This "Made with Japan" effort will combine Quantinuum's quantum technology with domestic research and manufacturing expertise, drawing on lessons from integrating and operating Reimei at RIKEN.

Under a separate agreement, Quantinuum, RIKEN and SoftBank will explore how quantum computing can be connected directly with AI data centers in Japan. The partners will assess infrastructure readiness and examine how connected systems could support commercial quantum-AI hybrid computing services, broadening access beyond the research community.

"Japan has established a strong foundation for hybrid quantum-HPC computing through the NEDO-supported JHPC-quantum project," said Takenori Kobayashi, Vice President, Head of Product Research & Development Division at SoftBank Corp. "Our responsibility is to turn these achievements into industrial value. Together with RIKEN and Quantinuum, we aim to advance a Quantum AI Datacenter that connects quantum computing with AI and HPC, making these capabilities accessible to businesses across Japan."

Learn more about the expanded joint Quantinuum-RIKEN research available here.

Research Support

This project is supported by New Energy and Industrial Technology Development Organization (NEDO), an organization under the jurisdiction of Japan's Ministry of Economy, Trade and Industry (METI)'s "Research and Development of Quantum-Supercomputers Hybrid Platform for Exploration of Uncharted Computable Capabilities" (Project Leader: Mitsuhisa Sato) as part of the "Project for Research and Development of Enhanced Infrastructures for Post 5G Information and Communications Systems (JPNP20017)."

About RIKEN

RIKEN, a National Research and Development Agency, is Japan's leading national comprehensive research institution renowned for high-quality research in a diverse range of scientific disciplines. Founded in 1917, initially as a private research foundation, RIKEN has grown rapidly in size and scope, today encompassing a network of world-class research centers and institutes across Japan. To learn more, please visit https://www.riken.jp/en

About SoftBank Corp.

Guided by the SoftBank Group's corporate philosophy, "Information Revolution – Happiness for everyone," SoftBank Corp. (TOKYO: 9434) operates telecommunications and IT businesses in Japan and globally. Building on its strong business foundation, SoftBank Corp. is aiming to activate the potential of AI across its businesses and drive implementation in line with its "Activate AI for Society" growth strategy. While further growing its telecom business, SoftBank is expanding its AI computing infrastructure and AI and Cloud service businesses with the aim of becoming a provider of Next-generation Social Infrastructure. To learn more, please visit https://www.softbank.jp/en/corp/.

About Quantinuum

Quantinuum (NASDAQ: QNT) is a leading quantum computing company offering a full-stack platform designed to make quantum computing deployable in real-world environments. The company has commercially deployed multiple generations of trapped-ion based quantum systems built on the well-established QCCD architecture, which it has implemented with novel designs and capabilities to achieve the industry's highest accuracy levels based on average two-qubit gate fidelity. Quantinuum has active engagements with market leaders across pharmaceuticals, material science, financial services, and government and industrial markets, as well as academic and research institutions globally. The company has a global workforce of approximately 800 employees, including top scientists and researchers. Over 70% of its technology team holds PhDs or Master's degrees. Quantinuum's headquarters is in Broomfield, Colorado, with additional facilities across the United States, United Kingdom, Germany, Japan, Qatar, and Singapore. For more information, please visit www.quantinuum.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are

forward-looking statements, including statements about the expected scope, benefits and outcomes of Quantinuum's expanded partnership with RIKEN and Memorandum of Understanding; expected capabilities and research applications of the upgraded Reimei quantum computer and RIKEN's hybrid quantum supercomputing platform; the planned joint research and development toward a "Made with Japan" fault-tolerant computer, including the participation of Japanese universities and domestic suppliers; the planned collaboration with SoftBank Corp. to connect quantum computers with AI data centers in Japan and potential development of commercial quantum-AI hybrid computing services; the expected results of ongoing research projects in Reimei, including preliminary results; Quantinuum's ability to help customers prepare for and realize commercial value from quantum computing; and the potential impact of quantum computing on sectors including electronics, energy and life sciences. Words such as "aim," "anticipate," "believe," "confidence," "could," "expect," "explore," "intend," "may," "path," "pathway," "plan," "potential," "seek," "suggest," "target," "will," "would" and similar expressions identify forward-looking statements, although not all forward-looking statements contain these words.

Forward-looking statements are based on Quantinuum's current expectations and assumptions and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied. These risks include, among others: the Memorandum of Understanding with RIKEN and the agreement with RIKEN and SoftBank Corp. may not result in definitive agreements, joint development or commercial services on the expected terms or timeline, or at all; Quantinuum's dependence on RIKEN, SoftBank Corp., NEDO, universities, suppliers and other third parties to perform their anticipated roles; the research results described in this press release are preliminary, were achieved in experimental settings and may not be confirmed or replicated at a larger scale, in logical computation, or in commercial use; Quantinuum may be unable to scale its systems, increase qubit counts or integrate its hardware, error-correction framework and software as planned; Quantinuum may not achieve its technology roadmap, including the development of a fault-tolerant quantum computer, on the expected timeline or at all; the pace of technical progress in quantum computing; Quantinuum's ability to maintain the availability and performance of its systems, including Reimei; competition, including advances by companies using other quantum computing modalities or architectures; the availability of funding, personnel and government support, including continued Japanese government funding of the JHPC-quantum project; risks related to international operations and collaborations, including compliance with export control laws and regulations; and the other risks described under "Risk Factors" in Quantinuum's Quarterly Report on Form 10-Q for the quarter ended September 30, 2026 and its subsequent filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date of this press release. Quantinuum undertakes no obligation to update any forward-looking statement, except as required by law.

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