



DIVISION OF
CORPORATION FINANCE

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

August 1, 2014

Via E-mail

Neil Dougherty
Senior Vice President and Chief Financial Officer
Keysight Technologies, Inc.
1400 Fountaingrove Parkway
Santa Rosa, CA 95403

**Re: Keysight Technologies, Inc.
Amendment No. 4 to Registration Statement on Form 10
Filed July 18, 2014
File No. 001-36334**

Dear Mr. Dougherty:

We have reviewed your filing 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 this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Exhibits

1. We note response 10 on page 4 of your response letter. Please identify in the exhibit index the change of control agreements.
2. We understand that you intend to amend your filing to address the attachments currently missing from the exhibits required to be filed per Regulation S-K Item 601(b)(10). We may have further comments at that time and after you file all remaining omitted exhibits.

Exhibit 10.19

3. Please comply with the requirements of Rule 12b-12(d).

Exhibit 99.1

Unaudited Pro Forma Condensed Combined Balance Sheet, page 35

4. We note some of your adjustments are on a net basis versus a gross basis. Pro forma adjustments should be presented gross on the face of pro forma statements, or with a detailed explanation presented in the pro forma footnotes. For example, please explain how the amount of the adjustments described in footnotes (G) and (H) results in a net cash adjustment of \$700 million.

Number of authorized shares, page 112

5. If the awards being issued in connection with the spinoff will not reduce the shares authorized under the plan, please revise the last paragraph on page 112 to clarify.

Certain Relationships and Related Person Transactions, page 117

6. Please disclose the substance of Appendix G to exhibit 2.1, and file the agreement as an exhibit to your Form 10.

The Cash Distribution, page 118

7. We note your revised disclosure on this page in response to comment 5 from our letter dated April 1, 2014 that the cash distribution is “to establish a target cash level at Keysight upon the distribution.” Please expand your response to address section 3.1(d) of exhibit 2.1.

Tax Matters Agreement, page 121

8. We note your reference to “certain related transactions” in the first sentence of the first risk factor on page 21. Please clarify the transactions at issue.

Intellectual Property Agreements, page 123

9. Due to your use of the vague term “certain” throughout the first paragraph of this section, it is unclear how investors can evaluate the implications of your disclosure. Why was some intellectual property transferred and other property licensed? What are the material terms of the license, and when does the license expire? Why have you licensed some of the technology back? What is the impact of the license back on your business? If a provision of an agreement is sufficiently significant as to be disclosed in your information statement, please revise your disclosure so that it is not presented with vague terms.

Real Estate Matters Agreement, page 123

10. Please tell us whether the subleases that you intend to grant Agilent pursuant to the agreement and the subleases that Agilent intends to grant you are at cost or include a profit for the sub lessor.

Description of Keysight's Capital Stock, page 136

11. We note that you have replaced the blank by which you had previously indicated that you would disclose the number of options and warrants to purchase, or securities convertible into, your common stock. Instead, you have included a statement that there are no shares of common stock underlying such securities as of the date of the information statement. However, if you are currently planning to issue such securities in connection with the spinoff, it is unclear how your revised statement alone is sufficient to satisfy the requirements of Rule 12b-20. If you are unable to determine the amount of securities that you intend to issue, it is unclear why you should not disclose in this section your intention to issue the securities, and add to your document any material risk factors related to the uncertainty generated by lack of disclosure regarding the actual number of securities to be outstanding.

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.

Neil Dougherty
Keysight Technologies, Inc.
August 1, 2014
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You may contact Gary Newberry at (202) 551-3761 or Lynn Dicker at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or me at (202) 551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc (via e-mail): Stephen Williams