

September 17, 2012

CERTAIN PORTIONS OF THIS LETTER HAVE BEEN OMITTED FROM THE VERSION FILED VIA EDGAR. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS. INFORMATION THAT WAS OMITTED IN THE EDGAR VERSION HAS BEEN NOTED IN THIS LETTER WITH A PLACEHOLDER IDENTIFIED BY THE MARK “[*]”. THE OMITTED PORTIONS ARE BRACKETED IN THIS PAPER LETTER FOR EASE OF IDENTIFICATION.**

Via EDGAR and Overnight Delivery

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

Attention: Amanda Ravitz
Praveen Kartholy
Geoffrey Kruczek
Jay Mumford
Gary Todd

**Re: Ambarella, Inc.
Registration Statement on Form S-1
Initially filed June 10, 2011
File No. 333-174838**

Ladies and Gentlemen:

On behalf of Ambarella, Inc. (the “**Company**”), and in connection with the Company’s Registration Statement on Form S-1 (File No. 333-174838) initially filed with the Commission on June 10, 2011 (the “**Registration Statement**”), we submit this supplemental letter to notify the staff (the “**Staff**”) of the Securities and Exchange Commission (the “**Commission**”) regarding the initial price range expected to be included on the cover of the Company’s preliminary prospectus in order to enable the Staff to complete its review of the Company’s option pricing and fair value determinations, as well as to address the Staff’s comment number 7 and comment number 8 in its letter to the Company dated July 7, 2011.

Because of the commercially sensitive nature of certain information contained herein, this submission is accompanied by a request for confidential treatment for selected portions of this letter. The Company has filed a separate letter with the Office of Freedom of Information and Privacy Act Operations in connection with the confidential treatment request, pursuant to Rule 83 of the Commission’s Rules on Information and Requests, 17 C.F.R. § 200.83. For the Staff’s reference, we have enclosed a copy of this correspondence marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

For the convenience of the Staff, we are providing to the Staff by overnight delivery copies of this letter.

We supplementally advise the Staff that, on September 14, 2012, representatives of Morgan Stanley & Co. LLC (“**Morgan Stanley**”), on behalf of the several underwriters, advised the Company that, based on then-current market conditions, they anticipated that the underwriters would recommend to the Company a preliminary price range between [***] per share (after giving effect to the one-for-4.5 reverse stock split (the “**Stock Split**”) described in Amendment No. 3 to the Company’s Registration Statement on Form S-1 filed on September 12, 2012 (“**Amendment No. 3**”)), though the Company expects the range that will be set forth on the cover of the Company’s preliminary prospectus will be narrower. The Company and Morgan Stanley have had discussions regarding the proposed offering prior to September 14, 2012 pursuant to which Morgan Stanley provided the Company with an analysis of the Company’s business, how it would position the Company for an offering, and valuation methodologies and analyses of comparable companies, but Morgan Stanley did not previously provide the Company with a valuation of the Company or a proposed price range. The preliminary price range above does not take into account the current lack of liquidity for the Company’s ordinary shares and assumes a successful initial public offering with no weighting attributed to any other outcome for the Company’s business, such as remaining a privately held company. There have been no changes to the recommendation from the underwriters of the preliminary price range since September 14, 2012.

The Company will set forth a bona fide preliminary price range in a pre-effective amendment to the Registration Statement prior to the distribution of any preliminary prospectus.

As described beginning on page 65 of Amendment No. 3, the Company regularly performs valuations of the Company’s ordinary shares to assist the Company’s Board of Directors (the “**Board**”) in its determination of the fair value of its ordinary shares for purposes of granting stock-based awards. The Board considers numerous objective and subjective factors, including the factors set forth on page 67 of Amendment No. 3, and the most recent valuation report prepared by an independent valuation specialist. The assumptions and inputs utilized in connection with such third-party valuations reflect the Board’s best estimate of the business condition, prospects and operating performance of the Company at each valuation date.

The Company granted options to purchase 140,210 shares of the Company’s ordinary shares (on a post-Stock Split basis) on July 10, 2012. At the time the option grants were approved, the Board determined that the fair value of the shares of the Company’s ordinary shares underlying such option grants was less than or equal to \$9.99 per share (post-Stock Split). The Board based its determination of the fair value of the Company’s ordinary shares on the factors described above and also considered the valuation report that the Company received from its independent valuation specialist (the “**Valuation Report**”) which concluded that, as of May 31, 2012, the fair market value of the Company’s ordinary shares was \$9.90 per share (post-Stock Split). As described in the Valuation Report, the Company’s business enterprise value was heavily weighted toward the probability of an IPO, with a 38.5% probability of an IPO by January 2013 and a 12.0% probability of an IPO by July 2013. As of May 31, 2012, the Company was still undecided about the precise timing and potential valuation of an offering.

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We supplementally advise the Staff that the Board intends to grant options to certain newly hired employees and service providers of the Company. Such options will be granted as of the effectiveness of the Registration Statement with an exercise price equal to the IPO price per share set forth on the cover of the Company's final prospectus.

The Company believes that the fair values determined by its Board for the ordinary shares applicable to each stock-based award are appropriate and demonstrate the diligent efforts of the Board to consider all relevant factors in determining fair value at each valuation date. The Company believes it has fully complied with all applicable rules and regulations for the determination of fair value, including the best practices outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

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Please direct your questions or comments regarding this supplemental letter to me at (650) 493-9300. Thank you for your assistance.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

/s/ Aaron J. Alter
Aaron J. Alter

Enclosures

cc (w/encl.): Feng-Ming Wang
Michael Morehead, Esq.
Ambarella, Inc.

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