

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

Mail Stop 3030

November 12, 2009

Via Facsimile and U.S. Mail

Mr. Russell C. Ellwanger Chief Executive Officer Tower Semiconductor Ltd. P.O. Box 619 Migdal Haemek, Israel 23105

> Re: Tower Semiconductor Ltd. Form 20-F for fiscal year ended December 31, 2008 Filed June 30, 2009 File No. 0-24790

Dear Mr. Ellwanger:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 20-F for fiscal year Ended December 31, 2008

Item 5. Operating and Financial Review and Prospects, page 38

Results of Operations, page 46

1. We note that revenues from your acquisition of Jazz Technologies contributed \$56.3 million to your total revenues for 2008, however, total revenues increased just \$20.8 million from 2007 to 2008. With a view towards providing investors with greater insight into your operations and possible future results of operations, please revise future filings to include greater analysis of the changes in your revenues. For example, discuss the underlying causes of the decline in revenues for legacy Tower operations from 2007 to 2008 and discuss whether there are any trends, positive or negative, impacting any of your product lines.

Trend Information, page 59

2. In your future filings, as applicable, please expand your disclosure here to provide a comprehensive discussion of the disclosure required by Item 5.D. In this regard, we note that page 3 of the Thompson StreetEventsSM transcript of your Q4 2008 conference call, conducted on February 19, 2009, contains a statement by your chief executive officer regarding an expected increase in average selling price of approximately 20% in the first quarter at your Israeli-based fabs and an additional 5% increase at your US-based fab.

Item 15. Controls and Procedures, page 87

Internal Control over Financial Reporting, page 87

3. We note from the auditor's report on internal control over financial reporting on page F-1.2 that "as described in Item 15…management excluded from its assessment the internal control over financial reporting at Jazz Technologies, Inc., which was acquired on September 19, 2008" and that the auditor has similarly excluded Jazz Technologies from its assessment of internal control over financial reporting. However, managements' report on internal control over financial reporting here does not include any disclosures suggesting that it excluded from its assessment the internal control over financial reporting at Jazz Technologies, Inc. As appropriate, please amend the filing to revise the disclosures here or in the auditors report on page F-1.2 to clarify whether the assessments included the internal control over financial reporting at Jazz Technologies, Inc. In this regard, to the extent that management excluded the internal control over financial reporting at Jazz Technologies, please revise to include the disclosures required by Question 3 of the SEC Frequently Asked Questions on Management's Report on Internal Control over Financial Reporting dated September 24, 2007.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Joseph McCann, Staff Attorney, at (202) 551-6262 or Jay Mumford, Legal Reviewer, at (202) 551-3637 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

Kevin L. Vaughn Accounting Branch Chief