

November 29, 2022

Via EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Manufacturing
100 F Street, N.E.
Washington, D.C. 20549
Attention: Andri Carpenter
Martin James

Re: Ambarella, Inc.
Form 10-K for the Fiscal Year Ended January 31, 2022
Filed April 1, 2022
File No. 001-35667

Ladies and Gentlemen:

Ambarella, Inc. (“we” or the “**Company**”) submits this letter in response to comments from the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) received by letter dated November 15, 2022, relating to the Company’s Form 10-K for the fiscal year ended January 31, 2022 (File No. 001-35667) originally filed with the Commission on April 1, 2022 (the “**Form 10-K**”).

In this letter, we have recited the comments from the Staff in italicized, bold type and have followed each comment with the Company’s response.

Form 10-K for the Fiscal Year Ended January 31, 2022

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

Results of Operations, page 54

- 1. Please revise the discussion in future filings to describe the impact of the supply chain issues your company is having on your results of operations. Also, discuss any known trends or uncertainties on your results. Refer to Item 303(b)(2) of Regulation S-K. In this regard, we note that your management has been discussing the impact of supply chain issues during each of your last three quarterly earnings calls.***

We acknowledge the Staff’s comment, and respectfully advise the Staff that we will revise the disclosures in future filings to provide additional description of the impact of supply chain constraints on the Company’s results of operations and discuss any known trends or uncertainties on its results.

In light of recent developments on this issue, we intend to include the following discussion in the Management's Discussion and Analysis of Financial Condition and Results of Operations section ("MD&A") of our upcoming Quarterly Report on Form 10-Q filing for the quarter ended October 31, 2022:

Factors Affecting Our Performance

Impact of Global Supply Shortages on our Business. Global supply shortages, and uncertainty in customer demand as well as the worldwide economy, in general, have continued as a result of the COVID-19 pandemic, and may be further exacerbated by the impacts of higher inflation. Supply chain issues impact our business as they relate to both our suppliers and our customers. With respect to our suppliers, we have in the past experienced supply constraints for certain chips from Samsung Electronics Corporation and we may in the future experience similar issues. With respect to our customers, to the extent customers face supply chain issues with respect to other components needed to pair with our products in order to produce their end products, such customers may delay future orders of our products or hold inventory of our products for longer periods of time. As a result, we may experience increased volatility in our sales and revenues in the near future, primarily owing to uncertainty around demand for semiconductor products, in general. In addition, recently, some customers have indicated they are reducing their inventory levels, as some component lead times contract toward normal levels. This may reduce such customers' demand for our products. The magnitude and duration of such volatility is uncertain and thus its impact on our business cannot be reasonably estimated at this time.

We believe that these disclosures sufficiently provide the impact of the ongoing macro-economic environment around supply chain constraints on our business. We will continue to update the disclosures in our future filings going forward, as the situation evolves.

- 2. *Revise your future filings to also discuss the changes in your revenue (i.e., increase or decrease) by volume and price. Refer to Item 303(b)(2)(iii) of Regulation S-K. In this regard, we note that your management has been providing similar information during each of your last three quarterly earnings calls.***

We acknowledge the Staff's comment, and respectfully submit that we have considered the guidance in Item 303(b)(2)(iii) of Regulation S-K in preparing our disclosures to explain material changes in revenue from period to period in MD&A.

We respectfully advise the Staff that while management has provided certain additional qualitative information regarding volume and price on the Company's quarterly earnings calls, the Company does not manage its business based on overall quantitative changes in volume and price, but rather focuses on revenue growth and gross margin. Additionally, various factors impact changes in volume and price in any given period, such as seasonality and geographic region mix, and the Company believes its historical disclosure framework in MD&A has focused on the information that will best enable an investor to understand the drivers of the Company's business as a whole.

We confirm that in our future filings, to the extent relevant and attributable to a material change in revenue, we will include discussion of volume or price, or both. In this regard, we have included below our draft disclosure regarding changes in revenue of our upcoming Quarterly Report on Form 10-Q filing for the quarter ended October 31, 2022:

We recorded revenue of \$XX and \$XX for the three and nine months ended October 31, 2022, respectively. This represented a decrease of XX% and an increase of XX%, respectively, as compared to the same periods in the prior fiscal year. Our revenue for the three months ended October 31, 2022, has been primarily impacted by fewer product unit shipments driven by customer efforts to revert their inventory closer to pre-pandemic levels, as component lead times contract. Continued adoption of our CV-based solutions, which have higher average selling prices, and increased nonrecurring engineering (NRE) project services partially offset this decrease from fewer product unit shipments.

Our revenue for the nine months ended October 31, 2022, increased compared to the corresponding period in prior fiscal year primarily due to continued adoption of our CV-based solutions which have higher average selling prices and increased NRE project services, partially offset by a marginal decline in product unit shipments driven by customer efforts to revert their inventory closer to pre-pandemic levels, as component lead times contract.

