



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

Mail Stop 3720

April 27, 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 27, 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

Incentive Bonus, page 36

1. We have considered your response to comment two from our letter dated April 24, 2009 as well as your proposed disclosure. Please further clarify your proposed disclosure as follows:
 - We note your statement that on April 30, 2008 the compensation committee replaced “invoiced shipment” results as a performance metric with “adjusted GAAP” results. Please revise your disclosure to clarify the difference

between invoiced shipment and adjusted GAAP results. We note that both measurements appear to reflect GAAP results adjusted for changes in your deferred revenue and deferred cost of inventory balances from the prior period.

- Please revise your disclosure to clarify which targets in your 2008 Bonus Plan were set in the first quarter of 2008 using the invoiced shipment operating measures and which targets were set in the second quarter of 2008 (or later), using the adjusted GAAP operating measures.
- We note that the first reference to VSOE in your proposed disclosure on page seven of your supplemental response does not include the definition of such term. Please revise your disclosure to include the appropriate definition of VSOE the first time you use such term in your proxy statement.
- Please revise your disclosure to indicate the percentage of his target bonus that Mr. Chandler achieved in 2008.

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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.

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 Jessica Plowgian for
Larry Spigel
Assistant Director

Cc: Richard A. Kline (via facsimile)