



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 3720

March 23, 2007

Jagdeep Singh  
President and Chief Executive Officer  
Infinera Corporation  
169 Java Drive  
Sunnyvale, CA 94089

**RE: Infinera Corporation  
Registration Statement on Form S-1  
Filed on February 26, 2007  
File No. 333-140876**

Dear Mr. Singh:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, 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. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. We note a number of blank spaces throughout your registration statement for information that you are not entitled to omit under Rule 430A, such as the anticipated price range information. Please include this disclosure as soon as practicable. Note that we may have additional comments once you have provided this disclosure. Therefore, please allow us sufficient time to review your complete disclosure prior to any distribution of preliminary prospectuses.

Artwork

2. We note the three bulleted phrases. It is not apparent here as to whether you are promising these matters, such as "enhanced revenue generation," for investors

regarding your company. Generally, you should only include text to the extent necessary to explain artwork visuals. Please revise to reduce or eliminate this text. To the extent that you retain any of it, ensure that the purpose of the included text is manifest.

Prospectus Summary, page 1

3. To ensure that you provide a balanced discussion, please discuss the following in the summary:
  - your net losses for each of the last three fiscal years and your accumulated deficit as of the most recently-completed fiscal period;
  - that a few customers have accounted for a significant percentage of your revenues and one customer accounted for over 60% of your revenues for fiscal 2006;
  - that you do not have long-term purchase commitments with these customers; and
  - that you shipped your first DTN System in November 2004.
4. Minimize your use of acronyms in the summary and throughout the prospectus by spelling out the terms, such as “photonic integrated circuit” instead of “PIC” and “wavelength division multiplexing” instead of “WDM.” We note that there are several instances in which you define a term as an acronym but then infrequently use the term, such as “ROADMs” instead of “Reconfigurable Optical Add/Drop Multiplexers” or a defined term following a name appears unnecessary, such as “Cheetah” on page 13. Further, there are instances where you do not explain the meaning of an acronym, such as “MSO” in the risk factors. Please revise accordingly.
5. Please limit the promotional nature of this section, including phrases such as “innovative solution,” “dramatically change the economics...” and “fundamentally change optical communications networks...,” and limit your summary to a brief, factual description of your operations. To the extent you retain these terms, provide us with objective support for your assertions and ensure that you make clear upon what standard or measure you base your claims. Also, describe the basis for your statement that you have had “#1 market share of 10Gbps long-haul ports shipped worldwide.” Include the standard or measurements upon which this conclusion is based.

The Offering, page 4

6. Indicate the percentage of your outstanding common stock that the number of shares being offered would represent following the offering.

Risk Factors, page 7

Our operating results may fluctuate significantly...., page 7

7. So that investors may understand the risk, explain here what “vendor specific objective evidence” is.

Claims by others that we infringe their intellectual property...., page 12

8. To assist investors in realizing the magnitude of the risk, please state the amount of the claimed damages.

If we fail to accurately forecast demand for our DTN System...., page 13

9. Briefly describe the extent of any backlog, with a fuller discussion in your business section of backlog in accordance with Regulation S-K Item 101(c)(1)(viii) and any related matters in accordance with Item 101(c)(1)(vi).

Dilution, page 24

10. Please quantify the further dilution to new investors that will occur upon exercise of your outstanding stock options.

Management’s Discussion and Analysis, page 32

Overview, page 27

11. We note your disclosure under the risk factor “We will incur increased costs as a result of operating as a public company...” beginning on page 19. Specifically address what changes in your results of operations, liquidity and capital resources, and trends you expect as a result of your reorganization from a private company to a public company. It is important for investors to understand your historical financial information when you were a private company and whether and the extent to which management expects the trends and results of operations to continue or change as a public company.

Overview of Consolidated Financial Data, page 32

12. We note the significant drop in the percentage of your overall revenues attributable to international sales between 2005 and 2006 (36% down to 14%). Discuss the reasons for this drop and whether it represents a trend in your sales mix.

13. On page 33, you describe how you amended customer agreements to shorten the software warranty period to one year. Describe any material adverse consequences to you or material unfavorable conditions for you that were undertaken in exchange for the shorter warranty period. Provide similar disclosure regarding any material adverse consequences that otherwise resulted from the change.

Gross Margin, page 35

14. You have stated that your common equipment is typically sold at low margins or at a loss. Please:
- Tell us why you believe it is appropriate to recognize the loss on the sale of equipment immediately. Further, tell us your consideration of whether such costs may be deferred and recognized as the related revenue is recognized. Refer to SFAS 91 and FASB Technical Bulletin 90-1, paragraph 4.
  - Tell us and disclose how your equipment sales impact the timing of your revenue recognition.
  - Tell us about the time period that elapses between the customer's purchase of common equipment and the additional equipment and how this decision impacts your revenue recognition.

