



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

Mail Stop 3720

April 24, 2009

Michael C. McCarthy III  
Chief Legal Officer and Corporate Secretary  
Infinera Corporation  
169 Java Drive  
Sunnyvale, CA 94089

**Re: Infinera Corporation  
Preliminary Proxy Statement on Schedule 14A  
Filed April 10, 2009  
File No. 001-33486**

Dear Mr. McCarthy:

We have reviewed your supplemental response letter submitted on April 23, 2009 and have the following comments. Where indicated, we think you should revise your preliminary proxy statement in response to these comments. Please understand that after our review of all of your responses, we may raise additional comments. If you disagree with any of these comments, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation.

We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Compensation Discussion and Analysis, page 31

1. We note your response to comment one from our letter dated April 17, 2009. We further note that your proposed disclosure references "certain pre-determined operational metrics" used to establish the Chief Executive Officer's total compensation as well as the compensation of other named executive officers. Please disclose the nature of these metrics. For each named executive officer, please explain how the compensation committee's consideration of each executive's "seniority, position, functional role and level of responsibility" in determining such officer's base salary (as discussed on page 35) and the committee's consideration of your officers' "ability to impact [y]our results that

drive stockholder value, their organization level, [and] their potential to take on roles of increasing responsibility” in determining equity awards (as discussed on page 37), resulted in the compensation awarded to such executives. See Item 402(b)(2)(vii) of Regulation S-K.

Incentive Bonus, page 36

2. We have considered your response to comment three from our letter dated April 17, 2009. Please tell us how you calculate each financial performance objective. Explain whether the revenue and operating income targets consist of financial-statement line items, non-GAAP measures derived from financial-statement line items or other publicly-disclosed figures. Please provide further analysis as to why disclosure of such financial targets for the last fiscal year would cause you competitive harm when disclosure of the performance targets will occur after the actual company revenue and operating income have been disclosed in your Form 10-K. In addition, we note that much of the insight that you argue disclosure of these targets will afford competitors seems to be important trend and management strategy information that is required to be disclosed in management’s discussion and analysis of financial condition and results of operation. Therefore, please either provide us with the additional analyses we are requesting herein or disclose the performance targets and threshold levels that must be reached for payment to each executive. Refer to Item 402(b)(2)(v) of Regulation S-K

If you believe that you may omit disclosure of the financial performance objectives for the incentive bonuses under Instruction 4 to Item 402(b) of Regulation S-K), please disclose how difficult it would be for the executive or how likely it would be for you to achieve the undisclosed objectives or targets. General statements regarding the level of difficulty or ease associated with achieving the targets are not sufficient. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the objectives, targets or other factors, provide as much detail as necessary without providing information that would result in competitive harm. For more information, please see also Question 118.04 of Regulation S-K’s Compliance and Disclosure Interpretations, available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>.

\* \* \* \*

As appropriate, please revise your preliminary proxy statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review.

Michael C. McCarthy III  
Infinera Corporation  
April 24, 2009  
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Please contact Jessica Plowgian, Attorney-Advisor, at (202) 551-3357, Kathleen Krebs, Special Counsel, at (202) 551-3350 or me, at (202) 551-3810, with any other questions.

Sincerely,

/s Kathleen Krebs, for  
Larry Spigel  
Assistant Director

Cc: Richard A. Kline (via facsimile)