



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 20, 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 filings 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.

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. We note your reference to multiple industries in the third paragraph of your "Executive Overview." Please tell us whether all of these industries contribute equally to your operations and whether any are experiencing developments that you expect will have a material impact on your business. We note for example your reference during your February 10, 2016 conference call to slower automotive spending. Please tell us how your Form 10-K and Form 10-Q for the period ended April 3, 2016 include the

disclosures regarding trends and seasonality required by Regulation S-K Item 303(a)(2)(ii), 303(a)(3)(ii), and Instruction 5 to Item 303(b). In your response, please address any material trend in revenue or margins from a country or region, and any material trend in order activity affecting inventory or otherwise affecting your financial condition or results of operations.

Gross Margin, page 18

2. Please tell us the extent of the effect of the “shift in revenue mix to relatively-lower margin products” on your gross margin, the reason for the shift, and whether this shift reflects a material trend. Also tell us whether existing arrangements with any material customer require future sales at a margin that differs materially from the disclosed margin.

Income Tax Expense, page 22

3. In Note 16 on page 59 we see the significant impact of the foreign tax rate differential and the overall low foreign effective tax rate. In future filings please expand MD&A to discuss your foreign effective tax rate, including discussion of the primary taxing jurisdictions where your foreign earnings are derived and the relevant statutory rates.

Item 8. Financial Statements

Note 1. Summary of Significant Accounting Policies, page 39

Revenue Recognition, page 41

4. We note the significant amount of unbilled revenue on your balance sheet in the Form 10-Q for the quarter ended July 5, 2015. In future filings please expand your revenue policy to describe the circumstances where you record revenue in advance of billing. Also, describe the factors you consider in determining the appropriate timing of revenue recognition for recorded revenue not billed at the balance sheet date.
5. We see from a risk factor on page six that you offer discounts to certain customers. In future filings please expand your accounting policy disclosure to describe the types of discounts offered and the related accounting. Refer to ASC 605-50-50.

Note 16. Taxes, page 59

6. In future filings please disclose the cumulative amount of undistributed earnings of your foreign subsidiaries for which no U.S. income taxes have been provided. Refer to ASC 740-30-50-2.

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7. It appears that your domestic U.S. federal effective income tax rate on earnings from continuing operations for 2015 exceeds 100%. Please explain to us the factors leading to the unusually high federal effective tax rate on earnings from continuing operations in 2015.

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

8. Please file a complete copy of your articles of incorporation as amended to date.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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