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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______ to ______

Commission File Number 001-37900

Everspin Technologies, Inc.
(Exact name of Registrant as specified in its Charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**26-2640654** **(I.R.S. Employer Identification No.)**

5670 W. Chandler Boulevard, Suite 100
Chandler, Arizona 85226
(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (480) 347-1111

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001	MRAM	The Nasdaq Stock Market

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES ☒ NO ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Small reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

The number of shares of Registrant's Common Stock outstanding as of July 31, 2019 was 17,151,478.

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In this Quarterly Report on Form 10-Q, "we," "our," "us," "Everspin Technologies," and "the Company" refer to Everspin Technologies, Inc. The Everspin logo and other trade names, trademarks or service marks of Everspin Technologies are the property of Everspin Technologies, Inc. This report contains references to our trademarks and to trademarks belonging to other entities. Trade names, trademarks and service marks of other companies appearing in this report are the property of their respective holders. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

PART I—FINANCIAL INFORMATION
Item 1. Financial Statements

EVERSPIN TECHNOLOGIES, INC.
Condensed Balance Sheets
(In thousands, except share and per share amounts)

	June 30, 2019 (Unaudited)	December 31, 2018 (See Note 2)
Assets		
Current assets:		
Cash and cash equivalents	$ 15,273	$ 23,379
Accounts receivable, net	5,864	7,522
Inventory	8,964	9,097
Prepaid expenses and other current assets	488	688
Total current assets	30,589	40,686
Property and equipment, net	3,867	4,286
Right-of-use assets	2,947	—
Other assets	73	73
Total assets	$ 37,476	$ 45,045
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,197	$ 2,637
Accrued liabilities	3,704	5,001
Current portion of long-term debt	5,977	5,977
Lease liabilities	1,583	—
Total current liabilities	13,461	13,615
Long-term debt, net of current portion	3,642	6,509
Lease liabilities, net of current portion	1,726	—
Total liabilities	18,829	20,124
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.0001 par value per share; 5,000,000 shares authorized; no shares issued and outstanding as of June 30, 2019 and December 31, 2018	—	—
Common stock, $0.0001 par value per share; 100,000,000 shares authorized; 17,151,290 and 17,095,456 shares issued and outstanding as of June 30, 2019 and December 31, 2018	2	2
Additional paid-in capital	160,564	158,912
Accumulated deficit	(141,919)	(133,993)
Total stockholders' equity	18,647	24,921
Total liabilities and stockholders' equity	$ 37,476	$ 45,045

The accompanying notes are an integral part of these condensed financial statements.

EVERSPIN TECHNOLOGIES, INC.
Condensed Statements of Operations and Comprehensive Loss
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Product sales	$ 8,003	$ 9,449	$ 17,026	$ 18,814
Licensing, royalty, and other revenue	643	1,316	1,646	6,804
Total revenue	8,646	10,765	18,672	25,618
Cost of sales	4,627	6,229	9,868	11,127
Gross profit	4,019	4,536	8,804	14,491
Operating expenses:				
Research and development	3,519	6,773	7,517	13,253
General and administrative	2,856	3,329	6,451	6,548
Sales and marketing	1,239	1,713	2,603	3,079
Total operating expenses	7,614	11,815	16,571	22,880
Loss from operations	(3,595)	(7,279)	(7,767)	(8,389)
Interest expense	(186)	(222)	(397)	(433)
Other income, net	111	132	238	176
Net loss and comprehensive loss	$ (3,670)	$ (7,369)	$ (7,926)	$ (8,646)
Net loss per common share, basic and diluted	$ (0.21)	$ (0.44)	$ (0.46)	$ (0.55)
Weighted-average shares used to compute net loss per common share, basic and diluted	17,137,338	16,635,261	17,117,777	15,717,248

The accompanying notes are an integral part of these condensed financial statements.

EVERSPIN TECHNOLOGIES, INC.
Condensed Statements of Stockholders' Equity
(In thousands, except share and per share amounts)
(Unaudited)

	Three and Six Months Ended June 30, 2019				
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2018	17,095,456	$ 2	$ 158,912	$ (133,993)	$ 24,921
Issuance of common stock under stock incentive plans	12,607	—	13	—	13
Stock-based compensation expense	—	—	704	—	704
Net loss	—	—	—	(4,256)	(4,256)
Balance at March 31, 2019	17,108,063	2	159,629	(138,249)	21,382
Issuance of common stock under stock incentive plans	43,227	—	137	—	137
Stock-based compensation expense	—	—	798	—	798
Net loss	—	—	—	(3,670)	(3,670)
Balance at June 30, 2019	17,151,290	$ 2	$ 160,564	$ (141,919)	$ 18,647

	Three and Six Months Ended June 30, 2018				
	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2017	12,817,201	$ 1	$ 128,422	$ (117,539)	$ 10,884
Adjustment to opening balance for adoption of new accounting standard	—	—	—	1,300	1,300
Issuance of common stock in secondary offering, net of issuance costs	3,772,447	1	24,608	—	24,609
Issuance of common stock under stock incentive plans	58,229	—	309	—	309
Compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES	—	—	237	—	237
Stock-based compensation expense	—	—	625	—	625
Net loss	—	—	—	(1,277)	(1,277)
Balance at March 31, 2018	16,647,877	2	154,201	(117,516)	36,687
Issuance of common stock under stock incentive plans	152,628	—	723	—	723
Compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES	—	—	225	—	225
Stock-based compensation expense	—	—	717	—	717
Net loss	—	—	—	(7,369)	(7,369)
Balance at June 30, 2018	16,800,505	$ 2	$ 155,866	$ (124,885)	$ 30,983

The accompanying notes are an integral part of these condensed financial statements.

EVERSPIN TECHNOLOGIES, INC.
Condensed Statement of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2019	**2018**
Cash flows from operating activities		
Net loss	$ (7,926)	$ (8,646)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	876	729
Loss on disposal of property and equipment	20	19
Stock-based compensation	1,502	1,342
Non-cash interest expense	153	200
Compensation expense related to vesting of common stock to GLOBALFOUNDRIES	—	462
Changes in operating assets and liabilities:		
Accounts receivable	1,658	(1,391)
Inventory	133	940
Prepaid expenses and other current assets	200	(635)
Other assets	—	(136)
Accounts payable	(456)	51
Accrued liabilities	(907)	2,591
Lease liabilities	(43)	—
Shipping term reversal	—	(39)
Net cash used in operating activities	(4,790)	(4,513)
Cash flows from investing activities		
Purchases of property and equipment	(461)	(347)
Net cash used in investing activities	(461)	(347)
Cash flows from financing activities		
Proceeds from the issuance of common stock, net of offering costs	—	24,609
Payments on debt	(3,000)	(1,000)
Payments on finance lease obligation	(5)	(6)
Proceeds from exercise of stock options and purchase of shares in employee stock purchase plan	150	1,032
Net cash (used in) provided by financing activities	(2,855)	24,635
Net (decrease) increase in cash and cash equivalents	(8,106)	19,775
Cash and cash equivalents at beginning of period	23,379	12,950
Cash and cash equivalents at end of period	$ 15,273	$ 32,725
Supplementary cash flow information:		
Interest paid	$ 257	$ 233
Operating cash flows paid for operating leases	$ 837	$ —
Financing cash flows paid for finance leases	$ 5	$ —
Right-of-use assets obtained in exchange for new operating leases	$ 23	$ —
Non-cash investing and financing activities:		
Purchases of property and equipment in accounts payable	$ 27	$ 27

The accompanying notes are an integral part of these condensed financial statements.

EVERSPIN TECHNOLOGIES, INC.

Notes to Unaudited Condensed Financial Statements

1. Organization and Nature of Business

Everspin Technologies, Inc. (the Company) was incorporated in Delaware on May 16, 2008. The Company's magnetoresistive random-access memory (MRAM) solutions offer the persistence of non-volatile memory with the speed and endurance of random-access memory (RAM) and enable the protection of mission critical data particularly in the event of power interruption or failure. The Company's MRAM solutions allow its customers in the industrial, automotive, transportation, and enterprise storage markets to design high performance, power efficient and reliable systems without the need for bulky batteries or capacitors.

Ability to continue as a going concern

The Company believes that its existing cash and cash equivalents as of June 30, 2019, coupled with its anticipated growth and sales levels will be sufficient to meet its anticipated cash requirements for at least the next twelve months from the financial statement issuance date. The Company's future capital requirements will depend on many factors, including its growth rate, the timing and extent of its spending to support research and development activities, the timing and cost of establishing additional sales and marketing capabilities, and the introduction of new products. The Company may be required at some point in the future to seek additional equity or debt financing, to sustain operations beyond that point, and such additional financing may not be available on acceptable terms or at all. If the Company is unable to raise additional capital or generate sufficient cash from operations to adequately fund its operations, it will need to curtail planned activities to reduce costs. Doing so will likely harm its ability to execute on its business plan.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (GAAP) and applicable rules and regulations of the Securities and Exchange Commission (SEC) regarding interim financial reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by GAAP have been condensed or omitted, and accordingly the balance sheet as of December 31, 2018 has been derived from the audited financial statements at that date but does not include all of the information required by GAAP for complete financial statements. These unaudited interim condensed financial statements have been prepared on the same basis as the Company's annual financial statements and, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair statement of the Company's financial information. The results of operations for the three and six months ended June 30, 2019 are not necessarily indicative of the results to be expected for the year ending December 31, 2019 or for any other interim period or for any other future year.

The accompanying condensed financial statements and related financial information should be read in conjunction with the audited financial statements and the related notes thereto for the year ended December 31, 2018, included in the Company's Annual Report on Form 10-K filed with the SEC.

Use of Estimates

The preparation of the condensed financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the condensed financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, fair value of assets and liabilities, inventory, product warranty reserves, income taxes, and stock-based compensation. The Company believes its estimates and assumptions are reasonable; however, actual results may differ from the Company's estimates.

Accounts receivable, net

The Company estimates credits to distributors based on the historical rate of credits provided to distributors relative to sales. At June 30, 2019, the allowance for product returns and the allowance for price concessions were $212,000 and $100,000, respectively. At December 31, 2018, the allowance for product returns and the allowance for price concessions were $144,000 and $569,000, respectively.

Accounts receivable, net consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Trade accounts receivable	$ 5,584	$ 7,297
Unbilled accounts receivable	592	938
Allowance for accounts receivable	(312)	(713)
Accounts receivable, net	$ 5,864	$ 7,522

Concentration of Credit Risk

Financial instruments that potentially expose the Company to a concentration of credit risk consist principally of cash and cash equivalents that are held by a financial institution in the United States and accounts receivable. Amounts on deposit with a financial institution may at times exceed federally insured limits. The Company maintains its cash accounts with high credit quality financial institutions and, accordingly, minimal credit risk exists with respect to the financial institutions.

Significant customers are those which represent more than 10% of the Company's total revenue or net accounts receivable balance at each respective balance sheet date. For the purposes of this disclosure, the Company defines "customer" as the entity that is purchasing the products or licenses directly from the Company, which includes the distributors of the Company's products in addition to end customers that the Company sells to directly. For each significant customer, revenue as a percentage of total revenue and accounts receivable as a percentage of total accounts receivable, net are as follows:

	Revenue Three Months Ended June 30,		Revenue Six Months Ended June 30,		Accounts Receivable, net As of	
Customers	2019	2018	2019	2018	June 30, 2019	December 31, 2018
Customer A	23 %	*	16 %	*	40 %	23 %
Customer B	13 %	*	12 %	*	*	*
Customer C	12 %	14 %	12 %	14 %	*	*
Customer D	11 %	*	13 %	*	*	*
Customer E	*	*	*	20 %	*	*
Customer F	*	19 %	*	13 %	*	*
Customer G	*	*	*	*	11 %	21 %
Customer H	*	*	*	*	*	11 %
Customer I	*	*	*	*	*	11 %

* Less than 10%

Fair Value of Financial Instruments

Fair value is defined as an exit price, representing the amount that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. The framework for measuring fair value provides a three-tier hierarchy prioritizing inputs to valuation techniques used in measuring fair value as follows:

Level 1— Observable inputs such as quoted prices for identical assets or liabilities in active markets;
Level 2— Inputs, other than quoted prices for identical assets or liabilities in active markets, which are observable either directly or indirectly; and

Level 3— Unobservable inputs in which there is little or no market data requiring the reporting entity to develop its own assumptions

The carrying value of accounts receivable, accounts payable, and other accruals readily convertible into cash approximate fair value because of the short-term nature of the instruments. As of June 30, 2019, based on Level 2 inputs and the borrowing rates available to the Company for loans with similar terms and consideration of the Company’s credit risk, the carrying value of the Company’s variable interest rate debt, excluding unamortized debt issuance costs, approximates fair value. The Company’s financial instruments consist of Level 1 assets. Where quoted prices are available in an active market, securities are classified as Level 1. Level 1 assets consist of highly liquid money market funds that are included in cash equivalents.

The following tables sets forth the fair value of the Company’s financial assets measured at fair value on a recurring basis (in thousands):

	June 30, 2019			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Money market funds	$ 15,417	$ —	$ —	$ 15,417
Total assets measured at fair value	$ 15,417	$ —	$ —	$ 15,417

	December 31, 2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Money market funds	$ 23,478	$ —	$ —	$ 23,478
Total assets measured at fair value	$ 23,478	$ —	$ —	$ 23,478

Leases

The Company leases office, lab, manufacturing space and equipment in various locations with initial lease terms of up to five years. These leases require monthly lease payments that may be subject to annual increases throughout the lease term. The terms of these leases also include renewal options at the election of the Company to renew or extend the lease for a range of an additional two to five years. These optional periods have not been considered in the determination of the right-of-use-assets (ROU) or lease liabilities associated with these leases as the Company did not consider it reasonably certain it would exercise the options.

The Company determines if an arrangement is a lease at inception. ROU assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent the Company’s obligation to make lease payments arising from the lease. The classification of the Company's leases as operating or finance leases along with the initial measurement and recognition of the associated ROU assets and lease liabilities is performed at the lease commencement date. The measurement of lease liabilities is based on the present value of future lease payments over the lease term. The Company’s uses its incremental borrowing rate, based on the information available at commencement date, to determine the present value of lease payments when its leases do not provide an implicit rate. The Company uses the implicit rate when readily determinable. The ROU asset is based on the measurement of the lease liability, includes any lease payments made prior to or on lease commencement and excludes lease incentives and initial direct costs incurred, as applicable. Lease expense for the Company’s operating leases is recognized on a straight-line basis over the lease term. Amortization expense for ROU assets associated with finance leases is recognized on a straight-line basis over the shorter of the useful life of the asset or the lease term and interest expense associated with finance leases is recognized on the balance of the lease liability using the effective interest method based on the estimated incremental borrowing rate.

The Company has lease agreements with lease and non-lease components. The Company has elected to not separate lease and non-lease components for any leases involving real estate and office equipment classes of assets and, as a result, accounts for the lease and non-lease components as a single lease component. The Company will separate lease and non-lease components for any leases involving manufacturing facility classes of assets. Further, the Company elected the short-term lease exception policy, permitting it to not apply the recognition requirements of this standard to leases with terms of 12 months or less (short-term leases) for all classes of assets. As of June 30, 2019, the Company did not have any short-term leases.

Operating leases are included in right-of-use assets, lease liabilities, and lease liabilities, net of current portion in the Company's balance sheet. Finance leases are included in property and equipment, other current liabilities, and other long-term liabilities in the Company's balance sheet.

Stock-based Compensation

Stock-based compensation arrangements include stock option grants and restricted stock unit (RSU) awards under the Company's equity incentive plans, as well as shares issued under the Company's Employee Stock Purchase Plan (ESPP), through which employees may purchase the Company's common stock at a discount to the market price.

The Company measures its stock option grants made to employees based on the estimated fair value of the options as of the grant date using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the requisite service period using the straight-line method. The Company has made an accounting policy election to account for forfeitures as they occur, rather than estimating expected forfeitures at the time of the grant.

Stock-based compensation expense for options granted to non-employees as consideration for services received is measured on the date of performance at the fair value of the consideration received or the fair value of the equity instruments issued, using the Black-Scholes option-pricing model, whichever can be more reliably measured. Compensation expense for options granted to non-employees is recognized as the underlying options vest. The Company has made an accounting policy election to account for forfeitures as they occur, rather than estimating expected forfeitures at the time of the grant. In addition, the Company made an accounting policy election to use the contractual term as the expected term rather than estimating the expected term.

Recently Adopted Pronouncements

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016 02, Leases (Topic 842), which establishes a comprehensive new lease accounting model. The new standard: (a) clarifies the definition of a lease; (b) requires a dual approach to lease classification similar to current lease classifications; and (c) causes lessees to recognize leases on the balance sheet as a lease liability with a corresponding ROU asset for leases with a lease-term of more than 12 months. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2018. In July 2018, the FASB issued ASU 2018-10, Codification Improvements to Topic 842 Leases and ASU No. 2018-11, Leases (Topic 842) Targeted Improvements. ASU 2018-10 clarifies how to apply certain aspects of ASU 2016-02. The Company adopted this standard on January 1, 2019, using the modified retrospective method. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

Topic 842 permits the application of certain practical expedients, of which the Company elected the "package of three" expedient, that eliminated the requirements to reassess prior conclusions about lease identification, lease classification, and initial direct costs. Further, the Company elected the short-term lease exception policy, permitting it to not apply the recognition requirements of this standard to short-term leases.

