

Rigetti Computing, Inc.
775 Heinz Avenue
Berkeley, CA 94710

December 18, 2023

VIA EDGAR

Division of Corporation Finance
Office of Technology
United States Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

RE: Rigetti Computing, Inc.
Registration Statement on Form S-3
File No. 333-275988

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Exchange Act of 1933, as amended, Rigetti Computing, Inc. (the “**Registrant**”) hereby requests that the U.S. Securities and Exchange Commission (the “**Commission**”) take appropriate action to cause the above-referenced Registration Statement on Form S-3 to become effective on December 19, 2023, at 4:00 p.m., Eastern Time, or as soon thereafter as is practicable or at such later time as the Registrant may orally request via telephone call to the staff of the Commission. The Registrant hereby authorizes each of Rupa Briggs and Sarah Sellers of Cooley LLP, counsel to the Registrant, to make such request on its behalf.

Once the Registration Statement has been declared effective, please orally confirm that event with Rupa Briggs of Cooley LLP, counsel to the Registrant, at (212) 479-6525, or in her absence, Sarah Sellers at (212) 479-6370.

Very truly yours,

RIGETTI COMPUTING, INC.

By: /s/ Jeffrey Bertelsen

Name: Jeffrey Bertelsen

Title: Chief Financial Officer

cc: Rick Danis, Rigetti Computing, Inc.
Rupa Briggs, Cooley LLP
Sarah Sellers, Cooley LLP