# **PROSPECTUS**

# 5,000,000 Shares



# **Common Stock**

This is the initial public offering of the common stock of Everspin Technologies, Inc. We are selling 5,000,000 shares of common stock.

Prior to this offering, there has been no public market for our common stock. The initial public offering price is \$8.00 per share. Our common stock has been approved for listing on The Nasdaq Global Market under the symbol "MRAM."

We are an "emerging growth company" as defined under the federal securities laws. Investing in our common stock involves risks. See "Risk Factors" beginning on page 11.

		Underwriting Price to Discounts and Public Commissions(1)			 Proceeds to Everspin			
Per share	\$	8.00	\$	0.56	\$ 7.44			
Total	\$ 40,00	0,000.00	\$ 2,8	00,000.00	\$ 37,200,000.00			

<sup>(1)</sup> See the section titled "Underwriting" for a description of the compensation payable to the underwriters.

We have granted the underwriters the option to purchase up to an additional 750,000 shares of common stock to cover over-allotments at the initial public offering price less the underwriting discount and commissions. The underwriters may exercise their option at any time within 30 days from the date of this prospectus.

GigaDevice Semiconductor (HK) Limited has agreed to purchase \$5.0 million of our common stock in a separate private placement concurrent with the completion of this offering at a price per share equal to the initial public offering price. The sale of these shares will not be registered under the Securities Act of 1933, as amended. The closing of this offering is not conditioned upon the closing of this concurrent private placement.

Certain of our directors and principal stockholders affiliated with our directors, have indicated an interest in purchasing up to an aggregate of approximately \$6.2 million of shares of common stock in this offering at the public offering price. See "Certain Relationships and Related Party Transactions" beginning on page 98.

Neither the Securities and Exchange Commission nor any state securities regulators has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on October 13, 2016.

Stifel Needham & Company

Co-Managers

Canaccord Genuity Craig-Hallum Capital Group

#### TABLE OF CONTENTS

<u>Prospectus Summary</u>	1
Risk Factors	11
Special Note Regarding Forward-Looking Statements	34
Market, Industry and Other Data	35
<u>Use of Proceeds</u>	36
<u>Dividend Policy</u>	36
<u>Capitalization</u>	37
Dilution Control of the Control of t	39
Selected Financial Data	41
Management's Discussion and Analysis of Financial Condition and Results of Operations	44
<u>Business</u>	66
<u>Management</u>	80
Executive Compensation	88
Certain Relationships and Related Party Transactions	98
Principal Stockholders	106
Description of Capital Stock	109
Shares Eligible for Future Sale	114
Material United States Federal Income and Estate Tax Consequences to Non-U.S. Holders	116
<u>Underwriting</u>	120
<u>Legal Matters</u>	127
Experts	127
Where You Can Find More Information	127
Index to Financial Statements	F-1

Neither we nor the underwriters have authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell shares of common stock and are seeking offers to buy shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Until November 1, 2016 (25 days after the commencement of this offering), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

# **TRADEMARKS**

Everspin Technologies, Inc., "The MRAM Company," and our logo are our trademarks and are used in this prospectus. This prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, our trademarks and tradenames referred to in this prospectus appear without the TM symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks and tradenames.

# INVESTORS OUTSIDE THE UNITED STATES

Neither we nor any of the underwriters have taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who have come into possession of this prospectus in a jurisdiction outside the United States are required to inform themselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

#### PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary is not complete and may not contain all the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the risks of investing in our common stock discussed under the heading "Risk Factors," and our financial statements and related notes included elsewhere in this prospectus, before making an investment decision. Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Everspin Technologies," "the company," "we," "us" and "our" refer to Everspin Technologies, Inc.

#### Overview

We are the leading provider of MRAM solutions. Our 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), and enable 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 are the only provider of commercially available MRAM solutions, and over the past eight years we have shipped over 60 million MRAM units.

Our magnetoresistive random access memory (MRAM) technology, unlike traditional semiconductor memory technologies, stores data as a magnetic state rather than an electrical charge, and is offered as either a discrete or embedded solution. Our products read and write data at speeds on par with most dynamic RAM (DRAM) and static RAM (SRAM). Our products offer the non-volatility of flash memory but with significantly superior endurance. We offer our MRAM solutions with different densities and interfaces to address the various needs of our customers. Our lower-density MRAM products, which we define as having bit densities from 128kb to 16Mb, offer write-speeds on par with SRAM, with virtually unlimited endurance. Our higher density products, which we define as having bit densities at or greater than 64Mb, offer write-speeds on par with DRAM and have superior endurance compared to most other non-volatile memory technologies.

Our lower-density products are optimized for use in industrial, and automotive and transportation applications, while our higher-density products are optimized for use in enterprise storage applications. In the enterprise storage market, we collaborate with industry-leading memory controller companies to enable compatibility of their controllers with our MRAM products, facilitating the adoption of our solutions into our customers' existing end products. We have over 600 customers worldwide, including Honeywell, ifm, Nikkiso and Siemens in the industrial market, Airbus and Hyundai Mobis in the automotive and transportation market, and Broadcom, Dell, IBM and Lenovo in the enterprise storage market.

We leverage both internal and outsourced manufacturing capabilities to produce our MRAM products. We purchase industry-standard complementary metal-oxide semiconductor (CMOS) wafers from semiconductor foundries and complete the processing of our products by inserting our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We have entered into a manufacturing agreement with GLOBALFOUNDRIES for 300mm high-volume production of our higher-density products. We believe our strategic relationship with GLOBALFOUNDRIES accelerates the development of our MRAM solutions, provides us with leading-edge outsourced manufacturing capabilities, and enables us to operate a variable cost financial model. In addition, GLOBALFOUNDRIES has the ability to embed our technology in its products for sale to its customers, from which we would earn licensing or royalty revenue.

For the years ended December 31, 2014 and 2015, and six months ended June 30, 2016, we recorded revenue of \$24.9 million, \$26.5 million and \$12.9 million, gross margin of 52.6%, 52.7% and 55.7%, and a net loss of \$10.2 million, \$18.2 million and \$10.0 million, respectively. As of June 30, 2016, we had 86 employees,

approximately half of whom are engaged in research and development. Our headquarters are located in Chandler, Arizona. Our principal design center is in Austin, Texas, and we have additional sales operations in the Americas, Europe and Asia-Pacific regions.

# The Opportunity for MRAM

Traditional memory technologies have either fast write-speeds or are non-volatile, but not both. MRAM combines both features into a single solution, making it an ideal memory to protect data in the event of power interruption or failure, and to store data that is frequently written and accessed. The following attributes make MRAM an increasingly important application specific memory solution for system architectures that require non-volatile memory with the speed and endurance of RAM:

*Non-volatile.* MRAM can retain data in the event of power interruption or failure, which enables end-system designers to create products without costly power-loss protection systems, such as batteries and capacitors.

*Fast-write Speeds.* MRAM offers write-speeds that are on par with the fastest available volatile memory technologies, including most DRAM and SRAM and is significantly faster than other non-volatile memories used today. For example, MRAM writes a block over 100,000 times faster than NAND flash, a type of non-volatile flash memory.

*Superior Write Cycle Endurance.* MRAM offers virtually unlimited write-cycle endurance (nearly ten million times greater than NAND flash), enabling end-systems designers to offer products that are not limited by memory wear-out. A write cycle is the recording of data in the memory cell.

*Scalable to Greater Densities and Smaller Process Geometries.* MRAM's write-speed and endurance are scalable with increasing bit densities and smaller geometries, which we believe will allow system designers to employ MRAM in applications that require more memory and smaller form factors.

**Proven to be Manufacturable at High Volumes.** MRAM can be manufactured in high volumes and in advanced nodes, and is compatible with standard CMOS.

**Low Energy Requirement.** MRAM utilizes energy efficiently over the duration of its write and read cycles. It has the ability to be completely powered down, consuming no energy while still retaining data, which data can be accessed quickly once power is restored.

#### **Our Solutions**

We are the only commercial provider of MRAM solutions. We have a strong track record of innovation in MRAM technology, as demonstrated by our successive introduction of MRAM products that address an increasingly broad spectrum of applications. Our three generations of MRAM discrete solutions are set forth in the following table.

Everspin Product	Everspin Technology	Incumbent Technology	Memory Densities	Primary Applications	Status	
1 <sup>st</sup> Generation	Field Switched (FS)	SRAM	128kb - 16Mb	Industrial / Automotive & Transportation	Shipping	
(Toggle)	Embedded	eSRAM	Customer-defined	Micro-controller Embedded SRAM plus Flash Replacement	Shipping	
2 <sup>nd</sup> Generation (ST-MRAM)	In-Plane Spin Torque (iST)	DRAM	64Mb - 256Mb	Enterprise Storage	Shipping 64Mb; Sampling 256Mb	
3 <sup>rd</sup> Generation (ST-MRAM)	Perpendicular Spin Torque (pST)	DRAM	64Mb - 1Gb+	Enterprise Storage & Servers	Sampling 256Mb; 1Gb+ in Development	

We offer embedded MRAM (eMRAM) to our customers for integration into their system-on-a-chip (SoC) solutions. We also enable GLOBALFOUNDRIES to offer eMRAM in the solutions they manufacture for their customers. We believe eMRAM offers significant advantages over existing embedded memory solutions, particularly in endurance, bandwidth, energy and area requirements, leakage and persistence. We also sell a high performance magnetic sensor, which is based on our Magnetic Tunnel Junction (MTJ) technology.

### **Our Competitive Strengths**

We apply our strengths to enhance our position as the leading supplier of MRAM products. We consider our key strengths to include the following:

Technology Leadership in MRAM. We are recognized as the industry leader in MRAM technology. We have invested significant capital resources in research and development, which has enabled us to become the only commercial supplier of MRAM. We have successfully developed and launched successive generations of solutions, each of which is based on the continued advancement of our MTJ technology. We have a substantial intellectual property portfolio that consists of more than 300 patents and more than 150 patent applications.

Strong Customer Base. We have sold our products to over 600 customers worldwide. We collaborate closely with our customers on product development, which helps us to optimize the performance, capability and features of our MRAM products. We believe our multi-year relationships with our industry-leading customers and their familiarity with our proven MRAM technologies enable us to drive more rapid adoption of our solutions into their current and future products.

Flexible Manufacturing and Integrated Value Chain. We leverage both internal and outsourced capabilities to manufacture our MRAM products. We purchase industry-standard CMOS wafers from semiconductor foundries and complete the processing by inserting our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We also utilize leading foundries to support high-volume production of our MRAM products at advanced process nodes. We believe our flexible approach to manufacturing allows us to streamline

research and development, rapidly prototype new products, and bring new products to market quickly and cost-effectively with limited capital expenditure requirements.

Strategic Relationship with GLOBALFOUNDRIES. We have a manufacturing agreement with GLOBALFOUNDRIES related to 300mm production, and we also have a joint development agreement to support research and development of MRAM. We believe this relationship allows us to leverage GLOBALFOUNDRIES' manufacturing expertise and technology portfolio to support our continued development of MRAM technology, and enables GLOBALFOUNDRIES to offer embedded MRAM technology in the products it manufactures for its customers.

*Proven Track Record.* We have produced successive generations of MRAM products and have continued to invest in research and development to develop new products. We have successfully established a manufacturing ecosystem, including internal and outsourced fabrication coupled with leading packaging, assembly and test providers, to maintain high quality and availability of our products. We believe our strategic relationship with GLOBALFOUNDRIES validates our leadership position in current and next-generation MRAM technology.

### **Our Strategy**

Our growth strategy focuses on increasing the adoption of our MRAM technologies, which we believe will enable a change in the architecture of storage and computing systems. We believe MRAM will continue to be adopted because it is replacing alternative solutions in a market that already exists. Our strategy comprises the following elements:

*Grow our Technology Leadership.* Our leadership in designing, developing and manufacturing MRAM solutions provides a strong foundation for delivering new products. We plan to grow our technology leadership position by offering higher density memory solutions, including 1Gb and above, to our customers through the continued advancement of our technology.

Expand our Presence with Existing Customers. We intend to continue to collaborate with our industry-leading customers to accelerate the adoption of our MRAM solutions into their systems. We believe our established and collaborative relationships with industry-leading providers of solid state drives (SSDs), redundant array of independent disks (RAIDs), and memory controllers will allow us to further penetrate enterprise storage applications with our MRAM solutions. We believe that our customers' experience with our first generation of products will help increase adoption of our current and future high density MRAM products and will allow MRAM to become a higher percentage of our customers' memory usage.

Expand our Customer Base. We believe there are significant opportunities to expand our customer base within the industrial, automotive and transportation, and enterprise storage markets. Our success has facilitated a growing knowledge and acceptance of MRAM technology that we intend to leverage to acquire new customers. Additionally, as we release higher density products, we expect to broaden the applications for our MRAM solutions in the enterprise storage market, and address complementary end markets such as server and mobile computing.

*Grow our Embedded MRAM Business.* We expect to leverage our expertise in embedded MRAM technology to grow our licensing business, which generates a royalty-based revenue stream. Currently, we collaborate with GLOBALFOUNDRIES to provide our embedded MRAM technology to its customers.

# **Risk Factors**

Our business is subject to numerous risks, including those described in the section titled "Risk Factors" immediately following this prospectus summary. Some of the more significant risks are:

• Our history of losses and that we may not be able to achieve or sustain profitability in the future.

- Our limited operating history that makes it difficult to evaluate our current business and future prospects.
- If we lose the lease of our 200mm facility in Chandler, Arizona, we will need to move our manufacturing capability to another facility.
- We may be unable to accurately forecast customer demand and match production levels to customer orders.
- We rely on third parties to manufacture, package, assemble and test our products.
- The market for our products is characterized by declines in average selling prices, which could negatively affect our revenue and margins.
- We rely on our relationships with original equipment manufacturers (OEMs) and original design manufacturers (ODMs) to enhance our
  product offerings 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 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 adversely affected.
- We have a material weakness in our internal control over financial reporting.

#### **Concurrent Private Placement**

GigaDevice Semiconductor (HK) Limited has agreed to purchase \$5.0 million of our common stock in a separate private placement concurrent with the completion of this offering at a price per share equal to the initial public offering price. The sale of these shares will not be registered under the Securities Act of 1933, as amended. The closing of this offering is not conditioned upon the closing of this concurrent private placement.

# **Corporate Information**

We were incorporated in Delaware in May 2008. In June 2008, Freescale Semiconductor, Inc. (now a wholly-owned subsidiary of NXP Semiconductors N.V.), spun-out its MRAM business as Everspin. Our offices are located at 1347 N. Alma School Road, Suite 220, Chandler, Arizona 85224. Our telephone number is (480) 347-1111. Our corporate website is at <a href="https://www.Everspin.com">www.Everspin.com</a>. The information contained on or that can be accessed through our website is not incorporated by reference into this prospectus, and you should not consider information on our website to be part of this prospectus or in deciding to purchase our common stock.

### **Implications of Being an Emerging Growth Company**

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012, and therefore we intend to take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting attested to by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these and other exemptions for up to five years or until we are no longer an "emerging growth company," whichever is earlier.

The Offering

Issuer Everspin Technologies, Inc.

Common stock offered by us 5,000,000 shares (or 5,750,000 shares if the underwriters exercise in full their

option to purchase additional shares to cover over-allotments)

Common stock to be sold in the concurrent private placement 625,000 shares

Common stock to be outstanding immediately after this offering and the 12,492,015 shares (or 13,242,015 shares if the underwriters exercise in full

concurrent private placement

12,492,015 shares (or 13,242,015 shares if the underwriters exercise in full their option to purchase additional shares to cover over-allotments)

Underwriters' option to purchase additional shares 750,000 shares

Use of proceeds We intend to use substantially all of the net proceeds from this offering and the

concurrent private placement for working capital and other general corporate

purposes, including an estimated payment of \$8.5 million due to

GLOBALFOUNDRIES in December 2016. We may also use a portion of the net proceeds we receive from this offering and the concurrent private placement for investments in or acquisitions of complementary businesses, products, services, technologies or other assets. See "Use of Proceeds" on page 36 for a more complete description of the intended use of proceeds from this

offering and the concurrent private placement.

Risk factors See "Risk Factors" beginning on page 11 and other information included in this

prospectus for a discussion of factors that you should consider carefully before  $% \left\{ 1\right\} =\left\{ 1\right\} =\left$ 

deciding to invest in our common stock.

Nasdaq Global Market Symbol "MRAM"

Potential Insider Participation Certain of our directors and principal stockholders affiliated with our directors,

have indicated an interest in purchasing up to an aggregate of approximately \$6.2 million of shares of common stock in this offering at the public offering price. See "Certain Relationships and Related Party Transactions." Because these indications of interest are not binding agreements or commitments to purchase, these stockholders may elect not to purchase any shares in this offering, or the underwriters may elect to sell more, fewer or no shares to them

in this offering. The

underwriters will receive the same discounts and commissions from any shares of our common stock purchased by these stockholders as they will from any other shares of our common stock sold to the public in this offering. Any shares purchased by these stockholders will be subject to the lock-up restrictions described in "Shares Eligible for Future Sale."

The number of shares of common stock to be outstanding after this offering and the concurrent private placement is based on 6,867,015 shares of common stock outstanding as of June 30, 2016, assuming conversion of all outstanding preferred stock into an aggregate of 2,486,199 shares of common stock, and the conversion of \$8.5 million principal amount of convertible promissory notes, plus interest assuming a conversion date of October 12, 2016, and initial public offering price of \$8.00 per share into 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) immediately prior to the closing of this offering, and excludes the following:

- 862,383 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of June 30, 2016, with a weighted-average exercise price of \$4.43 per share;
- 27,690 shares of our common stock issuable upon exercise of outstanding warrants as of June 30, 2016, with a weighted-average exercise
  price of \$26.00 per share;
- 463,259 shares of common stock reserved for future grants under our 2008 Equity Incentive Plan as of June 30, 2016, which shares reserved for future issuance and not subject to outstanding stock options ceased to be available for issuance at the time our 2016 Equity Incentive Plan became effective in connection with this offering;
- 500,000 shares of common stock reserved for future issuance under our 2016 Equity Incentive Plan, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution of the underwriting agreement related to this offering; and
- 96,153 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic
  increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution
  of the underwriting agreement related to this offering.

Unless otherwise indicated, all information in this prospectus assumes:

- a 1-for-26 reverse split of our common and preferred stock effected on September 21, 2016;
- the conversion of 2,486,199 shares of our convertible preferred stock outstanding as of June 30, 2016, into an aggregate of 2,486,199 shares of our common stock immediately prior to the closing of this offering;
- the sale and issuance of 625,000 shares of common stock in the concurrent private placement to GigaDevice Semiconductor (HK) Limited at the initial public offering price;
- the conversion of \$8.5 million principal amount of convertible promissory notes plus interest assuming a conversion date of October 12, 2016, into 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) immediately prior to the closing of this offering;

- the conversion of all convertible preferred stock warrants outstanding as of June 30, 2016, into warrants to purchase up to an aggregate 27,690 shares of our common stock immediately prior to the closing of this offering;
- no exercise of outstanding stock options or warrants subsequent to June 30, 2016;
- the filing of our amended and restated certificate of incorporation and the effectiveness of our amended and restated bylaws immediately prior to the closing of this offering; and
- no exercise of the underwriters' option to purchase additional shares to cover over-allotments.

### **Summary Financial Data**

The following tables summarize our historical financial and other financial data. We have derived the summary statements of operations data for the years ended December 31, 2014 and 2015, from our audited financial statements included elsewhere in this prospectus. We derived the summary statements of operations data for the six months ended June 30, 2015 and 2016, and the summary balance sheet data as of June 30, 2016, from our unaudited interim financial statements included elsewhere in this prospectus. The unaudited interim financial statements have been prepared on the same basis as our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our financial position and results of operations. Our historical results are not necessarily indicative of the results that may be expected in the future. The following summary financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

		Year Ended December 31, 2014 2015			Six Months Ended June 3 2015 2016			
		(In thousands, except share and per share amount) (Unaudited)					int)	
Statements of Operations Data:								
Product sales	\$	23,071	\$	25,875	\$	12,437	\$	12,723
Licensing and royalty revenue		1,825		671		217		143
Total revenue		24,896		26,546		12,654		12,866
Cost of sales		11,806		12,568		5,231		5,704
Gross profit		13,090		13,978		7,423		7,162
Operating expenses:								
Research and development(1)		12,664		21,126		9,642		11,231
General and administrative(1)		7,085		6,565		3,574		3,295
Sales and marketing(1)		3,259		3,823		1,454		1,688
Total operating expenses		23,008		31,514		14,670		16,214
Loss from operations		(9,918)		(17,536)		(7,247)		(9,052)
Interest expense		(263)		(653)		(183)		(1,184)
Other income (expense), net		(2)		6		9		280
Net loss	\$	(10,183)	\$	(18,183)	\$	(7,421)	\$	(9,956)
Net loss per common share, basic and diluted(2)	\$	(4.00)	\$	(7.12)	\$	(2.91)	\$	(3.90)
Shares used to compute net loss per common share, basic and diluted(2)	2	,544,578	2,	552,205	2,	552,185	2,	,555,397
Pro forma net loss per share, basic and diluted (unaudited)(2)		_	\$	(3.61)			\$	(1.67)
Shares used to compute pro forma net loss per share, basic and diluted (unaudited)(2)			5,	038,404			5,	,839,451
Other Financial Data:								
Adjusted EBITDA(3)	\$	(7,497)	\$	(14,013)	\$	(5,842)	\$	(6,739)

(1) Includes stock-based compensation as follows:

		Year Ended		hs Ended		
	Dec	ember 31,	June	30,		
	2014	2015	2015	2016		
		(In thousands)				
			(unaudited			
Research and development	\$304	\$ 169	\$ 74	\$ 89		
General and administrative	392	190	85	100		
Sales and marketing	103	57	27	22		
Total stock-based compensation expense	\$ 799	\$ 416	\$ 186	\$ 211		

See Notes 2 and 12 to our financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per common share, pro forma

net loss per share, and the weighted-average number of shares used in the computation of the per share amounts.

We define Adjusted EBITDA as net income or loss adjusted for depreciation and amortization, stock-based compensation expense, compensation expense related to the vesting of common stock held by GLOBALFOUNDRIES resulting from our joint development agreement and interest expense. See "Selected Financial Data" for a reconciliation of Adjusted EBITDA to net loss, the most directly comparable GAAP financial measure, the explanation of why we track Adjusted EBITDA, why Adjusted EBITDA may be a useful measure for investors, and the limitations of this measure as an analytical tool.

The pro forma as adjusted information set forth in the table below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering that will be determined at pricing.

	As of June 30, 2016				
	Actual	Pro Forma(1) (In thousands)		Forma As justed(2)	
Balance Sheet Data:		( ,			
Cash and cash equivalents	\$ 2,642	\$ 6,142	\$	44,867	
Working capital (deficit)	(11,506)	(2,757)		35,968	
Total assets	13,696	17,196		55,921	
Derivative liability	388	_		_	
Convertible promissory notes payable — related party	4,861	_		_	
Long-term debt, current and non-current	9,046	9,046		9,046	
Redeemable convertible preferred stock warrant liability	416	_		_	
Redeemable convertible preferred stock	64,642	_		_	
Total stockholders' (deficit) equity	(78,704)	(4,897)		33,828	

Reflects (i) the conversion of the outstanding shares of our redeemable convertible preferred stock as of June 30, 2016, into 2,486,199 shares of our common stock, (ii) the conversion of warrants to purchase 27,690 shares of redeemable convertible preferred stock into warrants to purchase 27,690 shares of common stock; (ii) the conversion of this offering and the related reclassification of our redeemable convertible preferred stock warrant liability to total stockholders' equity (deficit), (iii) the conversion of \$8.5 million principal amount of convertible promissory notes, plus interest assuming a conversion date of October 12, 2016, into 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) immediately prior to the closing of this offering.

Reflects the pro forma adjustments described in footnote (1) and the sale and issuance of 5,000,000 shares of our common stock by us in this offering and 625,000 shares of common stock in the concurrent private placement to GigaDevice Semiconductor (HK) Limited at the initial public offering price of \$8.00 per share after deducting underwriting discounts and commissions, the placement agent fee and estimated offering expenses payable by us.

#### RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors together with all of the other information contained in this prospectus, including our financial statements and the related notes, before deciding whether to invest in shares of our common stock. Each of these risks could harm our business, operating results, financial condition or growth prospects. As a result, the trading price of our common stock could decline and you may lose all or part of your investment.

### **Risk Factors Related to Our Business and Our Industry**

### 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 \$10.2 million, \$18.2 million, and \$10.0 million for the years ended December 31, 2014 and 2015, and the six months ended June 30, 2016, respectively. As of June 30, 2016, we had an accumulated deficit of \$89.7 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. Our ability to generate sufficient revenue and to transition to profitability and generate consistent positive cash flows is uncertain. In addition, as a public company, we will incur significant additional legal, accounting and other expenses that we did not incur as a private company. We do not know whether our revenue will grow rapidly enough to absorb these costs, and our limited operating history makes it difficult to assess the extent of these 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.

### Our limited operating history 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. (now a wholly-owned subsidiary of NXP Semiconductors N.V.), spun-out its MRAM business as Everspin. We have been shipping magnetoresistive random access memory (MRAM) products since our incorporation in 2008, and we have experienced a high rate of growth for our products. However, we may not be able to sustain the growth rate for sales of these products and our revenue could decline. We have also been developing our next-generation of Spin-Torque MRAM (ST-MRAM) products. Adoption of these products is important to the future growth of our business, but revenue associated with these products has not been material to date.

Our limited operating history and limited experience selling 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 and 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. 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.

We manufacture some of our MRAM products at our 200mm facility we lease in Chandler, Arizona, and if we are unable to renew this lease we will need to find another facility and move our manufacturing capability, which would be time consuming, costly, and hamper our ability to provide our MRAM products to customers in the time frames they require.

Under a single agreement we lease two facilities for our 200mm manufacturing and research and development functions from NXP. NXP has exercised its option to terminate the lease effective April 14, 2017. We are currently in negotiations with NXP to renew the manufacturing facility portion of the lease, and NXP has indicated its desire to continue to lease to us this facility. However, if we are not able to extend the manufacturing portion of the lease before April 2017, or if we lose this lease earlier than expected for any reason or are not able to find alternative facilities in a timely manner, our ability to produce and deliver a large portion of our MRAM products will be severely harmed. Even if we are able to find alternative facilities, the time and cost of transferring our manufacturing to a new facility could substantially harm our business. We are also seeking office and laboratory space at a different location, and if we are unable to find this space on reasonable terms, our business and operations may be harmed.

We rely on third parties to 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 manufacturing, assembly, packaging and testing presents a number of risks, including but not limited to:

· 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;
- 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), Advanced Semiconductor Engineering (ASE), 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 ST-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; and
- changes in tax, legal, or regulatory requirements may necessitate changes in our agreements.

Further, GLOBALFOUNDRIES may terminate the joint development agreement with us if we materially breach a term of the agreement, such as, but not limited to, by our failing to pay any undisputed sum which has been outstanding for 45 or more days from the date of invoice, and fail to remedy the breach within 60 days after receiving notice from GLOBALFOUNDRIES, or if we fail to pay project costs by December 16, 2016, which were approximately \$5.6 million as of June 30, 2016, and are estimated to be approximately \$8.5 million in December 2016. If GLOBALFOUNDRIES 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 expect the average selling price of our products to 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 serious financial difficulties or cease operations, our business will be adversely affected. In addition, the adverse impact of an unfavorable economy may adversely impact customer spending, which may adversely impact demand for our products.

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 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 next-generation products, which we expect to be one of the drivers of our revenue growth in the future. However, we may not succeed in developing and marketing these 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 new generations of our 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 ST-MRAM products to date. While we expect revenue from our ST-MRAM products to increase, if we are unable to 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. 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.

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. 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 OEMs and 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 41% of our total revenue for the year ended December 31, 2015, and two customers each accounted for more than 10% of our total revenue during the period. Our five largest end customers together accounted for 34% of our total revenue for the six months ended June 30, 2016, but none 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 prospectus:

- 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 and 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;
- 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 others 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 you 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. The main competition for sensor products includes AMR, Crocus, GMR and Hall Effect. These technologies directly compete with our products and are supplied by Alps, Asahi Kasei Microdevices, Fairchild, Invensys (now Schneider), Kionix and Micronas. In addition, as the MRAM market opportunity grows, we expect new entrants such as Avalanche will 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 more 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.