3. In future filings, expand your disclosure to identify specific actions planned or taken, if any, to mitigate inflationary pressures.

We acknowledge the Staff's comment and respectfully submit that we have been monitoring the impact of inflationary pressures on our business and related disclosures. To date, inflation has not had a material impact on the Company's results of operations.

We are closely monitoring the changes from inflation and its impact on our business and financial position, and will update the disclosure in future filings, as necessary.

Notes to the Consolidated Financial Statements

Revenue Recognition, page 81

- 4. We note that during each of your last three quarterly earnings calls your management discussed your revenues by products and end-market. Please tell us your consideration of ASC 606-10-50-5 and 50-6, which call for disclosing disaggregated revenue by product or product families and end-market, in concluding that similar information should not be provided in this note. Otherwise, revise your future filings to comply. Similarly, revise your MD&A in future filings to provide a more detailed discussion of revenues by products and end-market.**

We acknowledge the Staff's comment, and respectfully submit that we have considered the guidance in ASC 606-10-50-5 and 50-6 with respect to disaggregated revenue disclosures in our filings. Under the guidance, we note that disaggregated revenue disclosures are required if the nature, amount, timing, and uncertainty of revenue and cash flows are impacted by different economic factors. Further, we note that ASC 606-10-55-89 provides that the extent to which the disaggregated revenue information is provided, depends on facts and circumstances pertaining to the underlying contracts with customers.

In this regard, we respectfully submit that, as disclosed in Note 1 to the Consolidated Financial Statements in the Form 10-K, a substantial majority of our revenue is derived from the sale of semiconductor products. Specifically, the Company sells system-on-chip, or SoC, semiconductors providing advanced image processing and high-resolution video compression. Our most recent generation of SoCs also integrate our artificial intelligence computer vision, or CV, technology. The Company does not view the CV-based SoCs as distinct product lines from non-CV SoCs, but rather as the next generation of continuously evolving image and video processors. The Company's chips are generally designed to address device requirements across the Company's existing markets. Thus, the same silicon mask may serve as the basis for SoC products that are utilized across end-markets.

The Company acknowledges that it has provided certain directional information related to changes in revenue by end-markets, as well as new product developments. The Company views this end-market identification as helpful for illustrative purposes to provide investors with an understanding of the end-markets the Company's products are sold into, particularly as the Company's business has evolved in recent years, and to illustrate that the Company is not concentrated in any one end-market. References to end-markets may be provided for directional purposes to give investors further information on our overall revenue performance. These references are not meant to imply that there are different economic factors that would impact the nature, amount, timing and uncertainty of revenue and cash flows. The Company notes that a detailed breakdown is not necessary for this purpose, and as such, the Company will limit discussion of revenues across its end-markets to a more directional and qualitative manner in future earnings calls.

The Company generally does not enter into contracts by product or end-market, and as such the Company's working capital and payment and credit terms do not vary by product or end-market. Contract terms and conditions with customers generally contain the same terms and conditions with respect to payment, delivery, supply and other rights for products sold into the various end-markets served by the Company. Sales are based on purchase orders and the substantial majority of product revenue recognition is done at a point in time. In addition, sales agreements for SoCs containing CV technology are generally the same as sales agreements for older generation SoCs that do not contain CV technology. Further, the Company derives a substantial portion of revenue from sales made through one distributor, WT Microelectronics Co., Ltd., and directly to one original design manufacturer customer, Chicony Electronics Co., Ltd., which buys multiple products and sells to multiple customers, across our various end-markets. Furthermore, demand risks for the Company's products/product families and end-markets have similar characteristics in that they are impacted by macro-economic factors such as general business and consumer spending, gross domestic product growth and other broad measures of economic activity.

The Company has thus concluded that disaggregation of revenue by product/product families or end-markets are not required under the guidance in ASC 606-10-50-5 and 50-6 because the nature, amount, timing and uncertainty of revenue and cash flows do not vary meaningfully by products/product families or by end-markets. The Company believes that the disclosure of revenues by the geographic regions of Taiwan, Asia Pacific, Europe, North American other than the United States, and United States appropriately depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

In summary, we believe that our current presentation of revenues disaggregated by geographic regions made as part of entity-wide disclosures under ASC 280-10-25-38, comply with the disclosure objective described in ASC 606-10-50-5 and 50-6. We regularly evaluate the most appropriate manner to disaggregate our revenues based on changes in our business and will revise our disclosures in the future as appropriate.

Please direct your questions or comments regarding the Company's responses to me at (408) 400-1492. Thank you for your assistance.

Sincerely,

/s/ Michael Morehead
General Counsel
Ambarella, Inc.

cc: Brian White, Chief Financial Officer, Ambarella, Inc.