



DIVISION OF
CORPORATION FINANCE

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

March 31, 2011

Avi S. Katz
Chief Executive Officer and Chairman of the Board
GigOptix, Inc.
2300 Geng Road, Suite 250
Palo Alto, CA 94303

Re: GigOptix, Inc.
Registration Statement on Form S-4
Filed March 4, 2011
File No. 333-172620

Dear Dr. Katz:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Please send us copies of the board books and any other materials provided by the financial advisors to assist the Board of Directors in evaluating the transaction. Also, provide us a copy of the engagement letters. Finally, provide copies of any financial projections provided by either party to the other.

Prospectus Cover Page

2. Please clarify your disclosure in the penultimate sentence of the second paragraph to indicate, if true, that Endwave shareholders will not know at the time of the vote the number of shares that they will receive.

3. The formula you disclose in the second paragraph appears to determine the aggregate *number* of shares Endwave holders will receive. It is therefore unclear why the penultimate sentence of that paragraph states that the *value* “cannot be determined until immediately before the consummation of the merger.” Please clarify.
4. Please provide the disclosure regarding the title and aggregate amount of securities being offered, as required by Item 501(b)(2) of Regulation S-K. Please also revise here to briefly describe how the formula works, what consideration it is intended to achieve for Endwave shareholders and the circumstances under which the exchange rate will change, if any, including the factors that might impact the conversion rate.

Questions and Answers..., page 1

5. We suggest including a toll free number for shareholders to call prior to their vote so that they may have exchange rate information as of a most recent practicable date. In an appropriate part in this section of your document, please disclose the anticipated amount of time between the vote and the closing of the merger transaction.

Q. What will Endwave stockholders receive..., page 1

6. Please revise your disclosure to illustrate how the formula operates in determining the amount of consideration. Your revised disclosure should clearly demonstrate as of the latest practicable date how the treatment of in-the-money options affects the shares to be issued on a per share basis. Once we have reviewed your disclosure, we may ask for clarifying disclosure in other locations of the prospectus.

Q. How much of GigOptix will former Endwave . . . , page 2

7. Please revise the example in the final sentence to indicate what percentage of GigOptix outstanding common stock the numbers stated represent.

Q. Will a broker or bank..., page 4

8. We note the use of the word “generally” in the response to this question. Please disclose the reason for this uncertainty.

Summary, page 5

9. Please revise the first page of your summary to disclose your net losses and accumulated deficit for the 2 most recently completed fiscal years and your auditor’s going concern opinion.

GigOptix, Inc., page 5

10. Avoid the use of promotional marketing language throughout and limit your disclosure to factually supported statements. For example, we note your reference to a “history of innovation,” “benefits over . . . competitors,” “superior properties” and “proven record.”
11. Remove references to well known companies unless you have a binding contract with them and they represent a significant portion of your revenues. Make similar revisions in the first paragraph on page 48, on page 57, and elsewhere as appropriate.

GigOptix’ Industry Background, page 5

12. Regarding the industry data that you cite in your document, please tell us whether you obtained the information from sources that are generally publicly available for no or nominal fee. If not, please file a consent pursuant to Rule 436 of the Securities Act of 1933.

Interests of Certain Persons in the Merger, page 11

13. We note your disclosure in the second paragraph regarding exclusion of the value of any accelerated vesting stock awards. Please disclose the number of stock awards that are subject to acceleration.

Risk Factors, page 17

14. You disclose that Japan accounted for 12% of revenue for the year ended December 31, 2010. To the extent that the recent events Japan have or are expected to impact your sales, please include an appropriate risk factor.

GigOptix could suffer..., page 31

15. Please disclose the risk from the substantial increase in accounts receivable since your December 31, 2009 fiscal year end, including any collection issues.

Risks Related to Ownership of Endwave’s Stock, page 44

16. Because this document is addressed to existing Endwave stockholders regarding an investment in GigOptix, please include a lead-in paragraph explaining how the risks described should be considered in the investment decision to be made.

Information about GigOptix, Inc., page 48

17. Qualitative statements about your products or business should have a reasonable basis and be qualified as management’s belief or removed. Please revise as appropriate.

Patents..., page 61

18. Please disclose the duration of your significant patents.

Government Regulations, page 63

19. We note your disclosure in the last sentence of the first paragraph. Please disclose whether you are currently in compliance.

Proposal One—Adoption of the Merger Agreement, page 129

Background of the Merger, page 129

20. If Party A proposed quantified terms to Endwave, please detail those terms, identify Party A and give specific reasons why the board rejected the offer.
21. Refer to the first sentence on page 132. Please disclose the terms proposed by Party B and identify Party B by name.

GigOptix's Reasons for the Merger, page 134

22. Please revise the final bullet point on page 134 to explain how the board concluded that the amounts disclosed were reasonable projections.
23. Please revise the final bullet point on page 135. It is inappropriate to require an investor to piece together information from other parts of your document. Likewise, revise the last bullet point on page 138.

Other Available Alternatives, page 136

24. Explain why, in the first bullet point, the board did not think other alternatives would be available.

Other Analyses, page 142

25. We note that a portion of Merriman's fees are contingent on the consummation of the merger, as described in the second paragraph on page 143. Please provide further detail regarding the contingent nature of the fees. Your disclosure should include, without limitation, the proportion of the fees that are contingent on the consummation of the merger.

Comparable Company Analysis, page 145

26. If available, please disclose the high and low values presented in the table on page 145.

The Merger Agreement, page 156

27. We note your disclosure preceding the description of the merger agreement on page 156. Because the representations in your agreements constitute public disclosure, if there are more recent, material developments that the company is aware of, you must disclose them. Please revise as appropriate.

Material U.S. Federal Income Tax..., page 171

28. Refer to the second paragraph on page 172. It is unclear why the merger is “intended” to qualify as a reorganization under section 368(a) when the paragraph immediately following indicates that counsel provided opinions that the merger will be treated as a reorganization under that section. Please revise. In addition, since the tax section appears to be intended to constitute counsel’s opinion, revise to clearly state counsel’s opinion, rather than stating that counsel has provided an opinion as to certain matters.
29. We note that on page 172 you state that the discussion of your material tax consequences assumes “that the merger constitutes a reorganization.” The disclosure should not contain assumptions regarding conclusions of law that underlie the ultimate opinion as to the tax consequences to holders. Please revise your disclosure here and on page 15 accordingly. Alternatively, tell us the degree of uncertainty there is about whether the merger will qualify as a “reorganization” within the meaning of Section 368(a) of the IRC.

Security Ownership..., page 175

30. Please reconcile the number of directors and executive officers in the last row of your table with the number of officers and directors listed in the table. Also, tell us why Ms. Tipton is not included in the table.
31. Please identify the natural persons who directly or indirectly have or share voting or investment power over the securities held by the entities in your table. Also, provide equivalent disclosure for the table on page 177.

Annex C

32. Refer to the penultimate paragraph. Please file a revised opinion as it is inappropriate to attempt to limit reliance on the opinion.

Exhibit Index

33. Please tell us where you filed the consents required by Rule 438 of the Securities Act.
34. We note that the document filed as exhibit 10.7 is dated after the filing date. In addition, there is no filing for that date under your current name. Please advise.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Avi S. Katz
GigOptix, Inc.
March 31, 2011
Page 7

You may contact Gabriel Eckstein at (202) 551-3286 or me at (202) 551-3528 with any questions.

Sincerely,

Amanda Ravitz
Assistant Director

cc (via fax): Jeffrey C. Selman, Esq.
Nixon Peabody LLP