Upon adoption of Topic 842, on January 1, 2019, the Company recorded an operating lease ROU asset of $3.6 million, operating lease liabilities of $4.0 million, and derecognized the deferred rent liability of $390,000. The accounting for the Company's finance leases remained substantially unchanged.

In June 2018, the FASB issued ASU No. 2018-07, Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 is intended to reduce the cost and complexity and to improve financial reporting for nonemployee share-based payments. The ASU expands the scope of Topic 718, (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. The standard is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted, but no earlier than a company's adoption date of Topic 606. The Company adopted this standard on January 1, 2019 and the impact of its adoption on the Company's financial statements was not material.

Recently Issued Pronouncements

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which amends the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and requires a cumulative effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. In April 2019, the FASB issued ASU No. 2019-04, Codification Improvements Financial Instruments-Credit Losses (Topic 326). The new ASU provides narrow-scope amendments to help apply ASU No. 2016-13. The Company is evaluating the impact of the adoption of ASU 2016-13 on its financial statements.

3. Revenue

The Company sells the majority of its products to its distributors, but also recognizes revenue under licensing and royalty agreements. The following table presents the Company’s revenues disaggregated by sales channel (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Distributor	$ 5,564	$ 8,386	$ 12,749	$ 16,531
Non-distributor	3,082	2,379	5,923	9,087
Total revenue	$ 8,646	$ 10,765	$ 18,672	$ 25,618

The following table presents the Company’s revenues disaggregated by timing of recognition (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Point in time	$ 8,180	$ 9,644	$ 17,631	$ 24,116
Over time	466	1,121	1,041	1,502
Total revenue	$ 8,646	$ 10,765	$ 18,672	$ 25,618

The following table presents the Company’s revenues disaggregated by type (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Product sales	$ 8,003	$ 9,449	$ 17,026	$ 18,814
License fees	—	—	—	5,000
Royalties	177	195	605	302
Other revenue	466	1,121	1,041	1,502
Total revenue	$ 8,646	$ 10,765	$ 18,672	$ 25,618

The Company recognizes revenue in three primary geographic regions: North America; Europe, Middle East and Africa (EMEA); and Asia-Pacific and Japan (APJ). The following table presents the Company’s revenues disaggregated by the geographic region to which the product is delivered or licensee is located (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
North America	$ 3,528	$ 2,379	$ 5,717	$ 4,110
EMEA	2,094	2,096	4,728	5,147
APJ	3,024	6,290	8,227	16,361
Total revenue	$ 8,646	$ 10,765	$ 18,672	$ 25,618

4. Balance Sheet Components

Inventory

Inventory consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	$ 38	$ 288
Work-in-process	6,501	6,759
Finished goods	2,425	2,050
Total inventory	$ 8,964	$ 9,097

Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	June 30, 2019	December 31, 2018
Accrued payroll-related expenses	$ 785	$ 1,558
Accrued joint development agreement expenses	1,190	661
Accrued inventory	812	1,678
Deferred rent	—	390
Other	917	714
Total accrued liabilities	$ 3,704	$ 5,001

5. Leases

During 2017, the Company entered into an operating lease for 27,974 square feet of office space for its corporate headquarters located in Chandler, Arizona, that expires in January 2022. The Company has the option to renew the lease through August 2024; however, the Company does not consider it reasonably certain it will exercise the renewal option.

The Company leases office and lab space for its design facility located in Austin, Texas, under an operating lease that expires in January 2022. The Company has the option to renew the lease for an additional five years; however, the Company does not consider it reasonably certain it will exercise the renewal option.

The Company has another operating lease for its Arizona manufacturing facility, which includes office and fabrication space. This lease is cancellable upon 24 months' notice by either of the parties and expires in January 2021.

The undiscounted future non-cancellable lease payments under the Company's leases were as follows (in thousands):

As of June 30, 2019	Operating Leases	Finance Lease	Total
2019 (remaining six months)	$ 857	$ 5	$ 862
2020	1,736	10	1,746
2021	859	—	859
2022	50	—	50
Total undiscounted lease payments	3,502	15	3,517
Less: Present value adjustment	(208)	—	(208)
Total lease liability	3,294	15	3,309
Less: Current portion of lease liability	(1,573)	(10)	(1,583)
Total lease liability, net of current portion	$ 1,721	$ 5	$ 1,726

As determined under ASC 840, the future minimum rental commitments under the Company’s operating leases at December 31, 2018 were as follows (in thousands):

Year Ending December 31,	Amount
2019	$ 1,645
2020	1,701
2021	846
2022	47
Total minimum lease payments	$ 4,239

Other information related to the Company's lease liabilities was as follows:

As of June 30, 2019	Operating leases	Finance lease
Weighted-average remaining lease term (years)	2.12	1.42
Weighted-average discount rate	6.01 %	3.50 %

Lease costs for the Company’s operating leases were $401,000 and $420,000 for the three months ended June 30, 2019 and 2018 respectively, and $800,000 and $851,000, for the six months ended June 30, 2019 and 2018 respectively. Variable lease payments for operating leases were immaterial for the three and six months ended June 30, 2019 and 2018. Lease costs for the Company’s finance lease were immaterial for the three and six months ended June 30, 2019 and 2018.

6. Debt

2017 Credit Facility

On May 4, 2017, the Company entered into a Loan and Security Agreement with Silicon Valley Bank (2017 Credit Facility) for a $12.0 million term loan. The term loan provided for interest at a floating rate equal to the prime rate minus 0.75%. The term loan provided for a period of interest-only payments through April 30, 2018, followed by fixed principal and interest payments based on a 24-month amortization schedule. An end of term fee of 6% of the amount borrowed must be made when the loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise.

On July 6, 2018, the Company entered into the First Amendment to the 2017 Credit Facility (the First Amendment). The First Amendment extended the period of interest-only payments through December 31, 2018, followed by fixed principal and interest payments based on either a 24-month or a 36-month amortization schedule if the Company achieves certain milestones. The Company determined it would not meet the milestones, therefore, the 2017 Credit Facility is based on a 24-month amortization schedule and matures in December 2020. The 2017 Credit Facility provides for interest at a floating rate equal to the prime rate minus 0.75%. As of June 30, 2019, the interest rate was 4.75%. The terms of the First Amendment included the refund of $1.0 million in principal payments previously made by the Company. An end of term fee of 7% of the amount borrowed must be made when the loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise. The additional payment is being accreted using the effective interest method. As of June 30, 2019, the effective interest rate under the 2017 Credit Facility was 7.77%.

In January 2019 and June 2019, the Company entered into the Second Amendment and the Third Amendment to the 2017 Credit Facility, respectively, which primarily modified the financial covenants under the 2017 Credit Facility.

The Company is permitted to make voluntary prepayments of the 2017 Credit Facility with a prepayment fee, calculated as of the effective date of the First Amendment, equal to (i) $240,000 during the first 12 months and (ii) $120,000 if prepaid in months 13-24. The Company is required to make mandatory prepayments of the outstanding loan upon the acceleration by lender following the occurrence of an event of default, along with a payment of the end of term fee, the prepayment fee and any other obligations that are due and payable at the time of prepayment. In the event of default, the interest rate in effect will increase by 5.0% per annum.

In conjunction with the First Amendment, outstanding warrants held by SVB to purchase 9,229 shares of the Company's common stock at $26.00 per share were cancelled. The Company subsequently issued a warrant to SVB for the purchase of 9,375 shares of the Company's common stock at an exercise price of $8.91 per share. The warrant can be exercised at any time and expires five years after the date of issuance. The Company estimated the fair value of the warrant as $43,000 on the date of issuance using the Black-Scholes option pricing model. The warrant was recorded as a discount to the debt and will be amortized into interest expense over the remaining term of the loan using the effective interest method.

Security for the 2017 Credit Facility includes all of the Company's assets except for intellectual property. The Company is required to comply with certain covenants under the 2017 Credit Facility, including requirements to maintain a minimum liquidity ratio, meet certain revenue targets, and restrictions on certain actions without the consent of the lender, such as limitations on its ability to engage in mergers or acquisitions, sell assets, enter into transactions involving related parties, incur indebtedness or grant liens or negative pledges on its assets, make loans or make other investments. Under these covenants, the Company is prohibited from paying cash dividends with respect to its capital stock. The Company was in compliance with all covenants at June 30, 2019. The 2017 Credit Facility contains a material adverse effect clause which provides that an event of default will occur if, among other triggers, an event occurs that could reasonably be expected to result in a material adverse effect on the Company's business, operations or condition, or on the Company's ability to perform its obligations under the term loan. As of June 30, 2019, management does not believe that it is probable that the clause will be triggered within the next 12 months, and therefore the term loan is classified as long-term.

The carrying value of the Company's 2017 Credit Facility at June 30, 2019 was as follows (in thousands):

	Current Portion	Long-Term Debt	Total
Credit Facility	$ 6,000	$ 3,840	$ 9,840
Unamortized debt discounts	(23)	(198)	(221)
Net carrying value	$ 5,977	$ 3,642	$ 9,619

The carrying value of the Company's 2017 Credit Facility at December 31, 2018 was as follows (in thousands):

	Current Portion	Long-Term Debt	Total
Credit Facility	$ 6,000	$ 6,840	$ 12,840
Unamortized debt discounts	(33)	(341)	(374)
Net carrying value	$ 5,967	$ 6,499	$ 12,466

The table below includes the principal repayments due under the 2017 Credit Facility (in thousands):

	Principal Repayments as of June 30, 2019
2019 (remaining six months)	$ 3,000
2020	6,840
Total principal repayments	$ 9,840

7. Stock-Based Compensation

The following table summarizes the stock option and award activity for the six months ended June 30, 2019:

	Options and Awards Available for Grant	Options Outstanding: Number of Options	Options Outstanding: Weighted-Average Exercise Price Per Share	Options Outstanding: Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value (In thousands)
Balance—December 31, 2018	764,145	1,475,299	$ 7.60	7.8	$ 284
Authorized	512,864	—	—		
RSUs granted	(141,750)	—	—		
RSUs cancelled/forfeited	9,000	—	—		
Options granted	(530,250)	530,250	$ 6.68		
Options exercised	—	(4,188)	$ 4.88		$ 12
Options cancelled/forfeited	124,269	(127,798)	$ 8.83		
Balance—June 30, 2019	738,278	1,873,563	$ 7.26	8.1	$ 556
Options exercisable—June 30, 2019		804,998	$ 6.95	6.9	$ 496

The total grant date fair value of options vested was $516,000 and $545,000 during the three months ended June 30, 2019 and 2018, respectively, and $1.2 million and $922,000 during the six months ended June 30, 2019 and 2018, respectively.

The weighted-average grant date fair value of employee options granted was $4.34 and $4.14 per share during the three months ended June 30, 2019 and 2018, respectively, and $4.07 and $4.56 per share during the six months ended June 30, 2019 and 2018, respectively.

2016 Employee Stock Purchase Plan

In January 2019, there was an increase of 170,955 shares reserved for issuance under the Company's Employee Stock Purchase Plan (ESPP). The Company had 417,939 shares available for future issuance under the Company's ESPP as of June 30, 2019. Employees purchased 22,405 shares for $130,000 during the three and six months ended June 30, 2019. Employees purchased 20,057 shares for $137,000 during the three and six months ended June 30, 2018.

Modification of Stock Awards

In February 2018, the Company modified the terms of 400,000 vested and unvested stock option awards granted to the Chief Executive Officer, by reducing their exercise price from $16.25 per share to $7.64 per share. There was no change to any of the other terms of the option awards. The modification resulted in an incremental value of $600,000 being allocated to the options, of which $63,000 was recognized to expense immediately based on options that were vested at the time of the modification. The remaining incremental value of $537,000 attributable to unvested options will be recognized over the remaining vesting term through September 2021.

Restricted Stock Units

The following table summarizes Restricted Stock Units (RSUs) activity for the six months ended June 30, 2019:

	RSUs Outstanding		
	Number of Restricted Stock Units		Weighted-Average Grant Date Fair Value Per Share
Balance—December 31, 2018	93,560	$	8.38
Granted	141,750		6.79
Vested	(29,241)		8.40
Cancelled/forfeited	(9,000)		7.86
Balance—June 30, 2019	197,069	$	7.25

The fair value of RSUs is determined on the date of grant based on the market price of the Company's common stock on that date. As of June 30, 2019, there was $1.3 million of unrecognized stock-based compensation expense related to RSUs to be recognized over a weighted-average period of 2.8 years.

Stock-based Compensation Expense

The Company recognized stock-based compensation expense from awards granted to employees and non-employees under its equity incentive plans and from its ESPP as follows, excluding amounts related to GLOBALFOUNDRIES, Inc. (GF) (in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019		2018		2019		2018	
Research and development	$	161	$	138	$	308	$	246
General and administrative		556		466		1,065		899
Sales and marketing		81		113		129		197
Total	$	798	$	717	$	1,502	$	1,342

As of June 30, 2019, there was $5.5 million of total unrecognized compensation expense related to unvested options which is expected to be recognized over a weighted-average period of 2.7 years. Compensation cost capitalized within inventory at December 31, 2019 and 2018 was not material.

8. Significant Agreements

GLOBALFOUNDRIES, Inc. Joint Development Agreement

On October 17, 2014, the Company entered into a Joint Development Agreement (JDA) with GF, for the joint development of the Company's Spin Transfer Torque MRAM (STT-MRAM) technology. In October 2018, the Company entered into the Third Amendment to the JDA with GF, which extended the term of the JDA until December 2019. The JDA also states that the specific terms and conditions for the production and supply of the developed STT-MRAM technology would be pursuant to a separate manufacturing agreement entered into between the parties.

Under the current JDA extension terms, each party licenses its relevant intellectual property to the other party. For certain jointly developed works, the parties have agreed to follow an invention allocation procedure to determine ownership. In addition, GF possesses the exclusive right to manufacture the Company's discrete and embedded STT-MRAM devices developed pursuant to the agreement until the earlier of three years after the qualification of the MRAM device for a particular technology node or four years after the completion of the relevant statement of work under which the device was developed. For the same exclusivity period associated with the relevant device, GF agreed not to license intellectual property developed in connection with the JDA to named competitors of the Company.

Generally, unless otherwise specified in the agreement or a statement of work, the Company and GF share project costs, which do not include personnel or production qualification costs, under the JDA. If GF manufactures, sells or transfers to customers wafers containing production quantified STT-MRAM devices that utilize certain design information, GF will be required to pay the Company a royalty.

The Company incurred project costs of $440,000 and $2.3 million for the three months ended June 30, 2019 and 2018 respectively and $1.2 million and $4.4 million for the six months ended June 30, 2019 and 2018 respectively, which were recognized in research and development expense. The Company entered into a Statement of Work (SOW) and an Amendment to the SOW, under the JDA with GF effective August 2016 and June 2018, respectively. The Company is entitled to revenues under the SOW and its Amendment upon delivery and acceptance of product. The Company did not recognize any revenue from GF during the three and six months ended June 30, 2019 and recognized revenue from GF of $500,000 during the three and six months ended June 30, 2018.

On October 21, 2014, GF participated, along with other investors, in the Company's Series B redeemable convertible preferred stock financing and purchased 192,307 shares at $26.00 per share. Contemporaneously, the Company sold 461,538 shares of its common stock to GF at a discounted price of $0.00026 per share. The common shares vest upon the achievement of a goal as set forth in the Statement of Work #1 (the SOW) under the JDA. The unvested common shares are subject to repurchase by the Company, if the JDA is terminated for any reason, for a one-year period after such termination, at a price that is the lower of the original price paid by GF or the fair value of the Company's common stock as of the date of repurchase. The Company has determined that the issuance of these shares of common stock to GF represents compensation for services to be provided under the JDA. Accordingly, the shares are accounted for similar to a stock award granted to a non-employee of the Company and are remeasured to their fair value as they vest. A total of 211,538 shares of common stock became vested on August 21, 2016, the designated Initial Measurement Date. The remaining shares vested on a monthly basis through October 21, 2018. The Company recognized non-cash compensation expense of $225,000 and $462,000 during the three and six months ended June 30, 2018, in research and development expense related to the vesting of the shares of common stock. As of December 31, 2018, all shares issued to GF were fully vested.

Silterra Malaysia Sdn. Bhd. Joint Collaboration Agreement

In September 2018, the Company entered into a Joint Collaboration Agreement (JCA) with Silterra Malaysia Sdn. Bhd. (Silterra), and another third party. The JCA will create additional manufacturing capacity for the Company's Toggle MRAM products. Initial production is expected to start in 2020. Under the JCA the Company will pay non-recurring engineering costs of $1.0 million. As of June 30, 2019, the Company has paid $400,000 of JCA costs. There were no JCA costs paid for during the three and six months ended June 30, 2019.

License Agreement

In March 2018, the Company entered into a global cross-license agreement with a customer pursuant to which the Company granted a worldwide, non-exclusive, non-transferable, irrevocable, royalty-bearing license under the Company's patents to use, sell, import and export the Company's products. Under the cross-license agreement, the Company received a non-refundable license fee and is entitled to annual royalty payments based upon low single digits of the average selling price of products covered under the license agreement. The license was transferred to the customer and the Company recognized the non-refundable license fee during the six months ended June 30, 2018. The cross-license agreement will remain in effect until the licensed patents have expired, been abandoned, or ruled invalid.

