



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4628

June 28, 2017

Via E-mail

Syed B. Ali
President and Chief Executive Officer
Cavium, Inc.
2315 N. First Street
San Jose, CA 95131

**Re: Cavium, Inc.
10-K for Fiscal Year Ended December 31, 2016
Filed February 28, 2017
File No. 001-33435**

Dear Mr. Ali:

We have limited our review of your filing to your contacts with countries that have been identified as state sponsors of terrorism, and we have the following comments. Our review with respect to this issue does not preclude further review by the Assistant Director group with respect to other issues. In our comments, we 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.

General

1. You state on page 6 of the 10-K that Cisco Systems and Nokia Solutions and Networks together accounted for 25.1% of your 2016 net revenue and that Cisco Systems, Nokia Solutions and Networks and Amazon.com together accounted for 42.9% and 44.4% of your net revenue in 2015 and 2014, respectively. Nokia Corporation discloses in its publicly filed annual reports that its Nokia Networks business sold services and/or network equipment to customers in Syria in 2014 and 2015. Additionally, Nokia Corporation discloses that it had sales through discontinued operations to customers in Sudan and Syria in 2014.

Sudan and Syria are designated by the Department of State as state sponsors of terrorism, and are subject to U.S. economic sanctions and export controls. Please describe to us the nature and extent of any past, current, and anticipated contacts with Sudan and Syria,

whether through subsidiaries, distributors, partners, customers or other direct or indirect arrangements. You should describe any services, products, information or technology you have provided to Sudan or Syria, directly or indirectly, and any agreements, commercial arrangements, or other contacts you have had with the governments of those countries or entities they control.

2. Please discuss the materiality of any contacts with Sudan and Syria you describe in response to the comment above, and whether those contacts constitute a material investment risk for your security holders. You should address materiality in quantitative terms, including the approximate dollar amounts of any associated revenues, assets, and liabilities for the last three fiscal years and the subsequent interim period. Also, address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company's reputation and share value. Various state and municipal governments, universities, and other investors have proposed or adopted divestment or similar initiatives regarding investment in companies that do business with U.S.-designated state sponsors of terrorism. You should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that have operations associated with Sudan and Syria.
3. According to a conference transcript published in March 2017, at the conference your CFO identified Huawei as one of your big customers for macro base stations. We are aware of news articles stating that Huawei is effectively barred from selling telecommunications network equipment in the U.S. and that the Department of Commerce is investigating Huawei for its alleged export or re-export of U.S. technology to Iran, Sudan and Syria in violation of U.S. export control laws. Please address for us the possibility that this information will have adverse reputational and other effects upon you because of your business relationship with Huawei.

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 Daniel Leslie, Staff Attorney, at (202) 551-3876 or me at (202) 551-3470 if you have any questions about the comments or our review.

Sincerely,

/s/ Cecilia Blye

Cecilia Blye, Chief
Office of Global Security Risk

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cc: Amanda Ravitz
Assistant Director
Division of Corporation Finance

Vincent P. Pangrazio
General Counsel
Cavium, Inc.