



DIVISION OF
CORPORATION FINANCE

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

March 14, 2013

Via E-mail

Helene Simonet
Principal Financial and
Accounting Officer
Coherent, Inc.
5100 Patrick Henry Drive
Santa Clara, California 95054

Re: Coherent, Inc.
Form 10-K for the Fiscal Year Ended September 29, 2012
Filed November 28, 2012
File No. 001-33962

Dear Ms. Simonet:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing[s] to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Brian Cascio

Brian Cascio
Accounting Branch Chief