



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