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. For example, cost of sales increased in the third and fourth quarters of 2015 due to product yield issues in our fabrication line. 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 you 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 you 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 reduce costs while integrating greater levels of 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 reduce our costs and increase performance. We are dependent on our relationships with our third-party foundries to transition to smaller geometry processes successfully. We cannot assure you 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 you 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.

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 generation MRAM products will be applicable to markets in which we are not currently operating. Selling into these markets, including higher density memory markets and the module business could put us into direct competition with our current or potential customers or other competitors with substantially more resources and experience than us. 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.

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 employees and although we recently issued refresh equity awards to our personnel in connection with this offering, there can be no assurance that these awards will be effective to retain our key employees. 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 new ERP system that we have recently implemented. 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. Even if we were allowed 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 and intend to expand our international operations, which exposes us to significant risks.

We have limited operations in Europe and Asia. We intend to expand our operations internationally. 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.

### We may require additional capital to fund our business, which may not be available to us on favorable terms or at all.

We believe that our existing cash and cash equivalents as of June 30, 2016, together with the additional borrowings available under our credit facility, cash proceeds from the convertible promissory notes issued in August 2016 and the net proceeds from this offering and the concurrent private placement, will be sufficient to meet our anticipated cash requirements for the next 12 months. Our ability to access the revolving loan under our credit facility depends upon levels of our accounts receivable and, therefore, the full amount may not be available to us at any specific time. Without the net proceeds from this offering and the concurrent private placement we will not have sufficient funds to meet our planned operating requirements throughout 2016 and beyond. 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. We may be required to seek additional equity or debt financing, and we cannot assure you that any such additional financing will be available to us on acceptable terms or at all. If we are unable to raise additional capital or generate sufficient cash from operations to adequately fund our operations, we will need to curtail planned activities to reduce costs. Doing so will likely harm our ability to execute on our business plan.

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. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

The audit report from our independent registered public accounting firm for the year ended December 31, 2015, states that our recurring losses raise substantial doubt about our ability to continue as a going concern. This report does not take into account any proceeds we will receive in this proposed offering and the concurrent private placement or our ability to draw down amounts under our line of credit. If we are unable to obtain adequate funding from this proposed offering and the concurrent private placement or in the future, or if we are unable to grow our revenue substantially to achieve and sustain profitability, we may not be able to continue as a going concern.

# 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. 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. 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 a default under the credit facility, which could cause all of the outstanding indebtedness thereunder to either become immediately due and payable or increase by five percent of the interest rate charged during the period of the unremedied breach.

# 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. In addition, although we do not expect to undergo an ownership change in connection with this offering and the concurrent private placement, 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.

# We will incur significantly increased costs and devote substantial management time as a result of operating as a public company.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. For example, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and will be required to comply with the applicable requirements of the Sarbanes-Oxley Act, and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, as well as rules and regulations subsequently implemented by the SEC and the NASDAQ Stock Market, including the establishment and maintenance of effective disclosure and internal controls and the establishment corporate governance practices. We expect that compliance with these requirements will increase our legal and financial compliance costs and will make some activities more time consuming and costly.

If we fail to hire additional 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 intend to hire additional accounting and finance staff with technical accounting, SEC reporting and Sarbanes-Oxley Act compliance expertise. Any inability to recruit and 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 increased demands that will result from 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.

If we fail to strengthen our financial reporting systems, infrastructure and internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately and prevent fraud. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404.

# 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.

If we fail to remediate a material weakness in our internal control over financial reporting, or experience any additional 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.

As a result of becoming a public company, we will be 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 beginning with our Annual Report on Form 10-K for the year ended December 31, 2017. This assessment will need to include 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.

In connection with the audit of our financial statements as of and for the years ended December 31, 2014, and 2015, we identified a material weakness in our internal control over financial reporting, as defined in the standards established by the Public Company Accounting Oversight Board of the United States. Our management has determined that we had a material weakness in our internal control over financial reporting as of December 31, 2014 and 2015, relating to the design and operation of our financial reporting processes. We have concluded that this material weakness was due to the fact that we do not yet have the appropriate resources with the appropriate level of experience and technical expertise to oversee our closing and financial reporting processes.

We are enhancing our internal controls, processes and related documentation necessary to remediate our material weakness and to perform the evaluation needed to comply with Section 404. We may not be able to complete our remediation, evaluation and testing in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, such as the one we

identified as described above, we will be unable to conclude that our internal controls are effective. The effectiveness of our controls and procedures may be limited by a variety of factors, including:

- faulty human judgment and simple errors, omissions or mistakes;
- fraudulent action of an individual or collusion of two or more people;
- inappropriate management override of procedures; and
- the possibility that any enhancements to controls and procedures may still not be adequate to assure timely and accurate financial control.

When we cease to be an "emerging growth company" under the federal securities laws, our auditors will be required to express an opinion on the effectiveness of our internal controls. If we are unable to confirm that our internal control over financial reporting is effective, or if our auditors are unable to express an opinion on the effectiveness of our internal controls, we could lose 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 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. 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 will require companies to perform diligence and disclose and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. The implementation of 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 will incur additional costs to comply 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 may not be 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 and This Offering

# There has been no prior public market for our common stock and an active trading market may not develop.

Prior to this offering, there has been no public market for our common stock. An active trading market may not develop following completion of this offering or, if developed, may not be sustained. The lack of an active

market may impair the value of your shares and your ability to sell your shares at the time you 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 and you may not be able to sell the shares you purchase in this offering at or above the offering price.

The initial public offering price for the shares of our common stock sold in this offering and the concurrent private placement is determined by negotiation between the representatives of the underwriters and us. This price may not reflect the market price of our common stock following this offering. In addition, 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.

In recent years, the 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 shortly following this offering. If the market price of shares of our common stock after this offering does not ever exceed the initial public offering price, you may not realize any return on your investment in us and may lose some or all of your investment.

In addition, in the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price. Securities litigation brought against us following volatility in our stock price, 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.

If a trading market for our common stock develops, the trading market will be influenced to some extent by the research and reports that industry or financial analysts publish about us and our business. We do not control these analysts. As a newly public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with our company or industry, which could affect their ability to accurately forecast our results and could make it more likely that we fail to meet their estimates. In the event we obtain securities or industry analyst coverage, 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, the fiscal year-end following the fifth anniversary of the completion of this initial public offering, 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 \$1.0 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.

# If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the pro forma as adjusted net tangible book value per share. As a result, investors purchasing common stock in this offering will incur immediate dilution of \$5.42 per share, based on our pro forma as adjusted net tangible book value per share as of June 30, 2016. For more information on the dilution you may suffer as a result of investing in this offering, see the section titled "Dilution."

This dilution is due to the substantially lower price paid by our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering and the exercise of stock options granted to our employees. The exercise of any of these options would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation.

A significant portion of our total outstanding shares are restricted from immediate resale but may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell their shares, could result in a decrease in the market price of our common stock. Immediately after this offering and the concurrent private placement, we will have outstanding 12,492,015 shares of common stock based on the number of shares outstanding as of June 30, 2016, including the shares of common stock issuable upon conversion of outstanding preferred stock and the conversion of \$8.5 million principal amount of convertible promissory notes, plus interest assuming a conversion date of October 12, 2016, into 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) immediately prior to the closing of this

offering. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Of the remaining shares, 7,492,015 shares are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold after the offering and the concurrent private placement as described in the section of this prospectus titled "Shares Eligible for Future Sale." Moreover, immediately after this offering, holders of an aggregate of up to 6,405,582 shares of our common stock, including shares of our common stock issuable upon the exercise or, in certain cases, net exercise of outstanding warrants, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders as described in the section of this prospectus titled "Description of Capital Stock—Registration Rights." We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

# 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.

Based upon shares outstanding as of September 1, 2016, after this offering and the concurrent private placement, our officers, directors and principal stockholders each holding more than 5% of our common stock, collectively, will control approximately 28.7% 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.

# We have broad discretion in the use of proceeds from this offering and the concurrent private placement for working capital and general corporate purposes.

The net proceeds of this offering and the concurrent private placement will be allocated to sales, marketing, research and development activities, working capital and general corporate purposes, including an estimated \$8.5 million to make a payment due to GLOBALFOUNDRIES in December 2016. We may also use a portion of the net proceeds of this offering and the concurrent private placement, other than the payment to GLOBALFOUNDRIES, to acquire complementary products, technologies or businesses. Within those categories, we have not determined the specific allocation of the net proceeds of this offering and the concurrent private placement. Our management will have broad discretion over the use and investment of the net proceeds of this offering and the concurrent private placement within those categories. Accordingly, investors in this offering have only limited information concerning management's specific intentions and will need to rely upon the judgment of our management with respect to the use of proceeds.

# Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the closing of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to provide reasonable assurance that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the

individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

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 that will become effective upon the closing of this offering 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, removal of directors, 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.

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These forward-looking statements include, but are not limited to, statements about:

- estimates of our future revenue, expenses, capital requirements and our needs for additional financing;
- our ability to obtain additional financing in this or future offerings;
- the implementation of our business model and strategic plans for our products, technologies and businesses;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products to new customers;
- · our ability to establish and maintain intellectual property protection for our products or avoid claims of infringement;
- our ability to hire and retain key personnel;
- · our financial performance;
- our estimates of the MRAM market opportunity;
- · the volatility of our share price; and
- our expectations regarding use of proceeds from this offering and the concurrent private placement.

Forward-looking statements are based on management's current expectations, estimates, forecasts, and projections about our business and the industry in which we operate, and management's beliefs and assumptions are not guarantees of future performance or development and involve known and unknown risks, uncertainties, and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this prospectus. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus.

## MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry and the market in which we operate, including our general expectations and market opportunity and market size, from our own internal estimates and research, and from industry publications and research, including the International Data Corporation (IDC) report, Worldwide Storage in Big Data Forecast, October 2015. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to these estimates. We have not independently verified the accuracy or completeness of the data contained in these industry publications and reports. The industry in which we operate is subject to a high degree of uncertainty and risk due to variety of factors, including those described in the "Risk Factors" section and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

#### USE OF PROCEEDS

We estimate that the net proceeds from this initial public offering of 5,000,000 shares of common stock will be approximately \$34.1 million, or \$39.7 million if the underwriters exercise their option to purchase additional shares in full, at the initial public offering price of \$8.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses. Our net proceeds from the concurrent private placement will be \$4.7 million after deducting the placement agent fee.

The principal purposes of this offering are to obtain additional capital, to create a public market for our common stock and to facilitate our future access to the public equity markets. We expect to use the net proceeds that we receive from this offering and the concurrent private placement for working capital and other general corporate purposes, including an estimated payment of \$8.5 million due to GLOBALFOUNDRIES in December 2016, research and development activities, sales and marketing activities and capital expenditures, to enhance existing and develop new products, expand our manufacturing capabilities and to fund our growth. The amount due to GLOBALFOUNDRIES by December 16, 2016, is for agreed upon project costs which bear interest at a rate of 14% per annum pursuant to our joint development agreement with GLOBALFOUNDRIES, as amended. We will make this payment by or before December 16, 2016. We may also use a portion of the net proceeds that we receive from this offering and the concurrent private placement for investments in or acquisitions of complementary businesses, products, services, technologies or other assets. We have not entered into any agreements or commitments with respect to any investments or acquisitions at this time.

We currently have no specific plans for the use of the net proceeds that we receive from this offering other than with respect to the payment to GLOBALFOUNDRIES set forth above. Accordingly, our management will have broad discretion over the use of the net proceeds from this offering and the concurrent private placement. Pending the use of the proceeds from this offering and the concurrent private placement, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities, certificates of deposit or government securities.

#### DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends on our capital stock in the foreseeable future. In addition, our term loan and revolving credit facility prohibits our ability to pay dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our board of directors subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions and capital requirements. Our future ability to pay cash dividends on our capital stock may also be limited by the terms of any future debt or preferred securities or future credit facility.

#### **CAPITALIZATION**

The following table sets forth our cash and cash equivalents and capitalization as of June 30, 2016, on:

- An actual basis;
- A pro forma basis, giving effect to (i) the conversion of the outstanding shares of our redeemable convertible preferred stock as of June 30, 2016, into 2,486,199 shares of our common stock, (ii) the conversion of warrants to purchase 27,690 shares of our redeemable convertible preferred stock into warrants to purchase 27,690 shares of common stock immediately prior to closing of this offering and the related reclassification of our convertible preferred stock warrant liability to additional paid-in capital, (iii) the conversion of \$8.5 million principal amount of convertible promissory notes plus interest assuming a conversion date of October 12, 2016, into 1,361,009 shares of common stock immediately prior to the closing of this offering (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016), and (iv) the effectiveness of our amended and restated certificate of incorporation; and
- A pro forma as adjusted basis, giving effect to (i) the pro forma adjustments set forth above and (ii) the sale and issuance of 5,000,000 shares of our common stock by us in this offering and the sale and issuance of 625,000 shares of common stock in the concurrent private placement, based upon the initial public offering price of \$8.00 per share, after deducting underwriting discounts and commissions, the placement agent fee and estimated offering expenses payable by us.

The pro forma as adjusted information set forth in the table below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

You should read this table together with the section of this prospectus titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	June 30, 2016				
	Actual (In the	Pro Forma ousands, except share and per sh (unaudited)	Pro Forma as Adjusted are amounts)		
Cash and cash equivalents	\$ 2,642	\$ 6,142	\$ 44,867		
Derivative liability	\$ 388	\$ —	\$ —		
Convertible promissory notes payable-related party	4,861	_	_		
Long-term debt, current and non-current	9,046	9,046	9,046		
Redeemable convertible preferred stock warrant liability	416	_	_		
Redeemable convertible preferred stock, \$0.0001 par value per share—68,080,000 shares authorized; 2,486,199 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	64,642	_	_		
Stockholders' equity (deficit):					
Preferred stock, \$0.0001 par value per share—no shares authorized, issued and outstanding, actual and pro forma; 5,000,000 shares authorized, no shares issued and outstanding, pro forma as adjusted	_	_	_		
Common stock, \$0.0001 par value per share – 175,000,000 shares authorized; 3,019,807 shares issued and outstanding, actual; 100,000,000 shares authorized, 6,867,015 shares issued and outstanding, pro forma; and 12,492,015 shares issued					
and outstanding, pro forma as adjusted	_	1	1		
Additional paid-in capital	10,983	84,751	123,476		
Accumulated deficit	(89,687)	(89,649)	(89,649)		
Total stockholders' equity (deficit)	(78,704)	(4,897)	33,828		
Total capitalization	\$ 649	\$ 4,149	\$ 42,874		

The number of shares of our common stock issued and outstanding in the table above does not include the following shares:

- 862,383 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of June 30, 2016, with a weighted-average exercise price of \$4.43 per share;
- 27,690 shares of our common stock issuable upon exercise of outstanding warrants as of June 30, 2016, with a weighted-average exercise price of \$26.00 per share;
- 463,259 shares of common stock reserved for future grants under our 2008 Equity Incentive Plan as of June 30, 2016, which shares reserved for future issuance and not subject to an outstanding stock option ceased to be available for issuance at the time our 2016 Equity Incentive Plan became effective in connection with this offering;
- 500,000 shares of common stock reserved for future issuance under our 2016 Equity Incentive Plan, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution of the underwriting agreement related to this offering; and
- 96,153 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution of the underwriting agreement related to this offering.

#### DILUTION

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

As of June 30, 2016, our historical net tangible book value (deficit) was approximately \$(80.3) million, or \$(26.58) per share of common stock. Historical net tangible book value (deficit) per share represents our total tangible assets less total liabilities, less redeemable convertible preferred stock, divided by the number of our outstanding shares of common stock.

As of June 30, 2016, our pro forma net tangible book value was approximately \$(6.5) million, or \$(0.94) per share of common stock. Our pro forma net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities and divided by the total number of shares of our common stock outstanding as of June 30, 2016, assuming the conversion of all outstanding shares of our redeemable convertible preferred stock into 2,486,199 shares of our redeemable convertible preferred stock into warrants to purchase 27,690 shares of common stock immediately prior to closing of this offering, the related reclassification of our redeemable convertible preferred stock warrant liability to stockholders' equity (deficit), and the conversion of \$8.5 million aggregate principal amount of convertible promissory notes, plus interest assuming a conversion date of October 12, 2016, into 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) immediately prior to the closing of this offering.

After giving further effect to the sale of 5,000,000 shares of our common stock in this offering and 625,000 shares of common stock in the concurrent private placement, at the initial public offering price of \$8.00 per share, after deducting underwriting discounts and commissions, the placement agent fee and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2016, would have been approximately \$32.3 million, or \$2.58 per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$3.52 per share to our existing stockholders and an immediate dilution of \$5.42 per share to investors purchasing shares in this offering.

The following table illustrates this dilution:

Initial public offering price per share		\$8.00
Historical net tangible book deficit per share as of June 30, 2016	\$(26.58)	
Pro forma increase in net tangible book value per share	25.64	
Pro forma net tangible book value per share as of June 30, 2016	(0.94)	
Increase in pro forma net tangible book value per share attributable to investors purchasing shares in this offering and the		
concurrent private placement	3.52	
Pro forma net tangible book value, as adjusted to give effect to this offering and the concurrent private placement		2.58 \$5.42
Dilution in pro forma net tangible book value per share to investors purchasing shares in this offering		\$5.42

If the underwriters exercise their option to purchase additional shares in full, the pro forma as adjusted net tangible book value per share of our common stock would be \$2.86 per share, and the dilution in pro forma net tangible book value per share to investors purchasing shares in this offering would be \$5.14 per share.

The following table summarizes, on a pro forma as adjusted basis described above as of June 30, 2016, the differences between existing stockholders and new investors (including the private placement shares) with

respect to the number of shares of common stock purchased from us, the total consideration paid to us, and the average price per share paid, before deducting estimated underwriting discounts and commissions, the placement agent fee and estimated offering expenses:

	Shares Purc	hased	Total Consider	ration	Average Price	
	Number	Percent	Amount	Percent	Per	Share
Existing stockholders	6,867,015	55.0%	\$ 64,758,000	59.0%	\$	9.43
Investors purchasing shares in this offering and the concurrent private						
placement	5,625,000	45.0	45,000,000	41.0	\$	8.00
Total	12,492,015	100.0%	\$109,758,000	100.0%		

Except as otherwise indicated, the above discussion and tables assume no exercise of the underwriters' option to purchase additional shares. If the underwriters exercise their option to purchase additional shares in full, our existing stockholders would own 51.9% and our new investors would own 48.1% of the total number of shares of our common stock outstanding upon the completion of this offering, including the concurrent private placement shares.

The number of shares of our common stock to be outstanding after the completion of this offering excludes:

- 862,383 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock outstanding as of June 30, 2016, with a weighted-average exercise price of \$4.43 per share;
- 27,690 shares of our common stock issuable upon exercise of outstanding warrants as of June 30, 2016, with a weighted-average exercise price of \$26.00 per share;
- 463,259 shares of common stock reserved for future grants under our 2008 Equity Incentive Plan as of June 30, 2016, which shares reserved for future issuance and not subject to an outstanding stock option ceased to be available for issuance at the time our 2016 Equity Incentive Plan became effective in connection with this offering;
- 500,000 shares of common stock reserved for future issuance under our 2016 Equity Incentive Plan, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution of the underwriting agreement related to this offering; and
- 96,153 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan, which became effective upon the execution of the underwriting agreement related to this offering.

To the extent that any outstanding options to purchase shares of our common stock or warrants to purchase shares of our common stock or convertible preferred stock are exercised or new awards are granted under our equity compensation plans, there will be further dilution to investors participating in this offering.

## SELECTED FINANCIAL DATA

The following selected statement of operations data for the years ended December 31, 2014 and 2015, and the balance sheet data as of December 31, 2014 and 2015, have been derived from our audited financial statements included elsewhere in this prospectus. The selected statements of operations data for the six months ended June 30, 2015 and 2016, and the selected balance sheet data as of June 30, 2016, have been derived from our unaudited interim financial statements included elsewhere in this prospectus. The unaudited interim financial statements have been prepared on the same basis as our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our financial position and results of operations. Our historical results are not necessarily indicative of the results that may be expected in the future. You should read the following selected financial and other data below in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

				Six Months	Months Ended June			
		2014	(In thousa	nds, except sh	are and p	er share amo	unts) audited)	2016
Statements of Operations Data:								
Product sales	\$	23,071	\$	25,875	\$	12,437	\$	12,723
Licensing and royalty revenue		1,825		671		217	_	143
Total revenue		24,896		26,546		12,654		12,866
Cost of sales		11,806		12,568		5,231	_	5,704
Gross profit		13,090		13,978		7,423		7,162
Operating expenses:							_	
Research and development(1)		12,664		21,126		9,642		11,231
General and administrative(1)		7,085		6,565		3,574		3,295
Sales and marketing(1)		3,259		3,823		1,454		1,688
Total operating expenses		23,008		31,514		14,670		16,214
Loss from operations		(9,918)		(17,536)		(7,247)		(9,052)
Interest expense		(263)		(653)		(183)		(1,184)
Other income (expense), net		(2)		6		9		280
Net loss	\$	(10,183)	\$	(18,183)	\$	(7,421)	\$	(9,956)
Net loss per common share, basic and diluted(2)	\$	(4.00)	\$	(7.12)	\$	(2.91)	\$	(3.90)
Shares used to compute net loss per common share, basic and diluted(2)	2,	544,578	2	,552,205	2	,552,185		2,555,397
Pro forma net loss per share, basic and diluted (unaudited)(2)	<u>-</u>		\$	(3.61)			\$	(1.67)
Shares used to compute pro forma net loss per share, basic and diluted (unaudited)(2)			5	,038,404				5,839,451
Other Financial Data:			_				_	
Adjusted EBITDA(3)	\$	(7,497)	\$	(14,013)	\$	(5,842)	\$	(6,739)

Includes stock-based compensation as follows:

		Year Ended December 31,			Six Months Ended June 30,			
	2	2014	2	015	2	2015	2	016
				(In th	ousands)			
						(una	udited)	
Research and development	\$	304	\$	169	\$	74	\$	89
General and administrative		392		190		85		100
Sales and marketing		103		57		27		22
Total stock-based compensation expense	\$	799	\$	416	\$	186	\$	211

- See Notes 2 and 12 to our financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per common share, pro forma net loss per share, and the weighted-average number of shares used in the computation of the per share amounts. We define Adjusted EBITDA as net income or loss adjusted for depreciation and amortization, stock-based compensation expense, compensation expense related to the vesting of common stock held by GLOBALFOUNDRIES resulting from our joint development agreement and interest expense. We use Adjusted EBITDA in conjunction with traditional GAAP operating performance measures 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.

Adjusted EBITDA has limitations as a financial measure and should not be considered a substitute for other measures of financial performance reported in accordance with GAAP. These limitations include the following:

- Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us or the impact of deferred income tax;
- Adjusted EBITDA does not reflect cash expenditure requirements for replacements or for new capital expenditures;
- Adjusted EBITDA excludes some recurring costs, such as the dilutive impact of non-cash stock-based compensation and depreciation and amortization; and
- other companies, including companies in our industry, may calculate Adjusted EBITDA differently from how we calculate this measure or not at all, which reduces its usefulness as a comparative measure.

Because of these limitations, you should consider Adjusted EBITDA alongside other financial performance measures, including net loss and our financial results presented in accordance with GAAP. The following table presents a reconciliation of net loss, the most directly comparable GAAP measure, to Adjusted EBITDA for each of the periods indicated:

	Year Ended	December 31,	Six Mont Jun	hs Ended e 30,
	2014	2015	2015	2016
	·	(In thousa	ınds)	
Adjusted EBITDA Reconciliation				
Net loss	\$ (10,183)	\$ (18,183)	\$ (7,421)	\$ (9,956)
Depreciation and amortization	1,517	1,340	677	380
Stock-based compensation expense	799	416	186	211
Compensation expense related to vesting of GLOBALFOUNDRIES common stock	107	1,761	533	1,442
Interest expense	263	653	183	1,184
Adjusted EBITDA	\$ (7,497)	\$ (14,013)	\$ (5,842)	\$ (6,739)

	As of Dec	As of December 31, 2014 2015		
		(In thousands)	2016 (unaudited)	
Balance Sheet Data:				
Cash and cash equivalents	\$ 9,624	\$ 2,307	\$ 2,642	
Working capital (deficit)	8,940	(198)	(11,506)	
Total assets	17,775	10,961	13,696	
Derivative liability	_	_	388	
Convertible promissory notes payable — related party	_	_	4,861	
Total long-term debt, current and non-current	2,874	7,914	9,046	
Redeemable convertible preferred stock warrant liability	145	437	416	
Redeemable convertible preferred stock	64,642	64,642	64,642	
Total stockholders' deficit	(54,428)	(70,430)	(78,704)	

# 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 "Selected Financial Data" and the financial statements and related notes included elsewhere in this prospectus. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed in "Risk Factors" and in other parts of this prospectus.

#### Overview

We are the leading provider of MRAM solutions. Our MRAM solutions offer the persistence of non-volatile memory and 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. 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 are the only provider of commercially available MRAM solutions, and over the past eight years we have shipped over 60 million MRAM units.

Our revenue is derived from the sale of our MRAM-based products in discrete unit form, as embedded technology, and through licensing and royalties of our MRAM technology. Revenue grew from \$24.9 million in 2014 to \$26.5 million in 2015. Revenue was \$12.7 million and \$12.9 million for the six months ended June 30, 2015 and 2016, respectively. We work directly with our 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 71%, 66%, and 52% of our revenue from products sold through distributors for the years ended December 31, 2014 and 2015, and the six months ended June 30, 2016, respectively.

We maintain a direct selling relationship, for strategic purposes, with several key customer accounts. Our direct sales personnel and representatives are organized into three primary regions: North America; Europe, Middle East and Africa (EMEA); and Asia-Pacific (APAC). In North America, our revenue was \$7.0 million and \$6.1 million for the years ended December 31, 2014 and 2015, respectively, and \$2.7 million and \$3.0 million for the six months ended June 30, 2015 and 2016, respectively. Our revenue in North America decreased for the year ended December 31, 2015, compared to the same period in 2014 primarily due to our licensing revenue decreasing year over year due to a non-recurring engineering payment of \$1.0 million in 2014 from one of our customers related to a technology transfer agreement. In EMEA, our revenue was \$3.5 million and \$4.3 million for the years ended December 31, 2014 and 2015, respectively, and \$2.3 million and \$2.7 million for the six months ended June 30, 2015 and 2016, respectively. In APAC, our revenue was \$14.5 million and \$16.1 million for the years ended December 31, 2014 and 2015, respectively, and \$7.6 million and \$7.2 million for the six months ended June 30, 2015 and 2016, respectively. We recognize revenue by geography based on the region in which our products are sold, and not to where the end products are shipped.

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 intend to utilize leading semiconductor foundries, including GLOBALFOUNDRIES, to support high-volume production of our high density MRAM products at advanced process nodes.

During the years ended December 31, 2014 and 2015, and the six months ended June 30, 2016, we continued to invest in research and development to support the development and production of our second generation of MRAM technology. We believe our continued investment will allow us to continue to develop and deploy products based on our Spin-Torque MRAM (ST-MRAM) technology. For the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, our research and development expenses were \$12.7 million, \$21.1 million, \$9.6 million and \$11.2 million, respectively. We expect that our research and development expenses will increase in the future as we continue to develop our MRAM technology internally and through our joint development agreement with GLOBALFOUNDRIES.

Our principal executive offices are located in Chandler, Arizona. The facility accommodates our principal sales, marketing and research and development. Also in Chandler, we lease office space, clean room space, and laboratory space for our 200mm production and research and development functions. Our primary product design personnel are located in our office in Austin, Texas.

For the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, we recorded revenue of \$24.9 million, \$26.5 million, \$12.7 million and \$12.9 million, gross margin of 52.6%, 52.7%, 58.7% and 55.7%, and a net loss of \$10.2 million, \$18.2 million, \$7.4 million and \$10.0 million, respectively.

#### **Key Metrics**

We monitor a variety of key financial metrics to help us evaluate growth 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.

