



DIVISION OF
CORPORATION FINANCE

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

April 15, 2015

Via Email

Mark Dentinger
Chief Financial Officer
InvenSense, Inc.
1745 Technology Drive
Suite 200
San Jose, California 95110

Re: InvenSense, Inc.
Form 10-K for the Fiscal Year Ended March 30, 2014
Filed May 29, 2014
File No. 001-35269

Dear Mr. Dentinger:

We have completed our review of your filings. 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 filings 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 filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Martin James

Martin James
Senior Assistant Chief Accountant