9. Net Loss Per Common Share

The following table sets forth the computation of basic and diluted net loss per share (in thousands, except share and per share amounts):

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Numerator:				
Net loss	$ (3,670)	$ (7,369)	$ (7,926)	$ (8,646)
Denominator:				
Weighted-average common shares outstanding	17,137,338	16,689,677	17,117,777	15,786,043
Less: weighted-average unvested common shares subject to repurchase	—	(54,416)	—	(68,795)
Weighted-average common shares outstanding used to calculate net loss per common share, basic and diluted	17,137,338	16,635,261	17,117,777	15,717,248
Net loss per common share, basic and diluted	$ (0.21)	$ (0.44)	$ (0.46)	$ (0.55)

The following outstanding shares of potentially dilutive securities have been excluded from diluted net loss per common share for the periods presented, because their inclusion would be anti-dilutive:

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Options to purchase common stock	1,873,563	1,696,187	1,873,563	1,696,187
Restricted stock units	197,069	89,230	197,069	89,230
Common stock subject to repurchase	—	38,462	—	38,462
Common stock warrants	27,836	27,690	27,836	27,690
Total	2,098,468	1,851,569	2,098,468	1,851,569

10. Subsequent Events

In August 2019, the Company executed an Amended and Restated Loan and Security Agreement (the 2019 Credit Facility), which amended and restated the 2017 Credit Facility, providing for a formula revolving line of credit (Line of Credit) and a term loan (2019 Term Loan) with Silicon Valley Bank to refinance in full the outstanding principal balance of $8.0 million under the 2017 Credit Facility. The Company paid the final payment of $0.8 million, which was due upon repayment of the 2017 Credit Facility.

The Line of Credit allows for a maximum draw of $5.0 million, subject to a formula borrowing base, has a two year term and bears interest at a floating rate equal to the Wall Street Journal (WSJ) prime rate plus 1.5%, per annum, subject to a floor of 6.75%. The Line of Credit provides for a commitment fee of 1.6% of the maximum availability of the Line of Credit, due upon closing, and a termination fee equal to 1% of the maximum availability under the Line of Credit, which is due in case of a termination of the Line of Credit prior to the scheduled maturity date. The Company drew $2.0 million at execution to pay off a portion of the outstanding balance of the 2017 Credit Facility, and $3.0 million remains available under the Line of Credit, subject to borrowing base availability.

The 2019 Term Loan provides for a $6.0 million term loan funded in full at closing, with a term of 42 months, and a 12-month interest only period followed by 30 months of equal principal payments, plus accrued interest. The 2019 Term Loan bears interest at a floating rate equal to the WSJ prime rate minus 0.75%, subject to a floor of 4.75%. A final payment of 7% of the original principal amount of the 2019 Term Loan must be made when the 2019 Term Loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise. The 2019 Term Loan has a prepayment fee equal to 2% of the total commitment, which is due only if the 2019 Term Loan is prepaid prior to the scheduled maturity date for any reason.

The 2019 Credit Facility contains a financial covenant, which requires the Company to maintain a minimum liquidity ratio. The obligations under the 2019 Credit Facility are secured by a first priority perfected security interest in the Company's assets excluding intellectual property.

In conjunction with entering into the 2019 Credit Facility, on August 5, 2019, the Company and SVB amended and restated the warrant issued to SVB in connection with the First Amendment, which was a warrant to purchase 9,375 shares of the Company's common stock at $8.91 per share, to add an option by SVB to put the warrant back to the Company for $50,000 upon expiration or a liquidity event, to be prorated if SVB exercises a portion of the warrant. The warrant expires on July 6, 2023.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our condensed financial statements and related notes included in Part I, Item 1 of this report and with our audited financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2018.

Forward-Looking Statements

This discussion contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are identified by words such as "believe," "will," "may," "estimate," "continue," "anticipate," "intend," "should," "plan," "expect," "predict," "could," "potentially" or the negative of these terms or similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, strategies, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this report in Part II, Item 1A — "Risk Factors," and elsewhere in this report. Forward-looking statements are based on our management's beliefs and assumptions and on information currently available to our management. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

Everspin is the leading manufacturer of discrete MRAM products. Everspin's Toggle and Spin Transfer Torque MRAM solutions offer the persistence of non-volatile memory, a type of memory that retains information even in the absence of power, with the speed and endurance of random-access memory (RAM). This enables the protection of mission critical data particularly in the event of power interruption or failure. Our MRAM solutions allow our customers in the industrial, automotive and transportation, and enterprise storage markets to design high performance, power efficient and reliable systems without the need for bulky batteries or capacitors.

We derive our revenue from the sale of MRAM-based products in discrete unit form, the sale of services, licenses of and royalties on our MRAM and magnetic sensor technology, the sale of backend foundry services and design services to third parties.

We work directly with our distributors and customers to have our MRAM devices designed into and qualified for their products. Although we maintain direct sales, support, and development relationships with our customers, once our products are designed into a customer's product, we sell a majority of our products to those customers through distributors. We generated 64% and 78% for the three months ended June 30, 2019 and 2018, respectively and 68% and 65% for the six months ended June 30, 2019 and 2018, respectively of our revenue from products sold through distributors.

We maintain a direct selling relationship, for strategic purposes, with several key customer accounts. Our sales team and representatives are organized into three primary regions: North America; Europe, Middle East and Africa (EMEA); and Asia-Pacific and Japan (APJ). We recognize revenue by geography based on the region in which our products are sold, and not to where the end products in which they are assembled are shipped. Our revenue by region for the periods indicated was as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
North America	$ 3,528	$ 2,379	$ 5,717	$ 4,110
EMEA	2,094	2,096	4,728	5,147
APJ	3,024	6,290	8,227	16,361
	$ 8,646	$10,765	$18,672	$25,618

We leverage both internal and outsourced capabilities to manufacture our MRAM products. We purchase industry-standard complementary metal-oxide semiconductor (CMOS) wafers from semiconductor foundries and complete the fabrication by inserting our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We believe this allows us to streamline research and development, rapidly prototype new products, and bring new products to market quickly and cost effectively. This strategy significantly reduces the capital investment that would otherwise be required to operate manufacturing facilities of our own. We utilize leading semiconductor foundry GLOBALFOUNDRIES to support full turnkey high-volume production of our high density MRAM products on 300mm wafers at advanced process nodes.

During the three and six months ended June 30, 2019, we continued to invest in research and development to support current and future MRAM technologies and products including our Spin Transfer Torque MRAM (STT-MRAM) technology. We believe this investment will allow us to continue to develop MRAM based products in response to market needs. Our research and development expenses were $3.5 million and $6.8 million for the three months ended June 30, 2019 and 2018 respectively and $7.5 million and $13.3 million for the six months ended June 30, 2019 and 2018 respectively. We expect our future research and development expenses to fluctuate quarterly depending on the qualification cycle of our technologies and products.

We recorded revenue of $8.6 million and $10.8 million for the three months ended June 30, 2019 and 2018 respectively, and $18.7 million and $25.6 million for the six months ended June 30, 2019 and 2018, respectively; gross margin was 46.5% and 42.2% for the three months ended June 30, 2019 and 2018 respectively, and 47.2% and 56.6% for the six months ended June 30, 2019 and 2018, respectively; and our net loss was $3.7 million and $7.4 million for the three months ended June 30, 2019 and 2018 respectively, and $7.9 million and $8.6 million for the six months ended June 30, 2019 and 2018, respectively. The decline in revenue in the six month period was primarily attributable to a one time licensing fee for our IP recognized in the three months ended March 31, 2018 and the loss of a customer in 2019, which was partially offset by new product sales. As the licensing fee had no associated cost of sales, our resulting gross margin was uncharacteristically high during the six months ended June 30, 2018.

Key Metrics

We monitor a variety of key financial metrics to help us evaluate trends, establish budgets, measure the effectiveness of our business strategies and assess operational efficiencies. These financial metrics include revenue, gross margin, operating expenses and operating income determined in accordance with GAAP. Additionally, we monitor and project cash flow to determine our sources and uses for working capital to fund our operations. We also monitor Adjusted EBITDA, a non-GAAP financial measure. We define Adjusted EBITDA as net income or loss adjusted for interest expense, tax, depreciation and amortization, stock-based compensation expense, and compensation expense related to the vesting of common stock held by GLOBALFOUNDRIES resulting from our joint development agreement.

Our management and board of directors use Adjusted EBITDA to understand and evaluate our operating performance and trends, to prepare and approve our annual budget and to develop short-term and long-term operating and financing plans. Accordingly, we believe that Adjusted EBITDA provides useful information for investors in understanding and evaluating our operating results in the same manner as our management and our board of directors.

The following table presents a reconciliation of net loss, the most directly comparable GAAP measure, to Adjusted EBITDA for each of the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Adjusted EBITDA reconciliation:				
Net loss	$(3,670)	$(7,369)	$(7,926)	$(8,646)
Depreciation and amortization	483	356	876	729
Stock-based compensation expense	798	717	1,502	1,342
Compensation expense related to vesting of GLOBALFOUNDRIES common stock	—	225	—	462
Interest expense	186	222	397	433
Adjusted EBITDA	$(2,203)	$(5,849)	$(5,151)	$(5,680)

Factors Affecting Our Results of Operations

Design wins. To continue to grow our revenue, we must continue to achieve design wins for our MRAM products. We consider a design win to occur when an original equipment manufacturer (OEM) or contract manufacturer notifies us that it has qualified one of our products as a component in a product or system for production. Because the life cycles for our customers' products can last for many years, if these products have successful commercial introductions, we expect to continue to generate revenues over an extended period of time for each successful design win. Any delay in the development of our products, or failure of our customers to adopt our products, could inhibit revenue growth or cause declines, which would significantly harm our business. In the fourth quarter of 2017, we recorded revenue for our first sale of 40nm 256Mb STT-MRAM products and we ramped up production in 2018.

Customer acceptance of our technology and customer product success. For our customers to use our products, they may have to redesign certain components of their existing designs. We have established relationships with several storage controller and Field Programmable Gate Array (FPGA) companies, including Phison Electronics, Sage Micro, Xilinx and Lattice as well as IP core companies, including Cadence, Synopsys, and Northwest Logic, to facilitate the integration of our MRAM solutions into our customers end products. Delays in our customers' design cycles may have adverse effects on the demand, and therefore sales, of our products.

Customer concentration. A relatively small number of end customers have historically accounted for a significant percentage of our revenue. Revenue from our four largest end customers collectively accounted for 33% and 26% of our total revenue in the three and six months ended June 30, 2019. One of these customers individually accounted for more than 10% of our total revenue in the three and six months ended June 30, 2019. Revenue from four of our end customers collectively accounted for 32% and 41% of our total revenue in the three and six months ended June 30, 2018. One of these end customers individually accounted for more than of 10% of our total revenue in the three months ended June 30, 2018, and two of these customers accounted for in excess of 10% of our total revenue in the six months ended June 30, 2018. It would be difficult to replace lost revenue resulting from the loss, reduction, cancellation or delay in purchase orders by any one of these end customers. Consolidation among our customers may further concentrate our customer base and expose us to increased risks relating to increased customer concentration. In addition, any significant pricing pressure exerted by a significant customer could adversely affect our operating results.

Pricing, product cost and gross margins of our products. Our gross margin has been, and will continue to be, affected by a variety of factors, including the timing of changes in pricing, shipment volumes, new product introductions, changes in product mix, changes in our purchase price of fabricated wafers, assembly and test service expenses, manufacturing yields and inventory write downs, if any. In general, newly introduced products, and products with higher densities and performance, tend to be priced higher than older, more mature products. Average selling prices in the semiconductor industry typically decline as products mature. Consistent with this historical trend, we expect that the average selling prices of our products will decline as they mature. In the normal course of business, we seek to offset the effect of declining average selling prices on existing products by reducing manufacturing expenses and introducing newer, higher value-added products. If we are unable to maintain overall average selling prices or to offset any declines in average selling prices with savings on product costs, our gross margin will decline.

Gross margin impact of licensing revenue. Our licensing revenue, which we collect as licensing fees and royalty payments, generates significantly higher gross margin than product revenue. Due to the high gross margin profile of this revenue stream, fluctuations in licensing revenue may have a greater impact on gross margin than a corresponding change in the demand for our products. Therefore, as licensing revenue fluctuates, we may see significant variations in gross margin.

Technology, process, and product development investment. We invest heavily to develop our MRAM technology, including the core MRAM technology, the joint development agreement with GLOBALFOUNDRIES, and the design of new and innovative products based on MRAM, to provide solutions to our current and future customers. We anticipate that we will continue to invest in our research and development to achieve our technology and product roadmaps. Our product development is targeted to specific segments of the market where we believe the densities and performance of our products can provide the most benefit. We believe our close coordination with our customers regarding their future product requirements enhances the efficiency of our research and development expenditures.

Financial Operations Overview

Revenue

We derive our revenue from the sale of our MRAM-based products in discrete unit form, the licensing of our MRAM and magnetic sensor technology and related royalties, the sale of backend foundry services and design services to third parties. We recognize sales of products in discrete unit form at a point in time, we recognize revenue related to licensing agreements when we have delivered rights to the technology, we recognize revenue related to royalty agreements in the period in which sales generated from products sold using our technology occurs, and we recognize sales of backend foundry services and design services to third parties over time.

For some of our products, we provide price protection and product return rights. As such, for sales through distributors of our discrete MRAM products, at the time of revenue recognition, which occurs when control of the products has been transferred to the distributor, we estimate product returns and the expected price concessions that will be provided to the distributor, which is included in the transaction price. We estimate the credits to the distributors based on the historical rate of credits provided to distributors relative to sales or, for some customers the credit is based on a previously negotiated fixed rate. Our licensing revenue is largely dependent on a small number of transactions during a given year.

Cost of Sales and Gross Margin

Cost of sales primarily includes the cost of our products including costs to purchase wafers, costs paid for wafer fabrication, costs associated with the assembly and testing of our products, shipping costs and costs of our manufacturing personnel. Cost of sales also includes indirect costs, such as warranty, inventory valuation reserves and overhead costs.

Gross profit is revenue less cost of sales. Gross margin is gross profit expressed as a percentage of total revenue. We expect that our gross margin may fluctuate from period to period, primarily as a result of changes in average selling price, revenue mix among our products, product yields and manufacturing costs. In addition, we may reserve against the value at which we carry our inventory based upon the product's life cycle and conditions in the markets in which we sell. Declines in average selling prices may be paired with improvements in our cost of sales, which may offset some of the gross margin reduction that could result from lower selling prices.

Operating Expenses

Our operating expenses consist of research and development, general and administrative and sales and marketing expenses. Personnel-related expenses, including salaries, benefits, bonuses and stock-based compensation, are among the most significant component of each of our operating expense categories.

Research and Development Expenses

Our research and development expenses consist primarily of personnel-related expenses for the design and development of our products and technologies, development wafers required to validate and characterize our technology, and expenses associated with our joint development agreement with GLOBALFOUNDRIES. Research and development expenses also include consulting services, circuit design costs, materials and laboratory supplies, fabrication and new packaging technology, and an allocation of related facilities and equipment costs. We recognize research and development expenses as they are incurred. We expect our research and development expenses to stay flat as we continue to invest in new products and technologies.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel expenses, allocated facilities costs, expenses for outside professional services, and expenses for personnel and consultants engaged in executive, finance, legal, information technology and administrative activities. We expect our general and administrative expenses to remain flat as we have reached a level of stabilization in staffing and costs of being a public company.

Sales and Marketing Expenses

Our sales and marketing expenses consist primarily of compensation for our sales, marketing, and business development personnel, including bonuses and commissions for our sales representatives. We expect our sales and marketing expenses, excluding variable commissions, to remain flat as we have reached a level of stabilization for staffing of sales personnel and representatives and marketing activities.

Interest Expense

Interest expense consists of cash and non-cash components. The non-cash component consists of interest expense recognized from the amortization of debt discounts derived from the issuance of a warrant, the end of term fee and debt issuance costs capitalized on our balance sheets as a reduction of the debt balance. Interest expense is due to our borrowings under our loan agreements.

Other Income, Net

Other income, net consists primarily of the interest income earned on our cash equivalents and foreign currency exchange gains and losses. Our foreign currency exchange gains and losses relate to transactions and asset and liability balances denominated in currencies other than the U.S. dollar.

Results of Operations

The following table sets forth our results of operations for the periods indicated:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2019	2018	2019	2018	2019	2018	2019	2018
	(In thousands)		(As a percentage of revenue)		(In thousands)		(As a percentage of revenue)	
Product sales	$ 8,003	$ 9,449	93 %	88 %	$17,026	$18,814	91 %	73 %
Licensing, royalty, and other revenue	643	1,316	7	12	1,646	6,804	9	27
Total revenue	8,646	10,765	100	100	18,672	25,618	100	100
Cost of sales	4,627	6,229	54	58	9,868	11,127	53	43
Gross profit	4,019	4,536	46	42	8,804	14,491	47	57
Operating expenses:								
Research and development	3,519	6,773	41	63	7,517	13,253	40	52
General and administrative	2,856	3,329	33	31	6,451	6,548	35	26
Sales and marketing	1,239	1,713	13	15	2,603	3,079	13	12
Total operating expenses	7,614	11,815	87	109	16,571	22,880	88	90
Loss from operations	(3,595)	(7,279)	(41)	(67)	(7,767)	(8,389)	(41)	(33)
Interest expense	(186)	(222)	(2)	(2)	(397)	(433)	(2)	(2)
Other income, net	111	132	1	1	238	176	1	1
Net loss	$(3,670)	$ (7,369)	(42)%	(68)%	$ (7,926)	$ (8,646)	(42)%	(34)%

Comparison of the three months ended June 30, 2019 and 2018

Revenue

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Product sales	$ 8,003	$ 9,449	$ (1,446)	(15.3)%
Licensing, royalty, and other revenue	643	1,316	(673)	(51.1)%
Total revenue	$ 8,646	$ 10,765	$ (2,119)	(19.7)%

Product sales decreased by $1.4 million or 15.3%, from $9.4 million during the three months ended June 30, 2018, to $8.0 million during the three months ended June 30, 2019. The decrease was primarily due to a decreased sales volume from the loss of a customer.