Our management and board of directors uses 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. Adjusted EBITDA was \$(7.5) million in 2014 and \$(14.0) million in 2015. The change was primarily a result of increased payroll and contract labor and expenses resulting from our joint development agreement with GLOBALFOUNDRIES. Payroll and contract labor increased \$2.9 million, from \$10.7 million in 2014 to \$13.6 million in 2015, accounting for approximately 45% of the decrease of Adjusted EBITDA from 2014 to 2015. Adjusted EBITDA was \$(5.8) million and \$(6.7) million in the six months ended June 30, 2015 and 2016, respectively. Expenses from our joint development agreement with GLOBALFOUNDRIES increased from \$0 in 2014 to \$3.6 million in 2015, accounting for approximately 55% of the decrease in Adjusted EBITDA. In the six months ended June 30, 2016, expenses from our joint development agreement increased from \$1.8 million to \$2.0 million in the same period in 2015 and payroll and contracted labor increased \$0.4 million from \$6.3 million in the six months ended June 30, 2015 to \$6.7 million in the same period in 2016. The increases in payroll and contract labor is consistent with our strategy to expand our operations and develop our MRAM technologies and products to support future growth.

See "Selected Financial Data" for more information and reconciliation of Adjusted EBITDA to net loss, the most directly comparable financial measure calculated in accordance with GAAP.

#### **Factors Affecting Our Results of Operations**

Design wins. In order 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 selected one of our products to be incorporated into a product or

system under development. Because the life cycles for our customers' products can last for several 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.

Customer acceptance of our technology and customer product success. In order for our customers to use our products, they may have to redesign certain components of their existing designs. We have established relationships with several controller companies, including Broadcom (formerly LSI and Avago) and Microsemi (formerly PMC-Sierra), and IP core companies, including Cadence, Northwest Logic and Altera (now part of Intel), to accelerate the implementation 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, including through distributors, from Broadcom, NXP, STMicroelectronics, and Dell, collectively, accounted for 37% and 41% of our total revenue in 2014 and 2015, respectively. Two of these customers accounted for more than 10% of our revenue in 2015. Revenue, including through distributors, from Dell, Broadcom, ST Microelectronics, NXP, and Nikkiso, collectively, accounted for 34% of our total revenue in the six months ended June 30, 2016. None of these customers individually accounted for in excess of 10% of our total revenue in the six months ended June 30, 2016. It would be difficult to replace lost revenue resulting from the loss, reduction, cancellation or delay in purchase orders by any one of these 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 investment 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.

#### **Components of Results of Operations**

#### Revenue

We derive our revenue from the sale of our MRAM-based products in discrete unit form, as embedded technology, and through licensing of and royalties on our MRAM technology. For sales through distributors, we defer recognition of revenue and the related expenses of our discrete MRAM products until the distributor has sold the products to its end customer. We recognize license fees when the applicable development milestones have been met in accordance with the terms of the licensing agreement. Our licensing revenue is largely dependent on a small number of transactions during a given year. We recognize revenue for royalties resulting from our licensing agreements in accordance with the terms of the licensing agreement.

## 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 the most significant component of each of our operating expense categories. In addition, we expect to increase research and development expenditures, hire additional personnel necessary to support our growth, and incur additional expenses associated with being a public company.

#### 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, test wafers required to 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 expect our research and development expenses to increase as we hire additional personnel to develop new products and product enhancements. We recognize research and development expenses as they are incurred.

## 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 to incur additional general and administrative expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, or SEC, and those of any national securities exchange on which our securities are traded, additional insurance expenses, investor relations activities and other administrative and professional services.

## 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 to increase as we hire additional sales personnel and representatives and increase our 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 warrants and debt issuance costs capitalized on our balance sheets as a reduction of the debt balance. The cash component of interest expense is attributable to our borrowings under our loan agreements.

## Other Income (Expense), Net

Other income (expense), net consists primarily of the change in fair value of our convertible preferred stock warrant liability. Our convertible preferred stock warrants are exercisable into shares that are contingently redeemable and as such, are classified as a liability on our balance sheets at their estimated fair value and are marked to market at each reporting period.

## **Results of Operations**

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

	Year I Decem		Six Mont Jun	hs Ended e 30,	
	2014 2015		2015	2016	
		(In thou			
	ф op o=4	A 05 055	(unau	,	
Product sales	\$ 23,071	\$ 25,875	\$12,437	\$12,723	
Licensing and royalty revenue	1,825	671	217	143	
Total revenue	24,896	26,546	12,654	12,866	
Cost of sales	11,806	12,568	5,231	5,704	
Gross profit	13,090	13,978	7,423	7,162	
Operating expenses(1):					
Research and development	12,664	21,126	9,642	11,231	
General and administrative	7,085	6,565	3,574	3,295	
Sales and marketing	3,259	3,823	1,454	1,688	
Total operating expenses	23,008	31,514	14,670	16,214	
Loss from operations	(9,918)	(17,536)	(7,247)	(9,052)	
Interest expense	(263)	(653)	(183)	(1,184)	
Other income (expense), net	(2)	6	9	280	
Net loss	\$(10,183)	\$(18,183)	\$ (7,421)	\$ (9,956)	

(1) Includes stock-based compensation expense as follows:

	Year Ended December 31,			Six Months Ended June 30,				
	2014		2015		2015 2015		2	2016
				(In t	thousands)			
						(w	naudited)	
Research and development	\$	304	\$	169	\$	74	\$	89
General and administrative		392		190		85		100
Sales and marketing		103		57		27		22
Total stock-based compensation expense	\$	799	\$	416	\$	186	\$	211

The following table set forth the statements of operations data for each of the periods presented as a percentage of revenue:

	Year End December		Six Months June 3	
	2014	2015	2015	2016
Total revenue	100%	100%	100%	100%
Cost of sales	47	47	41	44
Gross margin	53	53	59	56
Operating expenses:				
Research and development	51	80	76	87
General and administrative	28	25	28	26
Sales and marketing	13	14	11	13
Total operating expenses	92	119	116	126
Loss from operations	(40)	(66)	(57)	(70)
Interest expense	(1)	(2)	(1)	(9)
Other income (expense), net	*	*	*	2
Net loss	(41)%	(68)%	(59)%	(77)%

<sup>\*</sup> Not material.

## Comparison of the Six Months Ended June 30, 2015 and 2016

Revenue

		onths Ended une 30,	Char	ıge				
	2015	2016	Amount	%				
	·	(Dollars in thousands)						
Product sales	\$12,437	\$12,723	\$ 286	2.3%				
Licensing and royalty revenue	217	143	(74)	(34.1)%				
Total revenue	\$12,654	\$12,866	\$ 212	1.7%				

Total revenue increased by \$0.2 million or 1.7%, from \$12.7 million during the six months ended June 30, 2015, to \$12.9 million during the six months ended June 30, 2016. Product sales increased \$0.3 million for the first half of 2016 compared to the same period in 2015 due primarily to an increase of \$1.1 million in first generation MRAM sales partially offset by a decrease of \$0.8 million in embedded MRAM sales. The decrease

in embedded MRAM sales was due to a significant customer's decision to decrease the amount of product held in inventory, which resulted in lower orders from this customer for the first half of 2016. The customer resumed its customary order level late in the second quarter of 2016.

Licensing and royalty revenue is a highly variable revenue item characterized by a small number of transactions annually with revenues based on size and terms of each transaction.

Cost of Sales and Gross Margin

		nths Ended ne 30,	Chans	re
	2015	2016	Amount	%
		(Dollars in th	iousands)	
Cost of sales	\$5,231	\$5,704	\$ 473	9.0%
Gross margin	58.7%	55.7%	*	*

(\*) Not meaningful.

Cost of sales increased by \$0.5 million or 9.0%, from \$5.2 million during the six months ended June 30, 2015, to \$5.7 million during the six months ended June 30, 2016, due to calibration issues with our manufacturing equipment in our fabrication line. Although we believe we have remedied these yield issues, manufacturing yields continue to remain a risk and could be adversely affected in the future in the event of break downs in mechanical systems, equipment failures or calibration errors. The increase was primarily due to a 13% increase in first generation MRAM product sales, and product mix. In an effort to fulfill pending customer orders, in the second half of 2016 we substituted product with a higher cost basis in place of a lower cost product for which we are expecting qualification certification late in the third quarter of 2016. Once the qualification certification is obtained, assuming the same order quantity, we expect we will achieve modest cost savings by shipping the new product.

Gross margin decreased from 58.7% during the six months ended June 30, 2015, to 55.7% during the six months ended June 30, 2016. The decrease was primarily due to product mix and product substitution as discussed above. In addition, although revenue increased, margin decreased because we were not able to use the lower cost basis version of a product, as discussed above. We expect to obtain certification of the lower cost product in the third quarter of 2016, which we expect will increase our gross margin.

#### Operating Expenses

	Six Months Ended			
	Jun	e 30,	Change	
	2015	2016	Amount	%
	•	(Dollars in the	ousands)	
Research and development	\$ 9,642	\$11,231	\$1,589	16.5%
General and administrative	3,574	3,295	(279)	(7.8)%
Sales and marketing	1,454	1,688	234	16.1%
Total operating expenses	\$14,670	\$16,214	\$1,544	10.5%

Research and Development. Research and development expenses increased \$1.6 million, or 16.5%, from \$9.6 million during the six months ended June 30, 2015, to \$11.2 million during the six months ended June 30, 2016. The increase was primarily attributable to an increase of \$0.9 million related to the vesting of common stock issued to GLOBALFOUNDRIES and increased payroll expense of \$0.4 million due to additional headcount in product engineering.

*General and Administrative.* General and administrative expenses decreased by \$0.3 million, or 7.8%, from \$3.6 million during the six months ended June 30, 2015, to \$3.3 million during the six months ended June 30,

2016. The decrease was primarily due to a decrease of an aggregate \$0.4 million in payroll and contract labor and employee related expenses primarily attributable to the redeployment of existing general and administrative operations personnel to research and development functions. These employees previously performed operations related duties such as planning and scheduling but have shifted focus to yield improvement and product certification efforts related to advanced product lifecycle and development stages. This decrease was partially offset by an increase of \$0.1 million in professional services incurred related to our preparation and audit of financial statements in connection with our proposed initial public offering.

Sales and Marketing. Sales and marketing expenses increased \$0.2 million, or 16.1%, from \$1.5 million during the six months ended June 30, 2015, to \$1.7 million during the six months ended June 30, 2016. The increase was primarily attributable to additional payroll expense and contract labor expense due to increased headcount.

Interest Expense

	Six I	Months				
	$\mathbf{E}_{0}$	nded				
	Ju	ne 30,	Chai	nge		
	2015	2016	Amount	%		
		(Dollars in thousands)				
Interest expense	\$183	\$1,184	\$1,001	547.0%		

Interest expense increased \$1.0 million from \$0.2 million during the six months ended June 30, 2015, to \$1.2 million during the six months ended June 30, 2016. The increase was primarily attributable to the increase in our outstanding debt balance year over year and amortization of debt discounts.

Other Income (Expense), Net

	5	Six Months Ended				
		June 30,		e		
	2015	2016	Amount	%		
		(Dollars in thousands)				
Other income (expense), net	\$ 9	\$280	\$ 271	*		

<sup>(\*)</sup> Not meaningful.

Other income (expense), net increased from \$9,000 during the six months ended June 30, 2015, to \$0.3 million during the six months ended June 30, 2016. The change was primarily related to the fair value remeasurement of our warrant liabilities at each balance sheet date and the fair value remeasurement of our derivative liability, which was initially recognized in the first quarter of 2016.

#### Comparison of the Years Ended December 31, 2014 and 2015

Revenue

	Year	Year Ended				
	Dece	December 31,		ge		
	2014	2015	Amount	%		
		(Dollars in thousands)				
Product sales	\$23,071	\$25,875	\$ 2,804	12.2%		
Licensing and royalty revenue	1,825	671	(1,154)	(63.2)%		
Total revenue	\$24,896	\$26,546	\$ 1,650	6.6%		

Total revenue increased by \$1.7 million, or 6.6%, from \$24.9 million during the year ended December 31, 2014, to \$26.5 million during the year ended December 31, 2015. The increase in revenue was attributable to increased customer adoption of discrete MRAM products, partially offset by a decrease in licensing and royalty revenue primarily related to the timing of milestone payments under existing or new licensing arrangements.

Cost of Sales and Gross Margin

	Year Ended December 31,		Chang	e
_	2014	2015	Amount	%
_		(Dollars in thou	ısands)	
\$1	11,806	\$12,568	\$ 762	6.5%
	52.6%	52.7%	*	*

<sup>\*</sup> Not meaningful

Cost of sales increased by \$0.8 million, or 6.5%, from \$11.8 million during the year ended December 31, 2014, to \$12.6 million during the year ended December 31, 2015. The increase was primarily due to an increase in the volume of products produced and sold.

Gross margin increased from 52.6% during the year ended December 31, 2014, to 52.7% during the year ended December 31, 2015. The increase was not material in comparing the results of 2014 to 2015.

Operating Expenses

	Yea	Year Ended		
	Dece	December 31,		ge
	2014	2015	Amount	%
		(Dollars in the	ousands)	
Research and development	\$12,664	\$21,126	\$8,462	66.8%
General and administrative	7,085	6,565	(520)	(7.3)%
Sales and marketing	3,259	3,823	564	17.3%
Total operating expenses	\$23,008	\$31,514	\$8,506	37.0%

Research and Development. Research and development expenses increased \$8.5 million, or 66.8%, from \$12.7 million during the year ended December 31, 2014, to \$21.1 million during the year ended December 31, 2015. The increase was primarily attributable to spending to develop ST-MRAM technology, including \$5.3 million in support of the joint development agreement with GLOBALFOUNDRIES, which included a non-cash charge of \$1.8 million related to the vesting of common stock issued to GLOBALFOUNDRIES, and \$2.8 million of additional payroll, contract labor, and direct materials for technology, process, design and systems development.

*General and Administrative.* General and administrative expenses decreased \$0.5 million, or 7.3%, from \$7.1 million during the year ended December 31, 2014, to \$6.6 million during the year ended December 31, 2015. The decrease was primarily attributable to the redeployment of existing general and administrative operations headcount to research and development functions.

*Sales and Marketing.* Sales and marketing expenses increased \$0.6 million, or 17.3%, from \$3.3 million during the year ended December 31, 2014, to \$3.8 million during the year ended December 31, 2015. The increase was attributable to additional payroll expense due to increased headcount and increased commissions to sales representatives.

Interest Expense

	Year l	Ended			
	December 31,		Chan	ıge	
	2014	2015	Amount	%	
	(Dollars in thousands)				
Interest expense	\$263	\$653	\$ 390	148.3%	

Interest expense increased \$0.4 million from \$0.3 million during the year ended December 31, 2014, to \$0.7 million during the year ended December 31, 2015. The increase was attributable to the increase in our outstanding debt balance year over year.

Other Income (Expense), Net

		Year Ended				
		December 31,		Change		
	201	4 2	015	Amount	%	
		(In thousands)				
Other income (expense), net	\$ (2	2) \$	6	\$ 8	*	

Not meaningful.

Other income (expense), net was an expense of \$2,000 during the year ended December 31, 2014, compared to income of \$6,000 during the year ended December 31, 2015. The change was primarily related to the fair value remeasurement of our warrant liabilities at each balance sheet date.

## **Quarterly Results of Operations and Other Data**

The following table sets forth our unaudited quarterly statements of operations data and other operating data for each of the quarters indicated. We have prepared the quarterly data on a basis consistent with the audited financial statements included in this prospectus. In the opinion of management, the quarterly information reflects all necessary adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of this data. This information should be read in conjunction with audited financial statements and related notes and other information included elsewhere in this prospectus. The results of historical periods are not necessarily indicative of results of operations for a full year or for any future period.

	Three Months Ended,					
	Mar. 31 2015	Jun. 30 2015	Sept. 30 2015	Dec. 31 2015	Mar. 31 2016	Jun. 30 2016
			(In tho	usands)		
Statements of Operations Data:						
Product revenue	\$ 6,088	\$ 6,349	\$ 6,671	\$ 6,767	\$ 6,126	\$ 6,597
Licensing and royalty revenue	217		421	33	81	62
Total revenue	6,305	6,349	7,092	6,800	6,207	6,659
Cost of sales	2,513	2,718	3,458	3,879	2,545	3,159
Gross profit	3,792	3,631	3,634	2,921	3,662	3,500
Operating expenses:						
Research and development	5,645	3,997	5,081	6,403	5,137	6,094
General and administrative	1,637	1,937	1,634	1,357	1,715	1,580
Sales and marketing	624	830	1,198	1,171	827	861
Total operating expenses	7,906	6,764	7,913	8,931	7,679	8,535
Loss from operations	(4,114)	(3,133)	(4,279)	(6,010)	(4,017)	(5,035)
Interest expense	(40)	(143)	(231)	(239)	(466)	(718)
Other income (expense), net	1	8	1	(4)	(57)	337
Net loss	\$(4,153)	\$(3,268)	\$(4,509)	\$(6,253)	\$ (4,540)	\$ (5,416)
Other Financial Data:						
Adjusted EBITDA	\$(3,544)	\$(2,298)	\$(3,273)	\$(4,898)	\$ (3,247)	\$ (3,492)

We recognized consecutive quarterly product sales revenue growth during 2015 as product revenue increased from \$6.1 million in the first quarter of 2015 to \$6.8 million in the fourth quarter of 2015. Our product revenue decreased to \$6.1 million in the first quarter of 2016 as compared to the fourth quarter of 2015, primarily due to a decrease in first generation and embedded MRAM product sales. This decrease was primarily due to a significant customer's decision to decrease the amount of product held in inventory, which resulted in lower orders from this customer for the first half of 2016. The customer resumed its customary order level late in the second quarter of 2016, which contributed to the increase in product revenue in the second quarter of 2016.

Licensing 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. In the first and third quarters of 2015, licensing revenue was higher primarily due to the timing of milestone payments under existing or new licensing arrangements.

Cost of sales increased during each quarter in 2015, primarily due to volume and mix of product sold in the first generation MRAM product line and product yield issues in the third and fourth quarters of 2015. In the first quarter of 2016 as compared to fourth quarter of 2015, cost of sales decreased 34%, to \$2.5 million, as a result of a decrease in product revenue and the cessation and correction of yield issues experienced in the second half of 2015. In an effort to fulfill pending customer orders, in the first half of 2016, we substituted product with a

higher cost basis in place of a lower cost product for which we are expecting qualification certification late in the third quarter of 2016; this product substitution resulted in higher costs in the first half of 2016. Qualification certification has since been obtained, so assuming the same order quantity, we expect we will achieve modest cost savings by shipping the new product.

Gross profit decreased from the third quarter to the fourth quarter of 2015 primarily due to volume, mix and product yield issues encountered in third and fourth quarters of 2015. The third quarter 2015 did not reflect a decrease from the prior quarter primarily as a result of the increased licensing revenue during that quarter.

Operating expenses were primarily impacted by increased headcount to support growth and investment in research and development activities. The increase was also attributable to the increase in stock-based compensation expense due to the increase in the fair value of our common stock and the related vesting of common stock issued to GLOBALFOUNDRIES. The decrease in the second quarter of 2015 was primarily driven by decreased research and development spending due to our investment in product development in the first quarter of 2015 that we were able to utilize throughout the year, offset primarily by increased headcount and increased expenses related to product certification goals. The decrease from the fourth quarter of 2015 to the first quarter of 2016 was primarily driven by \$1.1 million of additional costs incurred in the fourth quarter on production of test units awaiting certification and increased non-cash charges related to the vesting of our common stock held by GLOBALFOUNDRIES in the fourth quarter 2015 compared to the first quarter 2016 in the amount of \$0.5 million.

The increase in interest expense quarter over quarter was primarily attributable to the increase in our outstanding debt balance and amortization of debt discounts.

We define Adjusted EBITDA as net income or loss adjusted for depreciation and amortization, stock-based compensation expense, compensation expense related to the vesting of common stock held by GLOBALFOUNDRIES resulting from our joint development agreement and interest expense. See "Selected Financial Data" for the explanation of why we track Adjusted EBITDA, why Adjusted EBITDA may be a useful measure for investors, and the limitations of this measure as an analytical tool. 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,					
	Mar. 31 2015	Jun. 30 2015	Sept. 30 2015	Dec. 31 2015	Mar. 31 2016	Jun. 30 2016
Net loss	\$(4,153)	\$(3,268)	\$(4,509)	\$(6,253)	\$ (4,540)	\$ (5,416)
Depreciation and amortization	272	405	396	267	196	184
Stock-based compensation expense	89	97	115	115	111	100
Compensation expense related to vesting of GLOBALFOUNDRIES common						
stock	208	325	494	734	520	922
Interest expense	40	143	231	239	466	718
Adjusted EBITDA	\$(3,544)	\$(2,298)	\$(3,273)	\$ (4,898)	\$ (3,247)	\$ (3,492)

## **Liquidity and Capital Resources**

We have generated significant losses since our inception and had an accumulated deficit of \$89.7 million as of June 30, 2016. We have financed our operations primarily through sales of our redeemable convertible preferred stock, debt financing and the sale of our products. As of June 30, 2016, we had \$2.6 million of cash and cash equivalents, compared to \$2.3 million as of December 31, 2015.

In June 2015, we refinanced our existing indebtedness and entered into a loan and security agreement with Ares Venture Finance (the 2015 Credit Facility) for a term loan of \$8.0 million and a \$4.0 million revolving loan,

which increased our borrowing costs and extended the maturity of our debt to June 2019 for the term loan and June 2017 for the revolving loan. The facility is collateralized by substantially all of our assets and contains various covenants as described in "—Contractual Obligations—2015 Credit Facility" below. We were in compliance with the financial covenants at December 31, 2015, and June 30, 2016. Our ability to access the revolving loan depends upon levels of our accounts receivable and, therefore, the full amount may not be available to us at any specific time.

We believe that our existing cash and cash equivalents as of June 30, 2016, and the \$3.5 million from our August 2016 Notes, together with the additional borrowings available under our 2015 Credit Facility, and net proceeds from this offering and the concurrent private placement, will be sufficient to meet our anticipated cash requirements for the next 12 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. Our independent registered public accounting firm has expressed in its auditors' report on our financial statements, included as part of this prospectus, a "going concern" opinion, meaning that we have suffered recurring losses from operations and negative cash flows from operations that raise substantial doubt regarding our ability to continue as a going concern. We need additional capital to meet our planned operating requirements throughout 2016 and beyond, which is one of the reasons why we are conducting this proposed initial public offering. We may be required to seek additional equity or debt financing, and we cannot assure you that any such additional financing will be available to us on acceptable terms or at all. If we are unable to raise additional capital or generate sufficient cash from operations to adequately fund our operations, 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.

The following table summarizes our cash flows for the periods indicated:

		ar Ended ember 31,			
	2014	2015	2015	2016	
	·	(In thousands)			
			(unau	dited)	
Cash used in operating activities	\$ (7,938)	\$(10,670)	\$(6,587)	\$(4,650)	
Cash used in investing activities	(525)	(1,295)	(666)	(427)	
Cash provided by financing activities	13,712	4,648	4,759	5,412	

#### Cash Used in Operating Activities

During the six months ended June 30, 2016, cash used in operating activities was \$4.7 million, which consisted of a net loss of \$10.0 million, adjusted by non-cash charges of \$2.6 million and an increase of \$2.7 million in our net operating assets and liabilities. The non-cash charges primarily comprised compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES under our joint development agreement of \$1.4 million, depreciation and amortization of \$0.4 million, non-cash interest expense of \$0.8 million, stock-based compensation of \$0.2 million and a gain of \$0.3 million from the fair value remeasurement of our derivative liability. The increase in our net operating assets and liabilities was primarily due to a net increase of \$2.1 million in the related party amount due to GLOBALFOUNDRIES in connection with the joint development agreement, a decrease of \$0.4 million in inventory and an increase of \$1.3 million in accounts payable and accrued liabilities due to an increase in purchases and timing of payments. These changes were partially offset by an increase in accounts receivable of \$0.8 million due to timing of cash receipts for outstanding balances and \$0.5 million in prepaid expenses and other current assets for advances made for the purchase of wafers.

During the six months ended June 30, 2015, cash used in operating activities was \$6.6 million, which consisted of a net loss of \$7.4 million, adjusted by non-cash charges of \$1.5 million and a decrease of

\$0.7 million in our net operating assets and liabilities. The non-cash charges primarily comprised 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, stock-based compensation of \$0.2 million and non-cash interest of \$0.1 million. The decrease in our net operating assets and liabilities was primarily due to an increase of \$1.0 million inventory, an increase of \$0.9 million in prepaid and other expenses for advances made for the purchase of wafers, and an increase of \$0.3 million in accounts receivable due to timing of cash receipts for outstanding balances, a decrease of \$0.6 million in accounts payable and accrued liabilities due to timing of payments. These changes were substantially offset by a net increase of \$1.6 million in the related party amount due to GLOBALFOUNDRIES in connection with the joint development agreement and an increase of \$0.5 million in the deferred income on shipments to distributors due to increase in such activity since year end.

During the year ended December 31, 2015, cash used in operating activities was \$10.7 million, which consisted of a net loss of \$18.2 million, adjusted by non-cash charges of \$3.7 million and an increase of \$3.8 million in our net operating assets and liabilities. The non-cash charges primarily comprised compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES under our joint development agreement of \$1.8 million, depreciation and amortization of \$1.3 million, stock-based compensation of \$0.4 million and non-cash interest expense of \$0.2 million. The increase in our net operating assets and liabilities was primarily due to \$3.3 million in accrued expenses associated with the joint development agreement.

During the year ended December 31, 2014, cash used in operating activities was \$7.9 million, which consisted of a net loss of \$10.2 million, adjusted by non-cash charges of \$2.5 million and a decrease of \$0.3 million in our net operating assets and liabilities. The non-cash charges primarily comprised depreciation and amortization of \$1.5 million, stock-based compensation of \$0.8 million, compensation expense related to vesting of common stock issued to GLOBALFOUNDRIES of \$0.1 million and non-cash interest expense of \$0.1 million. The decrease in our net operating assets and liabilities was primarily due to an increase in trade and related parties receivables resulting from an increase in our revenue in 2014.

#### Cash Used in Investing Activities

Cash used in investing activities during the six months ended June 30, 2016 and 2015, was \$0.4 million and \$0.7 million, respectively, consisting of capital expenditures primarily for the purchase of manufacturing equipment.

Cash used in investing activities during the years ended December 31, 2014 and 2015, was \$0.5 million and \$1.3 million, respectively, which consisted of capital expenditures primarily for the purchase of manufacturing equipment, and purchased software.

#### Cash Provided by Financing Activities

During the six months ended June 30, 2016, cash provided by financing activities was \$5.4 million consisting of proceeds of \$6.5 million from borrowings partially offset by payments on deferred offering costs of \$0.6 million, long-term debt of \$0.4 million, and capital lease obligations of \$0.1 million.

During the six months ended June 30, 2015, cash provided by financing activities was \$4.8 million consisting of from \$8.0 million in borrowings partially offset by payments on long-term debt of \$3.0 million, debt issuance costs of \$0.1 million and capital lease obligations of \$0.1 million.

During the year ended December 31, 2015, cash provided by financing activities was \$4.6 million consisting of proceeds of \$8.0 million from borrowings under our long-term debt facility partially offset by \$3.2 million in payments on long-term debt and capital lease obligations.

During the year ended December 31, 2014, cash provided by financing activities was \$13.7 million consisting primarily of net proceeds of \$10.0 million from the issuance of redeemable convertible preferred stock and proceeds of \$4.0 million from borrowing under our debt facility.

## **Off-Balance Sheet Arrangements**

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

## **Contractual Obligations**

The following table summarizes our contractual obligations as of December 31, 2015 (in thousands):

	Payments Due by Period					
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total	
Long-term debt, current and non-current, including interest(1)	\$ 1,684	\$6,622	\$1,423	\$ —	\$ 9,729	
Capital lease obligation	205	_		_	205	
Operating leases	1,301	796	<u> </u>		2,097	
Total	\$ 3,190	\$7,418	\$1,423	\$ —	\$12,031	

(1) The interest charges have been calculated using a rate of 8.75%, which was the rate in effect for 2015. The debt bears interest at a variable rate and interest charges in future periods may be higher.

The following table summarizes our contractual obligations as of June 30, 2016 (in thousands):

	Payments Due by Period				
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
Convertible promissory notes payable – related party(1)	\$ 5,169	\$ —	<del>\$</del> —	<del>\$</del> —	\$ 5,169
Long-term debt, current and non-current, including interest(2)	4,308	6,293		_	10,601
Capital lease obligation	109	_	_	_	109
Operating leases	1,118	328	_	_	1,446
Total	\$ 10,704	\$6,621	\$—	\$ —	\$17,325

(1) The interest charges for convertible promissory notes have been calculated using a fixed rate of 5.0%.

In May 2016, we entered into an amendment to our joint development agreement with GLOBALFOUNDRIES to modify the payment schedule and clarify our payment obligations for certain past project costs. Under the amendment, GLOBALFOUNDRIES has the right to terminate the joint development agreement if we do not pay the project costs, with interest, by December 16, 2016. As of June 30, 2016, the amount owed to GLOBALFOUNDRIES is \$5.6 million, and is estimated to be \$8.5 million in December 2016.