Critical Accounting Policies and Estimates, page 37

Stock-Based Compensation, page 38

15. Please tell us how the independent appraiser considered the initial public offering in determining the fair value of the common stock underlying your options.
16. Provide all the applicable disclosures under paragraphs 179-182 of the AICPA Audit and Accounting Practice Aid Series, "Valuation of Privately-Held-Company Equity Securities Issued as Compensation."
17. We note your reference to independent valuation specialists to assist in determining the estimated fair value of your common stock. While you are not required to make reference to this independent valuation specialist, when you do you should also disclose the name of the expert and include the consents of the expert. If you decide to delete your reference to the independent valuation specialist, you should revise to provide disclosures that explain the method and assumptions used by management to determine the valuation. Please revise.
18. We note that total compensation cost related to stock-based awards will be amortized on a straight-line basis over a weighted-average period of 1.1 years. Tell us how you derived this weighted-average period, considering your

disclosure on page F-33 that your options generally vest over a four-year period.

Inventories, page 41

19. Expand your discussion of inventory write downs to separate write downs related to obsolescence or reduced demand from the write downs related to the anticipated sales at a loss, if any. Also clarify if the sales at a loss include the sale of common equipment that is typically sold at low margins or at a loss.

Results of Operations, page 41

20. Explain what you mean by “negative manufacturing variances” in the paragraph on page 42 that compares 2005 cost of revenue and gross margin to 2006 cost of revenue and gross margin.

Liquidity and Capital Resources, page 46

21. Provide more details regarding the \$66.5 million loss that was generated in 2004 that you mention on page 47.
22. Discuss the reasons behind the decline in working capital between 2004 and 2006 and what steps are being taken to halt the decline in the future.

Business, page 50

23. We note that you include industry research for estimated growth data and other figures cited throughout the document, such as those provided by Ovum-RHK. Please provide us with marked copies of any materials that support these and other third party statements, clearly cross-referencing a statement with the underlying factual support. Confirm for us that these documents are publicly available. To the extent that any of these reports have been prepared specifically for this filing, file a consent from the party.
24. Identify the third-party industry analyst to whom you cite as support for your statement, among other statements, that “in the third quarter of 2005 [you] achieved, and have since maintained through the fourth quarter of 2006, the #1 market share of 10 Gbps long-haul ports shipped worldwide.”

Competition, page 62

25. To the extent known, revise to include here a clear, concrete and quantitative discussion of your relative market share in the markets in which you operate. If you are unable to provide market share information, then please disclose this fact and explain the reason for that inability.

Compensation Discussion and Analysis, page 73

26. Regarding your explanation of the compensation that you paid your named executive officers, please consider the extent to which you should include separate discussion of a named executive officer's compensation where any policy or decisions for that named executive officer's compensation have been materially different from those of the other named executive officers' compensation.

We note, for example, that the amount of Mr. Chandler's non-equity incentive plan compensation in the summary compensation table on page 80 is based on sales commissions and that this circumstance, which comprised a significant portion of his total compensation, seems unique to him among the named executive officers. Yet your compensation discussion and analysis does not discuss the role sales commissions play in the compensation of Mr. Chandler or any of your other named executive officers. As another example, we note that the grants of plan-based awards table on page 81 shows executive officers Singh and Williams received significantly greater stock options in 2006, particularly on August 8, 2006, than the other named executive officers received. Yet it is not apparent as to what circumstance led to this difference or whether it reflects a material difference in your policy or decision-making regarding their compensation. Please revise or advise.

Summary Compensation Table, page 80

27. Revise footnote (1) to the table to make clear that the amounts disclosed under the "Option Grants (\$)" column represent the proportionate amount of an award's total fair value that is recognized in the company's financial statements for 2006 as calculated in accordance with SFAS No. 123(R) (as opposed to the entire grant date fair value of the award).

Underwriting, page 110

28. As soon as practicable, furnish to us a statement as to whether or not the amount of compensation to be allowed or paid to the underwriters has been cleared with the NASD. Prior to the effectiveness of this registration statement, please provide us with a copy of the letter or a call from the NASD informing us that NASD has no additional concerns.
29. Describe briefly the factors that the underwriters would consider in determining whether to consent to the sale of shares by management and particular other stockholders before the lock-up period's expiration.