Licensing, royalty, and other revenue is a highly variable revenue item characterized by a small number of transactions annually with revenue based on size and terms of each transaction. Licensing, royalty, and other revenue decreased by $0.7 million from $1.3 million during the three months ended June 30, 2018, to $0.6 million during the three months ended June 30, 2019. The decrease was primarily due to a decrease of $0.7 million in milestone payments earned for research and development activity performed on behalf of GLOBALFOUNDRIES.

Cost of Sales and Gross Margin

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Cost of sales	$ 4,627	$ 6,229	$(1,602)	(25.7)%
Gross margin	46.5 %	42.1 %		

Cost of sales decreased by $1.6 million or 25.7%, from $6.2 million during the three months ended June 30, 2018, to $4.6 million during the three months ended June 30, 2019. The decrease was due to a lower volume of wafers processed.

Gross margin increased from 42.1% during the three months ended June 30, 2018, to 46.5% during the three months ended June 30, 2019. We experienced lower yields in 2018 due to a manufacturing tool failure in the fourth quarter of 2017, which caused a decrease in yields during 2018.

Operating Expenses

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Research and development	$ 3,519	$ 6,773	$(3,254)	(48.0)%
Research and development as a % of revenue	41 %	63 %		

Research and Development Expenses. Research and development expenses decreased by $3.3 million or 48.0%, from $6.8 million during the three months ended June 30, 2018, to $3.5 million during the three months ended June 30, 2019. The decrease was partially due to a $1.8 million decrease in expenses incurred in connection with our joint development agreement with GLOBALFOUNDRIES due to the less spending on STT-MRAM process and product development, a $0.7 million decrease in spending on direct materials and supplies used in research and development activities due to the timing of purchases, a $0.2 million decrease in software costs, a $0.2 million decrease in contract labor costs, a $0.2 million decrease in costs to repair equipment, and a $0.2 million decrease in the amount attributable to the vesting of shares of common stock issued to GLOBALFOUNDRIES as all shares vested in 2018.

	Three Months Ended June 30, 2019	2018	Change Amount	%
	(Dollars in thousands)			
General and administrative	$ 2,856	$ 3,329	$ (473)	(14.2)%
General and administrative as a % of revenue	33 %	31 %		

General and Administrative Expenses. General and administrative expenses decreased by $0.5 million or 14.2%, from $3.3 million during the three months ended June 30, 2018, to $2.9 million during the three months ended June 30, 2019. The decrease was partially due to a $0.3 million decrease in professional services.

	Three Months Ended June 30, 2019	2018	Change Amount	%
	(Dollars in thousands)			
Sales and marketing	$ 1,239	$ 1,713	$ (474)	(27.7)%
Sales and marketing as a % of revenue	13 %	15 %		

Sales and Marketing Expenses. Sales and marketing expenses decreased by $0.5 million or 27.7%, from $1.7 million during the three months ended June 30, 2018, to $1.2 million during the three months ended June 30, 2019. The decrease was primarily due to a $0.4 million decrease in employee related costs, and a $0.1 million decrease in other marketing expenses.

Interest Expense

	Three Months Ended June 30, 2019	2018	Change Amount	%
	(Dollars in thousands)			
Interest expense	$ 186	$ 222	$ (36)	(16.2)%

Interest expense remained relatively flat at $0.2 million during the three months ended June 30, 2019, compared to the three months ended June 30, 2018. The slight decrease was primarily due to a decrease in non-cash interest related to the amortization of debt discounts derived from the issuance of a warrant, an end of term fee and debt issuance costs, which was offset by an increase in cash interest due to an increase in the prime rate.

Other Income, Net

	Three Months Ended June 30, 2019	2018	Change Amount	%
	(Dollars in thousands)			
Other income, net	$ 111	$ 132	$ (21)	(15.9)%

Other income, net remained relatively flat at $0.1 million during the three months ended June 30, 2019, compared to the three months ended June 30, 2018. The slight decrease was primarily due to a decrease in interest income earned on our cash balances during the quarter.

Comparison of the six months ended June 30, 2019 and 2018

Revenue

	Six Months Ended June 30, 2019	2018	Change Amount	%
	(Dollars in thousands)			
Product sales	$ 17,026	$ 18,814	$(1,788)	(9.5)%
Licensing, royalty, and other revenue	1,646	6,804	(5,158)	(75.8)%
Total revenue	$ 18,672	$ 25,618	$(6,946)	(27.1)%

Product sales decreased by $1.8 million or 9.5%, from $18.8 million during the six months ended June 30, 2018, to $17.0 million during the six months ended June 30, 2019. The decrease was primarily due to a decreased sales volume from the loss of a customer, which was offset in part by new product sales.

Licensing, royalty, and other revenue is a highly variable revenue item characterized by a small number of transactions annually with revenue based on size and terms of each transaction. Licensing, royalty, and other revenue decreased by $5.2 million from $6.8 million during the six months ended June 30, 2018, to $1.6 million during the six months ended June 30, 2019. The decrease was primarily due to a non-refundable license fee related to a cross-license agreement entered into with a customer in March 2018, and a decrease of $0.6 million in milestone payments earned for research and development activity performed on behalf of GLOBALFOUNDRIES. These decreases were partially offset by a $0.3 million increase in royalty revenue and a $0.2 million increase in sales of our backend foundry services.

Cost of Sales and Gross Margin

	Six Months Ended June 30,		Change	
	2019	**2018**	**Amount**	**%**
	(Dollars in thousands)			
Cost of sales	$ 9,868	$11,127	$(1,259)	(11.3)%
Gross margin	47.2 %	56.6 %		

Cost of sales decreased by $1.3 million or 11.3%, from $ 11.1 million during the six months ended June 30, 2018, to $9.9 million during the six months ended June 30, 2019. The decrease was primarily due to a lower volume of wafers processed.

Gross margin decreased from 56.6% during the six months ended June 30, 2018, to 47.2% during the six months ended June 30, 2019. The decrease in gross margin was primarily attributable to a one time licensing fee for our IP recognized in the first half of the six months ended June 30, 2018. As the licensing fee had no associated cost of sales, our resulting gross margin increased.

Operating Expenses

	Six Months Ended June 30,		Change	
	2019	**2018**	**Amount**	**%**
	(Dollars in thousands)			
Research and development	$ 7,517	$13,253	$(5,736)	(43.3)%
Research and development as a % of revenue	40 %	52 %		

Research and Development Expenses. Research and development expenses decreased by $5.7 million or 43.3%, from $13.3 million during the six months ended June 30, 2018, to $7.5 million during the six months ended June 30, 2019. The decrease was partially due to a $3.2 million decrease in expenses incurred in connection with our joint development agreement with GLOBALFOUNDRIES due to the less spending on STT-MRAM process and product development, a $1.4 million decrease in spending on direct materials and supplies used in research and development activities due to the timing of purchases, a $0.5 million decrease in the amount attributable to the vesting of shares of common stock issued to GLOBALFOUNDRIES as all shares vested in 2018, a $0.3 million decrease in software costs, and a $0.3 million decrease in contract labor costs.

	Six Months Ended June 30,		Change	
	2019	**2018**	**Amount**	**%**
	(Dollars in thousands)			
General and administrative	$ 6,451	$ 6,548	$ (97)	(1.5)%
General and administrative as a % of revenue	35 %	26 %		

General and Administrative Expenses. General and administrative expenses remained relatively flat at $6.5 million during the six months ended June 30, 2019, compared to the six months ended June 30, 2018. The slight decrease was primarily due to a $0.3 million decrease in professional services, which was offset by a $0.3 million increase in employee costs due to an increase in headcount and stock-based compensation costs.

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Sales and marketing	$ 2,603	$ 3,079	$ (476)	(15.5)%
Sales and marketing as a % of revenue	13 %	12 %		

Sales and Marketing Expenses. Sales and marketing expenses decreased by $0.5 million or 15.5%, from $3.1 million during the six months ended June 30, 2018, to $2.6 million during the six months ended June 30, 2019. The decrease was due to $0.3 million decrease in employee related costs, and a $0.2 million decrease in other marketing expenses.

Interest Expense

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Interest expense	$ 397	$ 433	$ (36)	(8.3)%

Interest expense remained relatively flat at $0.4 million during the six months ended June 30, 2019, compared to the six months ended June 30, 2018. The slight decrease was primarily due to a decrease in non-cash interest related to the amortization of debt discounts derived from the issuance of a warrant, an end of term fee and debt issuance costs, which was offset by an increase in cash interest due to an increase in the prime rate.

Other Income, Net

	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018	Change Amount	Change %
	(Dollars in thousands)			
Other income, net	$ 238	$ 176	$ 62	35.2 %

Other income, net remained relatively flat at $0.2 million during the six months ended June 30, 2019, compared to the six months ended June 30, 2018. The slight increase was primarily due to an increase in interest income as a result of higher interest rates.

Liquidity and Capital Resources

We have generated significant losses since our inception and had an accumulated deficit of $141.9 million as of June 30, 2019, compared to $134.0 million as of December 31, 2018. We have financed our operations primarily through the sale of our common stock in our initial public offering (IPO), sales of our redeemable convertible preferred stock, debt financing and the sale of our products. As of June 30, 2019, we had $15.3 million of cash and cash equivalents, compared to $23.4 million as of December 31, 2018.

In February 2018, we completed a follow-on underwritten public offering of our common stock under our Registration Statement filed in November 2017 (File No. 333-221331), selling 3,772,447 shares of our common stock at an offering price of $7.00 per share for proceeds of $24.5 million, net of $1.9 million of underwriting discounts and commissions and other offering costs.

In May 2017, we executed a Loan and Security Agreement (2017 Credit Facility) with Silicon Valley Bank for a $12.0 million term loan, which we amended in July 2018 to extend the interest only payment period until December 31, 2018, followed by fixed principal and interest payments based on either a 24-month or a 36-month amortization schedule if we achieved certain milestones. We determined we would not meet the milestones, as such the amended loan was based on a 24-month amortization schedule. The outstanding balance of the loan was to be repaid monthly beginning on January 1, 2019 over the remaining two-year term of the amended loan with an end of term fee of $0.8 million due upon maturity. In January 2019 and June 2019, we entered into the Second Amendment and the Third Amendment to the 2017 Credit Facility, respectively, which primarily modified the financial covenants. The loan was secured by a first priority perfected security interest in our assets excluding any intellectual property.

In August 2019, we executed an Amended and Restated Loan and Security Agreement (the 2019 Credit Facility) providing for a formula revolving line of credit (Line of Credit) and a term loan (2019 Term Loan) with Silicon Valley

Bank to refinance in full the outstanding principal balance under the 2017 Credit Facility. The 2019 Credit Facility amended and restated the 2017 Credit Facility. The Line of Credit allows for a maximum draw of $5.0 million, subject to a formula borrowing base, and has a two year term. The Line of Credit provides for a commitment fee of 1.6% of the maximum availability of the Line of Credit, due upon closing, and a termination fee equal to 1% of the maximum availability of the Line of Credit, which is due in case of a termination of the Line of Credit prior to the scheduled maturity date. The 2019 Term Loan provides for a $6.0 million term loan, and the term is 42 months, with a 12-month interest only period followed by 30 months of equal principal payments, plus accrued interest. At the closing of the 2019 Credit Facility, we drew the 2019 Term Loan in full, and an advance under the Line of Credit of $2.0 million in order to satisfy in full the outstanding principal balance under the 2017 Credit Facility. The 2019 Term Loan is subject to a final payment of 7% of the original principal amount of the 2019 Term Loan, which is due when the 2019 Loan is prepaid or repaid in full. In addition, if the 2019 Term Loan is prepaid prior to the scheduled maturity date, a prepayment fee equal to 2% of the original principal amount of the 2019 Term Loan is due. All obligations under the 2019 Credit Facility are secured by a first priority perfected security interest in the Company's assets excluding intellectual property.

We believe that our existing cash and cash equivalents as of June 30, 2019, coupled with the execution of our Line of Credit and 2019 Loan in August 2019, our anticipated growth and sales levels will be sufficient to meet our anticipated cash requirements for at least the next twelve months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our spending to support research and development activities, the timing and cost of establishing additional sales and marketing capabilities, and the introduction of new products. If we are unable to raise additional capital or generate sufficient cash from operations to adequately fund our operations in a timely manner, we will need to curtail planned activities to reduce costs and extend the time period over which our current resources will be able to fund operations. Doing so will likely harm our ability to execute on our business plan, and if we are unable to raise additional capital at all, may be forced to cease operations altogether, file for bankruptcy, or undertake any combination of the foregoing. In such event, our stockholders may lose their entire investment in our company.

Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2019	**2018**
	(In thousands)	
Cash used in operating activities	$ (4,790)	$ (4,513)
Cash used in investing activities	(461)	(347)
Cash provided by (used in) financing activities	(2,855)	24,635

Cash Flows From Operating Activities

During the six months ended June 30, 2019, cash used in operating activities was $4.8 million, which consisted of a net loss of $7.9 million, adjusted by non-cash charges of $2.6 million and a change of $0.6 million in our net operating assets and liabilities. The non-cash charges primarily consisted of stock-based compensation of $1.5 million, depreciation and amortization of $0.9 million, and interest expense related to the amortization of debt issuance costs of $0.2 million. The change in our net operating assets and liabilities was primarily due to a decrease of $1.4 million in accrued liabilities and accounts payable due to a decrease in accrued payroll costs, accrued manufacturing costs, and the timing of payments. These changes were partially offset by a decrease in accounts receivable of $1.7 million due to a lower sales volume and timing of cash receipts for outstanding balances, a decrease of $0.1 million in inventory, and a decrease of $0.2 million in prepaid expenses and other current assets due to the timing of payments.

During the six months ended June 30, 2018, cash used in operating activities was $4.5 million, which consisted of a net loss of $8.6 million, adjusted by non-cash charges of $2.8 million and a change of $1.4 million in our net operating assets and liabilities. The non-cash charges primarily consisted of stock-based compensation of $1.3 million, depreciation and amortization of $0.7 million, compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES under our joint development agreement of $0.5 million, and interest expense related to the amortization of debt issuance costs of $0.2 million. The change in our net operating assets and liabilities was primarily due to an increase in accounts receivable of $1.4 million due to timing of cash receipts for outstanding balances and an increase of $0.8 million in prepaid expenses and other current assets and other assets due to the timing of payments.

These changes were partially offset by an increase of $2.6 million in accounts payable and accrued liabilities due to the timing of payments and an increase in inventory purchases in connection with the joint development agreement with GLOBALFOUNDRIES, and a decrease of $0.9 million in inventory due to increased sales and scrapped inventory.

Cash Flows From Investing Activities

Cash used in investing activities during the six months ended June 30, 2019 and 2018, was $0.5 million and $0.3 million respectively for the purchase of manufacturing and computer equipment.

Cash Flows From Financing Activities

Cash used in financing activities during the six months ended June 30, 2019, was $2.9 million primarily consisting of $3.0 million in payments of long-term debt, offset in part by $0.2 million in proceeds from stock option exercises and purchases of shares in our employee stock purchase plan.

Cash provided by financing activities during the six months ended June 30, 2018, was $24.6 million consisting of net proceeds from the issuance of common stock of $24.6 million, and $1.0 million from stock option exercises and purchases of shares in our employee stock purchase plan, offset in part by payments of long-term debt of $1.0 million.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements and do not have any holdings in variable interest entities.

Critical Accounting Policies and Significant Judgements and Estimates

Our condensed financial statements have been prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. The preparation of these condensed financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. We base our estimates on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no changes to our critical accounting policies and estimates described in the Annual Report on Form 10-K for the year ended December 31, 2018, filed with the Securities and Exchange Commission (SEC) on March 15, 2019, that have had a material impact on our condensed financial statements and related notes.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not required for a smaller reporting company.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures.

Our management, with the participation of our management team, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended), as of June 30, 2019, the end of the period covered by this quarterly report on Form 10-Q.

Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of June 30, 2019, based on the material weakness described below.

Material weakness in internal control over financial reporting.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. In connection with the preparation of our unaudited condensed financial statements for the quarter ended September 30, 2018, we identified an error in the previously filed financial statements that has caused us to restate and amend the our previously issued condensed financial statements and related financial information as of and for the three and six months ended June 30, 2018. This error was the result of a material weakness in our internal control over financial reporting, which continued to exist at June 30, 2019. Specifically, i) our information technology systems do not currently provide management the ability to accurately monitor inventory movements and quantities at third-party locations, ii) internal processes to provide for clear communication between operational and financial personnel within the Company are insufficient, and iii) we have insufficient personnel with the appropriate level of experience to prevent and detect errors on a timely basis in our financial statements.

Management's plan to remediate the material weakness.

To remediate this material weakness, we are taking the following actions:

- We are currently updating our information technology tools, including our ERP system, to enhance our ability to monitor inventory and its movement through our manufacturing process and to provide checks and balances to third-party reports.

- We have, and continue to put in place, management dashboard tools to alert all involved as to the performance of inventory against our business goals.

