



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4561

July 13, 2017

James R. Scapa
Chief Executive Officer.
Altair Engineering Inc.
1820 E. Big Beaver Road
Troy, MI 48083

Re: Altair Engineering Inc.
Draft Registration Statement on Form S-1
Submitted June 16, 2017
CIK No. 0001701732

Dear Mr. Scapa:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus cover page

1. Please revise the prospectus cover page to disclose the dual class structure of your common stock, including a brief discussion of the respective voting rights of your Class A and Class B common stock and the significant control that your affiliates will retain after the completion of this offering.

Prospectus summary

Overview, page 1

2. On page 3 you disclose the percentage of your total billings generated from customers in certain regions and on page 122 you disclose the percentage of your software billings accounted for by certain industries. Please revise these disclosures to provide a cross-reference to your definition and discussion of billings. Alternatively, revise to present these metrics as a percentage of your total revenue and software revenue, respectively.

Competitive strengths

Units-based subscription model, page 6

3. You disclose that your units-based subscription model is a competitive strength that has transformed the way your customers use your software and has delivered strong retention rates and revenue growth. Please revise to briefly discuss how your subscription model differs from the licensing models used by other companies in your industry.

Summary historical consolidated financial and other data

Consolidated statements of operations data, page 17

4. We note that this offering will trigger the termination of a call feature on certain Class B shares. Revise to include here and on page 58 pro forma earnings per share for the year ended December 31, 2016 and three months ended March 31, 2017 that give effect to the reversal of the stock-based compensation liability adjustments related to these shares. Please also revise the pro forma balance sheet disclosures on pages 18 and 53 to reflect the reversal of the liability.

Key metrics, page 18

5. Your risk factor disclosure on page 22 identifies the importance of existing customers renewing your software licenses. Considering the significance of recurring software revenue, please disclose renewal rates as a key metric or advise. We refer you to Item 303 of Regulation S-K and Section III.B.1 of SEC Release No. 33-8350.
6. Your disclosure of free cash flow on pages 19, 67 and 79 lacks mention of the most comparable GAAP measure. Please revise to more prominently disclose operating cash flow. See Question 102.10 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.

Risk factors

Risks relating to our business and industry

We have experienced significant revenue growth and we may fail to sustain..., page 20

7. You disclose that HyperWorks revenue has historically constituted a significant portion of your total revenue. Please revise to disclose the percentage of your revenue accounted for by HyperWorks during the most recent period presented in your financial statements.

Because we derive a substantial portion of our revenues from customers in..., page 23

8. You disclose that the automotive and aerospace industries accounted for approximately 58% of your fiscal 2016 revenue. On page F-12 you disclose that sales to customers within the automotive industry accounted for 50% of your fiscal 2016 revenue. In light of the high concentration of revenue accounted for by sales to the automotive industry in fiscal 2016, please revise this risk factor to clarify that the automotive industry accounted for 50% of your fiscal 2016 revenue.

Risks related to this offering and ownership of our Class A common stock

Certain provisions in our charter documents and Delaware law could prevent..., page 47

9. You disclose that certain matters upon which your governing documents permit your stockholders to vote on require the affirmative vote of the holders of at least two-thirds of the voting power of all the then outstanding shares. Please further clarify the matters outlined in your charter documents that require this supermajority approval.

Market, industry and other data, page 50

10. With respect to statements attributed to industry publications, such as the statements attributed to Gartner and IDC reports, please revise to disclose the title and year of publication of such reports.

Management's discussion and analysis of financial condition and results of operations, page 61

11. We note that you discuss seasonality and foreign currency fluctuations as factors affecting your performance on page 62 and your key metrics on page 78. Please expand your overview to further discuss material opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which your executives are most focused for both the short and long-term. Refer to Section III.A of SEC Release No. 33-8350.