In August 2016, we entered into an amendment to the facility lease for our design facility located in Austin, Texas to increase the leased space from 5,002 square feet to 11,084 square feet and extend the lease term from September 2016 to January 2022. The aggregate amount of payments due under the amended lease is \$1.1 million.

In September 2016, we entered into an amendment to the January 2016 Notes and August 2016 Notes to extend the maturity date from September 30, 2016 to December 15, 2016.

<sup>(2)</sup> The interest charges for the 2015 Credit Facility have been calculated using a rate of 8.75%, which was the rate in effect for the first half of 2016. The debt bears interest at a variable rate and interest charges in future periods may be higher.

#### 2015 Credit Facility

In June 2015, we entered into a loan and security agreement with Ares Venture Finance for a term loan of \$8.0 million and a \$4.0 million revolving loan for working capital purposes and to repay our existing debt to another lender. The term loan bears interest at a floating rate equal to the greater of (i) 8.75% or (ii) LIBOR plus 7.75%, and matures in June 2019. The revolving loan bears interest at a floating rate equal to the prime rate plus 3.75% and matures on June 5, 2017. The outstanding balance on our revolving loan is limited to the lesser of \$4.0 million or 85% of the outstanding balance of our receivables. Our obligations under the 2015 Credit Facility are secured by substantially all of our assets. The 2015 Credit Facility contains customary covenants restricting our activities, including limitations on our ability to sell assets, engage in mergers and acquisitions, enter into transactions involving related parties, incur indebtedness or grant liens or negative pledges on our assets, make loans or make other investments. Under these covenants, we are prohibited from paying dividends with respect to our capital stock. We were in compliance with all covenants at June 30, 2016.

In connection with the 2015 Credit Facility, we issued a warrant to the lender to purchase 18,461 shares of Series B redeemable convertible preferred stock at \$26.00 a share.

## January 2016 Convertible Promissory Notes

In January 2016, we entered into a Note Purchase Agreement, as amended in September 2016, with several of our stockholders for the issuance of convertible promissory notes (the "January 2016 Notes") for an aggregate principal amount of \$5.0 million. The January 2016 Notes bear interest at 5.0% per annum and have a maturity date of December 15, 2016, extended from the original maturity date of September 30, 2016. The outstanding principal amount and accrued interest on the January 2016 Notes are convertible into shares of Series B redeemable convertible preferred stock, at any time, upon written election of the holders of at least a majority of the outstanding principal balance of the January 2016 Notes. In the event of an equity financing with proceeds in excess of \$5.0 million ("Qualified Financing") prior to the maturity of the January 2016 Notes, the outstanding principal and accrued interest automatically convert into shares of stock issued in the equity financing based on a price per share equal to the price per share paid by investors in the financing. In the event of a firmly underwritten initial public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended (an IPO), the outstanding principal and accrued interest convert into shares of our common stock at a price per share equal to 80% of the per share price of the common stock issued in the IPO. In the event of a deemed liquidation event occurring before the maturity date, the January 2016 Notes will be repaid in cash in an amount equal to three times the outstanding principal amount. The redemption of the January 2016 Notes upon a deemed liquidation event and in the event of an IPO are contingent redemption features that are not clearly and closely related to the debt instrument and have been bifurcated and recognized as a derivative liability on the balance sheet as of June 30, 2016. The compound derivative was recorded as a debt discount of \$0.7 million on the issuance date of the January 2016 Notes and

#### August 2016 Convertible Promissory Notes

In August 2016, we entered into a Note Purchase Agreement, as amended in September 2016, with several of our stockholders for the issuance of subordinated convertible promissory notes (the "August 2016 Notes") for an aggregate principal amount of \$3.5 million. The August 2016 Notes bear interest at 5.0% per annum and have a maturity date of December 15, 2016, extended from the original maturity date of September 30, 2016. In the event of a Qualified Financing prior to the maturity of the August 2016 Notes, the outstanding principal and accrued interest convert into shares of stock issued in the Qualified Financing based on a price per share equal to the price per share paid by investors in such financing. In the event of an IPO, the outstanding principal and accrued interest convert into shares of common stock at a price per share equal to 80% of the per share price of the common stock issued in the IPO. In the event of a deemed liquidation event occurring before the maturity date, the August 2016 Notes will be repaid in cash in an amount equal to three times the outstanding principal amount. The redemption of

the August 2016 Notes upon a deemed liquidation event and in the event of an IPO are contingent redemption features that are not clearly and closely related to the debt instrument and will be bifurcated and recognized as a derivative liability on the balance sheet at the date of issuance.

## **Internal Control over Financial Reporting**

Prior to this offering we were a private company and have had limited accounting and financial reporting personnel and other resources with which to address our internal controls and procedures. In connection with the audits of our consolidated financial statements as of and for the years ended December 31, 2014 and 2015, we identified a material weakness in our internal control over financial reporting, as defined in the standards established by the Sarbanes-Oxley Act. Our management has determined that we had a material weakness in our internal control over financial reporting as of December 31, 2014 and 2015, relating to the design and operation of our financial reporting processes. We have concluded that this material weakness in our internal controls was due to the fact that we did not have resources with the appropriate level of experience and technical expertise to oversee our financial reporting processes.

In order to remediate this material weakness, we have taken the following actions:

- we are continuing to actively seek accounting and finance staff members to augment our current staff and to improve the effectiveness of our closing and financial reporting processes;
- · we are currently updating our information technology tools, including the recent implementation of an ERP system;
- we are formalizing our accounting policies and internal controls documentation and strengthening supervisory reviews by our management;
- we have engaged external consultants to assist us with preparation and review activities associated with the financial statements and our financial reporting processes; and
- in May 2016, we added an independent board member with significant semiconductor CFO experience to chair our audit committee.

In connection with the initiatives we are implementing to remediate the material weakness, we expect to incur additional expense as we hire additional financial accounting staff, utilize consultants and improve our accounting and financial reporting systems. The initiatives we are implementing are subject to continued management review supported by confirmation and testing, as well as audit committee oversight. We expect to complete the measures above as soon as practicable following this offering and will continue to implement measures to remedy our internal control deficiencies in order to meet the deadline imposed by Section 404 of the Sarbanes-Oxley Act of 2002. However, we cannot be certain that the measures we have taken or may take in the future will ensure that we will establish and maintain adequate controls over our financial processes and reporting in the future.

Notwithstanding the material weakness that existed as of December 31, 2014 and 2015, our management has concluded that the financial statements included elsewhere in this prospectus present fairly, in all material respects, our financial position, results of operation 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. Our independent registered public accounting firm has not assessed the effectiveness of our internal control over financial reporting and, under the JOBS Act, will not be required to provide an attestation report on the effectiveness of our internal control over financial reporting so long as we qualify as an "emerging growth company," which may increase the risk that weaknesses or deficiencies in our internal control over financial reporting go undetected.

## **Critical Accounting Policies and Estimates**

Our financial statements and related notes included elsewhere in this prospectus have been prepared in accordance with United States generally accepted accounting principles. The preparation of these financial statements requires our management to make judgments and estimates 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. Our estimates are based 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 judgments and estimates under different assumptions or conditions and any such differences may be material. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

## Revenue Recognition—Distributors

We sell the majority of our products to our distributors at a uniform list price. Price protection rights grant distributors the right to a credit in the event of declines in the price of our products. Distributors are provided with price concessions subsequent to delivery of product to them depending on their end customer and sales price. These concessions are based on a variety of factors, including customer, product, quantity, geography and competitive differentiation. We defer revenue on shipments to distributors as the price is not fixed or determinable until delivery has been made by the distributor to its customer and the final sales price has been established. At the time of shipment to distributors, we record a trade receivable for the selling price as there is a legally enforceable obligation of the distributor to pay for the product delivered, we relieve inventory for the carrying value of goods shipped, and the net of these amounts, the gross profit, we record as deferred income on shipments to distributors on the balance sheet. The amount of gross profit that will be ultimately recognized in our statements of operations on such sales could be lower than the deferred income recorded on our balance sheet as a result of (a) credits granted to distributors on specifically identified products and customers to allow the distributors to earn a competitive gross profit on the sale of our products to the end customer and (b) price protection concessions related to market pricing conditions. We are unable to estimate the credits to the distributors due to the wide variability of negotiated price concessions granted to them. Therefore, we record the price concessions against deferred income at the time the distributor sells the product to its customers. The recognition of revenue from deferred income on shipments to distributors is ultimately contingent upon delivery of product to the distributor's customer, at which point the price is fixed or determinable.

At June 30, 2016, we had approximately \$3.0 million of deferred revenue and \$1.4 million of deferred cost of sales, resulting in the recognition of \$1.6 million of deferred income on shipments to distributors. At December 31, 2015, we had approximately \$2.6 million of deferred revenue and \$1.2 million of deferred cost of sales, resulting in the recognition of \$1.4 million of deferred income on shipments to distributors. At December 31, 2014, we had approximately \$3.4 million of deferred revenue and \$1.6 million of deferred cost of sales, resulting in the recognition of \$1.8 million of deferred income on shipments to distributors.

Products returned by distributors and subsequently scrapped have historically been immaterial to our results of operations. We routinely evaluate the risk of impairment of the deferred cost of sales component of deferred income on shipments to distributors. Because of the historically immaterial amounts of inventory that have been scrapped, and historically rare instances where discounts given to a distributor result in a price less than our cost, we believe the deferred costs are recorded at their approximate carrying values.

## Inventory

We record inventories at the lower of cost, determined on a first-in, first-out basis or specific identification method, or market. We routinely evaluate quantities and values of inventory on hand and inventory that may be

returned from distributors in light of current market conditions and market trends, and record provisions for inventories in excess of demand and subject to obsolescence. This evaluation may take into consideration expected demand, the effect new products may have on the sale of existing products, technological obsolescence and other factors. We record inventory write-downs for the valuation of inventory when required based on the analysis of the information immediately above and inventory balances are not readjusted until sold. Unanticipated changes in technology or customer demand could result in a decrease in demand for our products, which may require additional inventory write-downs that could materially affect our results of operations.

## **Derivative Liability**

Our January 2016 Notes contain certain redemption features that meet the definition of a derivative. We estimated the fair value of the derivative liability using a with-and without-model and the probability-weighted expected return method, which estimates a discounted value based upon an analysis of various future outcomes. The with-and without-model calculates the value of our convertible debt with features being evaluated for separate accounting, and an identical instrument without those features. The outcomes of each scenario in the probability-weighted expected return method are based on a market multiple approach. The derivative liability is subject to re-measurement at each balance sheet date and the change in fair value, if any, is recognized as other income (expense), net in the statements of operations. We will continue to adjust the liability for changes in fair value until the earlier of: (i) maturity of the January 2016 Notes; (ii) the completion of an IPO; (iii) the completion of a Qualified Financing; or (iv) the optional conversion into Series B preferred stock.

## Stock-based Compensation

We recognize compensation costs related to stock options granted to employees and directors based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. We estimate the grant date fair value and the resulting stock-based compensation expense using the Black-Scholes option-pricing model. We expense the grant date fair value of stock-based awards on a straight-line basis over the period during which the employee is required to provide service in exchange for the award (generally the vesting period).

We estimate the fair value of our stock-based awards using the Black-Scholes option-pricing model, which requires the input of highly subjective assumptions. Our assumptions are as follows:

*Expected Term.* The expected term represents the period we expect the stock-based awards to be outstanding. We use the simplified method to determine the expected term, which is calculated as the average of the time to vesting and the contractual life of the options.

*Expected Volatility.* As our common stock has never been publicly traded, we derive the expected volatility from the average historical volatilities of publicly traded companies within our industry that we consider to be comparable to our business over a period approximately equal to the expected term for employees' options and the remaining contractual life for non-employees' options.

*Risk-free Interest Rate.* We base the risk-free interest rate on the U.S. Treasury yield with a maturity equal to the expected term of the option in effect at the time of grant.

*Dividend Yield.* We assume the expected dividend to be zero as we have never paid dividends and have no current plans to pay any dividends on our common stock.

In addition to the assumptions used in the Black-Scholes option-pricing model, we also estimate a forfeiture rate to calculate the stock-based compensation for our equity awards. We will continue to use judgment in evaluating the expected volatility, expected terms and forfeiture rates utilized for our stock-based compensation calculations on a prospective basis.

We recorded stock-based compensation expense of \$0.8 million, \$0.4 million, \$0.2 million and \$0.2 million for the years ended December 31, 2014 and 2015, and for the six months ended June 30, 2015 and 2016, respectively. We expect to continue to grant stock options and other equity-based awards in the future, and to the extent that we do, the stock-based compensation expense we recognize in future periods will likely increase.

Historically, for all periods prior to this offering, the fair values of the shares of common stock underlying our stock-based awards were estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants, our board of directors considered, among other things, contemporaneous valuations of our common stock prepared by an unrelated third-party valuation firm in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. Given the absence of a public trading market for our common stock, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including: the rights, preferences and privileges of our preferred stock relative to those of our common stock; our operating results and financial condition; our levels of available capital resources; equity market conditions affecting comparable public companies; general U.S. market conditions; and the lack of marketability of our common stock.

For valuations after the completion of this offering, our board of directors intends to determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant.

The intrinsic value of all outstanding options as of June 30, 2016, was \$3.1 million based on the initial public offering price of \$8.00 per share.

#### **JOBS Act Accounting Election**

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

## **Recent Accounting Pronouncements**

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, Revenue from Contracts with Customers. Areas of revenue recognition that will be affected include, but are not limited to, transfer of control, variable consideration, allocation of transfer pricing, licenses, time value of money, contract costs and disclosures. In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers: Deferral of Effective Date, which defers the effective date of ASU 2014-09 by one year and allows early adoption as of the original effective date of fiscal years and interim reporting periods beginning after December 15, 2016, at which time companies may adopt the new standard update under the full retrospective method or the modified retrospective method. The deferral results in the new revenue standard will become effective for us for fiscal years and interim reporting periods beginning after December 15, 2017. We are currently evaluating the impact that the adoption of ASU 2014-09 will have on our financial statements and related disclosures.

In August 2014, the FASB issued ASU No. 2014-15, Presentation of Financial Statements—Going Concern, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern. The new standard provides guidance around management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related financial statement note disclosures. The new standard is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early adoption is permitted. We do not expect the adoption of this standard to have a material impact on our financial statements and related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, Interest-Imputation of Interest, Simplifying the Presentation of Debt Issuance Costs, which requires that the debt issuance costs related to a recognized debt

liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. This ASU is effective retrospectively for fiscal years and interim periods within those years beginning after December 15, 2015. Early adoption is permitted, and we have elected to early adopt this ASU retrospectively, effective January 1, 2014.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory, which requires an entity to measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2016. We do not expect the adoption of this ASU to have a material impact on our financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases, 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 right-of-use asset for leases with a lease term of more than twelve months. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2018. We are currently evaluating the impact that the adoption of ASU 2016-02 will have on our financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09 Compensation-Stock Compensation (Topic 718) Improvements to Employee Share-Based Payment Accounting, which is intended to simplify several aspects of the accounting for employee share-based payment transactions, including the income tax consequences, the determination of forfeiture rates, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2016, and early adoption is permitted. We are currently evaluating the impact that the adoption of ASU 2016-09 will have on our financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments — Credit Losses (Topic 326), which is intended to provide financial statement users with more useful information about expected credit losses on financial assets held by a reporting entity at each reporting date. The new standard replaces the existing incurred loss impairment methodology with a methodology that requires consideration of a broader range of reasonable and supportable forward-looking information to estimate all expected credit losses. The amended guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2019, and early adoption is permitted. We are currently evaluating the impact that the adoption of ASU 2016-13 will have on our financial statements and related disclosures.

#### **Quantitative and Qualitative Disclosures about Market Risk**

We are exposed to market risks in the ordinary course of our business, including the effects of interest rate changes and foreign currency fluctuations. Information relating to quantitative and qualitative disclosures about these markets risks is described below.

Interest Rate Risk

We are primarily exposed to interest rate risk from variable rate borrowings under our 2015 Credit Facility, and to a lesser extent, from our cash position. We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in interest rates. A hypothetical 10% increase in our borrowing rates would not have a material impact on interest expense on our principal balances as of December 31, 2015, and June 30, 2016.

Foreign Currency Risk

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates.

Substantially all of our revenue is denominated in United States dollars. Our expenses are generally denominated in United States dollars; however, we do incur expenses in the currencies of our subcontracted manufacturing suppliers, which are located in Europe and in Asia. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchanges rates applicable to our business would not have a material impact on our historical financial statements.

We have not hedged exposures denominated in foreign currencies or used any other derivative financial instruments. Although we transact the substantial majority of our business in U.S. dollars, future fluctuations in the value of the U.S. dollar may affect the competitiveness of our products and thus may impact our results of operations and cash flows.

#### BUSINESS

#### Overview

We are the leading provider of MRAM solutions. Our 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. 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 are the only provider of commercially available MRAM solutions, and over the past eight years we have shipped over 60 million MRAM units.

Our magnetoresistive random access memory (MRAM) technology, unlike traditional semiconductor memory technologies, stores data as a magnetic state rather than an electrical charge, and is offered as either a discrete or embedded solution. Our products read and write data at speeds on par with most dynamic RAM (DRAM) and static RAM (SRAM). Our products offer the non-volatility of flash memory, but with significantly superior endurance. We offer our MRAM solutions with different densities and interfaces to address the various needs of our customers. Our lower-density MRAM products, which we define as having bit densities from 128kb to 16Mb, offer write-speeds on par with SRAM, with virtually unlimited endurance. Our higher-density products, which we define as having bit densities at or greater than 64Mb, offer write-speeds on par with DRAM and have superior endurance compared to most other non-volatile memory technologies.

Our lower-density products are optimized for use in industrial and automotive and transportation applications, while our higher-density products are optimized for use in enterprise storage applications. In the enterprise storage market, we collaborate with industry-leading memory controller companies to enable compatibility of their controllers with our MRAM products, facilitating the adoption of our solutions into our customers' existing end products. We have over 600 customers worldwide, including Honeywell, ifm, Nikkiso and Siemens in the industrial market, Airbus and Hyundai Mobis in the automotive and transportation market, and Broadcom, Dell, IBM and Lenovo in the enterprise storage market. We sell our products directly and through our established distribution channel to industry-leading OEMs and original design manufacturers (ODMs).

We leverage both internal and outsourced manufacturing capabilities to produce our MRAM products. We purchase industry-standard complementary metal-oxide semiconductor (CMOS) wafers from semiconductor foundries and complete the processing of our products by inserting our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We have entered into a manufacturing agreement with GLOBALFOUNDRIES for 300mm high-volume production of our higher-density products. We believe our strategic relationship with GLOBALFOUNDRIES accelerates the development of our MRAM solutions, provides us with leading-edge outsourced manufacturing capabilities, and enables us to operate a variable cost financial model. In addition, GLOBALFOUNDRIES has the ability to embed our technology in its products for sale to its customers, from which we would earn licensing or royalty revenue.

For the years ended December 31, 2014 and 2015, we recorded revenue of \$24.9 million and \$26.5 million, gross margin of 52.6% and 52.7%, and a net loss of \$10.2 million and \$18.2 million, respectively. For the six months ended June 30, 2015 and 2016, we recorded revenue of \$12.7 million and \$12.9 million, gross margin of 58.7% and 55.7%, and a net loss of \$7.4 million and \$10.0 million, respectively. As of June 30, 2016, we had 86 employees, approximately half of whom are engaged in research and development. Our headquarters are located in Chandler, Arizona. We also operate a design center in Austin, Texas and additional sales operations in the Americas, Europe and Asia-Pacific regions.

## **Industry Trends**

The advent of cloud computing and growth in the number of connected devices is increasing the need for the transmission and storage of a vast amount of data. Connected devices combine hardware and software

elements that produce, receive and analyze data, and communicate to one another through direct network connections or through a cloud computing platform. The requirement for access to data in the private and public cloud is increasing the total amount of data traffic received and subsequently stored. According to IDC, big data capacity is expected to grow to 73.4 billion gigabytes in 2019 from 26.2 billion gigabytes in 2015, representing a compound annual growth rate, or CAGR, of 29%.

Increased connectivity and computing requirements have created greater demand for memory solutions that have the speed to capture data quickly and the endurance to store it reliably. As more systems become connected, new memory technology will be vital to improve power efficiency and performance, while at the same time ensuring reliability in the event of power interruption or failure. Improvements in system performance for the industrial, automotive and transportation, and enterprise storage end markets may require continued advancements in memory and storage technologies.

Enterprise Storage. Enterprise and cloud storage providers seek to offer solutions that provide end-users with faster, more secure and more reliable access to data. The adoption of Solid-State Drives (SSD), which is a NAND flash-based storage system, in the enterprise storage market has resulted in faster access to data in cloud computing environments and data centers. However, to meet end-user demand for even faster access to data, DRAM is used as a buffer to transmit data to and from the SSD system. Data that is passing through DRAM is referred to as data-in-flight. In order to protect data-in-flight from power interruption or failure, enterprise storage architects have traditionally installed batteries or large capacitors in their systems. However, batteries and capacitors are not always reliable, consume a large amount of space within a system that could otherwise be used for additional memory capacity, and make it increasingly difficult to design smaller form factor and higher performing systems.

RAID controllers and RAID host bus adapters enable greater reliability and higher performance in enterprise storage systems. RAID controllers use DRAM as a data buffer, data cache and storage of critical system data. Protecting this data in the event of power interruption or failure is important to the performance of RAID storage systems. In order to protect data-in-flight, RAID systems use a complex scheme to write the unprotected data in DRAM to a NAND flash memory module in the event of power interruption or failure. To provide the time and energy needed to complete the writing of data, bulky batteries or super capacitors must be designed into the RAID system.

Industrial, Automotive and Transportation. Industrial, automotive and transportation applications require critical system data to be captured continuously at high speeds, preserved for long periods of time in harsh environments, protected in the event of power interruption or failure, and restored at the point when power was lost. Increasing automation and connectivity of applications in industrial, automotive and transportation markets is driving the need for reliable, persistent memory. The predominant memory solutions used in these applications are SRAM and flash memory. While SRAM is able to capture data very quickly, it is unable to retain data in the event of power interruption or failure, and therefore requires the use of external batteries, which increases system and maintenance cost, and decreases overall system reliability. The slow write-speed and low write-cycle endurance of flash memory limit its use in these intensive data-logging applications.

#### **Limitations of Existing and Emerging Memory Solutions**

The memory market consists primarily of two memory types, volatile memory, which requires power to maintain stored information, and non-volatile memory, which maintains stored information even in the absence of power. DRAM accounts for a majority of the volatile memory market, while other volatile memories such as SRAM accounts for a smaller portion of the overall volatile memory market. NAND flash accounts for the majority of the non-volatile memory, while other non-volatile memories such as NOR flash, make up a smaller portion of the overall non-volatile memory market. Emerging memory technologies, such as Resistive RAM (ReRAM), Conductive Bridge RAM (CB RAM), and 3D XPoint may offer certain advantages to existing NAND flash memory and DRAM, but these technologies have yet to be produced in volume, and we believe volume production may prove to be difficult. In addition, we believe these emerging memory technologies are not well

suited for write caching and buffering in enterprise storage applications given their slower write-speeds and significantly lower write-cycle endurance, which require wear leveling, resulting in unpredictable latency.

None of today's traditional memory technologies offer a complete solution for the expanding need for nonvolatile memory with fast write-speeds and high write-cycle endurance. Existing and emerging volatile memory solutions offer fast write-speeds but require external power sources, such as batteries and capacitors, to protect against data loss in the event of power interruption or failure. Existing non-volatile memory solutions offer the ability to maintain data in the absence of power, but lack the write-speed or write-cycle endurance required by system processors. Moreover, existing volatile and non-volatile memory solutions are reaching practical limits on their ability to continue to scale down in size and cost. As feature sizes scale down, DRAM cells will continue to become increasingly complex with diminishing scalability. NAND flash provides low cost storage technology, but the advances in density, such as multi-level cell data storage, have degraded write cycle endurance.

#### The Opportunity for Fast, Persistent Memory—MRAM

Traditional memory technologies have either fast write-speeds or are non-volatile, but not both. MRAM combines both features into a single solution, making it an ideal memory to protect data in the event of power interruption or failure, and to store data that is frequently written and accessed. We believe customers that employ MRAM in their systems are better able to design higher performance, lower power, more reliable and simpler systems than they would be able to design using existing memory technologies. The following attributes make MRAM an increasingly important application specific memory solution for system architectures that require non-volatile memory with the speed and endurance of RAM:

#### Non-Volatile

MRAM can retain data in the event of power interruption or failure, which enables end-system designers to create products without costly power-loss protection systems, such as batteries and capacitors.

#### Fast-Write Speeds

MRAM offers write-speeds that are on par with the fastest available volatile memory technologies, including most DRAM and SRAM and is significantly faster than other non-volatile memories used today. For example, MRAM writes a block over 100,000 times faster than NAND flash.

#### Superior Write Cycle Endurance

MRAM offers superior write-cycle endurance to existing non-volatile solutions, enabling end-systems designers to offer products that are not limited by memory wear-out. For example, MRAM write-cycle endurance is nearly 10 million times greater than NAND flash.

#### Scalable to Greater Densities and Smaller Process Geometries

MRAM's write-speed and endurance are scalable with increasing bit densities and smaller geometries, which we believe will allow system designers to employ MRAM in applications that require more memory and smaller form factors.

## Proven to be Manufacturable at High Volumes

MRAM can be manufactured in high volumes and in advanced nodes, and is compatible with standard CMOS.

## Low Energy Requirement

MRAM utilizes energy efficiently over the duration of its write and read cycles. It has the ability to be completely powered down, consuming no energy while still retaining data, which can be accessed quickly once power is restored.

These attributes enable MRAM to be used as a true Storage Class Memory, by which we mean a form of memory that has non-volatility that is similar to storage but with performance that is similar to memory. MRAM has already proven its commercial viability as a discrete and embedded solution in application specific memory markets and we believe it will become a mainstream memory technology in the future.

## **Discrete MRAM Market Opportunity**

We estimate the market opportunity for application specific MRAM products to be approximately \$1.8 billion by 2018, growing approximately at a 19% compound annual growth rate (CAGR) from approximately \$1 billion in 2015. We expect the introduction of increasingly higher density MRAM solutions will result in greater adoption of MRAM technology into a wider range of applications and end markets.

We expect our first generation MRAM solutions, which have lower bit densities ranging from 128kb to 16Mb, to continue to serve customers in the industrial, automotive and transportation end markets, where products tend to have long product life cycles. As MRAM bit densities increase, we believe MRAM solutions will be well-suited to address a wider range of large and growing markets, such as server and storage, increasing the overall market opportunity for MRAM. We believe our second and third generation MRAM solutions, which are designed to have bit densities at or greater than 64Mb, will drive the rapid adoption of our products into enterprise storage applications. We believe the introduction of MRAM solutions with bit densities greater than 1Gb will extend the opportunity for MRAM into additional adjacent markets such as server and mobile computing.

# 1ST Gen 2<sup>ND</sup> Gen 3<sup>RD</sup> Gen 64Mb 256Mb 16Mb 2,000 MRAM Market (\$M) 1.600 2nd & 3rd Ger 1.400 ■ 1st Gen 1,200 1,000 800 600 200

MRAM Roadmap Expands the Market Opportunity

Based on Everspin estimates

## **Embedded MRAM Technology**

In addition to use as a discrete product, MRAM can serve as embedded memory in a variety of CMOS technologies. Memory accounts for a significant portion of the area of System-on-a-Chips (SoC), application

specific integrated circuits (ASIC), application specific standard products, microcontrollers, baseband processors, storage controllers, application processors and field-programmable gate arrays. Memory that is integrated in these products is called embedded memory and offers similar performance to its discrete counterparts.