- We are establishing multi-discipline processes to actively manage and make decisions regarding our inventory to support our business objectives.

- We are providing additional training to our Operations Teams and updating procedures with our third-party Assembly Houses.

- We have hired additional qualified personnel to assist management with its financial statement close process and provide oversight of our financial reporting.

We are assessing our accounting policies and internal controls documentation to ensure they are effective in helping us manage the business. Notwithstanding the material weakness that exists, our management has concluded that the financial statements included elsewhere in this Quarterly Report on Form 10-Q present fairly, in all material respects, our financial position, results of operations and cash flows in conformity with GAAP.

If we fail to fully remediate this material weakness or fail to maintain effective internal controls in the future, it could result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis, which could cause investors to lose confidence in our financial information or cause our stock price to decline.

Changes in internal control over financial reporting.

Except with respect to the remediation efforts described above, there have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) that occurred during the three months ended June 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent limitation on the effectiveness of internal control.

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute assurances. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. Legal Proceedings

We are not party to any material legal proceedings at this time. From time to time, we may become involved in various legal proceedings that arise in the ordinary course of our business.

ITEM 1A. Risk Factors

The following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by us or on our behalf. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we deem immaterial also may impair our business operations. If any of the following risks or such other risks actually occurs, our business could be harmed.

Risk Factors Related to Our Business and Our Industry

We may need additional funding and may be unable to raise capital when needed, which could force us to delay, reduce, or eliminate planned activities.

Our total revenue was approximately $18.7 million for the six months ended June 30, 2019, and $49.4 million for the year ended December 31, 2018, and, as of June 30, 2019, we had cash and cash equivalents of approximately $15.3 million. Our existing capital may be insufficient to meet our requirements. Based on our current operating plan, we believe our cash and cash equivalents and availability under our revolving line of credit facility will be sufficient to fund our operating requirements for at least 12 months; however, management expects operating losses and cash flow deficits to continue for the foreseeable future. We may need to raise additional funds through financings or borrowings in order to accomplish our long-term planned objectives. Failure to raise additional funds could delay, reduce, or halt our sales of our products and would impact our ability to continue our business. If we raise additional funds through issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock.

We have no committed sources of capital funding other than our revolving line of credit facility and there is no assurance that additional funding will be available to us in the future or be secured on acceptable terms. If adequate funding is not available when needed, we may be forced to curtail operations, including our commercial activities and research and development programs, or cease operations altogether, file for bankruptcy, or undertake any combination of the foregoing. In such event, our stockholders may lose their entire investment in our company.

In addition, if we do not meet our payment obligations to third parties as they become due, we may be subject to litigation claims and our creditworthiness would be adversely affected. Even if we are successful in defending against these claims, litigation could result in substantial costs and would be a distraction to management, and may have other unfavorable results that could further adversely impact our financial condition. Stockholders should not rely on our balance sheet as an indication of the amount of proceeds that would be available to satisfy claims of creditors, and potentially be available for distribution to stockholders, in the event of liquidation.

We have a history of losses which may continue in the future, and we cannot be certain that we will achieve or sustain profitability.

We have incurred net losses since our inception. We incurred net losses of $17.8 million and $7.9 million for the year ended December 31, 2018, and the six months ended June 30, 2019, respectively. As of June 30, 2019, we had an accumulated deficit of $141.9 million. We expect to incur significant expenses related to the continued development and expansion of our business, including in connection with our efforts to develop and improve upon our products and technology, maintain and enhance our research and development and sales and marketing activities and hire additional personnel. While our products offer unique benefits over other industry memory technologies, our per-bit cost to product our product is currently higher than competing technologies. As a result, our ability to capture market share and generate sufficient revenue to transition to profitability and generate consistent positive cash flows is uncertain. We do not know whether we will be able to grow our revenue rapidly enough to absorb these costs, and it is difficult for us to assess the extent of our expenses, or their impact on our results of operations.

Further, our revenue may not increase or may decline for a number of possible reasons, many of which are outside our control, including a decline in demand for our products, increased competition, business conditions that adversely affect the semiconductor memory industry, including reduced demand for products in the end markets that we serve, or our failure to capitalize on growth opportunities. If we fail to generate sufficient revenue to support our operations, we may not be able to achieve or sustain profitability. If revenue does not grow sufficiently, we may not be able to meet our debt covenants, including the liquidity ratio and sales targets.

Our limited history of making our STT-MRAM products makes it difficult to evaluate our current business and future prospects.

We have been in existence as a stand-alone company since 2008, when Freescale Semiconductor, Inc. (subsequently acquired by NXP Semiconductor) spun-out its MRAM business as Everspin. We have been shipping magnetoresistive random-access memory (MRAM) products since our incorporation in 2008. However, we only began to manufacture and ship our Spin Transfer Torque MRAM (STT-MRAM) products in the fourth quarter of 2017.

Our limited experience selling our STT-MRAM products, combined with the rapidly evolving and competitive nature of our market, makes it difficult to evaluate our current business and future prospects. In addition, we have limited insight into emerging trends that may adversely affect our business, financial condition, results of operations and prospects. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, including unpredictable and volatile revenue and increased expenses as we continue to grow our business. The viability and demand for our products may be affected by many factors outside of our control, such as the factors affecting the growth of the industrial, automotive, transportation, and enterprise storage industries and changes in macroeconomic conditions. If we do not manage these risks and overcome these difficulties successfully, our business will suffer.

We may be unable to match production with customer demand for a variety of reasons including our inability to accurately forecast customer demand or the capacity constraints of our suppliers, which could adversely affect our operating results.

We make planning and spending decisions, including determining production levels, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are not contractually committed to buy any quantity of products beyond purchase orders. Furthermore, many of our customers may increase, decrease, cancel or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, necessitate more onerous procurement commitments and reduce our gross margin. If we overestimate customer demand, we may purchase products that we may not be able to sell, which could result in decreases in our prices or write-downs of unsold inventory. Conversely, if we underestimate customer demand or if sufficient manufacturing capacity is unavailable, we could lose sales opportunities and could lose market share or damage our customer relationships. We manufacture MRAM products at our 200mm facility we lease in Chandler, Arizona and use a single foundry, GLOBALFOUNDRIES, for production of higher density products on advanced technology nodes, which may not have sufficient capacity to meet customer demand. The rapid pace of innovation in our industry could also render significant portions of our inventory obsolete. Excess or obsolete inventory levels could result in unexpected expenses or write-downs of inventory values that could adversely affect our business, operating results and financial condition.

As we expand into new potential markets, we expect to face intense competition, including from our customers and potential customers, and may not be able to compete effectively, which could harm our business.

We expect that our new and future MRAM products will be applicable to markets in which we are not currently operating. The markets in which we operate and may operate in the future are extremely competitive and are characterized by rapid technological change, continuous evolving customer requirements and declining average selling prices. We may not be able to compete successfully against current or potential competitors, which include our current or potential customers as they seek to internally develop solutions competitive with ours or as we develop products potentially competitive with their existing products. If we do not compete successfully, our market share and revenue may decline. We compete with large semiconductor manufacturers and designers and others, and our current and potential competitors have longer operating histories, significantly greater resources and name recognition and a larger base of customers than we do. This may allow them to respond more quickly than we can to new or emerging technologies or changes in customer requirements. In addition, these competitors may have greater credibility with our existing and potential customers. Some of our current and potential customers with their own internally developed solutions may choose not to purchase products from third-party suppliers like us.

We rely on third parties to distribute, manufacture, package, assemble and test our products, which exposes us to a number of risks, including reduced control over manufacturing and delivery timing and potential exposure to price fluctuations, which could result in a loss of revenue or reduced profitability.

Although we operate an integrated magnetic fabrication line located in Chandler, Arizona, we purchase wafers from third parties and outsource the manufacturing, packaging, assembly and testing of our products to third-party foundries and assembly and testing service providers. We use a single foundry, GLOBALFOUNDRIES Singapore Pte. Ltd., for production of higher density products on advanced technology nodes. Our primary product package and test operations are located in China, Taiwan and other Asian countries. We also use standard CMOS wafers from third-party foundries, which we process at our Chandler, Arizona, facility.

Relying on third-party distribution, manufacturing, assembly, packaging and testing presents a number of risks, including but not limited to:

- our interests could diverge from those of our foundries, or we may not be able to agree with them on ongoing development, manufacturing and operational activities, or on the amount, timing, or nature of further investments in our joint development;
- capacity and materials shortages during periods of high demand;
- reduced control over delivery schedules, inventories and quality;
- the unavailability of, or potential delays in obtaining access to, key process technologies;
- the inability to achieve required production or test capacity and acceptable yields on a timely basis;
- misappropriation of our intellectual property;
- the third party’s ability to perform its obligations due to bankruptcy or other financial constraints;
- exclusive representatives for certain customer engagements;
- limited warranties on wafers or products supplied to us; and
- potential increases in prices.

We currently do not have long-term supply contracts with our third-party contract manufacturers for our MRAM products, including NXP, United Microelectronics Corporation, Taiwan Semiconductor Manufacturing Company, Limited (TSMC), United Test and Assembly Center (UTAC), Global Testing Corporation (GTC), ChipMos, OSE Taiwan, and Amkor, and we typically negotiate pricing on a per-purchase order basis and in some cases on an annual basis. Therefore, they are not obligated to perform services or supply components to us for any specific period, in any specific quantities, or at any specific price, except as may be provided in a particular purchase order. During periods of high demand and tight inventories, our third-party foundries and packaging, assembly and testing contractors may allocate capacity to the production of other companies' products while reducing deliveries to us, or significantly raise their prices. In particular, they may allocate capacity to other customers that are larger and better financed than us or that have long-term agreements, decreasing the capacity available to us. Shortages of capacity available to us may be caused by the actions of their other, large customers that may be difficult to predict, such as major product launches.

Our manufacturing agreement with GLOBALFOUNDRIES includes a customary forecast and ordering mechanism for the supply of certain of our wafers, and we are obligated to order and pay for, and GLOBALFOUNDRIES is obligated to supply, wafers consistent with the binding portion of our forecast. However, our manufacturing arrangement is also subject to both a minimum and maximum order quantity that while we believe currently addresses our projected foundry capacity needs, may not address our maximum foundry capacity requirements in the future. We may also be obligated to pay for unused capacity if our demand decreases in the future, or if our estimates prove inaccurate. GLOBALFOUNDRIES also has the ability to discontinue its manufacture of any of our wafers upon due notice and completion of the notice period. This could cause us to have to find another foundry to manufacture those wafers or redesign our core technology and would mean that we may not have products to sell until such time. Any time spent engaging a new manufacturer or redesigning our core technology could be costly and time consuming and may allow potential competitors to take opportunities in the market place. Moreover, if we are unable to find another foundry to manufacture our products or if we have to redesign our core technology, this could cause material harm to our business and operating results.

If we need other foundries or packaging, assembly and testing contractors, or if we are unable to obtain timely and adequate deliveries from our providers, we might not be able to cost-effectively and quickly retain other vendors to satisfy our requirements. Because the lead-time needed to establish a relationship with a new third-party supplier could be several quarters, there is no readily available alternative source of supply for any specific component. In addition, the time and expense to qualify a new foundry could result in additional expense, diversion of resources or lost sales, any of which would negatively impact our financial results.

If any of our current or future foundries or packaging, assembly and testing subcontractors significantly increases the costs of wafers or other materials or services, interrupts or reduces our supply, including for reasons outside of their control, or if any of our relationships with our suppliers is terminated, our operating results could be adversely affected. Such occurrences could also damage our customer relationships, result in lost revenue, cause a loss in market share or damage our reputation.

Our joint development agreement and strategic relationships involve numerous risks.

We have entered into strategic relationships to manufacture products and develop new manufacturing process technologies and products. These relationships include our joint development agreement with GLOBALFOUNDRIES to develop advanced MTJ technology and STT-MRAM. These relationships are subject to various risks that could adversely affect the value of our investments and our results of operations. These risks include the following:

- our interests could diverge from those of our foundries, or we may not be able to agree with them on ongoing development, manufacturing and operational activities, or on the amount, timing, or nature of further investments in our joint development;
- we may experience difficulties in transferring technology to a foundry;
- we may experience difficulties and delays in getting to and/or ramping production at foundries;
- our control over the operations of foundries is limited;
- due to financial constraints, our joint development collaborators may be unable to meet their commitments to us and may pose credit risks for our transactions with them;
- due to differing business models or long-term business goals, our collaborators may decide not to join us in funding capital investment, which may result in higher levels of cash expenditures by us;

- our cash flows may be inadequate to fund increased capital requirements;
- we may experience difficulties or delays in collecting amounts due to us from our collaborators;
- the terms of our arrangements may turn out to be unfavorable;
- we are migrating toward a fabless model as 300mm production becomes required and this increases risks related to less control over our critical production processes; and
- changes in tax, legal, or regulatory requirements may necessitate changes in our agreements.

In addition, under the terms of our joint development agreement with GLOBALFOUNDRIES, we share the development costs. Further, our joint development agreement expires in December 2019 unless a statement of work is in place at that time, in which case it expires on the date the last statement of work is finished. If GLOBALFOUNDRIES fails to extend or terminates the joint development agreement, our ability to continue to develop our MRAM technology will be significantly impaired.

If our strategic relationships are unsuccessful, our business, results of operations, or financial condition may be materially adversely affected.

The market for semiconductor memory products is characterized by declines in average selling prices, which we expect to continue, and which could negatively affect our revenue and margins.

Our customers for some of our products may see the average selling price of competitive products decrease year-over-year and we expect this trend to continue. When such pricing declines occur, we may not be able to mitigate the effects by selling more or higher margin units, or by reducing our manufacturing costs. In such circumstances, our operating results could be materially and adversely affected. Our stand-alone and embedded MRAM products have experienced declining average selling prices over their life cycle. The rate of decline may be affected by a number of factors, including relative supply and demand, the level of competition, production costs and technological changes. As a result of the decreasing average selling prices of our products following their launch, our ability to increase or maintain our margins depends on our ability to introduce new or enhanced products with higher average selling prices and to reduce our per-unit cost of sales and our operating costs. We may not be able to reduce our costs as rapidly as companies that operate their own manufacturing, assembly and testing facilities, and our costs may even increase because we rely in part on third parties to manufacture, assemble and test our products, which could also reduce our gross margins. In addition, our new or enhanced products may not be as successful or enjoy as high margins as we expect. If we are unable to offset any reductions in average selling prices by introducing new products with higher average selling prices or reducing our costs, our revenue and margins will be negatively affected and may decrease.

The semiconductor memory market is highly cyclical and has experienced severe downturns in the past, generally as a result of wide fluctuations in supply and demand, constant and rapid technological change, continuous new product introductions and price erosion. During downturns, periods of intense competition, or the presence of oversupply in the industry, the selling prices for our products may decline at a high rate over relatively short time periods as compared to historical rates of decline. We are unable to predict selling prices for any future periods and may experience unanticipated, sharp declines in selling prices for our products.

Unfavorable economic and market conditions, domestically and internationally, may adversely affect our business, financial condition, results of operations and cash flows.

We have significant customer sales both in the U.S. and internationally. We also rely on domestic and international suppliers, manufacturing partners and distributors. We are therefore susceptible to adverse U.S. and international economic and market conditions. If any of our manufacturing partners, customers, distributors or suppliers experience slowdowns in their business, serious financial difficulties or cease operations, our business will be adversely affected. In addition, the adverse impact of an unfavorable economy may adversely impact consumer spending, which may adversely impact our customers' spending and demand for our products.

Further, increasing trade tensions and tariffs, particularly with China, may increase the costs we incur to produce our products. Although we are seeking to qualify alternative suppliers and facilities in the event that it becomes necessary to obtain materials from other sources to limit the effect of tariffs, there is no guarantee that we will be able to do so or, if we are, that these alternative sources will fully mitigate the effect that tariffs and other trade restrictions will have on our business, which may have an adverse effect on our financial condition and results of operations.

We must continuously develop new and enhanced products, and if we are unable to successfully market our new and enhanced products for which we incur significant expenses to develop, our results of operations and financial condition will be materially adversely affected.

To compete effectively in our markets, we must continually design, develop and introduce new and improved technology and products with improved features in a cost-effective manner in response to changing technologies and market demand. This requires us to devote substantial financial and other resources to research and development. We are developing new technology and products, which we expect to be one of the drivers of our revenue growth in the future. However, as it is taking us longer than we expected to develop our 1Gb STT-MRAM product, we may not succeed in developing and marketing this and other new and enhanced products. We also face the risk that customers may not value or be willing to bear the cost of incorporating our new and enhanced products into their products, particularly if they believe their customers are satisfied with current solutions. Regardless of the improved features or superior performance of our new and enhanced products, customers may be unwilling to adopt our solutions due to design or pricing constraints, or because they do not want to rely on a single or limited supply source. Because of the extensive time and resources that we invest in developing new and enhanced products, if we are unable to sell customers our new products, our revenue could decline and our business, financial condition, results of operations and cash flows would be negatively affected. For example, we generated limited revenue from sales of our STT-MRAM products to date. While we expect revenue from our STT-MRAM products to increase, if we are unable to generate more customer adoption of our 256Mb and 1Gb products and scale MRAM to gigabit densities to address applications currently served by DRAM, we may not be able to materially increase our revenue. If we are unable to successfully develop and market our new and enhanced products that we have incurred significant expenses developing, our results of operations and financial condition will be materially and adversely affected.

