



DIVISION OF
CORPORATION FINANCE

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

May 17, 2011

Via E-mail

David A. Flynn
Chief Executive Officer and President
Fusion-io, Inc.
2855 E. Cottonwood Parkway, Suite 100
Salt Lake City, Utah 84121

**Re: Fusion-io, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed on May 6, 2011
File No. 333-172683**

Dear Mr. Flynn:

We have reviewed your amended filing and the supplemental letter filed on May 13, 2011 and have the following comments. References to prior comments are to those in our letter dated April 5, 2011.

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

Stock Based Compensation, page 53

1. We note your response to prior comment 16 provided in your supplemental letter dated May 13, 2011 that the following factors contributed to the differences between the fair value of your common stock on April 14, 2011, as determined by the Board, and the preliminary midpoint of the range of the estimated offering price, as recommended by the underwriters:
 - The use of different comparable public companies by the underwriters in their valuation model;
 - The averaging of a discounted cash flow income approach and a market approach utilized in the valuation report considered by the Board as compared to the use of a market approach by the underwriters; and
 - The difference in the Company's long term growth rate utilized in considering the initial public offering price, as compared to the Company's long term growth rate in the discounted cash flow valuation model utilized in the valuation report considered by the Board.

We further note that you have reassessed the valuation of your common stock for your April 14, 2011 stock option grants based on the use of a revised group of comparable

public companies as identified by the underwriters. Tell us why you did not also revise the April 14, 2011 valuation to use only a market approach and to use the same long term growth rate as identified by the underwriters.

2. Tell us why you did not use the revised group of public companies as identified by the underwriters, as well as the other methodologies and assumptions used by the underwriters discussed above, in determining the fair value of your common stock for your fiscal year 2011 grants. Also, tell us why the use of the revised group of comparable public companies does not suggest that the discount rates used throughout fiscal year 2011 should be revised. Contrast your response to prior comment 15 regarding your selection of your discount rates to your selection of the revised group of comparable companies. That is, explain why the use of a high discount rate is warranted during fiscal year 2011 in light of the revised group (e.g., is the revised group at the same stage of development?).
3. We note your disclosure on page 55 that for the October 8, 2010, December 31, 2010 and April 5, 2011 valuations you used both the income approach and the market approach and weighted the approaches equally based on your view that both valuation methods provided a reasonable estimate of fair value, are equally reliable and resulted in similar values. Please reconcile this statement with your statement that the averaging of an income approach and a market approach utilized in the valuation report considered by the Board, as compared to the use of a market approach by the underwriters, was one of the factors that contributed to the difference between the fair value of your common stock on April 14, 2011, as determined by the Board, and the preliminary midpoint of the range of the estimated offering price, as recommended by the underwriters.
4. Considering your reassessed valuation for your April 14, 2011 grants, revise your disclosures to discuss the factors that significantly contributed to the increase in the fair value of your common shares between January 25, 2011/February 19, 2011 and April 14, 2011, and between April 14, 2011 and the mid-point of the estimated range of the initial public offering price. Disclose quantitatively or qualitatively the significance of each factor. That is, describe how much of the growth in fair value can be attributed to each of these factors. Add disclosure to explain why a factor or an assumption has changed. Also, if a change in forecasted revenue is a contributing factor to the increase in fair value, please ensure you disclose the underlying events contributing to this change and the timing of these events.

David A. Flynn
Fusion-io, Inc.
May 17, 2011
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Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 11. Subsequent Events, page F-38

5. Revise to disclose the amount of unrecognized stock based compensation associated with the April 2011 grant of stock options.

You may contact Laura Veator, Staff Accountant, at (202) 551-3716 or Stephen Krikorian, Accounting Branch Chief, at (202) 551-3488 if you have any questions regarding comments on the financial statements and related matters. Please address other questions to Matthew Crispino, Staff Attorney, at (202) 551-3456 or, in his absence, to me at (202) 551-3735.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs
Assistant Director

cc: Via E-mail
Robert G. Day, Esq
Wilson Sonsini Goodrich & Rosati