



DIVISION OF
CORPORATION FINANCE

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

September 28, 2012

Via E-mail

Mr. Ford Tamer
President and Chief Executive Officer
Inphi Corporation
3945 Freedom Circle, Suite 1100
Santa Clara, California 95054

**Re: Inphi Corporation
Schedule TO-I
Filed on September 20, 2012
File No. 005-85976**

Dear Mr. Tamer:

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 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.

What happens if my employment terminates before tendered options are canceled...?, page 3

1. You disclose that, in order to participate in the offer, an offeree must remain employed through the date on which surrendered options are cancelled, which is after the expiration date. Eligibility must be determined by no later than the expiration date. Please revise the terms of your offer.

Forward-Looking Statements, page 11

2. Please revise this section to omit the references to Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Those provisions are inapplicable by their terms to statements made in connection with a tender offer.

Section 5. Withdrawal Rights and Change of Election, page 20

3. Please disclose the date certain after which securities may be withdrawn pursuant to Rule 13e-4(f)(2)(ii). See Item 1004(a)(1)(vi) of Regulation M-A.

Section 6. Acceptance of Options for Exchange and Issuance of Replacement Options, page 21

4. Please disclose the manner in which securities will be accepted for payment. See Item 1004(a)(1)(viii) of Regulation M-A.

Section 7. Conditions of the Offer, page 22

5. You state that if any of the listed events shall have been determined by you to have occurred that in your judgment makes it inadvisable to proceed with the offer, you may terminate or amend the offer, or postpone the acceptance of any options. Please revise to include an objective standard for the determination of whether a condition has been satisfied.

Section 16. Extension of Offer; Termination; Amendment, page 33

6. In the second bullet point on the top of page 34, you state that you will extend the offer as necessary to ensure that at least 10 business days remain in the offer following a change in the type of options eligible to be tendered. Please advise how you determined that expanding the scope of the offer in this manner would not constitute a new offer requiring that the offer remain open for at least 20 business days following the change. See Rule 14e-1(a). We have similar concerns with respect to the third bullet point on the top of page 34.

Election Form

7. You have asked security holders to waive the right to claim any loss of opportunity as a result of participation in the offer (see the final clause immediately above the signature block). We view this as an impermissible waiver under Section 29(a) of the Exchange Act. Please revise.

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:

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- 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 me at (202) 551-3503 if you have any questions regarding our comments.

Sincerely,

/s/ David L. Orlic

David L. Orlic
Special Counsel
Office of Mergers and Acquisitions

cc: Via E-mail
Allison Leopold Tilley, Esq.
Pillsbury Winthrop Shaw Pittman LLP