Today's embedded memory solutions include embedded SRAM (eSRAM), embedded Flash (eFlash), and embedded DRAM (eDRAM). We believe these technologies have difficulties scaling to advanced CMOS processing nodes. Embedded MRAM's (eMRAM) compatibility with CMOS processes, combined with its lower leakage, byte addressability and high write-cycle endurance make it well-suited as a replacement for eSRAM, eFlash and eDRAM. We believe the use of eMRAM will be more cost effective for foundries by maintaining compatibility with standard CMOS, thus improving manufacturing efficiency.

eSRAM, which uses six transistors (6-T) to construct a memory bit, requires more silicon area and additional power due to leakage current from its multiple-transistor architecture. Embedded MRAM, which uses a single transistor architecture, results in less leakage current and requires a smaller area on an integrated circuit to achieve equivalent or better performance than eSRAM.

eFlash requires relatively high voltage and area overhead to program the memory bits, which is contrary to the trend of scaling down the CMOS process for lower power and less chip area. eFlash also has a limited number of write cycles, which can render it ineffective as working memory on the chip. Compared to eFlash, eMRAM requires lower voltage to program bits, which results in greater power efficiency and it has higher write-cycle endurance. eMRAM is byte-addressable and has symmetric read and write timing, which makes it suitable as working memory. eFlash must be erased and programmed in pages, which is less efficient for intensive writing applications.

eDRAM is a volatile memory that does not retain data when power is off. eDRAM manufacturing requires additional process steps and costs to build a capacitor to store the data. This manufacturing process could diminish the functionality of the memory or logic components in the integrated circuit. eMRAM, however, can be added towards the end of the manufacturing process, which does not impact the overall performance of the integrated circuit.

The versatility of eMRAM can simplify the design and architecture of the overall integrated circuit by providing the ability to have one memory type serve as both working memory and code storage memory.

#### **Our Solutions**

We are the only commercial provider of MRAM solutions. We have a strong track record of innovation in MRAM technology, as demonstrated by our successive introduction of MRAM products that address an increasingly broad spectrum of applications.

Everspin Product	Everspin Technology	Incumbent Technology	Memory Densities	Primary Applications	Status	
1" Generation (Toggle)	Field Switched (FS)	SRAM	128kb - 16Mb	Industrial / Automotive & Transportation	Shipping	
	Embedded	eSRAM	Customer-defined	Micro-controller Embedded SRAM plus Flash Replacement	Shipping	
2 <sup>rd</sup> Generation (ST-MRAM)	In-Plane Spin Torque (iST)	DRAM	64Mb - 256Mb	Enterprise Storage	Shipping 64Mb; Sampling 256Mb	
3 <sup>rd</sup> Generation (ST-MRAM)	Perpendicular Spin Torque (pST)	DRAM	64Mb - 1Gb+	Enterprise Storage & Servers	Sampling 256Mb; 1Gb+ in Development	

## First Generation

Our first generation products, which we have been shipping since 2008, are primarily designed to address applications in the industrial, automotive and transportation markets. Our customers in these markets require memory technology that is non-volatile, writes continuously at high speeds to limit data loss, operates in harsh environments, and maintains endurance over long product lifecycles. To address these requirements, we designed our first generation of MRAM products to offer the persistence of non-volatile memory, speeds comparable to SRAM, reliability across a wide temperature range, and virtually unlimited write-cycles. We have designed our first generation products to be compatible with industry standard interfaces, including standard SRAM, SPI (Serial Peripheral Interface) and QSPI (Quad SPI) interfaces, enabling our customers to replace incumbent memory solutions with our first generation MRAM solutions. We believe this has been important for the initial success and early adoption of our first generation products.

#### **Second Generation**

Our second generation products, which began shipping in 2014, are principally designed to address the requirements of the enterprise storage market, which includes high performance SSDs, RAID systems and servers. Our customers require low latency, protection of data against power interruption and failure, high density and reliability. Our second generation products offer performance comparable to DRAM, and are up to five orders of magnitude faster than flash block writes, non-volatile to protect against power loss, four times the density of our largest first generation product, and offer endurance superior to flash. We have designed our second generation products to be compatible with industry standard DDR3 interfaces, enabling our customers to realize the benefits of higher performance and power efficiency as compared to traditional memory products requiring batteries or super capacitors.

#### **Third Generation**

Our third generation products, which are currently in development, are initially targeted for enterprise-class storage and server applications. We use our Perpendicular Magnetic Tunnel Junction (PMTJ) technology to deliver further bit density and power efficiency increases to create a true Storage Class Memory solution. Our third generation products are designed to be compatible with standard DDR3, DDR4, SPI, and QSPI interfaces, which we believe will facilitate market adoption of our products in the enterprise storage and server markets.

#### **Embedded MRAM**

We offer embedded MRAM (eMRAM) to our customers for integration in their SoC solutions. We also enable GLOBALFOUNDRIES to offer eMRAM in the solutions they manufacture for their customers. Our embedded memory solutions offer high performance, low cost and low power and can be manufactured using standard CMOS. eMRAM offers significant advantages over existing embedded memory solutions, particularly in endurance, bandwidth, energy and area requirements, leakage and persistence. We believe our eMRAM solutions offer the performance benefits and process compatibility to become the embedded memory of choice for our current and future foundry partners.

### Sensors

We have developed and are currently shipping a high performance, high-reliability magnetic sensor, which is based on our MTJ technology. Our magnetic sensor offers three-axis orientation in a single die, and is integrated into consumer electronics applications as an electronic compass. We believe our magnetic sensor technology can be used for additional power management applications in the industrial, and automotive and transportation, end markets. We currently license our magnetic sensor technology to third parties for their commercial use and plan to continue this strategy.

#### Aerospace

Aerospace and satellite electronic systems require memory that is able to withstand exposure to the levels of radiation encountered in avionics and space applications. MRAM is not susceptible to radiation induced errors because data is stored as a magnetic state rather than as an electrical charge. Aerospace and satellite equipment manufacturers license our technology for use in their electronic systems. Through license agreements, we provide manufacturing service and technology access to certain of our customers, and we sell products to value added subcontractors.

### **Our Competitive Strengths**

We apply our strengths to enhance our position as the leading supplier of MRAM products. We consider our key strengths to include the following:

Technology Leadership in MRAM. We are recognized as the industry leader in MRAM technology. We have invested significant capital resources in research and development, which has enabled us to become the only commercial supplier of MRAM. We have successfully developed and launched successive generations of solutions, each of which is based on the continued advancement of our MTJ technology. We have a substantial intellectual property portfolio that consists of more than 300 patents and more than 150 patent applications.

Strong Customer Base. We have sold our products to over 600 customers worldwide, which include industry leaders such as Honeywell, ifm, Nikkiso and Siemens in the industrial market, Airbus and Hyundai Mobis in the automotive and transportation market, and Broadcom, Dell, IBM and Lenovo in the enterprise storage market. We collaborate closely with our customers on product development, which helps us to optimize the performance, capability and features of our MRAM products. We believe our multi-year relationships with our industry-leading customers and their familiarity with our proven MRAM technologies enable us to drive more rapid adoption of our solutions into their current and future products.

Flexible Manufacturing and Integrated Value Chain. We leverage both internal and outsourced capabilities to manufacture our MRAM products. We purchase industry-standard CMOS wafers from semiconductor foundries and complete the processing by inserting our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We also utilize leading foundries to support high-volume production of our MRAM products at advanced process nodes. Additionally, we have established relationships at industry-leading packaging, assembly and test providers to ensure the quality and availability of products for our customers. We believe our flexible approach to manufacturing allows us to streamline research and development, rapidly prototype new products, and bring new products to market quickly and cost-effectively with limited capital expenditure requirements.

Strategic Relationship with GLOBALFOUNDRIES. We have a manufacturing agreement with GLOBALFOUNDRIES related to 300mm production, and we also have a joint development agreement to support research and development of MRAM. GLOBALFOUNDRIES has committed significant investment to support high volume production of our products at advanced technology nodes. We believe this relationship allows us to leverage GLOBALFOUNDRIES' manufacturing expertise and technology portfolio to support our continued development of MRAM technology, and enables GLOBALFOUNDRIES to offer eMRAM technology in the products it manufactures for its customers.

*Proven Track Record.* We have produced successive generations of MRAM products, and have continued to invest in research and development to develop new products. We have successfully established a manufacturing ecosystem, including internal and outsourced fabrication coupled with leading packaging, assembly and test providers, to maintain high quality and availability of our products. We believe our relationship with GLOBALFOUNDRIES validates our leadership position in current and next-generation MRAM technology.

#### **Our Strategy**

Our growth strategy focuses on increasing the adoption of our MRAM technology which we believe will enable a change in the architecture of storage and computing systems. We believe MRAM will continue to be adopted because it is replacing alternative solutions in a market that already exists. Our strategy comprises the following elements:

*Grow our Technology Leadership*. Our leadership in designing, developing and manufacturing MRAM solutions provides a strong foundation for delivering new products. We plan to grow our technology leadership position by offering higher density memory solutions, including 1Gb and above, to our customers through the continued advancement of our technology.

Expand our Presence with Existing Customers. We intend to continue to collaborate with our industry-leading customers to accelerate the adoption of our MRAM solutions into their systems. We believe our established and collaborative relationships with industry-leading SSD, RAID, and memory controller providers will allow us to further penetrate enterprise storage applications with our MRAM solutions. We believe that our customers' experience with our first generation of products will help increase adoption of our current and future high density MRAM products and will allow MRAM to become a higher percentage of our customers' memory usage.

Expand our Customer Base. We believe there are significant opportunities to expand our customer base within the industrial, automotive and transportation, and enterprise storage markets. Our success has facilitated a growing knowledge and acceptance of MRAM technology that we intend to leverage to acquire new customers. Additionally, as we release higher density products, we expect to broaden the applications for our MRAM solutions in the enterprise storage market, and address complementary end markets such as server and mobile computing.

*Grow our Embedded MRAM Business.* We expect to leverage our expertise in embedded MRAM technology to grow our licensing business, which generates a royalty-based revenue stream. Currently, we collaborate with GLOBALFOUNDRIES to provide our embedded MRAM technology to its customers.

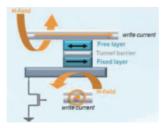
#### **Our Technology**

## Memory Architecture

Our MRAM solutions are based on our MTJ technology, which writes data by establishing a stable magnetic state, and reads data by measuring the resistance of the MTJ. MTJ devices are multilayered structures, including thin metal and dielectric layers, which are fabricated with methods commonly used in semiconductor manufacturing. The resistance is determined by the orientation of the magnetic field in the free layer relative to the fixed layer.

## First Generation MRAM Technology

Our first generation MRAM technology uses a magnetic field to program, or write, bits. A significant advantage of this "field switching" is virtually unlimited write endurance, as reversing the free-layer magnetization with a magnetic field does not have any wear-out mechanism. Field Switched MRAM products are currently in production at the 180nm and 130nm nodes.

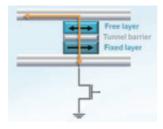


Field Switched MRAM bit cell. Each bit cell comprises an MTJ connected in series with a select transistor.

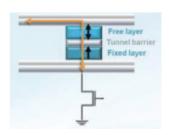
## Second and Third Generation MRAM Technology

Our second and third generations of MRAM technologies use the spin-torque transfer property, which is the manipulation of the spin of electrons with a polarizing current, to establish the desired magnetic state of the free layer to program, or write, the bits in the memory array. Spin Torque MRAM, or ST-MRAM, provides a significant reduction in switching energy compared to Field Switched MRAM, and is highly scalable, enabling higher density memory products. Our second generation MRAM technology uses an In-Plane MTJ structure, while our third generation uses a Perpendicular MTJ. We have developed materials and Perpendicular MTJ stack designs with high perpendicular magnetic anisotropy, which provides long data retention, small cell size, greater density, high endurance and low power.

#### **Second Generation**



#### **Third Generation**



Schematic depiction of the In-Plane MTJ and Perpendicular MTJ bit cells.

## **Embedded MRAM Technology**

MRAM technology is more easily embedded than most other memory technologies, due to the way the MRAM module is integrated in standard CMOS. Since the MRAM module is inserted between metal layers in the back-end-of-line part of the fabrication process, above the transistor layers, it does not disturb the CMOS fabrication process. Integrating MRAM in standard CMOS for SoC applications does not impact the performance of the integrated circuit.

#### Customers

Our MRAM products are used by industry-leading customers in the industrial, automotive and transportation, and enterprise storage markets. Representative customers using our discrete products in these end markets include:

Industrial	Automotive and Transportation	Enterprise Storage
Honeywell	Airbus	Broadcom
ifm	Hyundai Mobis	Dell
Nikkiso		IBM
Siemens		Lenovo

We sell our products through our direct sales force and through a network of distributors and contract manufacturers. Direct, distributor and contract manufacturer customers purchase our solutions on an individual purchase order basis, rather than pursuant to long-term agreements.

We consider our customer to be the end customer purchasing either directly from a distributor, a contract manufacturer or us. An end customer purchasing through a contract manufacturer typically instructs the contract manufacturer to obtain our products and to incorporate our products with other components for sale by the contract manufacturer to the end customer. Although we actually sell the products to, and are paid by, the distributors and contract manufacturers, we refer to the end customer as our customer.

During the year ended December 31, 2015, more than 600 end customers purchased our products. Sales to NXP and Avago Technologies Ltd. (Broadcom) whether directly by us or through distributors or contract manufacturers, each accounted for 13% of our revenue during 2015, and 6% and 9% for the six months ended June 30, 2016, respectively. Sales to Dell accounted for 9% of our revenue during the six months ended June 30, 2016. No other end customers accounted for more than 10% of our revenue during 2015. None of our end customers individually accounted for more than 10% of our revenue during the first six months of 2016. NXP is a customer for our embedded and sensor solutions.

### **Sales and Marketing**

We sell our products through a direct sales channel and a network of representatives and distributors. The majority of our customers, and their associated contract manufacturers, buy our products through our distributors. We maintain sales, supply chain and logistics operations and have distributors in Asia to service the production needs of contract manufacturers such as us Flextronics, Foxconn, Inventec and Sanmina. We also maintain direct selling relationships with several strategic customers. Our direct sales representatives are located in North America, the United Kingdom, Germany, Hong Kong, and Taiwan.

Our typical sales cycle consists of a sales and development process in which our field engineers and sales personnel work closely with our customers' design engineers. This process can take from three to 12 months to complete, and a successful sales cycle culminates in a design win. Once we establish a relationship with a customer, we continue a sales process to maintain our position and to secure subsequent new design wins at the customer. Each customer lead, whether new or existing, is tracked through our CRM tool and followed in stages of prospect, design in, design win and production. This tracking results in a design win pipeline that provides a measure of the future business potential of the opportunities.

Our technical support personnel have expertise in hardware and software, and have access to our development team to ensure proper service and support for our OEM customers. Our field application and engineering team provides technical training and design support to our customers.

## Manufacturing

We rely on third-party suppliers for most phases of the manufacturing process, including initial fabrication and assembly.

#### Wafer Manufacturing

We manufacture our first generation and second generation MRAM discrete products, and provide foundry services for embedded MRAM, licensed MRAM products and MTJ based sensors in our 200mm manufacturing facility. Our facility is in an ISO-4 clean room and is qualified for the production of automotive grade products. We actively manage inventory, including automated process flows, process controls and recipe management, and we use standard equipment to manufacture our products.

For our second generation products, GLOBALFOUNDRIES will manufacture our 256Mb in-plane MTJ discrete memory on 40nm CMOS on 300mm wafers. Our third generation of ST-MRAM, based on perpendicular MTJ, is in development in our 200mm fabrication facility and at GLOBALFOUNDRIES. Volume production of our third generation of ST-MRAM products is planned to be at more advanced process nodes at GLOBALFOUNDRIES on 300mm wafers.

#### Assembly and Test

We have designed test protocols to maximize yields at assembly and final test, reduce manufacturing costs and improve quality. Our design and product engineering teams have developed and implemented wafer-level test programs to characterize the behavior of our MRAM devices. We create predictive models and test each of our parts to assure the reliability of the products in the field. We also add unique electronic part identification numbers to provide material traceability.

To protect the MRAM devices from stray magnetic fields, we developed packaging solutions, which we have qualified at independent, industry-leading sub-contractors, including Amkor, ASE and UTAC. We have successfully qualified our MRAM devices in various packages at temperatures ranging from commercial to automotive grade. Stringent test protocols have ensured high quality product with no reported field failures in our shipped products since inception. As part of our commitment to quality, our quality management system has been certified to ISO 9001:2000 standards. Our foundry vendors and sub-contractors are also ISO 9001 certified.

## ST-MRAM Joint Development Agreement

On October 17, 2014, we entered into a joint development agreement with GLOBALFOUNDRIES Inc., a semiconductor foundry, for the joint development of our ST-MRAM technology. The term of the agreement is the later of four years from the effective date or until the completion, termination, or expiration of the last statement of work entered into pursuant the joint development agreement.

The joint development agreement also states that the specific terms and conditions for the production and supply of the developed MRAM technology would be pursuant to a separate manufacturing agreement entered into between the parties. See "—ST-MRAM Manufacturing Agreement" below.

Under the joint development agreement, each party granted licenses to 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, GLOBALFOUNDRIES possesses the exclusive right to manufacture our discrete and embedded spin torque 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, GLOBALFOUNDRIES agreed not to license intellectual property developed in connection with the agreement to named competitors of ours.

Generally, unless otherwise specified in the agreement or a statement of work, we and GLOBALFOUNDRIES share defined project costs equally under the joint development agreement. If GLOBALFOUNDRIES manufactures, sells or transfers wafers containing production qualified MRAM devices that utilized certain Everspin design information to its customers, GLOBALFOUNDRIES will pay royalties to us for each such wafer transferred or sold to a customer.

Except for breaches of confidentiality provisions and each party's indemnification obligations to one another under the agreement, liability under the agreement is capped at a range depending on project costs and royalty amounts. Either party may terminate the agreement if the other party materially breaches a term of the agreement, and fails to remedy the breach after receiving notice from the non-breaching party. If a party terminates the manufacturing agreement for material breach in accordance with its terms, that party may also terminate the joint development agreement.

On May 27, 2016, we entered into an amendment to the joint development agreement to modify the payment schedule and to clarify our payment obligations for certain past project costs. Under the amendment, GLOBALFOUNDRIES may terminate the joint development agreement with us if we materially breach a term of the agreement, such as, but not limited to, by our failing to pay any undisputed sum which has been outstanding for 45 or more days from the date of invoice, and fail to remedy the breach within 60 days after receiving notice from GLOBALFOUNDRIES, or if we fail to pay project costs by December 16, 2016, which were approximately \$5.6 million as of June 30, 2016, and are estimated to be approximately \$8.5 million in December 2016. See "Risk Factors" for further discussion of our agreements with GLOBALFOUNDRIES.

## ST-MRAM Manufacturing Agreement

On October 23, 2014, we entered into a manufacturing agreement with GLOBALFOUNDRIES Singapore Pte. Ltd. that sets forth the specific terms and conditions for the production and supply of wafers manufactured using our spin torque MRAM technology developed under the joint development agreement with GLOBALFOUNDRIES. Pursuant to that joint development agreement, GLOBALFOUNDRIES possesses certain exclusive rights to manufacture such wafers for our discrete and embedded spin torque MRAM devices. 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. GLOBALFOUNDRIES also has the ability to discontinue its manufacture of any of our wafers upon due notice and completion of the notice period. The initial term of the manufacturing agreement is for three years, which automatically renews for successive one year periods thereafter unless either party provides sufficient advance notice of non-renewal.

Except for breaches of confidentiality provisions and each party's indemnification obligations to one another under the agreement, liability under the agreement is capped at the lesser of a set amount or the total purchase price received by GLOBALFOUNDRIES from us in the twelve months immediately preceding the claim for the specific product that caused the damages. Either party may terminate the agreement if the other party materially breaches a term of the agreement, and fails to remedy the breach after receiving notice from the non-breaching party. GLOBALFOUNDRIES may terminate the agreement if we fail to pay any undisputed sum which has been outstanding for sixty or more days from the date of invoice.

#### Competition

Our products, all of which offer the persistence of non-volatile memory with the speed and endurance of random access memory, enable the protection of mission critical data particularly in the event of power interruption or failure. Our solutions are designed for use in applications in the industrial, automotive and transportation, and enterprise storage markets where the combination of high write-cycle endurance and fast write-speeds are of critical importance.

Our principal competitors to our first generation Field Switched MRAM products, which are tailored primarily for the industrial, automotive and transportation, and enterprise storage markets, include companies that offer non-volatile SRAM (NVSRAM), SRAM, and FRAM products, such as Cypress, Fujitsu, Integrated Silicon Solution (ISSI), Macromix, Microchip, Micron, Renesas, Samsung and Toshiba. Our second and third generation ST-MRAM products are designed primarily for the enterprise storage market, which includes high performance SSDs, RAID systems and servers. Our second and third generation ST-MRAM products are intended to replace DRAM-

based solutions, which comprised DRAM and additional back-up power supply components, such as supercapacitors and batteries that are required to make DRAM persistent. Customers typically purchase DRAM and super capacitors and batteries from separate vendors, and pair them together in order to create a DRAM-based solution capable of protecting data against power interruption or loss. Companies that offer DRAM devices include Hynix, Micron, Samsung, and several other smaller companies. In the future we may also face competition from companies developing MRAM technologies, such as Avalanche, Spin Transfer Technologies, and other larger and smaller semiconductor companies.

Our sensor products compete with giant magnetoresistive (GMR), anisotropic magnetoresistive (AMR) and Hall effect sensors supplied by Alps, Asahi Kasei Microdevices, Crocus, Fairchild, Invensys (now Schneider), Kionix and Micronas.

Our ability to compete successfully in the market for our products is based on a number of factors, including:

- our product attributes and specifications;
- successful customer engagements from throughout the product life cycle;
- high quality and reliability as measured by our customers;
- the ease of implementation of our products by customers;
- preferred supplier status at numerous customers and ODMs
- manufacturing expertise and strength;
- reputation and strength of customer relationships;
- competitive pricing in the market against the competition while maintaining our gross margin profile; and
- our success in meeting the needs of future customer requirements through continued development of new products.

We believe we compete favorably with respect to each of these factors.

#### **Intellectual Property**

Our success depends, in part, on our ability to protect our products and technologies from unauthorized third-party copying and use. To accomplish this, we rely on a combination of intellectual property rights, including patents, trade secrets, copyrights and trademarks, as well as customary contractual protections. As of June 30, 2016, we held 341 issued patents that expire at various times between August 2016 and September 2034, and had 157 patent applications pending. Included in our issued patents and pending applications are patents/applications in the United States, China, Europe, France, Germany, Japan, the Republic of Korea, Italy, Singapore, Taiwan, and the United Kingdom.

We seek to file for patents that have broad application in the semiconductor industry and that would be helpful in the magnetoresistive memory and sensor markets. However, there can be no assurance that our pending patent applications or any future applications will be approved, that any issued patents will provide us with competitive advantages or will not be challenged by third parties, or that the patents or applications of others will not have an adverse effect on our ability to do business. In addition, there can be no assurance that others will not independently develop substantially equivalent intellectual property or otherwise gain access to our trade secrets or intellectual property, or disclose such intellectual property or trade secrets, or that we can effectively protect our intellectual property.

We generally control access to and use of our confidential information through employing internal and external controls, including contractual protections with employees, contractors and customers. We rely in part

on U.S. and international copyright laws to protect our mask work. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

## **Employees**

At June 30, 2016, we had 86 employees in the United States and 21 full time equivalent contractors and consultants in Singapore, China, Taiwan, the United Kingdom, the United States and Germany. None of our employees are either represented by a labor union or subject to a collective bargaining agreement. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

#### **Facilities**

Our headquarters is located in Chandler, Arizona, where we lease 8,464 square feet of office space under a lease that expires in the first half of 2018. This facility accommodates our principal sales, marketing, research and development, and administrative activities. Also in Chandler, we lease 18,041 square feet of office, cleanroom, and laboratory space for our 200mm manufacturing and research and development functions, which lease expires in April 2017. We are currently in the process of renegotiating the cleanroom portion of the lease and moving office and laboratory space to alternate facilities. Our primary product design personnel are located in Austin, Texas in a leased 11,084 square foot office that expires in January 2022.

We believe that our existing facilities are sufficient for our current needs. Upon renewal of all leases, we will evaluate our space needs as we add employees and grow our business. We further believe that suitable additional or substitute space will be available on commercially reasonable terms to meet our future needs.

### **Legal Proceedings**

We are not currently a party to any legal proceedings. From time to time, however, we may become involved in legal proceedings and claims arising in the ordinary course of our business. The semiconductor industry is characterized by frequent claims and litigation, including claims regarding patent and other intellectual property rights, as well as improper hiring practices. Any such claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

#### MANAGEMENT

#### **Executive Officers, Key Employees and Directors**

The following table sets forth information regarding our executive officers, key employees and directors, as of September 1, 2016:

Name	Age	Position(s)
Executive Officers and Key Employees		
Phillip LoPresti	55	President, Chief Executive Officer and Director
Jeffrey Winzeler	56	Chief Financial Officer
Jon Slaughter, Ph.D.	56	Vice President, Technology Research and Development
Sanjeev Aggarwal, Ph.D.	49	Vice President, Manufacturing and Process Development
Scott Sewell	54	Vice President, Worldwide Sales and Marketing
Bryan Kang	51	Vice President of MRAM Technology and Product Development
Thomas Andre	47	Vice President, Design Engineering
Terry Hulett	58	Vice President, Storage Solutions
Angelo Ugge	69	Vice President, Operations and Business Development
Non-Employee Directors		
Robert W. England(1)(2)	64	Director
Lawrence G. Finch(2)(3)	82	Director
Ron Foster(1)	65	Director
Peter Hébert(1)(3)	39	Director
Stephen J. Socolof(2)	56	Director
Geoffrey R. Tate(3)	62	Director

<sup>1)</sup> Member of the audit committee.

## **Executive Officers and Key Employees**

Phillip LoPresti has served as our President and Chief Executive Officer and as a member of our board of directors since June 2010. From October 2008 to May 2010, Mr. LoPresti served as Director of High Speed Data Converters for Intersil Corporation. From June 2006 to October 2008. Mr. LoPresti was President and Chief Executive Officer of Kenet, Inc. Prior to joining Kenet, Mr. LoPresti spent 22 years in various roles, ultimately as Vice President and general manager of NEC Electronics America. Mr. LoPresti received both his bachelor's and master's of science degrees in electrical engineering from Boston University. We believe Mr. LoPresti's experience in the industry, his role as our President and Chief Executive Officer and his knowledge of our company enables him to make valuable contributions to our board of directors.

Jeffrey Winzeler has served as our Chief Financial Officer since April 2015. From March 2014 to January 2015, Mr. Winzeler served as Chief Financial Officer at Avnera Corporation, a privately held semiconductor company specializing in analog and digital SoCs, where he was responsible for all aspects of the finance function. From January 2012 to January 2014, Mr. Winzeler served as Chief Financial Officer at Rackwise Inc. a provider of data center management software, where he was responsible for all aspects of the finance function. From December 2006 to November 2011, Mr. Winzeler worked at Solar Power Incorporated. He was a Vice President of Franchise Development for Solar Power and developed the first residential solar franchise offering in the United States. He subsequently became the Chief Financial Officer for Solar Power. From January 2005 to December 2006, Mr. Winzeler served as Chief Financial Officer for International Display Works Inc. Prior to International Display Works, Mr. Winzeler worked at Intel Corporation from March 1988 to August 2004. At Intel, he held numerous positions including Flash Division Controller, Worldwide Assembly Test Manufacturing

<sup>(2)</sup> Member of the compensation committee.

<sup>(3)</sup> Member of the nominating and corporate governance committee.

Controller, Israel Finance controller, Fab 9 and Fab 11 Controller, and Finance Analyst. Mr. Winzeler received his degree in finance from the University of Idaho

Jon Slaughter, Ph.D. has served as our Vice President, Technology Research and Development since the spin-off of the company from Freescale Semiconductor, Inc. in June 2008. Dr. Slaughter directs research and development efforts for our ST-MRAM. From March 2007 to June 2008, Dr. Slaughter was manager of MRAM Process and Magnetic Materials for Freescale Semiconductor, Inc., where his team was responsible for fabrication of the first commercial MRAM products as well as development of next generation MRAM materials. From 1996 to 2007, Dr. Slaughter and his team developed the magnetic materials and devices used to bring the first MRAM to volume production in 2006, starting in Motorola, Inc. and continuing with Freescale when Freescale separated from Motorola. Before joining Motorola, Dr. Slaughter was an Associate Research Professor at the University of Arizona's Optical Sciences Center. Dr. Slaughter received his bachelor's degree in physics and mathematics from University of Wisconsin, River Falls, and doctorate in physics from Michigan State University.

