

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**POST-EFFECTIVE AMENDMENT NO. 1
TO**

**Form S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

AMPRIUS TECHNOLOGIES, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware
(Jurisdiction of
Incorporation or Organization)

3690
(Primary Standard Industrial
Classification Code Number)

98-1591811
(I.R.S. Employer
Identification Number)

**1180 Page Avenue
Fremont, California 94538
(800) 425-8803**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Dr. Kang Sun
Chief Executive Officer
Amprius Technologies, Inc.
1180 Page Avenue
Fremont, California 94538
(800) 425-8803**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Michael J. Danaher
Mark B. Baudler**

Austin D. March Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, CA 94304 Tel: (650) 493-9300

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective and on the consummation of the business combination described in the enclosed proxy statement/prospectus.

If the securities being registered on this Form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act.

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (as may be amended after the date hereof, the **"Post-Effective Amendment No. 1"**) is filed with the Securities and Exchange Commission (the **"Commission"**) by Amprius Technologies, Inc. (the **"Registrant"**) and amends the registration statement initially filed with the Commission on Form S-4 (File No. 333-265740) on June 21, 2022, as amended on July 25, 2022, August 10, 2022 and August 22, 2022, which was declared effective by the Commission on September 1, 2022 (the **"Registration Statement"**).

At the time that the Registration Statement was declared effective, the Registration Statement registered, among other things, 46,000,000 shares of common stock of the Registrant (the **"Underlying Shares"**) that are issuable upon the exercise of 46,000,000 public warrants of the Registrant (the **"Public Warrants"**), the offering of which was registered by the Registration Statement.

This Post-Effective Amendment is being filed to remove from registration the previously registered Underlying Shares covered by the Registration Statement, 214,388 of which have been sold. The Registrant hereby requests that the 46,000,000 Underlying Shares issuable on exercise of the warrants be removed from registration by means of this Post-Effective Amendment.

A total of 22,733,336 Underlying Shares are being registered under a registration statement on Form S-1 (File No. 333-271149) initially filed with the Commission on April 5, 2023, which the Registrant intends to request that the Staff of the Commission declare effective as soon as practicable following the effectiveness of this Post-Effective Amendment No.1.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Fremont, California, on April 5, 2023.

AMPRIUS TECHNOLOGIES, INC.

By: /s/ Dr. Kang Sun

Name: Dr. Kang Sun

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement on Form S-4 has been signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Dr. Kang Sun</u> Dr. Kang Sun	Chief Executive Officer and Director (Principal Executive Officer)	April 5, 2023
<u>/s/ Sandra Wallach</u> Sandra Wallach	Chief Financial Officer (Principal Financial and Accounting Officer)	April 5, 2023
<u>/s/ Donald R. Dixon</u> Donald R. Dixon	Director	April 5, 2023
<u>/s/ Dr. Steven Chu</u> Dr. Steven Chu	Director	April 5, 2023
<u>/s/ Dr. Wen Hsieh</u> Dr. Wen Hsieh	Director	April 5, 2023
<u>/s/ Justin Mirro</u> Justin Mirro	Director	April 5, 2023