

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

Mail Stop 3720

March 29, 2017

Thomas J. Fallon Chief Executive Officer Infinera Corporation 140 Caspian Court Sunnyvale, CA 94089

Re: Infinera Corporation

Form 10-K for Fiscal Year Ended December 31, 2016

Filed February 23, 2017 File No. 001-33486

Dear Mr. Fallon:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. Please comply with the following comment in future filings. Confirm in writing that you will do so and explain to us how you intend to comply.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

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

Revenues, 2016 compared to 2015, page 38

1. We note that domestic revenue decreased by 10% during 2016 primarily driven by a slowdown in spending from significant customer consolidation. Please quantify the declines seen in legacy products and services from customer consolidation, increases seen from the introduction of Transmode's metro products in 2016, and how this may impact your future financial results. Please refer to Item 303(a)(3)(i) and (ii) of Regulation S-K and Section III.B.3 of Commission Release 33-8350.

Thomas J. Fallon Infinera Corporation March 29, 2017 Page 2

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Robert Shapiro, Senior Staff Accountant, at (202) 551-3273, Ivette Leon, Assistant Chief Accountant, at (202) 551-3351, or me at (202) 551-3810 with any questions.

Sincerely,

/s/ Carlos Pacho

Carlos Pacho Senior Assistant Chief Accountant AD Office 11 – Telecommunications