



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

June 17, 2016

Via E-mail

Mr. Richard A. Morin
Executive Vice President and Chief Financial Officer
Cognex Corporation
One Vision Drive
Natick, Massachusetts 01760

Re: Cognex Corporation
Form 10-K for Fiscal Year Ended December 31, 2015
Filed February 10, 2016
Form 10-Q for the Quarterly Period Ended April 3, 2016
Filed May 2, 2016
File No. 001-34218

Dear Mr. Morin:

We have reviewed your June 2, 2016 response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments 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 comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our May 20, 2016 letter.

Form 10-K for Fiscal Year Ended December 31, 2015

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Executive Overview, page 17

1. Please reconcile your response to prior comment 1 with (1) statements made during your February 10, 2016 conference call discussing a slowed growth rate in China and a slower economy in Europe, and (2) statements made during your May 2, 2016 conference call indicating that you experience seasonal trends in both your factory-automation and

logistics businesses. Also, in future filings, please ensure that the significance of each of your industry and end-market references in your document is clear from context.

Gross Margin, page 18

2. Please expand your response to prior comment 2 to (1) clarify the basis for your conclusion that a margin in the mid 70% range would be immaterial, and (2) address whether the preferred pricing arrangement with your material customer involves a material change in margin during periods beyond your second quarter. Also tell us the extent that your margins would have changed during the periods presented absent your agreement with the material customer; your response should make clear the extent that you must make sales with margins that offset your preferred pricing to maintain historic margins.

Income Tax, page 22

3. Please refer to comment 3. We see that the statutory tax rates in your major foreign jurisdictions are significantly higher than the foreign effective tax rate that can be derived from the disclosures in Note 16. Accordingly, in future filings please also disclose the foreign effective tax rate and describe the principal reasons for the difference between the foreign effective tax rate and the foreign statutory rates you disclose in MD&A.

Item 8. Financial Statements

Note 1. Summary of Significant Accounting Policies, page 39

Revenue Recognition, page 41

4. Please refer to comment 4. While we acknowledge the proposed revisions to your revenue recognition disclosure, in future filings, please describe the specific circumstances where you recognize revenue in advance of billing, including a description of the underlying terms of any specific arrangements. Also, describe how payment terms of those arrangements differ from those when you recognize revenue and bill receivables at shipment or delivery, as described in your basic revenue policy disclosure.

Note 16. Taxes, page 59

5. Please refer to comment 7. While your response indicates that you have repatriated a certain amount of current year earnings in each year, Note 16 does not provide any disclosure about repatriated earnings and we do not see any deferred tax liability for undistributed foreign earnings not deemed permanently reinvested. To help us better understand your response, please describe to us the actual circumstances leading you to repatriate and provide for U.S. income taxes on foreign earnings and quantify the impact on the provision for income taxes for each year presented. Also, clarify the basis for

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your disclosure on page 61 that you do not provide U.S. income taxes on foreign subsidiaries undistributed earnings because they are deemed to be permanently reinvested.

6. Please refer to comment 7. Tell us the cumulative amount of undistributed earnings of your foreign subsidiaries at December 31, 2015.

Form 10-Q for the Quarterly Period Ended April 3, 2016

7. Please expand your response to prior comment 8 to provide your analysis of whether your complete amended charter was required to be filed with your previous Form 10-Q; include in your response the date that the charter was amended. Also address in your response when you are required to file your complete amended bylaws.

You may contact Julie Sherman at (202) 551-3640 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Laurie Abbott at (202) 551-8071 or Russell Mancuso, Legal Branch Chief, at (202) 551-3617 with any other questions.

Sincerely,

/s/Gary Todd for

Brian Cascio
Accounting Branch Chief
Office of Electronics and Machinery