Key metrics, page 78

12. Your discussion of non-GAAP Adjusted EBITDA without a corresponding discussion of GAAP Net income (loss) causes your non-GAAP measure to be more prominent than the most directly comparable GAAP measure. Please revise to include a discussion of GAAP Net income (loss) for each period presented. See Question 102.10 of the updated Non-GAAP Compliance and Disclosure Interpretations issued on May 17, 2016.

Liquidity and capital resources

Cash flows, page 80

13. We note that the majority of your cash and cash equivalents is held outside of the United States. Revise to disclose the tax effect if you were to repatriate your undistributed earnings of foreign subsidiaries. We refer you to Item 303(a)(1) of Regulation S-K and Section IV of SEC Release No. 33-8350.

Executive compensation

2016 Summary compensation table, page 134

14. It appears that the amounts reported in Mr. Morof's bonus column were based upon the achievement of certain performance goals and therefore may have been awarded pursuant to an "incentive plan," as such term is defined in Item 402(m)(5)(iii) of Regulation S-K. In this regard, we note your discussion of Mr. Morof's employment letter on page 135 and your executive bonus pool on page 143. Accordingly, please revise to disclose these amounts in the non-equity incentive plan column or advise why this is not required. For guidance, consider Question 119.02 of our Regulation S-K Compliance and Disclosure Interpretations. Additionally, ensure any such revisions discuss the material terms of any non-equity incentive plan awards made, including a general description of the formula or criteria to be applied in determining the amounts payable. See Item 402(o)(5) of Regulation S-K.

AShF, Srl consulting agreement, page 136

15. Please file your consulting agreement with AShF, Srl or advise why this is not required. See Item 601(b)(10)(iii)(A) of Regulation S-K.

Consolidated financial statements

Notes to consolidated financial statements

Note 11. Stock-based compensation, page F-29

16. Please provide us with a breakdown of all options granted during fiscal 2016 and to date in fiscal 2017, and include the fair value of the underlying common stock used to value such awards as determined by your board of directors. Please also provide us with the fair value of the underlying common stock as of December 31, 2015 and 2016 and March 31, 2017 used to fair value your stock-based compensation liabilities. To the extent there were any significant fluctuations in the fair values from period-to-period, please describe for us the factors that contributed to these fluctuations, including any intervening events within the company or changes in your valuation assumptions or methodology.

Note 13. Income taxes, page F-32

17. Please revise to disclose the undistributed earnings of foreign subsidiaries that are currently reinvested. Refer to ASC 740-30-50-2.

Note 19. Segment information, page F-40

18. Please revise to reconcile Adjusted EBITDA to consolidated income before income taxes. See ASC 280-10-50-30.

Part II: Information not required in the prospectus

Item 15. Recent sales of unregistered securities, page II-2

19. With respect to the unregistered sales of securities to non-employees for which you relied on Securities Act Section 4(a)(2) or Regulation D promulgated thereunder, please clarify the nature of the purchasers (i.e., accredited or sophisticated). See Item 701(d) of Regulation S-K.

General

20. Please supplementally provide us with copies of all written communications, as defined in Securities Act Rule 405, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Securities Act Section 5(d), whether or not they retain copies of the communications.
21. Your prospectus indicates that certain graphics or artwork has not yet been filed. As soon as possible, please provide us with copies of any graphics or artwork you intend to use in your prospectus. Upon review of such materials, we may have further comments. For

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Altair Engineering Inc.
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guidance, consider Question 101.02 of our Securities Act Forms Compliance and Disclosure Interpretations.

You may contact Frank Knapp, Staff Accountant, at (202) 551-3805 or Christine Dietz, Assistant Chief Accountant, at (202) 551-3408 if you have questions regarding comments on the financial statements and related matters. Please contact Mitchell Austin, Staff Attorney, at (202) 551-3574 or me at (202) 551-3735 with any other questions.

Sincerely,

/s/ Barbara C. Jacobs

Barbara C. Jacobs
Assistant Director
Office of Information Technologies
and Services

cc: Selim Day, Esq.
Lowenstein Sandler LLP