Our success and future revenue depend on our ability to secure design wins and on our customers' ability to successfully sell the products that incorporate our solutions. Securing design wins is a lengthy, expensive and competitive process, and may not result in actual orders and sales, which could cause our revenue to decline.

We sell to customers that incorporate MRAM into their products. A design win occurs after a customer has tested our product, verified that it meets the customer's requirements and qualified our solutions for their products. We believe we are dependent on the adoption of our 256Mb and 1Gb MRAM products by our customers to secure design wins. In the fourth quarter of 2017, we recorded revenue for our first sale of 40nm 256Mb STT-MRAM products and we ramped up production in 2018 and into 2019. Our customers may need several months to years to test, evaluate and adopt our product and additional time to begin volume production of the product that incorporates our solution. Due to this generally lengthy design cycle, we may experience significant delays from the time we increase our operating expenses and make investments in our products to the time that we generate revenue from sales of these products. Moreover, even if a customer selects our solution, we cannot guarantee that this will result in any sales of our products, as the customer may ultimately change or cancel its product plans, or efforts by our customer to market and sell its product may not be successful. We may not generate any revenue from design wins after incurring the associated costs, which would cause our business and operating results to suffer. Any further delay in the qualification of our 1Gb MRAM product, or failure of our customers to adopt our 1Gb MRAM products, could inhibit revenue growth or cause declines, which would significantly harm our business and prevent us from becoming profitable.

If a current or prospective customer designs a competitor's solution into its product, it becomes significantly more difficult for us to sell our solutions to that customer because changing suppliers involves significant time, cost, effort and risk for the customer even if our solutions are superior to other solutions and remain compatible with their product design. Our ability to compete successfully depends on customers viewing us as a stable and reliable supplier to mission critical customer applications when we have less production capacity and less financial resources compared to most of our larger competitors. If current or prospective customers do not include our solutions in their products and we fail to achieve a sufficient number of design wins, our results of operations and business may be harmed.

We rely on our relationships with original equipment manufacturers (OEMs) and original design manufacturers (ODMs) to enhance our solutions and market position, and our failure to continue to develop or maintain such relationships in the future would harm our ability to remain competitive.

We develop our products for leading OEMs and ODMs that serve a variety of end markets and are developing devices for automotive, transportation, industrial and storage applications. For each application, manufacturers create products that incorporate specialized semiconductor technology, which makers of memory products use as the basis for their products. These manufacturers set the specifications for many of the key components to be used on each generation of their products and, in the case of memory components, generally qualify only a few vendors to provide memory components for their products. As each new generation of their products is released, vendors are validated in a similar fashion. We must work closely with OEMs and ODMs to ensure our products become qualified for use in their products. As a result, maintaining close relationships with leading OEMs and ODMs that are developing devices for automotive, transportation, industrial and storage applications is crucial to the long-term success of our business. We could lose these relationships for a variety of reasons, including our failure to qualify as a vendor, our failure to demonstrate the value of our new solutions, declines in product quality, or if OEMs or ODMs seek to work with vendors with broader product suites, greater production capacity or greater financial resources. If our relationships with key industry participants were to deteriorate or if our solutions were not qualified by our customers, our market position and revenue could be materially and adversely affected.

The loss of one or several of our customers or reduced orders or pricing from existing customers may have a significant adverse effect on our operations and financial results.

We have derived and expect to continue to derive a significant portion of our revenues from a small group of customers during any particular period due in part to the concentration of market share in the semiconductor industry. Our four largest end customers together accounted for 26% of our total revenue for the six months ended June 30, 2019, although one of these customers accounted for more than 10% of our revenue during that period. Our four largest end customers together accounted for 29% of our total revenue for the year ended December 31, 2018, and one of these customers individually accounted for more than 10% of our total revenue during the period. The loss of a significant customer, a business combination among our customers, a reduction in orders or decrease in price from a significant customer or disruption in any of our commercial or distributor arrangements may result in a significant decline in our revenues and could have a material adverse effect on our business, liquidity, results of operations, financial condition and cash flows.

Our results of operations can fluctuate from period to period, which could cause our share price to fluctuate.

Our results of operations have fluctuated in the past and may fluctuate from period to period in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include the following factors, as well as other factors described elsewhere in this report:

- the receipt, reduction, delay or cancellation of orders by large customers;
- the gain or loss of significant customers or distributors;
- the timing and success of our launch of new or enhanced products and those of our competitors;
- market acceptance of our products and our customers’ products;
- the level of growth or decline in the industrial, automotive, transportation, enterprise storage and other markets;
- the timing and extent of research and development and sales and marketing expenditures;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- changes in our product mix;
- our ability to reduce the manufacturing costs of our products;

- competitive pressures resulting in lower than expected average selling prices;
- fluctuations in sales by and inventory levels of OEMs and ODMs that incorporate our memory products in their products;
- cyclical and seasonal fluctuations in our markets;
- fluctuations in the manufacturing yields of our third-party manufacturers;
- quality issues that arise from manufacturing issues at our third-party manufacturers;
- events that impact the availability of production capacity at our third-party subcontractors and other interruptions in the supply chain including due to geopolitical events, natural disasters, materials shortages, bankruptcy or other causes;
- supply constraints for and changes in the cost of the other components incorporated into our customers' products;
- the timing of expenses related to the acquisition of technologies or businesses;
- product rates of return or price concessions in excess of those expected or forecasted;
- costs associated with the repair and replacement of defective products;
- unexpected inventory write-downs or write-offs;
- costs associated with litigation over intellectual property rights and other litigation;
- changes in accounting standards, such as revenue recognition, which we were required to adopt beginning in 2018;
- changes in tax laws, such as the Tax Cuts and Jobs Act of 2017 recently enacted;
- the length and unpredictability of the purchasing and budgeting cycles of our customers;
- loss of key personnel or the inability to attract qualified engineers; and
- geopolitical events, such as war, threat of war or terrorist actions, or the occurrence of natural disasters.

The semiconductor memory industry is highly cyclical and our markets may experience significant cyclical fluctuations in demand as a result of changing economic conditions, budgeting and buying patterns of customers and other factors. As a result of these and other factors affecting demand for our products and our results of operations in any given period, the results of any prior quarterly or annual periods should not be relied upon as indicative of our future revenue or operating performance. Fluctuations in our revenue and operating results could also cause our stock price to decline.

If sales of our customers' products decline or if their products do not achieve market acceptance, our business and operating results could be adversely affected.

Our revenue depends on our customers' ability to commercialize their products successfully. The markets for our customers' products are extremely competitive and are characterized by rapid technological change. Competition in our customers' markets is based on a variety of factors including price, performance, product quality, marketing and distribution capability, customer support, name recognition and financial strength. As a result of rapid technological change, the markets for our customers' products are characterized by frequent product introductions, short product life cycles, fluctuating demand and increasing product capabilities. As a result, our customers' products may not achieve market success or may become obsolete. We cannot assure our stockholders that our customers will dedicate the resources necessary to promote and commercialize their products, successfully execute their business strategies for such products, or be able to manufacture such products in quantities sufficient to meet demand or cost-effectively manufacture products at a high volume. Our customers do not have contracts with us that require them to manufacture, distribute or sell any products. Moreover, our customers may develop internally, or in collaboration with our competitors, technology that they may utilize instead of the technology available to them through us. Our customers' failure to achieve market success for their products, including as a result of general declines in our customers' markets or industries, could negatively affect their willingness to utilize our products, which may result in a decrease in our revenue and negatively affect our business and operating results.

Our revenue also depends on the timely introduction, quality and market acceptance of our customers' products that incorporate our solutions. Our customers' products are often very complex and subject to design complexities that may result in design flaws, as well as potential defects, errors and bugs. We incur significant design and development costs in connection with designing our solutions for customers' products. If our customers discover design flaws, defects, errors or bugs in their products, or if they experience changing market requirements, failed evaluations or field trials, or issues with other vendors, they may delay, change or cancel a project. If we have already incurred significant development costs, we may not be able to recoup those costs, which in turn would adversely affect our business and financial results.

We face competition and expect competition to increase in the future. If we fail to compete effectively, our revenue growth and results of operations will be materially and adversely affected.

The global semiconductor market in general, and the semiconductor memory market in particular, are highly competitive. We expect competition to increase and intensify as other semiconductor companies enter our markets, many of which have greater financial and other resources with which to pursue technology development, product design, manufacturing, marketing and sales and distribution of their products. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could materially and adversely affect our business, revenue and operating results. Currently, our competitors range from large, international companies offering a wide range of traditional memory technologies to companies specializing in other alternative, specialized emerging memory technologies. Our primary memory competitors include Cypress, Fujitsu, Integrated Silicon Solution, Macronix, Microchip, Micron, Renesas, Samsung, and Toshiba. In addition, as the MRAM market opportunity grows, we expect new entrants such as Avalanche Technologies may enter this market and existing competitors, including leading semiconductor companies, may make significant investments to compete more effectively against our products. These competitors could develop technologies or architectures that make our products or technologies obsolete.

Our ability to compete successfully depends on factors both within and outside of our control, including:

- the functionality and performance of our products and those of our competitors;
- our relationships with our customers and other industry participants;
- prices of our products and prices of our competitors' products;
- our ability to develop innovative products;
- our competitors' greater resources to make acquisitions;
- our ability to obtain adequate capital to finance operations;
- our ability to retain high-level talent, including our management team and engineers; and
- the actions of our competitors, including merger and acquisition activity, launches of new products and other actions that could change the competitive landscape.

Competition could result in pricing pressure, reduced revenue and loss of market share, any of which could materially and adversely affect our business, results of operations and prospects. In the event of a market downturn, competition in the markets in which we operate may intensify as our customers reduce their purchase orders. Our competitors that are significantly larger and have greater financial, technical, marketing, distribution, customer support and other resources or more established market recognition than us may be better positioned to accept lower prices and withstand adverse economic or market conditions.

Our customers require our products and our third-party contractors to undergo a lengthy and expensive qualification process. If we are unsuccessful or delayed in qualifying any of our products with a customer, our business and operating results would suffer.

Prior to selecting and purchasing our products, our customers typically require that our products undergo extensive qualification processes, which involve testing of our products in the customers' systems, as well as testing for reliability. This qualification process may continue for several months or years. However, obtaining the requisite qualifications for a memory product does not assure any sales of the product. Even after successful qualification and sales of a product to a customer, a subsequent revision in our third-party contractors' manufacturing process or our selection of a new contract manufacturer may require a new qualification process, which may result in delays and excess or obsolete inventory. After our products are qualified and selected, it can and often does take several months or years before the customer commences volume production of systems that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualify our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, sales of those products may be precluded or delayed, which may impede our growth and harm our business.

Our costs may increase substantially if we or our third-party manufacturing contractors do not achieve satisfactory product yields or quality.

The fabrication process is extremely complicated and small changes in design, specifications or materials can result in material decreases in product yields or even the suspension of production. From time to time, we and/or the third-party foundries that we contract to manufacture our products may experience manufacturing defects and reduced manufacturing yields. In some cases, we and/or our third-party foundries may not be able to detect these defects early in the fabrication process or determine the cause of such defects in a timely manner. There may be a higher risk of product yield issues in newer STT-MRAM products.

Generally, in pricing our products, we assume that manufacturing yields will continue to improve, even as the complexity of our products increases. Once our products are initially qualified either internally or with our third-party foundries, minimum acceptable yields are established. We are responsible for the costs of the units if the actual yield is above the minimum set with our third-party foundries. If actual yields are below the minimum we are not required to purchase the units. Typically, minimum acceptable yields for our new products are generally lower at first and gradually improve as we achieve full production, but yield issues can occur even in mature processes due to break downs in mechanical systems, equipment failures or calibration errors. Unacceptably low product yields or other product manufacturing problems could substantially increase overall production time and costs and adversely impact our operating results. Product yield losses will increase our costs and reduce our gross margin. In addition to significantly harming our results of operations and cash flow, poor yields may delay shipment of our products and harm our relationships with existing and potential customers.

The complexity of our products may lead to defects, which could negatively impact our reputation with customers and result in liability.

Products as complex as ours may contain defects when first introduced to customers or as new versions are released. Delivery of products with production defects or reliability, quality or compatibility problems could significantly delay or hinder market acceptance of the products or result in a costly recall and could damage our reputation and adversely affect our ability to retain existing customers and attract new customers. Defects could cause problems with the functionality of our products, resulting in interruptions, delays or cessation of sales of these products to our customers. We may also be required to make significant expenditures of capital and resources to resolve such problems. We cannot assure our stockholders that problems will not be found in new products, both before and after commencement of commercial production, despite testing by us, our suppliers or our customers. Any such problems could result in:

- delays in development, manufacture and roll-out of new products;

- additional development costs;

- loss of, or delays in, market acceptance;
- diversion of technical and other resources from our other development efforts;
- claims for damages by our customers or others against us; and
- loss of credibility with our current and prospective customers.

Any such event could have a material adverse effect on our business, financial condition and results of operations.

We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.

We aim to use the most advanced manufacturing process technology appropriate for our solutions that is available from our third-party foundries. As a result, we periodically evaluate the benefits of migrating our solutions to other technologies to improve performance and reduce costs. These ongoing efforts require us from time to time to modify the manufacturing processes for our products and to redesign some products, which in turn may result in delays in product deliveries. We may face difficulties, delays and increased expense as we transition our products to new processes, and potentially to new foundries. We will depend on our third-party foundries as we transition to new processes. We cannot assure our stockholders that our third-party foundries will be able to effectively manage such transitions or that we will be able to maintain our relationship with our third-party foundries or develop relationships with new third-party foundries. If we or any of our third-party foundries experience significant delays in transitioning to new processes or fail to efficiently implement transitions, we could experience reduced manufacturing yields, delays in product deliveries and increased expenses, any of which could harm our relationships with our customers and our operating results.

As smaller line width geometry manufacturing processes become more prevalent, we intend to move our future products to increasingly smaller geometries to integrate greater levels of memory capacity and/or functionality into our products. This transition will require us and our third-party foundries to migrate to new designs and manufacturing processes for smaller geometry products. We may not be able to achieve smaller geometries with higher levels of design integration or to deliver new integrated products on a timely basis. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to increase product value. We are dependent on our relationships with our third-party foundries to transition to smaller geometry processes successfully. We cannot assure our stockholders that our third-party foundries will be able to effectively manage any such transition. If we or our third-party foundries experience significant delays in any such transition or fail to implement a transition, our business, financial condition and results of operations could be materially harmed.

Changes to industry standards and technical requirements relevant to our products and markets could adversely affect our business, results of operations and prospects.

Our products are only a part of larger electronic systems. All products incorporated into these systems must comply with various industry standards and technical requirements created by regulatory bodies or industry participants to operate efficiently together. Industry standards and technical requirements in our markets are evolving and may change significantly over time. For our products, the industry standards are developed by the Joint Electron Device Engineering Council, an industry trade organization. In addition, large industry-leading semiconductor and electronics companies play a significant role in developing standards and technical requirements for the product ecosystems within which our products can be used. Our customers also may design certain specifications and other technical requirements specific to their products and solutions. These technical requirements may change as the customer introduces new or enhanced products and solutions.

Our ability to compete in the future will depend on our ability to identify and comply with evolving industry standards and technical requirements. The emergence of new industry standards and technical requirements could render our products incompatible with products developed by other suppliers or make it difficult for our products to meet the requirements of certain of our customers in automotive, transportation, industrial, storage and other markets. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards and requirements. If our products are not in compliance with prevailing industry standards and technical requirements for a significant period of time, we could miss opportunities to achieve crucial design wins, our revenue may decline and we may incur significant expenses to redesign our products to meet the relevant standards, which could adversely affect our business, results of operations and prospects.

Failure to protect our intellectual property could substantially harm our business.

Our success and ability to compete depend in part upon our ability to protect our intellectual property. We rely on a combination of intellectual property rights, including patents, mask work protection, copyrights, trademarks, trade secrets and know-how, in the United States and other jurisdictions. The steps we take to protect our intellectual property rights may not be adequate, particularly in foreign jurisdictions such as China. Any patents we hold may not adequately protect our intellectual property rights or our products against competitors, and third parties may challenge the scope, validity or enforceability of our issued patents, which third parties may have significantly more financial resources with which to litigate their claims than we have to defend against them. In addition, other parties may independently develop similar or competing technologies designed around any patents or patent applications that we hold. Some of our products and technologies are not covered by any patent or patent application, as we do not believe patent protection of these products and technologies is critical to our business strategy at this time. A failure to timely seek patent protection on products or technologies generally precludes us from seeking future patent protection on these products or technologies.

In addition to patents, we also rely on contractual protections with our customers, suppliers, distributors, employees and consultants, and we implement security measures designed to protect our trade secrets and know-how. However, we cannot assure our stockholders that these contractual protections and security measures will not be breached, that we will have adequate remedies for any such breach or that our customers, suppliers, distributors, employees or consultants will not assert rights to intellectual property or damages arising out of such contracts.

We may initiate claims against third parties to protect our intellectual property rights if we are unable to resolve matters satisfactorily through negotiation. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming and distracting to management. It could also result in the impairment or loss of portions of our intellectual property, as an adverse decision could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively impact our business, financial condition and results of operations. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. Our failure to secure, protect and enforce our intellectual property rights could materially harm our business.

We may face claims of intellectual property infringement, which could be time-consuming, costly to defend or settle, result in the loss of significant rights, harm our relationships with our customers and distributors, or otherwise materially adversely affect our business, financial condition and results of operations.

