

Mail Stop 6010

June 18, 2007

Thomas R. Melendrez
Exar Corporation
48720 Kato Road
Fremont, CA 94538

**Re: Exar Corporation
Registration Statement on Form S-4
Filed May 24, 2007
File No. 333-143243**

Dear Mr. Melendrez:

We have limited our review of your filing to those issues we have addressed in our 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.

Unaudited Pro Forma Combined Condensed Financial Statements, page 150

Note 1. Basis of Presentation, page 154

1. Tell us more about the conversion of approximately one-half of the Sipex convertible notes as part of the acquisition. In your discussion please clearly explain how the conversion of a portion of the outstanding notes is directly attributable to the transaction and factually supportable. In addition, please expand your discussion in note (g) to explain how you calculated the reduction in related interest expense.

2. We noted your discussion that the fair value of options was estimated using a Black-Scholes model. Tell us and revise your notes to include the significant assumptions used to estimate the fair value of the options.

Preliminary Estimated Purchase Price Allocation, page 155

3. We note that the excess of the purchase price over the net assets acquired in the acquisition will result in goodwill of approximately \$150.5 million. Tell us and revise your discussion to include a discussion of the factors that contributed to a purchase price that resulted in recognition of a significant amount of goodwill. Refer to paragraph 51(b) of SFAS 141.

Tangible Assets Acquired and Liabilities Assumed, page 155

4. Tell us and revise the filing to disclose the basis for your preliminary allocation of \$66 million of the purchase price to acquired intangible assets as well as your useful life estimates for the intangibles. Specifically address why you believe these adjustments are factually supportable.

In-process research and development, page 156

5. We noted your estimate that \$5.0 million of the purchase price represents purchased in-process technology. Please revise the filing to describe the nature and timing of the remaining efforts and related cash requirements necessary to develop the incomplete technology into a commercially viable product. Describe the potential effects on results of operations and financial position if the technology is not successful and timely completed. Describe the current status of the project(s).

Note 2. Pro forma adjustments, page 157

6. We noted your adjustments to eliminate share based compensation expenses recorded by Sipex under SFAS 123(R) and the corresponding adjustment to record amortization of unearned compensation related to Sipex options assumed. Please address the following:
 - Tell us how your accounting for the Sipex options to be assumed complies with SFAS 141 or other applicable GAAP.
 - Tell us and revise your notes to the pro forma combined condensed statement of operations to disclose the significant assumptions used to estimate the fair value of the options by Exar.
 - Explain the nature of and reason for any significant differences between the expense amount recorded by Sipex and the pro forma adjustment you computed.

7. Reference is made to adjustments (h), (l) and (o). Tell us and revise your notes herein to provide further information regarding your calculation to record income taxes on a combined basis as well as the reason for the pro forma adjustments to your valuation allowances. In your discussion, please also tell us how you determined, and your basis for, the pro forma combined effective tax rate.
8. Reference is made to adjustment (p). Tell us about and revise this note to provide further information about the adjustments to eliminate Sipex's deferred income and the adjustment to record a liability associated with price protection and returns associated with Sipex distributor inventory.
9. Reference is made to adjustment (q). Tell us and revise your note to provide further information about your adjustment to record the fair value adjustment for the Sipex convertible notes. Please explain the nature of the adjustment as well as your calculation.

General

10. Please update the financial statements to comply with Rule 3-12 of Regulation S-X. Note we may have additional comments after reviewing your updated pro forma financial statements.
11. Please include currently dated and signed consents from your independent auditors with any amendment filed.
12. We note that on pages 133 and H-22 you refer to an independent appraisal obtained when testing the corporate headquarters facility. Please revise the filing to name the independent valuation expert where referenced and in the Experts section, and include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment 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 Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Julie Sherman at (202) 551-3640 or Jay Webb at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3800 with any other questions.

Sincerely,

Peggy Fisher
Assistant Director

cc (via fax): Warren Lazarow, Esq.

Thomas R. Melendrez
Exar Corporation
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