Sanjeev Aggarwal, Ph.D. has served as our Vice President, Manufacturing and Process Development since March 2010, where he supervises research and development efforts for integration of spin torque MRAM onto CMOS and manages our production for Field Switched MRAM on 200mm and ST-MRAM on 300mm wafers. From June 2008 to February 2010, Dr. Aggarwal served as our Director, Manufacturing and Process Technology. From September 2006 to May 2008, Dr. Aggarwal was senior member of the technical staff at Freescale Semiconductor, Inc. and led the integration efforts for Field Switched MRAM development. From July 2000 to August 2006, Dr. Aggarwal was member Group Technical Staff at Texas Instruments. Dr. Aggarwal received his bachelor's degree in ceramic engineering from Indian Institute of Technology (BHV) Varanasi, and doctorate in materials science and engineering from Cornell University.

**Scott Sewell** has served as our Vice President, Worldwide Sales and Marketing since September 2010. From 1999 to 2010, Mr. Sewell was President of West Associates, Inc. Mr. Sewell also has served in multi-national sales management positions at NEC Electronics Corp. and Sharp Electronics Corporation. Early in his career, Mr. Sewell was a senior design engineer for General Dynamics Corporation in the Command, Control, Communication and Intelligence group. Mr. Sewell received his bachelor's of science degree in electronic engineering from Oklahoma State University.

*Bryan Kang* has served as our Vice President, MRAM Technology and Product Development since September 2016. From April 2015 to September 2016, Mr. Kang served as Memory and Design Architect at Nantero, Inc., where he designed and developed non-volatile memory devices. From December 2007 to March 2015, Mr. Kang served as Head of the Design Center at SK Hynix America Inc., where he led in the development of various memory technologies, including the first 4Gb DDR3 using 3xnm technology. Mr. Kang has over 25 years of experience in semiconductor memory design and product planning. Mr. Kang received his bachelor's of science degree in electrical engineering from KyungPook National University in Korea and his M.B.A from Ajou University in Korea.

Thomas Andre has served as our Vice President, Design Engineering since July 2013 and as our Director of Engineering from April 2011 to July 2013. From August 2001 to April 2011, Mr. Andre was a design project leader for the MRAM development team at Motorola, Inc., Freescale Semiconductor, Inc., following its spin-off from Motorola, and then at Everspin, following our spin-off from Freescale. In addition, Mr. Andre has led several stand-alone DRAM designs at Alliance Semiconductor Corp and held design positions in the Defense Systems and Electronics Group at Texas Instruments Incorporated. Mr. Andre has served on the Custom Integrated Circuits Conference Technical Program Committee since 2003 including Technical Program Chair in 2010. Mr. Andre received his bachelor's of science degree in electrical engineering from Clarkson University in New York.

*Terry Hulett* has served as our Vice President, Storage Solutions since October 2013. Mr. Hulett has a background in architecture, hardware and software development and operations on products including leading

edge network controllers and leading edge CPUs. From March 2009 to September 2013, Mr. Hulett was a Strategic Planner at Intel Corporation, where he was responsible for strategies for high end networking products and server class CPUs. From 1985 to 2008, when Mr. Hullet joined Intel, Mr. Hulett held several engineering executive roles at NetEffec Inc., Banderacom Inc., Silicon Solutions, Inc. and Advanced Micro Devices, Inc. Mr. Hulett holds several patents and has published technical articles, and was a member of the original 68000 design team at Motorola, Inc. Mr. Hulett received his bachelor's of science degree in electrical engineering from Oklahoma State University.

Angelo Ugge has served as our Vice President, Business Development since July 2014 and has assumed the role of VP Operations and Business Development from October 1, 2015. From August 2006 to June 2014, Mr. Ugge was President of Eviteck Consulting LLC, a marketing and business development consulting firm in Europe focused on helping to develop small and medium size technology companies, where he was responsible for managing two major development programs in cooperation with the European Community and the Italian Ministry of Industrial Development. Prior to Eviteck, Mr. Ugge held the Chief Executive Officer position at Bridgeco AG of Zurich, Switzerland and MemsOptical Inc. of Huntsville, Alabama, and was Vice President and General Manager of ST Microelectronics N.V. Mr. Ugge received his bachelor's degree in electrical engineering from the Technical Industrial Institute of State, Milano, and master's degree in physics from the University of Milano, Italy.

#### **Non-Employee Directors**

Robert W. England has served as a member of our Board of Directors since July 2009. Since 2006, Mr. England has served as an independent engineering and operations management consultant for various companies ranging from Fortune 500 companies to venture-backed firms. From 2001 to 2006, Mr. England served as the Chief Executive Officer and President at Cumbre Pharmaceuticals, Inc. (formerly Cumbre, Inc.). Previously, Mr. England spent 27 years at Texas Instruments Incorporated, which he joined in 1973, in integrated circuit design and product engineering, manufacturing supervision, integrated circuit process development and operations management. Mr. England also served as Senior Vice President and Manager of Texas Instruments Incorporated's worldwide semiconductor memory business and as Senior Vice President responsible for the Digital Light Processing business unit. Mr. England received his bachelor's of science degree in electronic engineering technology from the University of Dayton, Ohio. We believe that Mr. England's extensive leadership experience in technology companies qualifies him to serve on our board of directors.

Lawrence G. Finch has served as a member of our Board of Directors since June 2008. Mr. Finch has served as managing director at Sigma Partners, a venture capital firm, since joining the firm in 1987. Mr. Finch brings a wealth of operational experience in moving early-stage technology companies through high-growth stages of development. He has advised more than 20 companies throughout his career. We believe that Mr. Finch's 40 years of experience in founding, managing, and financing businesses, strong relationships in the semiconductor space, and his knowledge of our company qualifies him to serve on our board of directors.

Ronald C. Foster has served as a member of our Board of Directors since May 2016. Since November 2014, Mr. Foster has served on the Board of Directors of Advanced Energy Industries, Inc. From April 2008 to March 2015, Mr. Foster served as Chief Financial Officer and Vice President of Finance of Micron Technology, Inc., where he served as a member of Micron's Board of Directors from June 2004 to April 2005. Before joining Micron, Mr. Foster was the Chief Financial Officer and Senior Vice President of FormFactor, Inc., a semiconductor wafer test equipment company. Prior to joining FormFactor, Inc., Mr. Foster served as the Chief Financial Officer for JDS Uniphase, Inc. and Novell, Inc., and also served in various financial and operational roles at Applied Materials, Inc. and Hewlett-Packard Company. Mr. Foster previously served as a board member of Inotera Memories Inc., LUXIM Corporation, and Aptina Company. Mr. Foster received his bachelor's of arts degree in economics from Whitman College and an M.B.A. from the University of Chicago. We believe that Mr. Foster's knowledge and experience in the semiconductor industry, financial management, accounting and finance issues enable him to make valuable contributions to our board of directors.

**Peter Hébert** was appointed as a member of our Board of Directors in June 2008. Mr. Hébert is a managing partner at Lux Capital, a venture capital firm, which he co-founded in 2000. In addition to Everspin, Mr. Hébert currently serves on the Board of Directors for Auris Surgical Robotics, Inc., Gridco Inc., Lux Research, Inc., Halo Neuro, Inc., Flex Logix Technologies, Inc. and Matterport, Inc. From 2003 to 2008, Mr. Hébert served as founding Chief Executive Officer of Lux Research, which he helped build into a leading emerging technology research firm. During his time at Lux Research, Mr. Hébert launched the publicly-listed Lux Nanotech Index and the PowerShares Lux Nanotech Portfolio. Mr. Hébert received his bachelor's of science degree from Syracuse University, where he graduated cum laude from the S.I. Newhouse School of Public Communications. We believe that Mr. Hébert possesses specific attributes that qualify him to serve as a director, including his experience in founding, managing, and financing businesses and his knowledge of emerging technologies, which enable him to make valuable contributions to our board of directors.

Stephen J. Socolof has served as a member of our Board of Directors since June 2008. Mr. Socolof is Managing Partner of New Venture Partners, a venture capital firm that he co-founded in 2001. Previously, Mr. Socolof worked at Lucent Technologies, Inc. from 1996 to 2001 where he established Lucent's New Ventures Group. Before joining Lucent, Mr. Socolof spent eight years with Booz, Allen & Hamilton Inc., where he was a leader of the firm's innovation consulting practice. Mr. Socolof is currently also a director of GainSpan Corporation, NVMdurance and Vasona Networks Inc. He was a director of SyChip, Inc. before its acquisition by Murata and an investor and observer of Flarion Technologies, Inc., until its acquisition by Qualcomm Inc., and Silicon Hive, until its acquisition by Intel Corporation. Mr. Socolof holds a bachelor's of arts degree in economics and a bachelor's of science degree in mathematical sciences from Stanford University and received his M.B.A. from the Amos Tuck School at Dartmouth College, where he was a Tuck Scholar. He currently serves on the Board of Directors of the Center for the Study of Private Equity at the Tuck School. We believe that Mr. Socolof's financial, business, and investment expertise and his knowledge of our company enable him to make valuable contributions to our board of directors.

Geoffrey R. Tate has served as a member of our Board of Directors since August 2009. From March 2010 until January 2012, Mr. Tate was the interim Chief Executive Officer and a member of the Board of Directors of Nanosolar, Inc. Mr. Tate was the founding Chief Executive Officer of Rambus Inc. in May 1990 and served as CEO and a member of the Board of Directors until January 2005. Mr. Tate served as the non-employee Chairman of the Board of Directors of Rambus from January 2005 to August 2006. From Rambus' IPO in 1997 to late 2003, Mr. Tate was also the sole member of the Stock Option Committee, which was authorized to approve and administer the issuance of options to Rambus non-executive employees. In 2006, Rambus' audit committee commenced an internal investigation of the timing of past stock option grants and related accounting issues. While Mr. Tate did not develop relevant policies and was not responsible for accounting judgments, Mr. Tate entered into a settlement agreement with Rambus. From 1979 to 1990, Mr. Tate served in various marketing and product line management positions and ultimately as Senior Vice President, Microprocessors and Logic, with Advanced Micro Devices, Inc. Mr. Tate received his bachelor's of science degree in computer science from University of Alberta and his M.B.A. from the Harvard Graduate School of Business Administration. We believe that Mr. Tate's possesses specific attributes that qualify him to serve as a director, including his extensive leadership experience as both executive and board director in the global semiconductor business and his deep industry knowledge.

#### **Family Relationships**

There are no family relationships among any of our directors or executive officers.

### **Board Composition**

The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling and direction to our management. Our board of directors meets on a regular basis and additionally as required. Our board of directors currently consists of seven directors. The members of our board of directors

were elected in compliance with the provisions of our amended and restated certificate of incorporation and a voting agreement among certain of our stockholders. The voting agreement will terminate upon the closing of this offering and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors. Our amended and restated certificate of incorporation to become effective upon the completion of this offering, or the amended and restated certificate of incorporation, will permit our board of directors to establish by resolution the authorized number of directors. Each director serves until the expiration of the term for which such director was elected or appointed, or until such director's earlier death, resignation or removal. At each annual meeting of stockholders, directors whose terms then expire will be elected to serve from the time of election and qualification until the next annual meeting following election. Our amended and restated certificate of incorporation provides that the authorized number of directors may be changed only by resolution of the board of directors.

## **Director Independence**

Upon the completion of this offering, we anticipate that our common stock will be listed on The Nasdaq Global Market. Under the listing requirements and rules of The Nasdaq Global Market, independent directors must compose a majority of a listed company's board of directors within 12 months after its initial public offering. In addition, the rules of The Nasdaq Global Market require that, subject to specified exceptions and phase in periods following its initial public offering, each member of a listed company's audit and compensation, nominating and governance committee be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act, or Rule 10A-3. Under the rules of The Nasdaq Global Market, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of our audit committee, our board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors has undertaken a review of its composition, the composition of its committees, and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment, and affiliations, including family relationships, our board of directors has determined that all of our board of directors except Phillip LoPresti do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable rules and regulations of the SEC, and the listing requirements and rules of The Nasdaq Global Market. In making this determination, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director. Our board of directors also determined that Messrs. Foster, England and Hébert, who compose our audit committee, upon the completion of this offering, satisfy the independence standards for the audit committee established by applicable SEC rules and the listing standards of The Nasdaq Global Market and Rule 10A-3 of the Exchange Act. Our board of directors has determined that Messrs. Socolof, England and Finch, who compose our compensation committee, upon the completion of this offering, are "non-employee directors" as defined in Rule 16b-3 promulgated under the Exchange Act and are "outside directors" as that term is defined in Section 162(m) of the Code, or Section 162(m). Each member of the nominating and corporate governance committee is independent within the meaning of the applicable NASDAQ listing standards, is a non-employee director and is free from any relationship that would interfere with the exercise of his or her independent j

#### **Board Committees**

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors.

#### **Audit Committee**

Our audit committee consists of Ron Foster, Robert W. England and Peter Hébert. The chair of our audit committee is Mr. Foster, who our board of directors has determined is an "audit committee financial expert" as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act, and accordingly possesses the requisite enhanced financial sophistication required under the listing standards of The Nasdaq Global Market for at least one member of the audit committee. Our board of directors has also determined that each member of our audit committee can read and understand fundamental financial statements in accordance with applicable requirements. In arriving at these determinations, the board of directors has examined each audit committee member's scope of experience and the nature of their experience in the corporate finance sector.

The primary purpose of the audit committee is to discharge the responsibilities of our board of directors with respect to our accounting, financial and other reporting and internal control practices and to oversee our independent registered public accounting firm. Specific responsibilities of our audit committee include:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure the independence and performance of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our financial statements and critical accounting policies and estimates;
- reviewing the adequacy and effectiveness of our internal controls;
- reviewing our policies on risk assessment and risk management;
- reviewing related-party transactions;
- obtaining and reviewing a report by the independent registered public accounting firm, at least annually, that describes our internal quality-control procedures, any material issues with such procedures and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services, other than *de minimis* non-audit services, to be performed by the independent registered public accounting firm.

#### **Compensation Committee**

Our compensation committee consists of Stephen J. Socolof, Robert W. England and Lawrence G. Finch. The chair of our compensation committee is Mr. Socolof.

The primary purpose of our compensation committee is to discharge the responsibilities of our board of directors to oversee our compensation policies, plans and programs and to review and determine the

compensation to be paid to our executive officers, directors and other senior management, as appropriate. Specific responsibilities of our compensation committee include:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- reviewing and approving, or recommending that our board of directors approve, the terms of compensatory arrangements with our executive officers;
- administering our stock and equity incentive plans;
- selecting independent compensation consultants and assessing whether there are any conflicts of interest with any of the committees compensation advisers;
- reviewing and approving, or recommending that our board of directors approve, incentive compensation and equity plans, severance agreements, change-of-control protections and any other compensatory arrangements for our executive officers and other senior management, as appropriate; and
- reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy.

### Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Geoffrey R. Tate, Lawrence G. Finch and Peter Hébert. The chair of our nominating and corporate governance committee is Mr. Tate. Specific responsibilities of our nominating and corporate governance committee include:

- identifying, evaluating and selecting, or recommending that our board of directors approve, nominees for election to our board of directors;
- · evaluating the performance of our board of directors and of individual directors;
- considering and making recommendations to our board of directors regarding the composition of the committees of the board of directors;
- reviewing developments in corporate governance practices;
- evaluating the adequacy of our corporate governance practices and reporting;
- reviewing management succession plans;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- · overseeing an annual evaluation of the board of directors' performance.

## Role of the Board in Risk Oversight

The audit committee of the board of directors is primarily responsible for overseeing our risk management processes on behalf of the board of directors. Going forward, we expect that the audit committee will receive reports from management on at least a quarterly basis regarding our assessment of risks. In addition, the audit committee reports regularly to the board of directors, which also considers our risk profile. The audit committee and the board of directors focus on the most significant risks we face and our general risk management strategies. While the board of directors oversees our risk management, management is responsible for day-to-day risk management processes. Our board of directors expects management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-

day activities and to effectively implement risk management strategies adopted by the audit committee and the board of directors. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our board of directors leadership structure, which also emphasizes the independence of the board of directors in its oversight of its business and affairs, supports this approach.

#### **Code of Business Conduct and Ethics**

Effective upon the closing of this offering, we have adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Following the closing of this offering, the code of business conduct and ethics will be available on our website at <code>www.Everspin.com</code>. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website to the extent required by the applicable rules and exchange requirements. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus.

## **Compensation Committee Interlocks and Insider Participation**

None of the members of our compensation committee has ever been an officer or employee of the company. None of our executive officers serve, or have served during the last fiscal year, as a member of the board of directors, compensation committee or other board committee performing equivalent functions of any entity that has one or more executive officers serving as one of our directors or on our compensation committee.

### **Director Compensation**

We have a policy of reimbursing our directors for their reasonable out-of-pocket expenses in connection with attending board of directors and committee meetings. From time to time, we have granted stock options to certain of our non-employee directors as compensation for their services. None of our non-employee directors were granted a stock option during the year ended December 31, 2015. Mr. England and Mr. Tate are our only non-employee directors who hold options to purchase our common stock. As of December 31, 2015, each of Mr. England and Mr. Tate held options to purchase 10,883 shares of our common stock.

In April 2016, our board of directors approved a policy for the compensation of our non-employee directors following the closing of this offering. Our non-employee directors will receive compensation in the form of equity and cash, as described below:

Equity Compensation for Current Directors. On the date of each annual meeting of stockholders, each current non-employee director will be granted an option to purchase shares of common stock, which we refer to as the Annual Grant, in an amount to be determined by our compensation committee. All of the shares underlying an Annual Grant will vest upon the earlier of (i) the next year's annual meeting of stockholders or (ii) one year from the date of grant, subject to continued service on the vesting date. 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.

Equity Compensation for Future Directors. Following this offering, newly-elected directors will be granted an option to purchase 16,250 shares of common stock, which we refer to as the Initial Grant. The shares underlying the Initial Grant will vest in a series of three equal annual installments on each anniversary of the date of grant, 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.

Cash Compensation. Each non-employee director will receive an annual fee of \$40,000 in cash for serving on our board of directors and \$1,500 for each meeting of the board of directors attended. The chairman of the audit committee of our board of directors will be entitled to an additional annual cash fee of \$15,000. All fees in cash will be payable in equal quarterly installments, payable in arrears.

#### **EXECUTIVE COMPENSATION**

#### Compensation

#### **Summary Compensation Table**

The following summary compensation table shows information regarding the compensation awarded to, earned by or paid to our Chief Executive Officer and our other two most highly compensated executive officers in 2015, which we refer to as our "named executive officers," during the year ended December 31, 2015.

Name and Principal Position Phillip LoPresti President and Chief Executive Officer	<b>Year</b> 2015	<u>Salary</u> \$275,000	Bonus(2) \$60,000	Stock Options(1) \$ 94,885	Total \$429,885
Terry Hulett Vice President, Storage Solutions	2015	\$213,213	\$51,880	\$ 17,115	\$282,208
Scott Sewell Vice President, Worldwide Sales and Marketing	2015	\$197,920	\$62,114	\$ 11,605	\$271,639

The amounts included in the Stock Options column represent the grant date fair value of stock options granted, calculated in accordance with FASB Accounting Standards Codification Topic 718. For a discussion of the assumptions made in the valuations reflected in this column, see Note 7 of the Financial Statements included elsewhere in this prospectus. 2015 bonus was approved by the board of directors in March 2016 but has not yet been paid.

## Outstanding Equity Awards as of December 31, 2015

The following table shows stock options outstanding for each of our named executive officers as of December 31, 2015.

Name	Vesting Commencement Date		Number of Securities rlying Unexercised Options able Unexercisable		)ption ise Price(5)	Option Expiration Date
Phillip LoPresti	08/20/2013	32,083(1)	22,916	\$	4.42	05/12/2024
	08/20/2013	58,176(1)	41,554	\$	4.42	05/12/2024
	03/20/2012	21,634(2)	1,442	\$	4.42	03/19/2022
	06/15/2010	92,307(3)	_	\$	4.42	06/14/2020
Terry Hulett	10/04/2013 10/04/2013	8,333(4) 8,333(4)	7,051 7,051	\$ \$	4.42 4.42	05/12/2024 05/12/2024
Scott Sewell	08/20/2013 08/20/2013	7,740 <sup>(1)</sup> 4,487 <sup>(1)</sup>	5,528 3,205	\$ \$	4.42 4.42	05/12/2024 05/12/2024
	09/21/2010	15,384(3)	_	\$	4.42	09/20/2020

Approximately 58.3% of the shares subject to this option were vested as of December 31, 2015, and the remainder vest in equal increments on a monthly basis thereafter through August 20, 2017.

## **Employee Benefits**

We provide standard employee benefits to our full- and part-time employees, including our named executive officers, in the United States (in the case of part-time, those that work 30 or more hours per week), including

Approximately 93.7% of the shares subject to this option were vested as of December 31, 2015, and the remainder vest in equal increments on a monthly basis thereafter through March 20,

All of the shares subject to this option were vested as of December 31, 2015.

Approximately 54.2% of the shares subject to this option were vested as of December 31, 2015, and the remainder vest in equal increments on a monthly basis thereafter through October 4,

On May 13, 2014, our board of directors approved a reduction of the exercise price of stock options to an exercise price of \$0.17 per share (the then current fair market value of our common

health, disability and life insurance and a 401(k) plan as a means of attracting and retaining our executives and employees.

## Tax Considerations

Our Board has considered the potential future effects of Section 162(m) of the Code on the compensation paid to our named executive officers. Section 162(m) disallows a tax deduction for any publicly held corporation for individual compensation exceeding \$1.0 million in any taxable year for our chief executive officer and each of the other named executive officers (other than our chief financial officer), unless compensation is performance-based. As we only recently became publicly-traded, our Board has not previously taken the deductibility limit imposed by Section 162(m) into consideration in setting compensation.

## Limitation on Liability and Indemnification

Upon the closing of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies, such as injunctive relief or rescission. Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that we are required to indemnify our directors to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also provide that, upon satisfaction of certain conditions, we shall advance expenses incurred by a director in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board. We have entered and expect to continue to enter into agreements to indemnify our directors and executive officers. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers or persons controlling us, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

## **Executive Employment Agreements and Bonus Plan**

We extended Executive Employment Agreements to each of our named executive officers in connection with their employment. The letters generally provide for at-will employment and set forth the named executive officer's initial base salary, initial equity grant amount and eligibility for employee benefits. In addition, each of our named executive officers has executed a form of our standard confidential information and invention assignment agreement. The key terms of the offer letters extended to our named executive officers that continue to be in effect are described below.

### Phillip LoPresti

Mr. LoPresti's current Executive Employment Agreement became effective April 25, 2016. Mr. LoPresti will be eligible for a target bonus in 2016 equal to 50% of his annual base salary. His eligibility for such annual bonus and the amount of such annual bonus in 2016 and thereafter will be determined by our board of directors in its sole discretion based upon the company's and Mr. LoPresti's achievement of objectives and milestones to be determined on an annual basis by our board in consultation with Mr. LoPresti.

Mr. LoPresti's Executive Employment Agreement provides for certain severance benefits if his employment is terminated without cause or if he resigns for good reason. If Mr. LoPresti's employment is terminated without cause or he resigns for good reason, Mr. LoPresti would be entitled to: (i) continuation payments over a six month severance period of his six month base salary, beginning on the sixtieth day following his separation from service; (ii) payment by us of COBRA premiums to continue health insurance coverage for himself and his eligible dependents over at most a six month severance period; and (iii) the accelerated vesting of a certain portion of Mr. LoPresti's equity awards. In addition, if Mr. LoPresti's employment is terminated without cause or he resigns for good reason within eighteen months of certain change-in-control events, the vesting of Mr. LoPresti's equity awards will be fully accelerated.

### Terry Hulett

Mr. Hulett's current Executive Employment Agreement became effective April 25, 2016. Mr. Hulett will be eligible for a target bonus in 2016 equal to 25% of his annual base salary. His eligibility for such annual bonus and the amount of such annual bonus in 2016 and thereafter will be determined by our board of directors in its sole discretion based upon the company's and Mr. Hulett's achievement of objectives and milestones to be determined on an annual basis by our board in consultation with Mr. Hulett.

Mr. Hulett's Executive Employment Agreement provides for certain severance benefits if his employment is terminated without cause or if he resigns for good reason. If Mr. Hulett's employment is terminated without cause or he resigns for good reason, Mr. Hulett would be entitled to: (i) continuation payments over a six month severance period of his six month base salary, beginning on the sixtieth day following his separation from service; (ii) payment by us of COBRA premiums to continue health insurance coverage for himself and his eligible dependents over at most a six month severance period; and (iii) the accelerated vesting of a certain portion of Mr. Hulett's equity awards. In addition, if Mr. Hulett's employment is terminated without cause or he resigns for good reason within twelve months of certain change-in-control events, the vesting of Mr. Hulett's equity awards will be accelerated with respect to fifty percent of his equity awards.

## Scott Sewell

Mr. Sewell's current Executive Employment Agreement became effective April 25, 2016. Mr. Sewell will be eligible for a bonus in 2016 based on sales targets. His eligibility for such annual bonus and the amount of

such annual bonus in 2016 and thereafter will be determined by our board of directors in its sole discretion based upon the company's and Mr. Sewell's achievement of objectives and milestones to be determined on an annual basis by our board in consultation with Mr. Sewell.

Mr. Sewell's Executive Employment Agreement provides for certain severance benefits if his employment is terminated without cause or if he resigns for good reason. If Mr. Sewell's employment is terminated without cause or he resigns for good reason, Mr. Sewell would be entitled to: (i) continuation payments over a six month severance period of his six month base salary, beginning on the sixtieth day following his separation from service; (ii) payment by us of COBRA premiums to continue health insurance coverage for himself and his eligible dependents over at most a six month severance period; and (iii) the accelerated vesting of a certain portion of Mr. Sewell's equity awards. In addition, if Mr. Sewell's employment is terminated without cause or he resigns for good reason within twelve months of certain change-in-control events, the vesting of Mr. Sewell's equity awards will be fully accelerated.

#### **Stock Plans**

The principal features of our equity incentive plans and our 401(k) plan are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which, other than the 401(k) plan, are filed as exhibits to the registration statement of which this prospectus is a part.

#### 2016 Equity Incentive Plan

Our board of directors adopted our 2016 Equity Incentive Plan, or the 2016 Plan, on April 25, 2016, and our stockholders subsequently approved the 2016 Plan on September 20, 2016. The 2016 Plan became effective on the date the registration statement of which this prospectus forms a part was declared effective by the SEC. Once the 2016 Plan becomes effective, no further grants will be made under our 2008 Equity Incentive Plan, which is described below.

Our 2016 Plan provides for the grant of incentive stock options, or ISOs, within the meaning of Section 422 of the Code, to our employees and our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation to our employees, directors and consultants. Addition, our 2016 Plan provides for the grant of performance cash awards to our employees, directors and consultants.

Authorized Shares. The maximum number of shares of our common stock that may be issued under our 2016 Plan is 500,000. The number of shares of our common stock reserved for issuance under our 2016 Plan will automatically increase on January 1 of each year, beginning on January 1, 2017, and continuing through and including January 1, 2024, by 3% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2016 Plan is 500,000.

Shares issued under our 2016 Plan will be authorized but unissued or reacquired shares of our common stock. Shares subject to stock awards granted under our 2016 Plan that expire or terminate without being exercised in full, or that are paid out in cash rather than in shares, will not reduce the number of shares available for issuance under our 2016 Plan. Additionally, shares issued pursuant to stock awards under our 2016 Plan that we repurchase or that are forfeited, as well as shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award, will become available for future grant under our 2016 Plan.

*Plan Administration.* Our board of directors, or a duly authorized committee of our board of directors, will administer our 2016 Plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified stock awards, and (2) determine the number of shares

subject to such stock awards. Subject to the terms of our 2016 Plan, the board of directors has the authority to determine the terms of awards, including recipients, the exercise, purchase or strike price of stock awards, if any, the number of shares subject to each stock award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, and the form of consideration, if any, payable upon exercise or settlement of the award and the terms of the award agreements for use under our 2016 Plan.

Our board of directors has the power to modify outstanding awards under our 2016 Plan. Our board of directors has the authority to reprice any outstanding option or stock appreciation right, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Section 162(m) Limits. At such time as necessary for compliance with Section 162(m) of the Code, no participant may be granted stock awards covering more than 115,384 shares (192,307 shares in the year of hire) of our common stock under our 2016 Plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise price or strike price of at least 100% of the fair market value of our common stock on the date of grant. Additionally, no participant may be granted in a calendar year a performance stock award covering more than 115,384 shares of our common stock or a performance cash award having a maximum value in excess of \$3 million under our 2016 Plan. These limitations are designed to allow us to grant compensation that will not be subject to the \$1,000,000 annual limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code.