The semiconductor memory industry is characterized by companies that hold patents and other intellectual property rights and that vigorously pursue, protect and enforce intellectual property rights. These companies include patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence. From time to time, third parties may assert against us and our customers' patent and other intellectual property rights to technologies that are important to our business. We have in the past, and may in the future, face such claims.

Claims that our products, processes or technology infringe third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and technical personnel. We may also be obligated to indemnify our customers or business partners in connection with any such litigation, which could result in increased costs. Infringement claims also could harm our relationships with our customers or distributors and might deter future customers from doing business with us. If any such proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the infringing products, processes or technology;
- pay substantial damages for infringement;
- expend significant resources to develop non-infringing products, processes or technology, which may not be successful;

- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;

- cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor; or

- pay substantial damages to our customers to discontinue their use of or to replace infringing technology sold to them with non-infringing technology, if available.

Any of the foregoing results could have a material adverse effect on our business, financial condition and results of operations. Furthermore, our exposure to the foregoing risks may also be increased if we acquire other companies or technologies. For example, we may have a lower level of visibility into the development process with respect to intellectual property or the care taken to safeguard against infringement risks with respect to the acquired company or technology. In addition, third parties may make infringement and similar or related claims after we have acquired technology that had not been asserted prior to the acquisition.

We make significant investments in new technologies and products that may not achieve technological feasibility or profitability or that may limit our revenue growth.

We have made and will continue to make significant investments in research and development of new technologies and products, including new and more technically advanced versions of our MRAM technology.

Investments in new technologies are speculative and technological feasibility may not be achieved. Commercial success depends on many factors including demand for innovative technology, availability of materials and equipment, selling price the market is willing to bear, competition and effective licensing or product sales. We may not achieve significant revenue from new product investments for a number of years, if at all. Moreover, new technologies and products may not be profitable, and even if they are profitable, operating margins for new products and businesses may not be as high as the margins we have experienced historically or originally anticipated. Our inability to capitalize on or realize substantial revenue from our significant investments in research and development could harm our operating results and distract management, harming our business.

Our success depends on our ability to attract and retain key employees, and our failure to do so could harm our ability to grow our business and execute our business strategies.

Our success depends on our ability to attract and retain our key employees, including our management team and experienced engineers. Competition for personnel in the semiconductor memory technology field, and in the MRAM space in particular, is intense, and the availability of suitable and qualified candidates is limited. We compete to attract and retain qualified research and development personnel with other semiconductor companies, universities and research institutions. Given our experience as an early entrant in the MRAM space, our employees are frequently contacted by MRAM startups and MRAM groups within larger companies seeking to employ them. The members of our management and key employees are at-will. If we lose the services of any key senior management member or employee, we may not be able to locate suitable or qualified replacements, and may incur additional expenses to recruit and train new personnel, which could severely impact our business and prospects. The loss of the services of one or more of our key employees, especially our key engineers, or our inability to attract and retain qualified engineers, could harm our business, financial condition and results of operations.

We may not be able to effectively manage our growth, and we may need to incur significant expenditures to address the additional operational and control requirements of our growth, either of which could harm our business and operating results.

As we continue to expand our business, we expect our headcount and overall size of our operations to grow significantly. To effectively manage our growth, we must continue to expand our operational, engineering and financial systems, procedures and controls and to improve our accounting and other internal management systems, such as our ERP system. This may require substantial managerial and financial resources, and our efforts in this regard may not be successful. Our current systems, procedures and controls may not be adequate to support our future operations. If we fail to adequately manage our growth, or to improve our operational, financial and management information systems, or fail to effectively motivate or manage our new and future employees, the quality of our products and the management of our operations could suffer, which could adversely affect our operating results.

We may engage in acquisitions of, or investments in, other companies, each of which may divert our management's attention, result in additional dilution to stockholders or use resources that are necessary to operate our business.

We may in the future seek to acquire or invest in businesses, products or technologies that we believe could complement or expand our business, enhance our technical capabilities or otherwise offer growth opportunities. However, our term loan and revolving credit facility prohibits our ability to merge with or acquire any other entity, and so we could only do so with the lender's consent. If we were to pursue such acquisitions or investments, they could create risks for us, including:

- difficulties in assimilating acquired personnel, operations and technologies or realizing synergies expected in connection with an acquisition, particularly with acquisitions of companies with large and widespread operations, complex products or that operate in markets in which we historically have had limited experience;
- unanticipated costs or liabilities, including possible litigation, associated with the acquisition;
- incurrence of acquisition-related costs;
- diversion of management's attention from other business concerns;
- use of resources that are needed in other parts of our business; and
- use of substantial portions of our available cash to consummate an acquisition.

A significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill, which must be assessed for impairment at least annually. If such acquisitions do not yield expected returns, we may be required to take charges to our earnings based on this impairment assessment process, which could harm our results of operations.

We may be unable to complete acquisitions at all or on commercially reasonable terms, which could limit our future growth. Acquisitions could also result in dilutive issuances of equity securities or the incurrence of additional debt, which could adversely affect our operating results and result in a decline in our stock price and further restrict our ability to pursue business opportunities, including potential acquisitions. In addition, if an acquired business fails to meet our expectations, our operating results may suffer.

We maintain operations outside of the United States which exposes us to significant risks.

The success of our business depends, in large part, on our ability to operate successfully from geographically disparate locations and to further expand our international operations and sales. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic and political risks that are different from those we face in the United States. We cannot be sure that further international expansion will be successful. In addition, we face risks in doing business internationally that could expose us to reduced demand for our products, lower prices for our products or other adverse effects on our operating results. Among the risks we believe are most likely to affect us are:

- difficulties, inefficiencies and costs associated with staffing and managing foreign operations;
- longer and more difficult customer qualification and credit checks;
- greater difficulty collecting accounts receivable and longer payment cycles;
- the need for various local approvals to operate in some countries;
- difficulties in entering some foreign markets without larger-scale local operations;
- compliance with local laws and regulations;

- unexpected changes in regulatory requirements, including the elimination of tax holidays;
- reduced protection for intellectual property rights in some countries;
- adverse tax consequences as a result of repatriating cash generated from foreign operations to the United States;
- adverse tax consequences, including potential additional tax exposure if we are deemed to have established a permanent establishment outside of the United States;
- the effectiveness of our policies and procedures designed to ensure compliance with the Foreign Corrupt Practices Act of 1977 and similar regulations;
- fluctuations in currency exchange rates, which could increase the prices of our products to customers outside of the United States, increase the expenses of our international operations by reducing the purchasing power of the U.S. dollar and expose us to foreign currency exchange rate risk if, in the future, we denominate our international sales in currencies other than the U.S. dollar;
- new and different sources of competition; and
- political and economic instability, and terrorism.

Our failure to manage any of these risks successfully could harm our operations and reduce our revenue.

To comply with environmental laws and regulations, we may need to modify our activities or incur substantial costs, and if we fail to comply with environmental regulations, we could be subject to substantial fines or be required to have our suppliers alter their processes.

The semiconductor memory industry is subject to a variety of international, federal, state and local governmental regulations directed at preventing or mitigating environmental harm, as well as to the storage, discharge, handling, generation, disposal and labeling of toxic or other hazardous substances. Failure to comply with environmental regulations could subject us to civil or criminal sanctions and property damage or personal injury claims. Compliance with current or future environmental laws and regulations could restrict our ability to expand our business or require us to modify processes or incur other substantial expenses which could harm our business. In response to environmental concerns, some customers and government agencies impose requirements for the elimination of hazardous substances, such as lead (which is widely used in soldering connections in the process of semiconductor packaging and assembly), from electronic equipment. For example, the European Union adopted its Restriction on Hazardous Substance Directive which prohibits, with specified exceptions, the sale in the EU market of new electrical and electronic equipment containing more than agreed levels of lead or other hazardous materials and China has enacted similar regulations. Environmental laws and regulations such as these could become more stringent over time, causing a need to redesign technologies, imposing greater compliance costs and increasing risks and penalties associated with violations, which could seriously harm our business.

Some of the facilities of our suppliers are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could damage our facilities, which could cause us to curtail our operations.

Some of our foundries and suppliers’ facilities in Asia are located near known earthquake fault zones and, therefore, are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, such as power loss, fire, floods and similar events. If any such disaster were to occur, our ability to operate our business could be seriously impaired. In addition, we may not have adequate insurance to cover our losses resulting from disasters or other similar significant business interruptions. Any significant losses that are not recoverable under our insurance policies could seriously impair our business and financial condition.

Provisions of our credit facility may restrict our ability to pursue our business strategies.

Borrowings under our existing credit facility are secured by substantially all of our assets, except for intellectual property. Our term loan facility prohibits our ability to, among other things:

- dispose of or sell assets;
- consolidate or merge with other entities;
- incur additional indebtedness;
- create liens on our assets;
- pay dividends;
- make investments;
- enter into transactions with affiliates; and
- redeem subordinated indebtedness.

These restrictions are subject to certain exceptions. In addition, our existing credit facility requires that we meet certain operating covenants, such as maintaining insurance on the collateral and meeting certain financial covenants, such as a minimum liquidity ratio. The operating restrictions and covenants in the term loan facility, as well as any future financing agreements that we may enter into, may restrict our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. Our ability to comply with these covenants may be affected by events beyond our control, and we may not be able to meet those covenants. A breach of any of these covenants could result in an event of default under the credit facility. We are required to make mandatory prepayments of the outstanding loan upon the acceleration by lender following the occurrence of an event of default, along with a payment of the end of term fee, the prepayment fee and any other obligations that are due and payable at the time of prepayment. In the event of default, the interest rate in effect will increase by 5.0% per annum.

The Tax Cuts and Jobs Act could adversely affect our business and financial condition.

In December 2017 the Tax Cuts and Jobs Act (2017 Tax Act) became law, which significantly amended the Internal Revenue Code of 1986. The 2017 Tax Act, among other things, reduced the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limits the tax deduction for interest expense to 30% of adjusted earnings, eliminates net operating loss carrybacks, imposes a one-time tax on offshore earnings at reduced rates regardless of whether they are repatriated, allows immediate deductions for certain new investments instead of deductions for depreciation expense over time, and modifies or repeals many business deductions and credits. The rate reduction took effect on January 1, 2018. Interpretations of this legislation are being released by various regulatory agencies and it is possible that there could be significant changes in interpretations that we may not be yet aware of, and which could adversely impact our financial results.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income, and tax credits to offset tax. As of December 31, 2018, we had federal net operating loss carryforwards of approximately $112.3 million of which $99.7 million will begin to expire in 2028 if not utilized, and $12.6 million will carryover indefinitely. As of December 31, 2018, we had state net operating loss carryforwards of approximately $44.3 million of which $43.5 million will begin to expire in 2023 if not utilized, and $0.8 million will carryover indefinitely. The federal NOLs generated prior to 2018 will continue to be governed by the NOL tax rules as they existed prior to the adoption of the new Tax Act, which means that generally they will expire 20 years after they were generated if not used prior thereto. The 2017 Tax Act repealed the 20-year carryforward and two-year carryback of NOLs originating after December 31, 2017 and also limits the NOL deduction to 80% of taxable income for tax years beginning after December 31, 2017. Any NOLs generated in 2018 will be carried forward and will not expire. There is no current impact to the us as we continue to be in a tax loss position for US tax purposes. We may experience an ownership change in the future, and our ability to utilize our NOLs and tax credits could be further limited by Section 382 of the Code. Future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Section 382 of the Code. Our net operating losses and tax credits could also be impaired under state laws. As a result, we might not be able to utilize a material portion of our state NOLs and tax credits.

If we fail to retain finance personnel and strengthen our financial reporting systems and infrastructure, we may not be able to timely and accurately report our financial results or comply with the requirements of being a public company, including compliance with the Sarbanes-Oxley Act and SEC reporting requirements.

We have accounting and finance staff members to maintain the effectiveness of our closing and financial reporting processes. Any inability to retain such personnel would have an adverse impact on our ability to accurately and timely prepare our financial statements. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If our finance and accounting organization is unable for any reason to respond adequately to the demands of being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause the trading price of our common stock to decline and could harm our business, operating results and financial condition.

Interruptions in our information technology systems could adversely affect our business.

We rely on the efficient and uninterrupted operation of complex information technology systems and networks to operate our business. Any significant disruption to our systems or networks, including, but not limited to, new system implementations, computer viruses, security breaches, facility issues, natural disasters, terrorism, war, telecommunication failures or energy blackouts, could have a material adverse impact on our operations, sales and financial results. Such disruption could result in a loss of our intellectual property or the release of sensitive competitive information or supplier, customer or employee personal data. Any loss of such information could harm our competitive position, result in a loss of customer confidence, and cause us to incur significant costs to remedy the damages caused by any such disruptions or security breaches. Additionally, any failure to properly manage the collection, handling, transfer or disposal of personal data of employees and customers may result in regulatory penalties, enforcement actions, remediation obligations, litigation, fines and other sanctions.

We may experience attacks on our data, attempts to breach our security and attempts to introduce malicious software into our IT systems. If attacks are successful, we may be unaware of the incident, its magnitude, or its effects until significant harm is done. Any such attack or disruption could result in additional costs related to rebuilding of our internal systems, defending litigation, responding to regulatory actions, or paying damages. Such attacks or disruptions could have a material adverse impact on our business, operations and financial results.

Third-party service providers, such as wafer foundries, assembly and test contractors, distributors and other vendors have access to certain portions of our and our customers' sensitive data. In the event that these service providers do not properly safeguard the data that they hold, security breaches and loss of data could result. Any such loss of data by our third-party service providers could negatively impact our business, operations and financial results, as well as our relationship with our customers.

We have a material weakness in our internal control over financial control which we are currently remediating, but if we experience material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

We are required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency or combination of deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual and interim financial statements will not be detected or prevented on a timely basis. Our management has determined that we have a material weakness in our internal control over financial reporting, as further described in Part I, Item 4. of this Report. If we are unable to remediate this material weakness, or experience additional weaknesses, we may not be able to accurately report our financial condition or results of operations, which may adversely affect investor confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline.

The issuance of new accounting standards or future interpretations of existing accounting standards could adversely affect our operating results.

We prepare our financial statements in accordance with accounting principles generally accepted in the United States of America, or GAAP. A change in those principles could have a significant effect on our reported results and might affect our reporting of transactions completed before a change is announced. GAAP is issued and subject to interpretation by the Financial Accounting Standards Board, the SEC and various other bodies formed to promulgate and interpret accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change. For example, beginning with our first quarter of 2018, we adopted the new revenue recognition standard, which changed the way we recognize revenue. The issuance of new accounting standards or future interpretations of existing accounting standards, or changes in our business practices or estimates, could result in future changes in our revenue recognition or other accounting policies that could have a material adverse effect on our results of operations.

Regulations related to "conflict minerals" may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.

Pursuant to the Dodd-Frank Act, the SEC has adopted requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These requirements require companies to perform diligence and disclose and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. These requirements could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of our products, and affect our costs and relationships with customers, distributors and suppliers as we must obtain additional information from them to ensure our compliance with the disclosure requirement. In addition, we incur additional costs in complying with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Since our supply chain is complex, we have not been able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free and these customers may discontinue, or materially reduce, purchases of our products, which could result in a material adverse effect on our results of operations and our financial condition may be adversely affected.

Risks Related to Our Common Stock

An active trading market may not be sustained.

Although our stock is currently traded on the Nasdaq Stock Market, an active trading market may not be sustained. The lack of an active market may impair the value of our common stock and our stockholders' ability to sell their shares at the time they may wish to sell them. An inactive market may also impair our ability to both raise capital by selling shares and acquire other complementary products, technologies or businesses by using our shares as consideration.

We expect that the price of our common stock will fluctuate substantially.

The market price of our common stock is likely to be highly volatile and may fluctuate substantially due to many factors, including:

- the introduction of new products or product enhancements by us or others in our industry;
- disputes or other developments with respect to our or others' intellectual property rights;
- product liability claims or other litigation;
- quarterly variations in our results of operations or those of others in our industry;

- sales of large blocks of our common stock, including sales by our executive officers and directors;
- changes in earnings estimates or recommendations by securities analysts; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

Stock markets generally have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may significantly affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our common stock.

In addition, in the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price, or for other reasons. Securities litigation brought against us following volatility in our stock price or otherwise, regardless of the merit or ultimate results of such litigation, could result in substantial costs, which would hurt our financial condition and operating results and divert management's attention and resources from our business.

These and other factors may make the price of our stock volatile and subject to unexpected fluctuation.

Securities analysts may not publish favorable research or reports about our business or may publish no information at all, which could cause our stock price or trading volume to decline.

The trading market for our common stock is influenced to some extent by the research and reports that industry or financial analysts publish about us and our business. If any of the analysts who cover us provide inaccurate or unfavorable research or issue an adverse opinion regarding our stock price, our stock price could decline. If one or more of these analysts cease coverage of our company or fail to publish reports covering us regularly, we could lose visibility in the market, which in turn could cause our stock price or trading volume to decline.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to "emerging growth companies" will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we may take advantage of certain exemptions and relief from various reporting requirements that are applicable to other public companies that are not "emerging growth companies." In particular, while we are an "emerging growth company" (1) we will not be required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, (2) we will be exempt from any rules that may be adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotations or a supplement to the auditor's report on financial statements, (3) we will be subject to reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (4) we will not be required to hold nonbinding advisory votes on executive compensation or stockholder approval of any golden parachute payments not previously approved.

