



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

March 21, 2017

Behrooz Abdi
Chief Executive Officer
InvenSense, Inc.
1745 Technology Drive, Suite 200
San Jose, California 95110

**Re: InvenSense, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed February 3, 2017
File No. 001-35269**

Dear Mr. Abdi:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Allison Leopold Tilley, Esq.
Pillsbury Winthrop Shaw Pittman LLP