Non-Employee Director Limit. The maximum number of shares subject to awards granted during a single calendar year to any non-employee director under the 2016 Plan, taken together with any cash fees paid to such non-employee director during the fiscal year, shall not exceed \$3 million in total value (calculating the value of any such awards based on the grant date fair value of such awards for financial reporting purposes). Our board of directors may make exceptions to this limit for individual non-employee directors in extraordinary circumstances (for example, to compensate such individual for interim service in the capacity of an officer of the company), as our board of directors may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation.

Stock Options. Incentive stock options and nonstatutory stock options are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2016 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2016 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

Restricted Stock Unit Awards. Restricted stock unit awards are granted pursuant to restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Restricted Stock Awards. Restricted stock awards are granted pursuant to restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, past services to us or any other form of legal consideration that may be acceptable to our

board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ceases for any reason, we may receive through a forfeiture condition or a repurchase right any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us.

Stock Appreciation Rights. Stock appreciation rights are granted pursuant to stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the purchase price or strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2016 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

*Performance Awards*. Our 2016 Plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid per covered executive officer imposed by Section 162(m) of the Code. Our compensation committee can structure such awards so that the stock or cash will be issued or paid pursuant to such award only following the achievement of certain pre-established performance goals during a designated performance period.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2016 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of incentive stock options, (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2016 Plan pursuant to Section 162(m) of the Code) and (5) the class and number of shares and exercise price, strike price or purchase price, if applicable, of all outstanding stock awards.

Our compensation committee may establish performance goals by selecting from one or more of the following performance criteria: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (6) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholder's equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) implementation or completion of projects or processes; (29) user satisfaction; (30) stockholders' equity; (31) capital expenditures; (32) debt levels; (33) operating profit or net operating profit; (34) workforce diversity; (35) growth of net income or operating income; (36) billings; (37) bookings; (38) the number of users, including but not limited to unique users; (39) employee retention; (40) budget management; (41) partner satisfaction; (42) entry into or completion of strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); and (43) to the extent that an Award is not int

Our compensation committee may establish performance goals on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (1) in the award agreement at the time the award is granted or (2) in such other document setting forth the performance goals at the time the goals are established, our compensation committee will appropriately make adjustments in the method of calculating the attainment of the performance goals as follows: (a) to exclude restructuring or other nonrecurring charges; (b) to exclude exchange rate effects; (c) to exclude the effects of changes to generally accepted accounting principles; (d) to exclude the effects of any statutory adjustments to corporate tax rates; and (e) to exclude the effects of any items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (f) to exclude the dilutive effects of acquisitions or joint ventures; (g) to assume that any business divested achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (h) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (i) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (j) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (k) to exclude the effect of any other unusual, non-recurring item of gain or loss; and (m) to exclude

Corporate Transactions. Our 2016 Plan provides that in the event of certain specified significant corporate transactions including: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of at least 50% of our outstanding securities, (3) the consummation of a merger or consolidation where we do not survive the transaction and (4) the consummation of a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding prior to such transaction are converted or exchanged into other property by virtue of the transaction, each outstanding award will be treated as the administrator determines unless otherwise provided in an award agreement or other written agreement between us and the award holder. The administrator may (1) arrange for the assumption, continuation or substitution of a stock award by a successor corporation; (2) arrange for the assignment of any reacquisition or repurchase rights held by us to a successor corporation; (3) accelerate the vesting, in whole or in part, of the stock award and provide for its termination prior to the transaction; (4) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us; (5) cancel or arrange for the cancellation of the stock award prior to the transaction and pay and pay such cash payment, or no consideration, determined by the board; or (6) make a payment, in the form determined by the board, equal to the excess, if any, of the value of the property the participant would have received upon exercise of the awards prior to the transaction over any exercise price payable by the participant in connection with the exercise. The plan administrator is not obligated to treat all stock awards or portions of stock awards, even those that are of the same type, in the same manner.

In the event of a change in control, awards granted under the 2016 Plan will not receive automatic acceleration of vesting and exercisability, although this treatment may be provided for in an award agreement. Under the 2016 Plan, a change in control is defined to include (1) the acquisition by any person or company of more than 50% of the combined voting power of our then outstanding stock, (2) a merger, consolidation or similar transaction in which our stockholders immediately prior to the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity), (3) a sale, lease, exclusive license or other disposition of all or substantially all of our assets to an entity that did not previously hold more than 50% of the voting power over company stock, and (4) our stockholders approve and the Board approves a plan of complete dissolution or liquidation or a complete dissolution or liquidation or a parent corporation.

*Transferability*. A participant may not transfer stock awards under our 2016 Plan other than by will, the laws of descent and distribution or as otherwise provided under our 2016 Plan.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2016 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopted our 2016 Plan. No stock awards may be granted under our 2016 Plan while it is suspended or after it is terminated.

# 2016 Employee Stock Purchase Plan

Our board of directors adopted our 2016 Employee Stock Purchase Plan, or the ESPP, on April 25, 2016, and our stockholders subsequently approved the ESPP on September 20, 2016. The ESPP became effective immediately upon the execution and delivery of the underwriting agreement related to this offering. The purpose of the ESPP is to secure the services of new employees, to retain the services of existing employees and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code.

Authorized Shares. The maximum aggregate number of shares of our common stock that may be issued pursuant to the exercise of purchase rights under our ESPP that are granted to our employees or to employees of any of our designated affiliates is 96,153 shares. Additionally, the number of shares of our common stock reserved for issuance under our ESPP will increase automatically each year, beginning on January 1, 2017, and continuing through and including January 1, 2026, by 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or a lesser number as determined by our board of directors. Shares subject to purchase rights granted under our ESPP that terminate without having been exercised in full will not reduce the number of shares available for issuance under our ESPP.

Administration. Our board of directors, or a duly authorized committee thereof, will administer our ESPP. Our board of directors has delegated concurrent authority to administer our ESPP to our compensation committee under the terms of the compensation committee's charter. The ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. We currently intend to have 12-month offerings with multiple purchase periods (of approximately six months in duration) per offering, except that the first purchase period under our first offering may be shorter or longer than six months, depending on the date on which the underwriting agreement relating to this offering becomes effective. An offering under the ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of a share of our common stock on the first date of an offering or (b) 85% of the fair market value of a share of our common stock on the date of purchase. For the initial offering, which commenced upon the execution and delivery of the underwriting agreement relating to this offering, the fair market value on the first day of the initial offering will be the price at which shares are first sold to the public.

*Limitations*. Our employees, including executive officers, or any of our designated affiliates may have to satisfy one or more of the following service requirements before participating in our ESPP, as determined by the

administrator: (1) customary employment with us or one of our affiliates for more than 20 hours per week and more than five months per calendar year, or (2) continuous employment with us or one of our affiliates for a minimum period of time, not to exceed two years, prior to the first date of an offering. An employee may not be granted rights to purchase stock under our ESPP if such employee (1) immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of our common stock, or (2) holds rights to purchase stock under our ESPP that would accrue at a rate that exceeds \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each calendar year that the purchase rights remain outstanding.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year, (3) the number of shares and purchase price of all outstanding purchase rights and (4) the number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of certain significant corporate transactions including: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of 50% of our outstanding securities, (3) the consummation of a merger or consolidation where we do not survive the transaction and (4) the consummation of a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days prior to such corporate transaction, and such purchase rights will terminate immediately.

*ESPP Amendments*, *Termination*. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

# 2008 Equity Incentive Plan

Our board of directors adopted our 2008 Equity Incentive Plan, or the 2008 Plan, in July 2008, and our stockholders subsequently approved the 2008 Plan in October 2008. The 2008 Plan provides for the discretionary grant of ISOs, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock awards to our employees, directors and consultants or our affiliates. ISOs may be granted only to our employees or employees of our affiliates. The option exercise price of all ISOs, nonstatutory stock options and stock appreciation rights may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each ISO, nonstatutory stock option and stock appreciation right may not exceed ten years from the date of grant.

The 2008 Plan was terminated on the date the 2016 Plan became effective. However, any outstanding stock awards granted under the 2008 Plan will remain outstanding, subject to the terms of our 2008 Plan and the applicable stock award agreements, until such outstanding stock awards that are stock options are exercised or until they terminate or expire by their terms, or until such stock awards are fully settled, terminated or forfeited.

*Authorized Shares*. The maximum number of shares of our common stock that may be issued under our 2008 Plan is 1,353,388. The maximum number of shares that may be issued upon the exercise of ISOs under our 2008 Plan is two (2) times the 2008 Plan share reserve.

Plan Administration. Our board of directors or a duly authorized committee of our board of directors administers our 2008 Plan and the stock awards granted under it. Our board of directors may also delegate to one or more of our officers the authority to (1) designate officers and employees to receive specified stock awards and (2) determine the number of shares subject to such stock awards. Subject to the terms of our 2008 Plan, the board of directors has the authority to determine and amend the terms of awards, including recipients, the exercise, purchase or strike price of stock awards, if any, the number of shares subject to each stock award, the fair market value of a share of our common stock, the vesting schedule applicable to the awards, together with any vesting acceleration, and the form of consideration, if any, payable upon exercise or settlement of the award and the terms of the award agreements for use under our 2008 Plan.

Our board of directors has the power to modify outstanding awards under our 2008 Plan. Our board of directors has the authority to reprice any outstanding option or stock appreciation right, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Corporate Transactions. Our 2008 Plan provides that in the event of certain specified significant corporate transactions, as defined under our 2008 Plan, each outstanding award will be treated as the administrator determines. The administrator may (1) arrange for the assumption, continuation or substitution of a stock award by a successor corporation, or the acquiring corporation's parent company; (2) arrange for the assignment of any reacquisition or repurchase rights held by us to a successor corporation, or the acquiring corporation's parent company; (3) accelerate the vesting, in whole or in part, of the stock award and provide for its termination prior to the transaction; (4) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us; or (5) make a payment in such form as determined by the board of directors equal to the excess of the value of the property that would have been received and the exercise price. The plan administrator is not obligated to treat all stock awards or portions of stock awards, even those that are of the same type, in the same manner.

In the event of a change in control, as defined in the 2008 Plan, awards granted under the 2008 Plan will not receive automatic acceleration of vesting and exercisability, although this treatment may be provided for in an award agreement.

*Transferability.* A participant may not transfer stock awards under our 2008 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2008 Plan.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend or terminate our 2008 Plan, provided that such action is approved by our stockholders to the extent stockholder approval is necessary and that such action does not impair the existing rights of any participant without such participant's written consent. As described above, our 2008 Plan will be terminated upon the effective date of this offering and no future stock awards will be granted thereunder.

#### CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2013, to which we have been a party, in which the amount involved exceeds \$120,000, and in which any of our directors, executive officers or beneficial holders of more than 5% of our common stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest.

Each agreement described below is filed as an exhibit to the registration statement of which this prospectus forms a part, and the following descriptions are qualified by reference to such agreements.

Compensation arrangements for our directors and named executive officers are described in this prospectus under the section titled "Executive Compensation."

## **Bridge Financings**

## March 2013 Bridge Financing

In March 2013, we sold an aggregate of \$2.0 million in convertible promissory notes at a price equal to the principal amount of such notes. These notes had an annual interest rate of 10% and a maturity date in March 2013, and were converted in July 2013 as described below. The following table summarizes the participation in the convertible note financing by any of our executive officers, directors and holders of more than 5% of our capital stock.

Name of 5% Stockholder	vertible Note cipal Amount
Entities affiliated with NV Partners(1)	\$ 738,613
Entities affiliated with Sigma Partners(2)	393,927
Entities affiliated with Lux Ventures(3)	322,528
Entities affiliated with Draper Fisher Jurvetson(4)	196,964
EPIC Venture Fund IV, LLC	196,964
Lawrence G. Finch <sup>(5)</sup>	98,482
The Tate Family Trust Dated 9/30/98(6)	32,827

Consists of (a) a note issued to NV Partners IV LP with a principal amount of \$642,272 and (b) a note issued to NV Partners IV-C LP with a principal amount of \$96,341 (together, "NV Partners"). Mr. Socolof, a member of our board of directors, is affiliated with NV Partners.

Consists of (a) a note issued to Sigma Partners 8, L.P. with a principal amount of \$377,764, (b) a note issued to Sigma Associates 8, L.P. with a principal amount of \$12,102 and (c) a note issued to Sigma Investors 8, L.P. with a principal amount of \$4,061 (collectively, "Sigma Partners"). Mr. Finch, a member of our board of directors, is affiliated with Sigma Partners. Consists of (a) a note issued to Lux Ventures II, L.P. with the principal amount of \$12,981

<sup>(</sup>together, "Lux Ventures"). Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures.

Consists of (a) a note issued to Draper Fisher Jurvetson Fund IX, L.P. with the principal amount of \$185,343, (b) a note issued to Draper Associates Riskmasters Fund II, LLC with the

principal amount of \$6,598 and (c) a note issued to Draper Fisher Jurvetson Partners IX, LLC with the principal amount of \$5,023 (collectively, "Draper Fisher Jurvetson").

Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.

Mr. Tate is a member of our board of directors and a trustee of the Tate Family Trust Dated 9/30/98.

#### **August 2014 Bridge Financing**

In August 2014, we sold an aggregate of \$2.0 million in convertible promissory notes at a price equal to the principal amount of such notes. These notes had an annual interest rate of 5% and a maturity date in August 2015, and were converted in December 2014 as described below. The following table summarizes the participation in the convertible note financing by any of our executive officers, directors and holders of more than 5% of our capital stock.

Name of 5% Stockholder	Convertible Note Principal Amount	
Entities affiliated with NV Partners(1)	\$	745,960
Entities affiliated with Sigma Partners(2)		397,845
Entities affiliated with Lux Ventures(3)		325,736
Entities affiliated with Draper Fisher Jurvetson <sup>(4)</sup>		198,922
EPIC Venture Fund IV, LLC		198,923
Lawrence G. Finch(5)		99,461
The Tate Family Trust Dated 9/30/98(6)		33,153

- Consists of (a) a note issued to NV Partners IV LP with a principal amount of \$648,661 and (b) a note issued to NV Partners IV-C LP with a principal amount of \$97,299. Mr. Socolof, a member of our board of directors, is affiliated with NV Partners.
- Consists of (a) a note issued to Sigma Partners 8, L.P. with a principal amount of \$381,643, (b) a note issued to Sigma Associates 8, L.P. with a principal amount of \$12,176 and (c) a note issued to Sigma Investors 8, L.P. with a principal amount of \$4,026. Mr. Finch, a member of our board of directors, is affiliated with Sigma Partners.

  Consists of (a) a note issued to Lux Ventures II, L.P. with the principal amount of \$13,110.
- Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures.

  Consists of (a) a note issued to Draper Fisher Jurvetson Fund IX, L.P. with the principal amount of \$187,186, (b) a note issued to Draper Associates Riskmasters Fund II, LLC with the principal amount of \$6,664 and (c) a note issued to Draper Fisher Jurvetson Partners IX, LLC with the principal amount of \$5,072. Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.

  Mr. Tate is a member of our board of directors and a trustee of the Tate Family Trust Dated 9/30/98.

## January 2016 Bridge Financing

In January 2016, we sold an aggregate of \$5.0 million in convertible promissory notes to existing investors at a price equal to the principal amount of such notes. These notes had an annual interest rate of 5% and, pursuant to an amendment in September 2016, a maturity date in December 2016. The following table summarizes the participation in the convertible note financing by any of our executive officers, directors and holders of more than 5% of our capital stock.

Name of 5% Stockholder	nvertible Note ncipal Amount
Entities affiliated with NV Partners(1)	\$ 1,864,899
Entities affiliated with Sigma Partners(2)	994,612
Entities affiliated with Lux Ventures(3)	814,339
Entities affiliated with Draper Fisher Jurvetson(4)	497,306
EPIC Venture Fund IV, LLC	497,306
Lawrence G. Finch(5)	248,653
The Tate Family Trust Dated 9/30/98(6)	82,884

Consists of (a) a note issued to and held by NV Partners IV LP with a principal amount of \$1,621,651 and (b) a note issued to and held by NV Partners IV-C LP with a principal amount of

<sup>\$243,248.</sup> Mr. Socolof, a member of our board of directors, is affiliated with NV Partners.

Consists of (a) a note issued to and held by Sigma Partners 8, L.P. with a principal amount of \$954,379, (b) a note issued to and held by Sigma Associates 8, L.P. with a principal amount of \$30,164 and (c) a note issued to and held by Sigma Investors 8, L.P. with a principal amount of \$10,069. Mr. Finch, a member of our board of directors, is affiliated with Sigma Partners.

Consists of (a) a note issued to and held by Lux Ventures II, L.P. with the principal amount of \$781,564 and (b) a note issued to and held by Lux Ventures II Sidecar, L.P. with the principal amount of \$32,775. Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures

- Consists of (a) a note issued to and held by Draper Fisher Jurvetson Fund IX, L.P. with the principal amount of \$467,965, (b) a note issued to and held by Draper Associates Riskmasters Fund II, LLC with the principal amount of \$16,660 and (c) a note issued to and held by Draper Fisher Jurvetson Partners IX, LLC with the principal amount of \$12,681.
- Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.
- Mr. Tate is a member of our board of directors and a trustee of the Tate Family Trust Dated 9/30/98.

#### August 2016 Bridge Financing

In August 2016, we sold an aggregate of \$3.5 million in convertible promissory notes to existing investors at a price equal to the principal amount of such notes. These notes have an annual interest rate of 5% and, pursuant to an amendment in September 2016, a maturity date in December 2016. The following table summarizes the participation in the convertible note financing by any of our executive officers, directors and holders of more than 5% of our capital stock.

Name of 5% Stockholder	Convertible Note Principal Amount
Entities affiliated with NV Partners(1)	\$1,305,430
Entities affiliated with Sigma Partners(2)	\$ 696,229
Entities affiliated with Lux Ventures(3)	\$ 570,038
Entities affiliated with Draper Fisher Jurvetson <sup>(4)</sup>	\$ 348,113
Epic Venture Fund IV, LLC	\$ 348,114
Lawrence G. Finch(5)	\$ 174,057
The Tate Family Trust dated 9/30/98(6)	\$ 58,019

- Consists of (a) a note issued to and held by NV Partners IV LP with a principal amount of \$1,135,156 and (b) a note issued to and held by NV Partners IV-C LP with a principal amount of
- Consists of (a) a note issued to and held by Sigma Partners 8, L.P. with a principal amount of \$1,153,150 and (b) a note issued to and held by Sigma Associates 8, L.P. with a principal amount of \$21,115 and (c) a note issued to and held by Sigma Investors 8, L.P. with a principal amount of \$21,115 and (c) a note issued to and held by Sigma Investors 8, L.P. with a principal amount of \$7,048. Mr. Finch, a member of our board of directors, is affiliated with Sigma Partners. Consists of (a) a note issued to and held by Lux Ventures II, L.P. with the principal amount of \$22,943. Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures.
- Consists of (a) a note issued to and held by Draper Fisher Jurvetson Fund IX, L.P. with the principal amount of \$327,575, (b) a note issued to and held by Draper Associates Riskmasters Fund II, LLC with the principal amount of \$11,662 and (c) a note issued to and held by Draper Fisher Jurvetson Partners IX, LLC with the principal amount of \$8,876. Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.
- Mr. Tate is a member of our board of directors and a trustee of the Tate Family Trust Dated 9/30/98.

## **Convertible Preferred and Common Stock Financings**

#### Sale of Common Stock and Series B Convertible Preferred Stock

In July 2013, we completed the closing of the sale of units in the aggregate of 1,972,988 shares of our common stock and 657,658 shares of our Series B convertible preferred stock (Unit Shares) at a purchase price of \$26.00 per Unit Share for an aggregate purchase price of \$15,324,480. Of the Unit Shares issued, 819,136 shares of the common stock and 273,034 shares of the Series B convertible preferred stock were issued upon conversion in full of the convertible notes sold in March 2013 and described above at a 75% discount to the purchase price.

The following table summarizes purchases of shares of our Series B convertible preferred stock by our executive officers, directors and holders of more than 5% of our capital stock.

Name	Common Stock	Series B Convertible Preferred Stock	Aggregate Purchase Price
Entities affiliated with NV Partners(1)	728,115	242,705	\$5,654,892
Entities affiliated with Sigma Partners(2)	388,328	129,442	3,015,942
Entities affiliated with Lux Ventures(3)	317,943	105,980	2,469,302
EPIC Venture Fund IV, LLC	194,164	64,721	1,507,971
Entities affiliated with Draper Fisher Jurvetson(4)	194,162	64,720	1,507,969
Lawrence G. Finch(5)	97,082	32,360	753,985
The Tate Family Trust Dated 9/30/98(6)	32,360	10,786	251,328

- Includes (a) 633,144 shares of common stock and 211,048 shares of Series B convertible preferred stock issued to and held by NV Partners IV LP and (b) 94,971 shares of common stock and 31,657 shares of Series B convertible preferred stock issued to and held by NV Partners IV-C LP. Mr. Socolof, a member of our board of directors, is affiliated with NV Partners. Includes (a) 372,465 shares of common stock and 124,155 shares of Series B convertible preferred stock issued to and held by Sigma Partners 8, L.P., (b) 11,903 shares of common stock and 3,967 shares of Series B convertible preferred stock issued to and held by Sigma Partners 8, L.P., (b) 11,903 shares of Series B convertible preferred stock issued to and held by Sigma Partners.
- Includes (a) 305,147 shares of common stock and 101,715 shares of Series B convertible preferred stock issued to and held by Lux Ventures II, L.P. and (b) 12,796 shares of common stock and 4,265 shares of Series B convertible preferred stock issued to and held by Lux Ventures II Sidecar, L.P. Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures. Includes (a) 182,708 shares of common stock and 60,902 shares of Series B convertible preferred stock issued to and held by Draper Fisher Jurvetson Fund IX, L.P., (b) 6,504 shares of
- common stock and 2,168 shares of Series B convertible preferred stock issued to and held by Draper Associates Riskmasters Fund II, LLC and (c) 4,950 shares of common stock and 1,650 shares of Series B convertible preferred stock issued to and held by Draper Fisher Jurvetson Partners IX, LLC.
- Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.
- Mr. Tate is a member of our board of directors and a trustee of the Tate Family Trust Dated 9/30/98.

## Sale of Series B Convertible Preferred Stock

In January 2014, October 2014 and December 2014, we completed the closing of the sale of an aggregate of 463,159 shares of our Series B convertible preferred stock at a purchase price of \$26.00 per share for an aggregate purchase price of \$12,016,263. 77,518 of the shares of Series B convertible preferred stock were issued upon conversion in full of the convertible notes sold in August 2014 and described above.

The following table summarizes purchases of shares of our Series B convertible preferred stock by our executive officers, directors and holders of more than 5% of our capital stock.

Name	Series B Convertible	Aggregate Purchase
Name	Preferred Stock	<u>Price</u>
GLOBALFOUNDRIES Inc.	192,307	\$5,000,000
Entities affiliated with NV Partners(1)	28,914	751,784
Entities affiliated with Sigma Partners(2)	15,420	400,951
Entities affiliated with Lux Ventures(3)	12,625	328,279
EPIC Venture Fund IV, LLC	7,710	200,476
Entities affiliated with Draper Fisher Jurvetson(4)	7,709	200,475
Lawrence G. Finch(5)	3,855	100,238
The Tate Family Trust Dated 9/30/98(6)	1,285	33,413

Includes (a) 25,143 shares issued to and held by NV Partners IV LP and (b) 3,771 shares issued to and held by NV Partners IV-C LP. Mr. Socolof, a member of our board of directors, is affiliated with NV Partners.

Includes (a) 14,793 shares issued to and held by Sigma Partners 8, L.P., (b) 471 shares issued to and held by Sigma Associates 8, L.P. and (c) 156 shares issued to and held by Sigma Investors 8, L.P. Mr. Finch, a member of our board of directors, is affiliated with Sigma Partners.

- (3) Includes (a) 12,117 shares issued to and held by Lux Ventures II, L.P. and (b) 508 shares issued to and held by Lux Ventures II Sidecar, L.P. Mr. Hébert, a member of our board of directors, is affiliated with Lux Ventures.
- (4) Includes (a) 7,255 shares issued to and held by Draper Fisher Jurvetson Fund IX, L.P., (b) 258 shares issued to and held by Draper Associates Riskmasters Fund II, LLC and (c) 196 shares issued to and held by Draper Fisher Jurvetson Partners IX, LLC.

(5) Mr. Finch is a member of our board of directors and is affiliated with Sigma Partners.

(6) Mr. Tate is a member of our board of directors and the trustee of the Tate Family Trust Dated 9/30/98.

#### Common Stock Issuance to GLOBALFOUNDRIES Inc.

In October 2014, we entered into a ST-MRAM Joint Development Agreement with GLOBALFOUNDRIES Inc. (the Development Agreement) for the joint development of our ST-MRAM technology and as partial consideration for entering into the Development Agreement, issued to GLOBALFOUNDRIES 461,538 shares of our Common Stock subject to vesting upon the achievement of a goal as set forth in the Statement of Work #1 under the Development Agreement, which shares are further subject to a repurchase option in our favor for up to one year in the event the Development Agreement is terminated for any reason. In addition, and as disclosed above, in October 2014, we issued 192,307 shares of our Series B convertible preferred stock to GLOBALFOUNDRIES for aggregate proceeds to us of \$5,000,000.

#### Other Agreements with GLOBALFOUNDRIES

We have entered into a joint development agreement and a manufacturing agreement with GLOBALFOUNDRIES. See "Risk Factors" and "Business—ST-MRAM Joint Development Agreement" and "Business—ST-MRAM Manufactory Agreement" for a discussion of these agreements.

#### Transactions with Freescale

We have entered into various transactions with Freescale (a wholly-owned subsidiary of NXP), a holder of in excess of 5% of our outstanding stock. We lease our manufacturing facility in Chandler, Arizona, from Freescale and total rent payments made during the years ended December 31, 2014 and 2015, and the six months ended June, 2015 and 2016, were \$1.0 million, \$1.0 million, \$582,000 and \$520,000, respectively. Freescale also performs processing of our products in its facility which is capitalized as part of the cost of inventory. The total processing costs incurred by us were \$3.3 million, \$3.9 million, \$1.9 million and \$1.3 million for the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, respectively. In addition, Freescale is one of our largest customers for the sale of embedded wafers, and total revenue from Freescale was \$3.2 million, \$3.5 million, \$1.8 million and \$0.7 million for the years ended December 31, 2014 and 2015, and the six months ended June 30, 2016, respectively. Amounts due from Freescale were \$541,000, \$564,000 and \$502,000 at December 31, 2014 and 2015, and June 30, 2016, respectively. Amounts due to Freescale were \$484,000, \$207,000 and \$596,000 at December 31, 2014 and 2015, and June 30, 2016, respectively.

#### **Indemnification Agreements**

Our amended and restated certificate of incorporation, which will be effective upon the closing of this offering, will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by the board. In addition, we have entered and expect to continue to enter into agreements to indemnify our directors and executive officers. For more information regarding these agreements, see the section of this prospectus titled "Executive Compensation—Limitation on Liability and Indemnification."

#### **Participation in This Offering**

The following directors and principal stockholders affiliated with our directors, including holders of more than 5% of our capital stock, have indicated an interest in purchasing shares of our common stock in this offering

at the public offering price in varying amounts: Entities affiliated with NV Partners (which is affiliated with Stephen Socolof, a member of our board of directors), entities affiliated with Sigma Partners (which is affiliated with Lawrence G. Finch, a member of our board of directors, who is also participating), entities affiliated with Lux Ventures (which is affiliated with Peter Hébert, a member of our board of directors), entities affiliated with Draper Fisher Jurvetson, EPIC Venture Fund IV, LLC, and Geoffrey R. Tate, a member of our board of directors. The aggregate amount that these entities have indicated an interest in purchasing is \$6.2 million of shares of our common stock, and each has indicated an interest in purchasing at least \$0.1 million of shares of our common stock. Because these indications of interest are not binding agreements or commitments to purchase, these stockholders may elect not to purchase any shares in this offering, or the underwriters may elect to sell more, less or no shares to them in this offering.

## **Investor Rights Agreement**

We are party to an investor rights agreement that provides holders of our convertible preferred stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, with certain registration rights, including the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. The investor rights agreement also provides for a right of first refusal in favor of certain holders of our stock with regard to certain issuances of our capital stock. The rights of first refusal will not apply to, and will terminate upon, closing of this offering. For a more detailed description of these registration rights, see the section of this prospectus titled "Description of Capital Stock—Registration Rights."

