



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

DIVISION OF
CORPORATION FINANCE

October 24, 2013

Via E-mail

David K. Flynn
President and Chief Executive Officer
Aerohive Networks, Inc.
330 Gibraltar Drive
Sunnyvale, CA 94089

**Re: Aerohive Networks, Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted October 8, 2013
CIK No. 0001372414**

Dear Mr. Flynn:

We have reviewed your amended draft registration statement and response letter and have the following comments. References to prior comments are to those in our letter dated October 3, 2013.

Prospectus Summary

The Offering, page 6

1. We note your response to prior comment 6. Please expand your disclosures on page 7 to explicitly state that these shares are included in the total number of shares of common stock to be outstanding after the offering.

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

Critical Accounting Policies

Revenue Recognition, page 81

2. Please revise your disclosures on page 82 as they relate to determining best estimated selling price, consistent with the revisions reflected on page F-14.

Business

Our Customers, page 101

3. We note your response to prior comment 34. Please disclose in this section the identity of the consolidated group that collectively accounted for more than 10% of your total

revenue in fiscal 2012 and the first six months of 2013 or advise why you believe such disclosure is not required. Refer to Item 101(c)(vii) of Regulation S-K.

Backlog, page 102

4. We note your response to prior comment 35. As noted in our prior comment, although you may not believe that your backlog is a meaningful indicator of your future revenues, we believe that such information may still be material to an investors' understanding of your business. Accordingly, please revise this section to provide the dollar amount of backlog orders in accordance with Item 101(c)(1)(viii) of Regulation S-K.

Notes to Consolidated Financial Statements

Note 1 Description of the Business and Summary of Significant Accounting Policies

Revenue Recognition, page F-13

5. We note in your response to prior comment 43 you conclude that the HiveManager software is essential to the functionality of the wireless access points ("AP") yet it has stand-alone value. Please clarify your conclusions further for us as they appear to be contradictory. In this regard, you state that the company's historical transactions demonstrate a nearly one-for-one attach rate relative to the purchase of HiveManager software in conjunction with the purchase of an AP. You further state that on an infrequent basis, certain customers purchase a nominal amount of excess hardware units to be stored for which they subsequently purchase the HiveManager software at a later date once the hardware is placed into service. These considerations seem to support your position that the software and nonsoftware components function together to deliver the tangible product's essential functionality. However, you state on page 22 of your response that the APs are designed to function without the instance of HiveManager being purchased, which seems to suggest the software is not essential to the functionality of the AP. Likewise, with regards to the HiveManager Online ("HMOL"), you conclude that the APs have stand-alone value because there are instances of sales of the AP without either a HiveManager perpetual license or HMOL SAAS subscription. However, as noted above, it appears those separate sales are only in instances where customers have purchased an excess of AP units, for which they subsequently purchased the HiveManager at a later date once the hardware is placed in service. This seems to suggest that there is no stand-alone value as customers have not placed the APs into service without the software. Please advise.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

David K. Flynn
Aerohive Networks, Inc.
October 24, 2013
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Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Melissa Kindelan, Staff Accountant, at (202) 551-3564 or Patrick Gilmore, Accounting Branch Chief, at (202) 551-3406 if you have questions regarding comments on the financial statements and related matters. Please contact Gabriel Eckstein, Staff Attorney, at (202) 551-3286 or, in his absence, the undersigned at (202) 551-3456 with any other questions. If you require further assistance, you may contact Barbara C. Jacobs, Assistant Director, at (202) 551-3735.

Sincerely,

Matthew Crispino
Staff Attorney

cc: Via E-mail
Mark B. Baudler, Esq.
Wilson Sonsini Goodrich & Rosati, P.C.