

Quantinuum and SoftBank Corp. Publish Joint White Paper on Scaling Practical Quantum Computing Use Cases Toward the Fault-Tolerant Era

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- The companies have published a joint white paper mapping commercially relevant quantum computing use cases in quantum chemistry and graph analytics to Quantinuum's hardware roadmap.
- The paper provides a framework for assessing how advances in quantum hardware and algorithms, could affect when practical industrial applications become feasible.
- SoftBank Corp. and Quantinuum will use the roadmap to inform their exploration of future quantum AI data center services and related business models.

TOKYO and BROOMFIELD, Colo., July 21, 2026 /PRNewswire/ -- Quantinuum (NASDAQ: QNT) and SoftBank Corp. ("SoftBank") today announced the publication of "Quantum Computing Frontiers," a joint white paper that maps two commercially-relevant quantum computing application areas against Quantinuum's hardware roadmap. The analysis examines how advances in quantum hardware and algorithms could affect when these applications become practical for industrial use.

The paper focuses on two representative application domains that SoftBank is actively using Quantinuum's systems to research: quantum chemistry for new materials discovery and energy research, and topological data analysis for large-scale graph analytics, including for telecommunications fraud detection. The authors anchor their assessment of the scalability of these two application areas against Quantinuum's published hardware roadmap, examining how projected advances in hardware capabilities and algorithms may enable the commercial readiness of future industrial applications.

Building on this use-case roadmap, the paper also examines how quantum computing, AI, and high-performance computing could be integrated into future computing infrastructure. It considers how progress across successive hardware generations could inform future quantum AI data center services and related business models, a key focus of the Quantinuum and SoftBank partnership [announced last year](#).

"The key takeaway of this study is that organizations do not need to wait for large-scale, fault-tolerant systems to explore where quantum computing can begin creating value," said **Duncan Jones, General Manager, Applications Group at Quantinuum**. "By using today's systems to develop, benchmark and refine applications in areas such as quantum chemistry and graph analytics, enterprises can build the technical and operational readiness needed for the next era of quantum-enabled computing."

"The question is no longer whether quantum computing may deliver value, but rather which problem classes become executable at which stage of hardware maturity," said **Ryuji Wakikawa, Senior Vice President & CTO at SoftBank Corp.** "However, we believe progress in hardware must be complemented by equally strong developments in quantum algorithms and the integration of quantum systems with AI and high-performance computing."

The white paper discusses illustrative scenarios describing how representative applications, technology maturity, and potential market opportunities may evolve over time under stated assumptions. The analysis provided in the paper is intended to provide a conceptual framework for understanding potential market evolution and does not represent financial guidance or forecasts. These analyses are intended to support discussion of future technology development and should not be interpreted as commitments regarding commercialization, infrastructure investment, products, services, or financial performance.

The full white paper is available to download on the [SoftBank](#) and [Quantinuum](#) websites.

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 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.^[1] Quantinuum has active engagements with market leaders across pharmaceuticals, material science, financial services, and government and industrial markets. The company has a global workforce of approximately 700 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.

Cautionary Statement Concerning Forward-Looking Statements

This press release contains certain statements that may be deemed "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements that are not historical facts. The words "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "future," "will," "seek," "foreseeable," the negative version of these words, or similar terms and phrases are intended to identify forward-looking statements. Such statements are based on certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current economic and industry conditions, expected future developments and other factors they believe to be appropriate. The forward-looking statements included in this release are also subject to a number of material risks and uncertainties, including but not limited to economic, competitive, governmental, and technological factors affecting our operations, markets, products, services and prices. New factors emerge from time to time, and it is not possible for Quantinuum to predict all such factors. Any forward-looking statement speaks only as of the date on which it is made, and, except as required by law, Quantinuum does not undertake any obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

[¹] As of December 31, 2025.

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