Consolidated Financial Statements

Report of Ernst & Young LLP, page F-2

30. Please remove the final paragraph prior to the effectiveness of the filing.

Notes to Consolidated Financial Statements

1. Organization and Significant Accounting Policies

Revenue Recognition, page F-11

31. Refer to page 8 of your risk factors. Tell us how the sales volume from each customer during the period can affect gross margin.
32. On page 33, you disclose that you have amended several of your significant sales contracts to shorten your contractual software warranty period. Tell us about the inducements that were provided to your customers to accept the reduced warranty period. Also, please:
- Tell us if these inducements had any impact on the overall accounting for the contractual arrangement.
  - Tell us about the consideration that you gave to these inducements to determine vendor specific objective evidence.
  - Disclose the impact that these changes will have on future revenue recognition here and in management's discussion and analysis under trends.
33. In the second paragraph on page F-12, you disclose that revenue for training and support services is recognized on a straight-line basis over the service contract term, which implies that you separately account for training and support and that you have vendor specific objective evidence. However, in the following paragraph, you disclose that you have not established vendor specific objective evidence of the fair value of training and support services. Tell us your consideration of the revenue from training and support services in establishing vendor specific objective evidence, or revise to clarify your disclosure.

Inventory Valuation, page F-14

34. We note that you record adjustments for common equipment inventory when you have already incurred the loss or you can reasonably estimate a loss. Since you continue to sell common equipment at significant losses, tell us the consideration that you have given to reporting similar common equipment inventory, which may be sold in the future at a loss, at lower of cost or market on your balance sheet.

35. We note that your inventories are stated at the lower of standard cost or market. Tell us why you believe it is appropriate to utilize standard cost rather than actual cost. Refer to your basis in the accounting literature. Also, tell us your rationale in the accounting literature for using average selling price versus estimated selling prices.

2. Cumulative Effect of Change in Accounting Principle, page F-19

36. Please revise to disclose the assumptions used to determine the fair value of your freestanding warrants.

4. Acquired Assets, page F-21

37. We note that you have allocated a portion of your purchase price of an asset acquisition to assembled workforce. In light of the FASB's concern, as indicated in paragraph B169 of SFAS 141, that reliable techniques to measure the fair value of the intellectual capital of a workforce are not yet available, please tell us how you were able to value this asset.
38. We note that you refer to third-party valuations. While you are not required to make reference to the third-party valuations, when you do you should disclose the name of the experts and include the consents of the experts in the filing. If you decide to delete your reference to the third-party valuations, please expand the disclosure to explain the theoretical models and assumptions used by you to determine the valuation.

11. Founder's Stock, Restricted Stock, Convertible Preferred Stock

Convertible Preferred Stock, page F-30

39. Tell us your basis for charging the difference between the repurchase price and the fair market value of the repurchased shares of \$1.5 million to other loss, net in 2004. Tell us and disclose the reason for the transaction.
40. Disclose the reason for issuing 2.7 million shares of Series F convertible preferred stock in 2005 to a customer and to an employee. Also, disclose your financial reporting for this transaction.

Conversion, page F-32

41. Tell us your consideration of the accounting literature related to beneficial conversion features, including EITF 00-27, for your Series G convertible



preferred stock. Further, it is unclear from your disclosures whether you issued warrants in connection with your Series G convertible preferred stock, which would be considered in your EITF 00-27 analysis.

Non-recourse Notes Receivable from Employee Stockholders, page F-33

42. Tell us your consideration of SAB Topic 4:E with regard to your balance sheet presentation of these notes receivables.

Exhibits

43. On pages 84 and 85, you state that you have written offers of employment with executive officers Chandler and McCarthy. Please file these agreements as Regulation S-K Item 601(b)(10)(iii) material contracts, or tell us in your response letter why you believe they are not required to be filed.
44. We note that you have submitted a request for confidential treatment of portions of exhibits under Rule 406 of the Securities Act. We may issue comments regarding the request in a separate letter and those comments may impact disclosure in the registration statement. Please note that you will need to resolve any issues on the confidential treatment request prior to effectiveness of the registration statement.

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As appropriate, please amend your filing 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 understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Sharon Virga, Senior Staff Accountant, at (202) 551-3385 or Kyle Moffatt, Accountant Branch Chief, at (202) 551-3836, if you have any questions regarding comments on the financial statements and related matters. Please contact Cheryl Grant, Senior Staff Attorney, at (202) 551-3359 or me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel  
Assistant Director

cc: via facsimile (650-493-6811)  
Matthew Sonsini/Wilson Sonsini Goodrich & Rosati