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

DIVISION OF
CORPORATION FINANCE

Via fax 972-9-765-1977

September 21, 2010

Shaike Orbach
Chief Executive Officer
Silicom Ltd.
8 Hanagar Street
Kfar Sava 44000, Israel

Re: Silicom LTD.
Form 20-F for the Fiscal Year Ended December 31, 2009
Filed March 18, 2010
File No. 000-23288

Dear Mr. Orbach:

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.

Form 20-F for the Fiscal Year Ended December 31, 2009

Item 3. Key Information

Risk Factors, page 9

1. You state on pages 51-52 that two of your founders, Messrs. Yehuda and Zohar Zisapel are directors and principal shareholders of several other corporations and in the event that any opportunities to develop, manufacture or sell new products or enter new fields arise which may conflict with the company, the directors then in office will determine whether or not you should seek to pursue it. You also disclose that a majority of your board of directors is not comprised of independent directors. Please tell us what consideration you gave to including risk factor disclosure regarding any conflicts that may arise from the relationships of your directors, officers, and major shareholders.

Item 4. Information on the Company, page 20

2. You state that your top two customers accounted for 27% of your revenues in 2009. Please tell us what consideration you have given to disclosing the identities of the customers and to discussing the material terms of any contractual arrangements with these significant customers. It appears that your revenues in the past have been affected by a reduction in the orders of these customers and that you may be substantially dependent on the related customer contracts. Please file the agreements as exhibits to the Form 20-F or provide us with a detailed analysis as to why you believe the agreements need not be filed pursuant to Instruction 4(b)(ii) to the Exhibits of Form 20-F.

3. We note your disclosure that you use certain key components in your products that are currently available from only one source and others that are available from a limited number of sources. Please tell us what consideration you have given to disclosing the material terms of your contractual arrangements with these suppliers, including Intel and Broadcom, and filing the agreements as exhibits to the Form 20-F. See Instruction 4(b)(ii) to the Exhibits of Form 20-F.

Item 5. Operating and Financial Review and Prospects

Operating Results, page 34

4. We note instances where two or more sources of a material change have been identified, without quantifying the amount that each source contributed to the change. For example, you state that the decrease in revenue in 2008 was due to the global downturn and the difficult market environment, and to a reduction in the orders of the company's largest customer. As a further example, you state that the increase in research and development expenses in 2008 was attributable to a weakening of the US Dollar against the New Israeli Shekel and to your continued investment in new products development, enhancements to existing products and the development of new and networking and connectivity technologies. Please quantify each source that contributed to a material change. See Item 5.A of Form 20-F and Section III.D of SEC Release No. 33-6835.

5. We note from your disclosures on page 37 that inventory levels were higher at December 31, 2008 because certain customers postponed and/or cancelled their purchase orders during the fourth quarter of fiscal 2008. We further note that you have recorded write-downs for obsolete inventory for each of the last three fiscal years. Tell us your consideration to include a discussion of how certain events, uncertainties and/or changes in circumstances (i.e. order cancellations, economic downturn, etc.) have impacted your inventory levels and accordingly the impact (or the expected impact) on your financial condition and results of operations. In addition, tell us how you considered enhancing your critical accounting policy disclosures to discuss the impact that estimates and assumptions have had on your inventory accounting and the potential risk for additional write-downs of obsolete or slow moving inventory inherent in such estimates and

assumptions. Please refer to Item 5.D. of Form 20-F and Section V of SEC Release No. 34-48960.

Liquidity, Page 37

6. Your disclosures indicate that you believe you have sufficient cash to meet your present requirements. Please confirm, if true, and revise in the future to clearly state whether the company's cash resources will be sufficient to fund your operating needs for the next twelve months. We refer you to FRC 501.03(a).

Compensation, page 43

7. It appears that you have not disclosed any amounts that you have set aside or accrued to provide pension, retirement or similar benefits to your directors or executive officers. See Item 6.B.2 of Form 20-F. We note that your board of directors has approved severance payments in the event of termination for the Chief Executive Officer and Chairman of the Board. Please advise.

Related Party Transactions, page 51

8. You state that the company receives "certain personnel and other services" from the Rad Group and distribution services from Bynet and its subsidiaries. Please explain the nature of the services provided by the Rad Group and Bynet and the material terms of the arrangements.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

General

9. We note that from your disclosures on page 19 that your marketable securities are subject to various risks (i.e. credit, liquidity, market and interest rate risk). Tell us how you considered including a discussion regarding the nature of the risks associated with your marketable securities portfolio. Also, tell us how you considered providing a sensitivity analysis or other quantitative analysis that expresses the potential loss in future earnings, fair value or cash flows related to the instruments. Please refer to Item 11 of Form 20-F.

Foreign Currency Exchange Risk, page 72

10. We note from your disclosures on pages 35 and 36 that fluctuations in the U.S. dollar against the New Israeli Shekel have significantly impacted your operating expenses. Tell us how you considered providing a sensitivity analysis or other quantitative presentation of the potential impact of changes in foreign exchange rates pursuant to Item 11 of Form 20-F.

Item 18. Financial Statements

Notes to Consolidated Financial Statements

Note 2 – Significant Accounting Policies, page F-8

11. Tell us and disclose the nature of your short-term bank deposits. In addition, tell us how you considered providing the disclosures as required by ASC 320-10-50-2 and ASC 820-10-50-1 through 50-9 for such deposits. If you continue to hold these deposits in the future, please include disclosures with regards to such investments, both as a separate significant accounting policy discussion as well as within your discussion of credit risk in Note 2.

Note 14 – Taxes on Income, page F-28

12. We note the company maintained a valuation allowance for deferred tax assets of $68,000 and $491,000 at December 31, 2009 and 2008, respectively. Please tell us the reasons for the 2008 valuation allowance and explain what changes lead to the subsequent decrease in the valuation allowance during fiscal 2009. In this regard, given your historical levels of positive pre-tax net income for each of the last five years, please describe further the positive and negative evidence considered in concluding that it is more likely than not that your deferred tax assets will not be realized. Also tell us how you considered significantly enhancing your disclosures to clarify your accounting for such allowance. We refer you to ASC 740-10-30-17 through 30-24.

Exhibits 12.1 and 12.2

13. Please use the exact language as referenced in Exhibit 12 of Form 20-F in future filings. In this regard, we note that your certifications pursuant to Section 302 of the Sarbanes-Oxley Act refer to “annual report” in paragraphs 2, 3 and 4(a) as opposed to referring to “report” as indicated in the instructions to exhibits of Form 20-F.

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 Robert Benton, Staff Accountant at (202) 551-3804 if you have questions regarding comments on the financial statements and related matters. Please contact Jan Woo, Staff Attorney at (202) 551-3453 or Maryse Mills-Apenteng, Special Counsel at (202) 551-3457 with any other questions. If you need further assistance, you may contact me at (202) 551-3499.

Sincerely,

Kathleen Collins
Accounting Branch Chief