



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

August 31, 2016

Via E-mail

Phillip LoPresti
Chief Executive Officer
Everspin Technologies, Inc.
1347 N. Alma School Road Suite 220
Chandler, Arizona 85224

**Re: Everspin Technologies, Inc.
Amendment No. 2 to
Draft Registration Statement on Form S-1
Submitted August 16, 2016
CIK No. 0001438423**

Dear Mr. LoPresti:

We have reviewed your amended draft registration statement 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our July 22, 2016 letter.

Risk Factors, page 10

Our joint development agreement and strategic relationships involve numerous risks, page 13

1. Please expand your disclosure here to discuss the risks associated with GLOBALFOUNDERIES' right to terminate the joint development agreement pursuant to the terms of the May 27, 2016 amendment, as disclosed on page 72.

Management's Discussion and Analysis, page 43

Comparison of six months ended June 30, 2015 and 2016, page 48

2. It appears that several unusual events contributed to your results for this period, including a single customer decreasing inventory, as well as an increase by you of inventory, possibly in anticipation of receiving orders or based upon existing orders. Please explain these factors more clearly so that an investor can understand your current business and possible factors that may cause present results to differ from future results. For example, if possible, describe the drivers that lead your customer to decrease inventory and whether this customer intends to continue purchases in the future. Also, was your "effort to timely fill product orders" driven by actual order volume or forecasted volume?
3. Please provide additional details about the reasons why you redeployed general and administrative personnel to research and development.

Business, page 62

Limitations of Existing and Emerging Memory Solutions, page 63

4. Please expand your response to prior comment 3 to clarify why the emerging technologies noted here would not compete with your higher density products, which you indicate on page 62 are "optimized" for use in the enterprise storage market. Please also clarify whether you consider the enterprise storage market to be a target market, and, if not, please revise your disclosures that suggest otherwise.

Exhibits

5. Please tell us which of the exhibit to this registration statement is the Equity Agreement referenced on the first page of exhibit 10.18. If you have not filed this Agreement, please do so or advise us as to why it need not be filed pursuant to Item 601(b)(4) or (10) of Regulation S-K.

Phillip LoPresti
Everspin Technologies, Inc.
August 31, 2016
Page 3

You may contact Michael Fay at (202) 551-3812 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Laurie Abbott at (202) 551-8071 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Matthew B. Hemington, Esq.
Cooley LLP