



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

June 21, 2022

Fumihide Esaka  
Chief Executive Officer  
Ambiq Micro, Inc.  
6500 River Place Boulevard  
Building 7, Suite 200  
Austin, TX 78730

**Re: Ambiq Micro, Inc.**  
**Draft Registration Statement on Form S-1**  
**Filed May 25, 2022**  
**CIK 0001500412**

Dear Mr. Esaka:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1 filed May 25, 2022

Prospectus Summary, page 5

1. We note your disclosure on Page 5 that your Company has partnered with "world class semiconductor foundry partners," to outsource manufacturing of your products. According to your disclosure in the Risk Factors section on page 26, TSMC is the "only producer of semiconductor wafers that are used in [your] products." Please revise the statement to clarify that the Company currently partners with only one semiconductor foundry manufacturer.

Summary Consolidated Financial Data  
Non-GAAP Measures, page 14

2. We note your Non-GAAP Net Loss and Non-GAAP gross profit metrics include an adjustment for your warranty provision. It is unclear to us why you believe adjusting for your warranty provision is appropriate, given that warranty matters are a normal recurring cost associated with the production of goods and warranty matters are ultimately cash settled. Please explain to us why you believe the adjustment is appropriate or otherwise remove the adjustment from your non-GAAP measures. Refer to Item 10(e)(1)(ii) of Regulation S-K and also Question 100.01 of the Commission's Compliance and Disclosure Interpretations for Non-GAAP Financial Measures for guidance.

Risk Factors

Some of our end customer and other third-party agreements provide ..., page 21

3. We note your disclosure that you hold various third-party development, product collaboration, and tech licensing agreements with third parties. Please disclose the scope and term of any material agreements and file them as exhibits to your registration statement. In addition, include a discussion of the duration and scope of the agreements that are material to your business.

Industry and Market Data, page 55

4. Please tell us whether you commissioned any of the reports or studies referenced in this section. With respect to the disclaimer regarding the disclosure characterized as "Gartner content," please explain the basis for attempting to limit investors' reliance on the information provided. In doing so, please indicate how management assessed the reliability of the information and whether it has adopted this information as management's belief.

Management's Discussion and Analysis of Financial Condition and Results of Operations  
Results of Operations

Comparison of Year Ended December 31, 2021 and 2020, page 69

5. Please expand your MD&A to quantify the individual factors that contributed to the overall decrease or increase in your financial statement line items. For instance, quantify the impact increased wafer fabrication costs and reduced yields on newer products had on your overall decrease in gross margin.

Employees; Facilities, page 92

6. We note your disclosure that you have employees located in the US, China, Taiwan and Singapore, along with offices in Austin, Taiwan, and China. Please clarify specifically where you have facilities and a distribution of your employees by location.

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Page 3

Board Composition, page 95

7. Please update your disclosures relating to the Board Composition, including disclosing the currently authorized number of Directors, the composition of each Class of Directors, and Committee assignments.

Principal Stockholders, page 117

8. We note the inclusion of Paul Rolls as the Chief Revenue Officer on page 93 and the summation of "All directors and executive officers as a group (9 persons)" within the table of Principal Stockholders. Please advise as to why Paul Rolls was excluded from the list of Named Executive Officers within the table.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Kevin Stertz at 202-551-3723 or Kevin Woody at 202-551-3629 if you have questions regarding comments on the financial statements and related matters. Please contact Alex King at 202-551-8631 or Jay Ingram at 202-551-3397 with any other questions.

Sincerely,

Division of Corporation Finance  
Office of Manufacturing