# Rigetti Computing Awarded Phase 2 of DARPA Benchmarking Program

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**Rigetti will leverage its resource estimation framework developed in Phase 1 to research the requirements necessary for designing fault tolerant quantum computers capable of solving some of humanity's most pressing problems.**

BERKELEY, Calif., Nov. 21, 2023 (GLOBE NEWSWIRE) -- Rigetti Computing, Inc. (Nasdaq: RGTI) ("Rigetti" or the "Company"), a pioneer in full-stack quantum-classical computing, today announced that it was awarded Phase 2 of the Defense Advanced Research Projects Agency (DARPA) Quantum Benchmarking Program to develop benchmarks for quantum application performance on large-scale quantum computers. The award is worth up to $1.5 million based on the achievement of certain milestones.

The goal of the DARPA Benchmarking Program is to create key quantum computing metrics for fault tolerant quantum computing, make those metrics testable, and estimate the required quantum and classical resources needed to reach critical performance thresholds. The three-year project comprises two phases. Rigetti was awarded Phase 1 in March 2022, and Phase 2 will be completed in March 2025. The University of Technology Sydney, Aalto University, and the University of Southern California will continue to be project partners in Phase 2.

"We are very proud to have been recognized for the work we delivered in Phase 1. This is a testament to the entire team's performance. This work allows us to get a deeper understanding of what areas in our quantum system need improvement to get closer to fault tolerance, and how our quantum computers need to scale in order to solve some of humanity's most important and pressing problems," says Dr. Subodh Kulkari, CEO of Rigetti.

The key output of Phase 1 was the development of a resource estimation framework to provide insight into the requirements of a superconducting quantum computing system necessary for solving large-scale, complex problems. Phase 2 will entail refining and optimizing our estimates for selected utility-scale problems, delivering new upper bounds on these requirements.

Another benefit of this resource estimation framework is to enable a cost benefit analysis into whether the resources needed to run a quantum application will be met by the value of solving the particular problem. A challenge in developing quantum algorithms is understanding how a problem will scale, and at what point a dataset is large or complex enough to benefit from the unique properties of quantum computing. Estimating the amount of time, the number of qubits, and the energy required could accelerate the work towards designing an optimized algorithm.

Phase 2 will be heavily focused on researching fault-tolerant quantum applications. Of particular interest are dynamical chemistry simulations and modeling the dynamics of quantum systems.

"By collaborating with domain experts who have quantum-amenable use cases, we get a valuable feedback loop that enables us to make improvements on the hardware and software level to improve quantum algorithm performance. Having a tool that takes a specific problem and a particular architectural model, and provides a detailed accounting of the resources required to solve that problem allows us to work backwards to create better benchmarks to measure our progress in building useful quantum computers," says Dr. Josh Mutus, Director of Quantum Materials at Rigetti.

**About Rigetti**
Rigetti is a pioneer in full-stack quantum computing. The Company has operated quantum computers over the cloud since 2017 and serves global enterprise, government, and research clients through its Rigetti Quantum Cloud Services platform. The Company's proprietary quantum-classical infrastructure provides high performance integration with public and private clouds for practical quantum computing. Rigetti has developed the industry's first multi-chip quantum processor for scalable quantum computing systems. The Company designs and manufactures its chips in-house at Fab-1, the industry's first dedicated and integrated quantum device manufacturing facility. Learn more at www.rigetti.com.

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**Cautionary Language Concerning Forward-Looking Statements**
Certain statements in this communication may be considered "forward-looking statements" within the meaning of the federal securities laws, including statements with respect to expectations related to the DARPA Benchmarking Program and expectations with respect to Rigetti's Phase 2 award to develop benchmarks for quantum application performance on large-scale quantum computers; the potential for quantum computing generally and Rigetti's efforts to reach fault tolerance. Forward-looking statements generally relate to future events and can be identified by terminology such as "commit," "may," "should," "could," "might," "plan," "possible," "intend," "strive," "expect," "intend," "will," "estimate," "believe," "predict," "potential," "pursue," "aim," "goal," "outlook," "anticipate," "assume," or "continue," or the negatives of these terms or variations of them or similar terminology. Such forward-looking statements are subject to risks, uncertainties, and other factors which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These forward-looking statements are based upon estimates and assumptions that, while considered reasonable by Rigetti and its management, are inherently uncertain. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: Rigetti's ability to achieve milestones, technological advancements, including with respect to its roadmap, help unlock quantum computing, and develop practical applications; the ability of Rigetti to complete ongoing negotiations with government contractors successfully and in a timely manner; the potential of quantum computing; the ability of Rigetti to obtain government contracts and the availability of government funding; the ability of Rigetti to expand its QCS business; the success of Rigetti's partnerships and collaborations; Rigetti's ability to accelerate its development of multiple generations of quantum processors; the outcome of any legal proceedings that may be instituted against Rigetti or others; the ability to meet stock exchange listing standards; costs related to operating as a public company; changes in applicable laws or regulations; the possibility that Rigetti may be adversely affected by other economic, business, or competitive factors; Rigetti's estimates of expenses and profitability; the evolution of the markets in which Rigetti competes; the ability of Rigetti to execute on its technology roadmap; the ability of Rigetti to implement its strategic initiatives, expansion plans and continue to innovate its existing services; the impact of the COVID-19 pandemic on Rigetti's business; disruptions in banking systems, increased costs, international trade relations, political turmoil, natural catastrophes, warfare (such as the

ongoing military conflict between Russia and Ukraine and related sanctions against Russia), and terrorist attacks; and other risks and uncertainties set forth in the section entitled “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2022, the Company’s future filings with the SEC, including the Company’s Quarterly Report on Form 10-Q for the three months ended June 30, 2023, and other documents filed by the Company from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and the Company assumes no obligation and does not intend to update or revise these forward-looking statements other than as required by applicable law. The Company does not give any assurance that it will achieve its expectations.