VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance Office of Manufacturing 100 F Street, N.E. Washington, D.C. 20549

> Re: Amprius Technologies, Inc. Registration Statement on Form S-3 (File No. 333-274834) Acceleration Request

Requested Date: Tuesday, October 10, 2023 Requested Time: 4:30 P.M. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Amprius Technologies, Inc. (the "Company") hereby requests that the above-referenced Registration Statement on Form S-3 (the "Registration Statement") be declared effective at the "Requested Date" and "Requested Time" set forth above or at such later time as the Company or its counsel may orally request via telephone call to the staff of the Division of Corporation Finance of the Securities and Exchange Commission. Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Wilson Sonsini Goodrich & Rosati, P.C., by calling Austin D. March at (512) 338-5410.

[Signature page follows]

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Sincerely, AMPRIUS TECHNOLOGIES, INC.

/s/ Sandra Wallach Sandra Wallach Chief Financial Officer

cc: Michael J. Danaher, Mark B. Baudler, and Austin D. March, Wilson Sonsini Goodrich & Rosati, P.C.