We may remain an "emerging growth company" until as late as December 31, 2021, though we may cease to be an "emerging growth company" earlier under certain circumstances, including (1) if the market value of our common stock that is held by nonaffiliates exceeds $700 million as of any June 30, in which case we would cease to be an "emerging growth company" as of the following December 31, or (2) if our gross revenue exceeds $1.07 billion in any fiscal year.

Investors may find our common stock less attractive if we rely on the exemptions and relief granted by the JOBS Act. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may decline or become more volatile.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

Our directors, officers and principal stockholders have significant voting power and may take actions that may not be in the best interests of our other stockholders.

Our officers, directors and principal stockholders each holding more than 5% of our common stock, collectively, control a significant percentage of our outstanding common stock. As a result, these stockholders, if they act together, will be able to control the management and affairs of our company and most matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change of control and might adversely affect the market price of our common stock. This concentration of ownership may not be in the best interests of our other stockholders.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include that:

- our board of directors has the right to expand the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;

- our stockholders may not act by written consent or call special stockholders’ meetings; as a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders’ meetings or special stockholders’ meetings called by the board of directors, the chairman of the board, the chief executive officer or the president;

- our certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;

- the affirmative vote of holders of at least 66-2/3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, will be required (a) to amend certain provisions of our certificate of incorporation, including provisions relating to the size of the board, special meetings, actions by written consent and cumulative voting and (b) to amend or repeal our bylaws, although our bylaws may be amended by a simple majority vote of our board of directors;

- stockholders must provide advance notice and additional disclosures to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders’ meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror’s own slate of directors or otherwise attempting to obtain control of our company; and

- our board of directors may issue, without stockholder approval, shares of undesignated preferred stock; the ability to issue undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Item 2. Recent Sales of Unregistered Securities and Use of Proceeds

Recent Sales of Unregistered Securities

Not applicable.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

In August 2019, the Company executed an Amended and Restated Loan and Security Agreement (the 2019 Credit Facility), which amended and restated the 2017 Credit Facility, providing for a formula revolving line of credit (Line of Credit) and a term loan (2019 Term Loan) with Silicon Valley Bank to refinance in full the outstanding principal balance of $8.0 million under the 2017 Credit Facility. The Company paid the final payment of $0.8 million, which was due upon repayment of the 2017 Credit Facility.

The Line of Credit allows for a maximum draw of $5.0 million, subject to a formula borrowing base, has a two year term and bears interest at a floating rate equal to the Wall Street Journal (WSJ) prime rate plus 1.5%, per annum, subject to a floor of 6.75%. The Line of Credit provides for a commitment fee of 1.6% of the maximum availability of the Line of Credit, due upon closing, and a termination fee equal to 1% of the maximum availability under the Line of Credit, which is due in case of a termination of the Line of Credit prior to the scheduled maturity date. The Company drew $2.0 million at execution to pay off a portion of the outstanding balance of the 2017 Credit Facility, and $3.0 million remains available under the Line of Credit, subject to borrowing base availability.

The 2019 Term Loan provides for a $6.0 million term loan funded in full at closing, with a term of 42 months, and a 12-month interest only period followed by 30 months of equal principal payments, plus accrued interest. The 2019 Term Loan bears interest at a floating rate equal to the WSJ prime rate minus 0.75%, subject to a floor of 4.75%. A final payment of 7% of the original principal amount of the 2019 Term Loan must be made when the 2019 Term Loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise. The 2019 Term Loan has a prepayment fee equal to 2% of the total commitment, which is due only if the 2019 Term Loan is prepaid prior to the scheduled maturity date for any reason.

The 2019 Credit Facility contains customary representations, warranties and affirmative and restrictive covenants, including restrictions on dispositions of assets, indebtedness, liens, distributions and transactions with affiliates. Events of default include, among other things, payment defaults, covenant defaults, cross-defaults to other indebtedness or material agreements, insolvency defaults, attachment of collateral, and a material adverse change event of default. If an event of default occurs and is not cured or waived, Silicon Valley Bank could accelerate the maturity of all obligations under the 2019 Credit Facility, apply the default rate of 5.0%, and exercise secured party remedies.

The 2019 Credit Facility contains a financial covenant, which requires the Company to maintain a minimum liquidity ratio. The obligations under the 2019 Credit Facility are secured by a first priority perfected security interest in the Company's assets excluding intellectual property.

In conjunction with entering into the 2019 Credit Facility, on August 5, 2019, the Company and SVB amended and restated the warrant issued to SVB in connection with the First Amendment, which was a warrant to purchase 9,375 shares of the Company's common stock at $8.91 per share, to add an option by SVB to put the warrant back to the Company for $50,000 upon expiration or a liquidity event, to be prorated if SVB exercises a portion of the warrant. The warrant expires on July 6, 2023. The amendment and restatement of the warrant was made in reliance on Section 4(a)(2) of the Securities Act of 1933, as amended, in that it was made with one sophisticated investor.

Item 6. Exhibits

EXHIBIT INDEX

Exhibit Number	Description	Incorporation By Reference Form	SEC File No.	Exhibit/ Reference	Filing Date
3.1	Amended and Restated Certificate of Incorporation.	8-K	001-37900	3.1	10/13/2016
3.2	Amendment to Amended and Restated Certificate of Incorporation	8-K	001-37900	3.1	5/22/2019
3.3	Bylaws.	8-K	001-37900	3.2	5/22/2019
4.1	Form of Common Stock Certificate of the Company.	S-1	333-213569	4.1	9/09/2016
4.2	Warrant to Purchase Common Stock, dated as of July 6, 2018, between the Company and Silicon Valley Bank.	10-Q	001-37900	4.2	8/09/2018
4.3	Reference is made to Exhibits 3.1, 3.2 and 3.3.				
10.1*	Third Amendment to Loan and Security Agreement, dated June 19, 2019 by and between the registrant and Silicon Valley Bank				
10.2*	Non-employee Director Compensation				
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	XBRL Instance Document				
101.SCH*	XBRL Taxonomy Extension Schema Document				
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document				

*	Filed herewith.
**	Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Everspin Technologies, Inc.

Date: August 7, 2019

By: /s/ Kevin Conley
Kevin Conley
President and Chief Executive Officer
(Duly Authorized Officer and Principal Executive Officer)

Everspin Technologies, Inc.

Date: August 7, 2019

By: /s/ Jeffrey Winzeler
Jeffrey Winzeler
Chief Financial Officer
(Principal Financial and Accounting Officer)

THIRD AMENDMENT TO
LOAN AND SECURITY AGREEMENT

THIS THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT (this “Amendment”) is entered into this 19th day of June 2019, by and between SILICON VALLEY BANK, a California corporation “Bank”), and EVERSPIN TECHNOLOGIES, INC., a Delaware corporation (“Borrower”).

RECITALS

A. Bank and Borrower have entered into that certain Loan and Security Agreement dated as of May 4, 2017 (as the same may from time to time be amended, modified, supplemented or restated; the **“Loan Agreement”).**

B. Bank has extended credit to Borrower for the purposes permitted in the Loan Agreement.

C. Borrower has requested that Bank amend the Loan Agreement to modify the financial covenants and make certain revisions to the Loan Agreement as more fully set forth herein.

D. Bank has agreed to modify the financial covenants and amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

Now, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the patties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the Loan Agreement.

2. Amendments to Loan Agreement.

2.1 Financial Covenants. Section 6.7(b) of the Loan Agreement is hereby deleted in its entirety and replaced with the following:

(b) <u>Performance to Plan.</u> As of the last day of each month, Borrower's TFS Revenue for such month calculated on a cumulative fiscal year to date basis, shall be equal to or greater than the amount set forth for such month on <u>Schedule 1</u> of the Compliance Certificate.

Commencing with the month ending January 31, 2020, the Performance to Plan financial covenant set forth in this Section shall be calculated based on not less than ninety percent (90%) of Borrower's projected performance as set forth in Borrower's annual financial projections approved by Borrower's Board of Directors for the 2020 fiscal year and delivered to Bank (the "2020 Performance to Plan Financial Covenant"). Borrower's failure to reach an agreement with Bank on the 2020 Performance to Plan Financial Covenant and to execute and deliver to Bank an amendment to this Agreement which provides the terms for such 2020 Performance to Plan Financial Covenant no later than February 29, 2020, shall constitute an immediate Event of Default under this Agreement.

2.2 Formation or Acquisition of Subsidiaries. Section 6.11 of the Loan Agreement is hereby amended by deleting it in its entirety and replacing it with the following:

6.11 Formation or Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, at the time that Borrower forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date (including, without limitation, pursuant to a Division), Borrower shall, upon Bank's request in its sole and absolute discretion, (a) cause such new Subsidiary to provide to Bank either a joinder to this Agreement to cause such Subsidiary to become a co-borrower hereunder or a Guaranty, together with such appropriate financing statements and/or Control Agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary), (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfact01y to Bank, and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, including one or more opinions of counsel satisfactory to Bank, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.11 shall be a Loan Document.

2.3 Dispositions. Section 7.1 of the Loan Agreement is hereby amended by deleting it in its entirety and replacing it with the following:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (including, without limitation, pursuant to a Division) (collectively, **"Transfer"),** or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (i) of Inventory in the ordinary course of business; (ii) of worn-out or obsolete Equipment that is, in the reasonable judgment of Borrower, no longer economically practicable to maintain or useful in the ordinary course of business of Borrower; (iii) consisting of Permitted Liens and Permitted Investments; (iv) consisting of the sale or issuance of any stock of Borrower permitted under Section 7.2 of this Agreement; (v) consisting of Borrower's use or transfer of money or Cash Equivalents in the ordinary course of its business for the payment of ordinary course business expenses in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents; (vi) of non-exclusive licenses for the use of the property of Borrower or its Subsidiaries in the ordinary course of business and licenses that could not result in a legal transfer of title of the licensed property but that may be exclusive in respects other than granting rights to a specific geographical territory and that may be exclusive as to territory only as to discreet geographical areas outside of the United States; and (vii) other Transfers that do not in the aggregate exceed Two Hundred Fifty Thousand Dollars ($250,000) during any fiscal year.

2.4 Mergers or Acquisitions. Section 7.3 of the Loan Agreement is hereby amended by deleting it in its entirety and replacing it with the following:

7.3 Mergers or Acquisitions. Merge or consolidate or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person (including, without limitation, by the formation of any Subsidiary or pursuant to a Division). A Subsidiary may merge or consolidate into another Subsidiary or into Borrower.

2.5 Definitions. The following new defined term is hereby inserted into Section 13.1 of the Loan Agreement following the definition of "Designated Deposit Account":

"Division" means, in reference to any Person which is an entity, the division of such Person into two (2) or more separate Persons, with the dividing Person either continuing or terminating its existence as part of such division, including, without limitation, as contemplated under Section 18-217 of the Delaware Limited Liability Company Act for limited liability companies formed under Delaware law, or any analogous action taken pursuant to any other applicable law with respect to any corporation, limited liability company, partnership or other entity

2.6 Compliance Certificate. From and after the date hereof, Exhibit B of the Loan Agreement is replaced in its entirety with Exhibit B attached hereto and all references in the Loan Agreement to the Compliance Certificate shall be deemed to refer to Exhibit B attached hereto.

3. Limitation of Amendments.

3.1 The amendments set forth in Section 2, above, are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document, or (b) otherwise prejudice any right or remedy which Bank may now have or may have in the future under or in connection with any Loan Document.

3.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

4. Representations and Warranties. To induce Bank to enter into this Amendment, Borrower hereby represents and warrants to Bank as follows:

4.1 Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

4.2 Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

4.3 The organizational documents of Borrower delivered to Bank on the Effective Date remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

4.4 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

4.5 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any law or regulation binding on or affecting Borrower, (b) any contractual restriction with a Person binding on Borrower, (c) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (d) the organizational documents of Borrower;

4.6 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made; and

4.7 This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

5. **Integration.** This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

6. **Counterparts.** This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

7. **Effectiveness.** This Amendment shall be deemed effective upon (a) the due execution and delivery to Bank of this Amendment by each party hereto, (b) Borrower's payment of a fully earned, non-refundable, amendment fee in an amount equal to Twenty-Five Thousand

Dollars ($25,000), and (c) Borrower's payment of Bank's legal fees and expenses incurred in connection with the negotiation and preparation of this Agreement.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

BORROWER:

EVERSPIN TECHNOLOGIES, INC.

By: /s/ Jeff Winzeler
Name: Jeff Winzeler
Title: Chief Financial Officer

BANK:

SILICON VALLEY BANK

By: /s/ Derek Hofmeister
Name: Derek Hofmeister
Title: Vice President

EXHIBIT B
COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK Date: ________________

FROM: EVERSPIN TECHNOLOGIES, INC.

The undersigned authorized officer of EVERSPIN TECHNOLOGIES, INC., a Delaware corporation, ("**Borrower**") certifies that under the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the "**Agreement**"):

(1) Borrower is in complete compliance for the period ending _______________ with all required covenants except as noted below; (2) there are no Events of Default; (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; (4) Borrower, and each of its Subsidiaries, has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.8 of the Agreement; and (5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank.

Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenants	**Required**	**Complies**
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes No
Annual financial statement (CPA Audited)	FYE within 150 days	Yes No
Board Projections	Earlier of (i) 15 days after board approval or (ii) February 28th of each calendar year	Yes No

10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
Board Projections	FYE within 30 days	Yes No

Financial Covenant	**Required**	**Actual**	**Complies**
Maintain on a Monthly Basis:			
Liquidity Ratio	1.50:1.00	____ to 1.00	Yes No
TFS Revenue	See Schedule 1	$_____	Yes No

The following financial covenant analysis and information set forth in Schedule 1 attached hereto are true and accurate as of the date of this Certificate.

Other Matters

Have there been any amendments of or other changes to the capitalization table of Borrower and to the Operating Documents of Borrower or any of its Subsidiaries? If yes, provide copies of any such amendments or changes with this Compliance Certificate.	Yes	No

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

EVERSPIN TECHNOLOGIES, INC.

By: ______________________________

Name: ______________________________

Title: ______________________________

BANK USE ONLY

Received by: ______________________________

AUTHORIZED SIGNER

Date: ______________________________

Verified: ______________________________

AUTHORIZED SIGNER

Date: ______________________________

Compliance Status: Yes No

Schedule 1 to Compliance Certificate

Financial Covenants of Borrower

In the event of a conflict between this Schedule and the Loan Agreement, the terms of the Loan Agreement shall govern.

Dated: ____________________

I. Liquidity Ratio (Section 6.7(a))

Required: As of the last day of each month, a Liquidity Ratio of not less than 1.50:1.00.

Actual:

A.	Unrestricted cash and Cash Equivalents maintained at Bank	$________
B.	Net accounts receivable	$________
C.	Liquidity (line A, plus line B)	$________
D.	Outstanding Obligations	$________
E.	Liquidity Ratio (line C, divided by line D)	______

Is line E equal to or greater than 1.50:1.00?

__________No, not in compliance __________Yes, in compliance

II. **Performance to Plan** (Section 6.7(b))

Required TFS Revenue of Borrower for such month (calculated on a cumulative fiscal year to date basis):

Month Ending	Minimum TFS Revenue
June 30, 2019	$17,806,000
July 31, 2019	$19,500,000
August 31, 2019	$22,000,000
September 30, 2019	$26,147,000
October 31, 2019	$28,200,000
November 30, 2019	$31,300,000
December 31, 2019	$36,426,000

Actual:

A.	Actual TFS Revenue of Borrower for such month (calculated on a cumulative year to date basis):	$__________

Is line A equal to or greater than the amount required above?

__________No, not in compliance   __________Yes, in compliance

Exhibit 10.2

NON-EMPLOYEE DIRECTOR COMPENSATION

Cash Compensation

Each non-employee director receives an annual fee of $24,000 in cash for serving on the Board of Directors. The Chairman of the Audit Committee of the Board of Directors receives an additional annual cash fee of $7,500. All fees in cash are payable in equal quarterly installments, payable in arrears.

Equity Compensation

Initial Grants. Newly-elected non-employee directors will be granted an option to purchase 30,000 shares of Everspin common stock (the “Initial Grant”). The shares underlying the Initial Grant will vest monthly over three years subject to continued service on each vesting date. In the event of a change in control, any unvested portion of the shares underlying an Initial Grant will fully vest and become exercisable immediately prior to the effective time of the change in control.

Annual Grants. On the date of each annual meeting of stockholders, each then current non-employee director may receive additional annual stock option grants or restricted stock unit grants (the “Annual Grant”), in an amount to be determined by the Compensation Committee. All stock options underlying an Annual Grant will vest monthly over one year from the date of grant. The restricted stock units vest in full one year after the date of grant. In the event of a change in control, any unvested portion of the shares underlying an Annual Grant will fully vest and become exercisable immediately prior to the effective time of such change in control.

Exhibit 31.1

Certification of the Principal Executive Officer

I, Kevin Conley, certify that:

1. I have reviewed this Form 10-Q of Everspin Technologies, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2019

/s/ Kevin Conley

Kevin Conley

(Principal Executive Officer)

Exhibit 31.2

Certification of Principal Financial Officer

I, Jeffrey Winzeler, certify that:

1. I have reviewed this Form 10-Q of Everspin Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2019

/s/ Jeffrey Winzeler

Jeffrey Winzeler

(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Kevin Conley, President and Chief Executive Officer of Everspin Technologies, Inc. (the “Company”), and Jeffrey Winzeler, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended June 30, 2019, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2019

/s/ Kevin Conley
Kevin Conley
(Principal Executive Officer)

/s/ Jeffrey Winzeler
Jeffrey Winzeler
(Principal Financial Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Everspin Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.