#### **Voting Agreement**

We are party to a voting agreement under which certain holders of our capital stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, have agreed to vote in a certain way on certain matters, including with respect to the election of directors. Pursuant to the voting agreement, each of New Venture Partners LLC, Lux Capital Management, LLC and Sigma Management 8, L.L.C. had the right to designate one member of our board of directors. Stephen J. Socolof, Peter Hébert and Lawrence G. Finch were designated by New Venture Partners LLC, Lux Capital Management, LLC and Sigma Management 8, L.L.C., respectively, under the voting agreement. The voting agreement and rights regarding the election or designation of members of our board of directors will terminate upon the closing of this offering and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors.

## Right of First Refusal and Co-Sale Agreement

We are party to a right of first refusal and co-sale agreement with holders of our convertible preferred stock and our founders, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, pursuant to which the holders of convertible preferred stock have a right of first refusal and co-sale in respect of certain sales of securities by our founders. The right of first refusal and co-sale agreement will terminate upon the closing of this offering.

#### **Employment Arrangements**

We have entered into Executive Employment Agreements with our executive officers as described in greater detail in the section of this prospectus titled "Executive Compensation—Executive Employment Agreements and Bonus Plan."

### **Stock Option Repricing**

In May 2014, we amended certain of our outstanding stock options to reset their respective exercise prices to \$4.42 per share, the fair market value of our common stock as of such date, as determined by our board of directors.

The following table summarizes options that were repriced for certain of our directors and executive officers:

Name	Number of Options	Original Exercise Price	New Exercise Price	Expiration Date
Phillip LoPresti	92,307	\$ 7.54	\$ 4.42	6/14/2020
	23,076	\$ 13.52	\$ 4.42	3/19/2022
Jon Slaughter, Ph.D.	4,807	\$ 7.54	\$ 4.42	7/21/2018
	1,153	\$ 7.54	\$ 4.42	7/13/2019
	3,653	\$ 7.54	\$ 4.42	4/20/2020
	5,769	\$ 7.54	\$ 4.42	9/20/2020
	1,923	\$ 13.52	\$ 4.42	6/18/2022
Sanjeev Aggarwal, Ph.D.	3,846	\$ 7.54	\$ 4.42	7/21/2018
	961	\$ 7.54	\$ 4.42	7/13/2019
	1,730	\$ 7.54	\$ 4.42	4/20/2020
	8,846	\$ 7.54	\$ 4.42	9/20/2020
	1,923	\$ 13.52	\$ 4.42	6/19/2022
Scott Sewell	15,384	\$ 7.54	\$ 4.42	9/20/2020
Thomas Andre	4,807	\$ 7.54	\$ 4.42	7/21/2018
	2,884	\$ 7.54	\$ 4.42	8/25/2018
	1,923	\$ 7.54	\$ 4.42	4/20/2020
	1,538	\$ 7.54	\$ 4.42	1/24/2021
	2,692	\$ 13.52	\$ 4.42	6/19/2022
Robert W. England	3,846	\$ 7.54	\$ 4.42	7/13/2019
	961	\$ 7.54	\$ 4.42	1/24/2021
Geoffrey R. Tate	3,846	\$ 7.54	\$ 4.42	8/17/2019
	961	\$ 7.54	\$ 4.42	1/24/2021

## **Policies and Procedures for Related Party Transactions**

Our board of directors has adopted a written related-person transaction policy setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar or related transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person.

In addition, under our code of conduct, our employees and directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest to our legal department, or, if the employee is an executive officer, to our board of directors.

In considering related-person transactions, our audit committee (or other independent body of our board of directors) will take into account the relevant available facts and circumstances including, but not limited to, the risks, costs and benefits to us, the terms of the transaction, the availability of other sources for comparable services or products and, if applicable the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated.

Although we did not have a written policy for the review and approval of transactions with related persons prior to this offering, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including all of the transactions described above. Prior to approving

such a transaction, the material facts as to a director's or officer's relationship or interest as to the agreement or transaction were disclosed to our board of directors. Our board of directors would take this information into account when evaluating the transaction and in determining whether such a transaction was fair to us and in the best interests of all of our stockholders. In addition, for each related party transaction described above, the disinterested directors in the context of each such transaction approved the applicable agreement and transaction.

#### PRINCIPAL STOCKHOLDERS

The following table presents information as to the beneficial ownership of our common stock as of September 1, 2016, for:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each named executive officer:
- · each of our directors; and
- all executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable. Common stock subject to options that are currently exercisable or exercisable within 60 days of September 1, 2016, are deemed to be outstanding and to be beneficially owned by the person holding the options for the purpose of computing the percentage ownership of any other person.

Percentage ownership of our common stock "before the offering" in the table is based on 5,506,006 shares of common stock issued and outstanding as of September 1, 2016, adjusted for the conversion of all outstanding shares of convertible preferred stock into 2,486,199 shares of common stock upon the completion of this offering. Percentage ownership of our common stock "after this offering" in the table is based on 12,492,015 shares of common stock issued and outstanding on September 1, 2016, adjusted for the conversion of all outstanding shares of convertible preferred stock and convertible promissory notes issued in January 2016 and August 2016 (assuming a conversion date of October 12, 2016) into 1,361,009 shares of common stock upon the completion of this offering, and the issuance of 5,000,000 shares of common stock in this offering and 625,000 shares of common stock in the concurrent private placement to GigaDevice Semiconductor (HK) Limited and assumes no exercise of the underwriters' option to purchase additional shares. Unless otherwise indicated, the address of each of the individuals and entities named below is c/o 1347 N. Alma School Road, Suite 220, Chandler, Arizona 85224.

Certain of our directors and principal stockholders affiliated with our directors, have indicated an interest in purchasing up to an aggregate of approximately \$6.2 million of shares of common stock in this offering at the public offering price. See "Certain Relationships and Related Party Transactions" beginning on page 98. The information in the table below does not reflect the potential purchase of any shares in this offering by our existing stockholders pursuant to these indications of interest.

		Shares Exercisable	Shares	Percentage Beneficiall	
Name and Address of Shares Beneficially Owned	Shares Owned	Within 60 Days	Beneficially Owned	Before the Offering	After the Offering
5% Stockholders:	Owned	Days	Owncu	the Offering	the Offering
Entities affiliated with NV Partners(1)#	1,503,359	507,632	2,010,991	33.4%	16.1%
Entities affiliated with Sigma Partners(2)#	801,790	270,735	1,072,525	18.6%	8.6%
Entities affiliated with Lux Ventures(3)#	656,465	221,665	878,130	15.3%	7.0%
GLOBALFOUNDRIES Inc.(4)	653,845	_	653,845	11.9%	5.2%
Freescale Semiconductor, Inc.(5)	557,692	_	557,692	10.1%	4.5%
EPIC Venture Fund IV, LLC(6)#	400,895	135,368	536,263	9.5%	4.3%
Entities affiliated with Draper Fisher Jurvetson(7)#	400,890	135,366	536,256	9.5%	4.3%
GigaDevice Semiconductor (HK) Limited(8)	625,000	_	625,000	_	5.0%
Directors and Named Executive Officers:					
Robert W. England	_	16,387	16,387	*	*
Lawrence G. Finch(9)#	200,447	67,683	268,130	4.8%	2.1%
Geoffrey R. Tate(10)#	66,814	38,947	105,761	1.9%	*
Peter Hébert <sup>(11)#</sup>	656,465	221,665	878,130	15.3%	7.0%
Stephen J. Socolof(12)#	1,503,359	507,632	2,010,991	33.4%	16.1%
Phillip LoPresti		237,837	237,877	4.1%	1.9%
Scott Sewell	_	31,977	31,977	*	*
Terry Hulett		23,076	23,076	*	*
Ron Foster	_	6,770	6,770	*	*
All directors and executive officers as a group (15 persons)(13)	2,427,085	1,292,798	3,719,883	54.7%	28.7%

Represents beneficial ownership of less than one percent of the outstanding common stock.

Represents beneficial ownership of less than one percent of the outstanding common stock. The shares in the column "Shares Exercisable Within 60 Days" include shares of common stock issuable upon conversion of shares of preferred stock issuable upon exercise of \$8.5 million of convertible promissory notes issued in January 2016 and August 2016 outstanding as of September 1, 2016, calculated with interest accruing through and until October 12, 2016. Consists of (a) 1,307,270 shares held by NV Partners IV LP, (b) 196,089 shares held by NV Partners IV-C LP (together with NV Partners IV LP, the "NVP Funds") and (c) 507,632 shares of common stock held by the NVP Funds issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of September 1, 2016, calculated with interest accruing through and until October 12, 2016. NVPG IV, LLC is the general partner of NV Partners IV LP and NV Partners IV-C LP. Andrew Garman, Stephen Socolof and Thomas Uhlman are the managing members of NVPG IV, LLC, and share voting and dispositive power with respect to the shares held by such entity. Each managing member disclaims beneficial ownership of these shares except to the extent of his pecuniary interest. The address for each of the entities affiliated with NV Partners is 430 Mountain Avenue, Suite 404, 4th Floor, Murray Hill, NJ 07974.

Consists of (a) 25,944 shares held by Sigma Associates 8 LP. ("Sigma Associates") (b) 8,277 shares held by Sigma Investors 9, LP. ("Sigma Investors") (a) 277,500 shares held by Sigma Investors") (b) 8,277 shares held by Sigma Investors 9, LP. ("Sigma Investors") (b) 8,277 shares held by Sigma Investors") (c) 277,500 shares held by Sigma Investors 9, LP. ("Sigma Investors") (c) 277,500 shares held by Sigma Investors 9, LP. ("Sigma Investors") (c) 277,500 shares held by Sigma Investors 9, LP. ("Sigma Investors") (c) 277,500 shares held by Sigma Investors 9, LP. ("Sigma Investors") (c) 277,500 shares held by Sigma Investors 9, LP. ("Sigma Inv

Murray Hill, NJ 07974.

Consists of (a) 25,924 shares held by Sigma Associates 8, L.P., ("Sigma Associates"), (b) 8,277 shares held by Sigma Investors 8, L.P., ("Sigma Investors"), (c) 767,589 shares held by Sigma Partners 8, L.P., ("Sigma Partners"), and (d) 270,735 shares of common stock held by the Sigma Funds (as defined below) issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of September 1, 2016, calculated with interest accruing through and until October 12, 2016. Sigma Management 8, L.L.C. is the general partner of Sigma Associates 8, L.P., Sigma Investors 8, L.P. and Sigma Partners 8, L.P. (collectively, the "Sigma Funds"). Sigma Management 8, L.L.C. has sole voting and investment power. Robert Davoli, Fahri Diner, Paul Flanagan, Gregory Gretsch, John Mandile, Peter Solvik, Robert Spinner and Wade Woodson, as managing members of Sigma Management 8, L.L.C., share this power. The address for each of the Sigma Funds is 156 Diablo Rd., Suite 320, Danville, CA 94526.

Consists of (a) 630,045 shares held by Lux Ventures II, L.P. ("LV-II"), (b) 26,420 shares held by Lux Ventures II Sidecar, L.P. ("Sidecar") (together with LV-II, the "Lux Funds") and (c) 221,665 shares of common stock held by the Lux Funds issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of

September 1, 2016, calculated with interest accruing through and until October 12, 2016. Lux Venture Partners II, L.P. ("LVP-II") is the general partner of the Lux Funds. Lux Venture Associates II, LLC ("LVA-II") is the general partner of LVP-II and Lux Capital Management, LLC ("LCM

LLC") is the sole member of LVA-II. Joshua Wolfe and Peter Hébert are the individual managers of LCM LLC (the "Individual Managers"). LVP II and LCM LLC disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein. LCM LLC, as sole member, may be deemed to share voting and investment powers for the shares held by the Lux Funds. As one of two individual managers, each of the Individual Managers disclaims beneficial ownership over the shares reported herein, and in all events disclaims beneficial ownership except to the extent of his pecuniary interest therein. The address for each of the Lux Funds is 295 Madison Ave., 24th Floor, NY, NY 10017

The address of GLOBALFOUNDRIES Inc. is PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands. The address of Freescale Semiconductor, Inc. is 6501 William Cannon Dr. West, Austin, TX 78735.

Includes 135,368 shares of common stock held by EPIC Venture Fund IV, LLC issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of September 1, 2016, calculated with interest accruing through and until October 12, 2016. Nicholaus Efstratis and Kent Madsen have shared voting and investment power with respect to the shares held by EPIC Venture Fund IV, LLC, each of whom disclaims beneficial ownership of the securities held by EPIC Venture Fund IV, LLC, except to the extent of any

respect to the section of the sectio Directors of the general partner entity of Fund IX that directly holds shares and as such, may be deemed to have voting and investment power with respect to such shares. The Managing Members of Partners IX are Timothy C. Draper, John H.N. Fisher and Stephen T. Jurvetson. The General Partner of DALP is Draper Associates, Inc. which is controlled by its President and majority shareholder, Timothy C. Draper. The Managing Member of DARF II is Timothy C. Draper. These individuals disclaim beneficial ownership with respect to such shares except to the extent of their pecuniary interest therein. The address of each of the entities affiliated with Draper Fisher Jurvetson is 2882 Sand Hill Road, Suite 150, Menlo Park, California 94025.

Consists solely of shares to be sold in a separate private placement concurrent with the completion of this offering at a price per share equal to the initial public offering price. The address of GigaDevice Semiconductor (HK) Limited is Room 1007 10/Floor, Ho King Shopping Centre, No 2-16, Fa Yuen Street, Mongkok, Kowloon Hongkong. Includes 67,683 shares of common stock held by Mr. Finch issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of

September 1, 2016, calculated with interest accruing through and until October 12, 2016.

Consists of (a) 16,387 shares of common stock issuable to Mr. Tate upon exercise of options exercisable within 60 days of September 1, 2016, (b) 22,560 shares of common stock held by the Tate Family Trust Dated 9/30/98 (the "Tate Family Trust") issuable upon conversion of shares of preferred stock issuable upon exercise of convertible promissory notes outstanding as of September 1, 2016, calculated with interest accruing through and until October 12, 2016, and (c) 66,814 shares of common stock held by the Tate Family Trust, of which Mr. Tate is a trustee. Mr. Tate shares voting and investment power with respect to such shares with Colleen Tate.

(11) Consists solely of shares held by the Lux Funds. See footnote 3 above.
(12) Consists solely of shares held by the NVP Funds. See footnote 1 above.
(13) Consists of shares held by each executive officer and director.

#### DESCRIPTION OF CAPITAL STOCK

#### **Capital Structure**

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect upon the closing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of our common stock and convertible preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

#### General

Upon the closing of this offering, our authorized capital stock will consist of 105,000,000 shares, all with a par value of \$0.0001 per share, of which:

- 100,000,000 shares are designated as common stock; and
- 5,000,000 shares are designated as preferred stock.

#### Common stock

As of June 30, 2016, after giving effect to the conversion of all outstanding shares of convertible preferred stock into 2,486,199 shares of common stock immediately prior to the closing of this offering, we had outstanding 5,506,006 shares of common stock held of record by 44 stockholders.

Voting Rights. Each holder of our common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders, except as otherwise expressly provided in our amended and restated certificate of incorporation or required by applicable law. Cumulative voting for the election of directors is not provided for in our amended and restated certificate of incorporation, which means that the holders of a majority of our shares of common stock can elect all of the directors then standing for election.

*Dividends and Distributions.* Subject to preferences that may apply to any shares of convertible preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that our board of directors may determine.

*Liquidation Rights.* Upon our liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating convertible preferred stock outstanding at that time after payment of liquidation preferences, if any, on any outstanding shares of convertible preferred stock and payment of other claims of creditors.

The rights, preferences, and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of convertible preferred stock that we may designate and issue in the future.

*Preemptive or Similar Rights.* Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

#### Convertible Preferred Stock

As of June 30, 2016, there were 2,486,199 shares of our convertible preferred stock outstanding. Immediately prior to the closing of this offering, all outstanding shares of our convertible preferred stock will convert into 2,486,199 shares of our common stock.

Upon the closing of this offering, our board of directors may, without further action by our stockholders, fix the rights, preferences, privileges and restrictions of up to an aggregate of 5,000,000 shares of preferred stock in one or more series and authorize their issuance. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that these holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action. Upon the closing of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

#### Warrants

As of June 30, 2016, we had warrants to purchase an aggregate of 3,076 shares of our Series A convertible preferred stock outstanding with an exercise price of \$26.00 per share. Unless earlier exercised, these warrants will expire in December 2019. Upon the closing of this offering, these warrants will become exercisable for 3,076 shares of our common stock with an exercise price of \$26.00 per share.

As of June 30, 2016, we had a warrant to purchase an aggregate of up to 6,153 shares of our Series B convertible preferred stock outstanding with an exercise price of \$26.00 per share and a warrant to purchase an aggregate of up to 18,461 shares of our Series B convertible preferred stock outstanding with an exercise price of \$26.00 per share. Unless earlier exercised, these warrants will expire in February 2024 and June 2025, respectively. Upon the closing of this offering, these warrants will become exercisable for up to 24,614 shares of our common stock with an exercise price of \$26.00 per share.

#### Convertible Debt

As of June 30, 2016, we had outstanding convertible debt in the total principal amount of \$5.0 million pursuant to convertible promissory notes issued in January 2016 (which does not include convertible debt in the total principal amount of \$3.5 million pursuant to convertible promissory notes issued in August 2016). Upon the closing of this offering, the outstanding principal balance and all unpaid accrued interest of these convertible promissory notes will convert into shares of our common stock at a 20% discount of the per share price of the common stock issued in this offering, unless otherwise converted pursuant to their terms prior to the closing of this offering.

#### **Registration Rights**

We are party to an investor rights agreement that provides that holders of our convertible preferred stock, certain holders of our common stock, holders of convertible promissory notes and warrants issued by us, and certain holders of common stock that received the common stock upon conversion of convertible preferred stock have certain registration rights. This investor rights agreement was entered into in October 2014 and has been amended or amended and restated from time to time in connection with our convertible preferred stock financings. The registration of shares of our common stock pursuant to the exercise of registration rights described below would enable the holders who have these rights to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the registration rights holders participating in any offering may include in any particular registration. The demand, piggyback and Form S-3 registration rights described below will expire on the earlier of (1) the date that is three years after the closing of this offering,

(2) with respect to each stockholder following the closing of this offering, at such time as such stockholder can sell all of its shares pursuant to Rule 144 of the Securities Act, or (3) a deemed liquidation event.

Demand registration rights. The holders of an aggregate of 5,838,661 shares of our common stock (including shares previously issued upon conversion of convertible preferred stock, shares issuable upon conversion of outstanding convertible preferred stock, shares issuable upon conversion of shares of convertible preferred stock issuable upon the net exercise or exercise of outstanding warrants and shares issuable upon conversion of preferred stock issuable upon exercise of convertible promissory notes, calculated with interest accruing through and until October 12, 2016) are entitled to certain demand registration rights. At any time beginning six months after the closing of this offering, the holders of not less than 75% of these shares may, on not more than two occasions, request that we file a registration statement to register at least 40% of their shares (or a lesser percent if having an aggregate offering price to the public, net of certain selling expenses, would exceed \$15,000,000).

Piggyback registration rights. In connection with this offering, the holders of an aggregate of 6,405,582 shares of our common stock previously issued upon conversion of convertible preferred stock and common stock issuable upon conversion of outstanding convertible preferred stock, shares of convertible preferred stock issuable upon the exercise or, in certain cases, net exercise of outstanding warrants and shares issuable upon conversion of preferred stock issuable upon exercise of convertible promissory notes, calculated with interest accruing through and until October 12, 2016, were entitled to, and the necessary percentage of holders waived, rights to include their shares of registrable securities in this offering. In the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act other than with respect to a demand registration or a registration statement on Form S-3, S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration.

Form S-3 registration rights. The holders of an aggregate of 5,847,890 shares of our common stock previously issued upon conversion of convertible preferred stock and common stock issuable upon conversion of outstanding convertible preferred stock, shares of convertible preferred stock issuable upon the exercise or, in certain cases, net exercise of outstanding warrants and shares issuable upon conversion of preferred stock issuable upon exercise of convertible promissory notes, calculated with interest accruing through and until October 12, 2016 will be entitled to certain Form S-3 registration rights. Such holders may make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, provided that they hold 10% of such shares and have an anticipated aggregated offering price of at least \$10 million, less certain expenses.

#### **Anti-Takeover Provisions**

#### Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the voting power of our shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws to be effective upon the closing of this offering will provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by consent in writing. A special meeting of stockholders may be called only by a majority of our whole board of directors, the chair of our board of directors, or our chief executive officer.

Our amended and restated certificate of incorporation will further provide that, immediately after this offering, the affirmative vote of holders of at least sixty-six and two-thirds percent (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 to amend certain provisions of our certificate of incorporation, including provisions relating to the size of the board, removal of directors, special meetings, actions by written consent and cumulative voting. The affirmative vote of holders of at least sixty-six and two-thirds percent (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 to amend or repeal our bylaws, although our bylaws may be amended by a simple majority vote of our board of directors.

The foregoing provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of our company by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of 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 change the control of our company.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of our company. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy rights. However, these provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in control of our company or our management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Our amended and restated certificate of incorporation provides that stockholder litigation alleging certain claims against us or our board of directors may only be brought in the courts located within the State of Delaware.

#### Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by (1) persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

## **Limitations on Liability and Indemnification**

See the section of this prospectus titled "Executive Compensation—Limitation on Liability and Indemnification."

#### Listing

Our common stock has been approved for listing on The Nasdaq Global Market under the trading symbol "MRAM."

#### **Transfer Agent and Registrar**

Upon the closing of this offering, the transfer agent and registrar for our common stock will be Computershare Trust Company, N.A.

#### SHARES ELIGIBLE FOR FUTURE SALE

Future sales of our common stock in the public market, or the availability of such shares for sale in the public market, could adversely affect market prices prevailing from time to time. As described below, only a limited number of shares will be available for sale shortly after this offering due to contractual and legal restrictions on resale. Nevertheless, sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price at such time and our ability to raise equity capital in the future.

Based on the number of shares outstanding as of June 30, 2016, and after giving effect to the conversion of our outstanding convertible preferred stock and convertible promissory notes (assuming a conversion date of October 12, 2016) into an aggregate of 1,361,009 shares of common stock (which includes 552,262 shares of common stock issuable upon conversion of convertible promissory notes in the aggregate principal amount of \$3.5 million issued in August 2016) upon the completion of this offering, 12,492,015 shares of common stock will be outstanding, or 13,242,015 shares of common stock if the underwriters exercise their option to purchase additional shares in full. All of the 5,000,000 shares sold in this offering will be freely tradable unless purchased by our affiliates, as that term is defined in Rule 144 under the Securities Act. The remaining outstanding shares of our common stock, including the 625,000 shares sold and issued in the concurrent private placement, will be "restricted securities" as that term is defined under Rule 144 of the Securities Act.

As a result of the lock-up agreements and the provisions of Rules 144 and 701 under the Securities Act, the shares of common stock that will be deemed restricted securities after this offering will be available for sale in the public market as follows:

- no shares will be available for sale until 180 days after the date of this prospectus, subject to certain limited exceptions provided for in the lockup agreements; and
- 7,492,015 shares will be eligible for sale beginning more than 180 days after the date of this prospectus, subject, in the case of shares held by our affiliates, to the volume limitations under Rule 144.

#### **Rule 144**

In general, under Rule 144, beginning 90 days after the date of this prospectus, a person who has beneficially owned restricted shares for at least six months would be entitled to sell those securities provided that (1) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (2) we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale and are current in filing our periodic reports. Persons who have beneficially owned restricted shares of common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed 1% of the number of our common stock then outstanding, which will equal approximately 132,420 shares immediately after this offering and the concurrent private placement, based on the number of shares of common stock outstanding as of June 30, 2016. Such sales by affiliates must also comply with the manner of sale and notice provisions of Rule 144 and to the availability of current public information about us.

#### **Rule 701**

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

#### **Lock-Up Agreements**

We, our executive officers and directors and all of our stockholders have agreed, with certain limited exceptions, that for a period of 180 days from the date of this prospectus, we and they will not, without the prior written consent of Stifel, Nicolaus & Company, Incorporated and Needham & Company, LLC (the Representatives), dispose of or hedge any shares or any securities convertible into or exchangeable for our common stock subject to certain exceptions. The Representatives in their sole discretion may release any of the securities subject to these lock-up agreements at any time. These agreements are described in the section of this prospectus titled "Underwriting."

The Representatives have advised us that they have no present intent or arrangement to release any common stock subject to a lock-up, and will consider the release of any lock-up on a case-by-case basis. Upon a request to release any shares of common stock subject to a lock-up, The Representatives would consider the particular circumstances surrounding the request, including, but not limited to, the length of time before the lock-up expires, the number of shares of common stock requested to be released, the reasons for the request, the possible impact on the market for our common stock and whether the holder of our common stock requesting the release is an officer, director or other affiliate of ours.

# MATERIAL UNITED STATES FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. All prospective non-U.S. holders of our common stock should consult with their own tax advisors with respect to the U.S. federal income tax consequences of the purchase, ownership and disposition of our common stock, as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local and non-U.S. tax consequences and any other U.S. federal tax consequences. In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing U.S. Treasury Regulations promulgated thereunder, published administrative rulings and judicial decisions, all as in effect as of the date of this prospectus. These laws are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus.

This discussion is limited to non-U.S. holders that hold shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any aspects of U.S. federal generation-skipping, gift or (except to the limited extent set forth below) estate tax, or any state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, holders subject to the alternative minimum tax or Medicare contribution tax, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies, and U.S. expatriates and certain former citizens or long-term residents of the United States.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships or such entities or arrangements. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences with respect to the matters discussed below.

#### **Distributions on Our Common Stock**

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in "Gain on Sale, Exchange or Other Disposition of Our Common Stock."

Subject to the discussion below regarding backup withholding and FATCA withholding, dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty generally will be required to provide a properly executed IRS Form W-8BEN (in the case of an individual), IRS Form W-8BEN-E (in the case of a corporation), or other appropriate form and satisfy relevant certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. To claim the exemption, the non-U.S. holder must furnish to us or our paying agent a valid IRS Form W-8ECI (or applicable successor form), certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code), unless a specific treaty exemption applies. Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

Non-U.S. Holders may be required to periodically update their IRS Form W-8.

#### Gain on Sale, Exchange or Other Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and FATCA withholding, in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

• the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" may also apply;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S.-source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States) provided the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- our common stock constitutes a U.S. real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation." Even if we are or become a U.S. real property holding corporation, provided that our common stock is regularly traded on an established securities market, our common stock will be treated as a U.S. real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, at any time during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

#### **Information Reporting and Backup Withholding**

We must report annually to the IRS and to each non-U.S. holder the gross amount of distributions on our common stock (whether or not the distribution represents taxable dividend income) paid to such holder and the tax withheld, if any, with respect to such dividends. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. U.S. backup withholding generally will not apply to a non-U.S. holder who provides a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or otherwise establishes an exemption.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Notwithstanding the foregoing, information reporting and backup withholding may apply if the broker has actual knowledge, or reason to know, that the holder is a U.S. person. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder's U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

Non-U.S. holders should consult with their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

#### **FATCA Withholding**

Sections 1471 through 1474 of the Code and related Treasury Regulations (commonly referred to as "FATCA") generally impose a U.S. federal withholding tax of 30% on dividends and the gross proceeds of a disposition of our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (as specifically defined for this purpose), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the foreign financial institution is subject to the diligence and reporting requirements, such institution must enter into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which may include certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing these withholding and reporting requirements may be subject to different rules. This U.S. federal withholding tax of 30% also applies to dividends and the gross proceeds of a disposition of our common stock paid to a non-financial foreign entity, unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. The withholding provisions described above will generally apply to dividends on our common stock paid on or after July 1, 2014, and with respect to gross proceeds of a sale or other disposition of our common stock on or after January 1, 2019. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. Non-U.S. holders are encouraged to consult with their own tax advisors regarding the possible implications of the legislation on their investment in our common stock.

#### Federal Estate Tax

An individual who is not a citizen of the United States and is also a nonresident (as specially defined for estate tax purposes) who is treated as the owner of, or has made certain lifetime transfers of, an interest in our common stock will be required to include the value thereof in his or her gross estate for U.S. federal estate tax purposes, and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise, even though such individual was not a citizen or resident of the United States at the time of his or her death.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT WITH ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK IN THEIR PARTICULAR CIRCUMSTANCES, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW, AS WELL AS TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL, NON-U.S. OR U.S. FEDERAL TAX LAWS.

#### UNDERWRITING

Stifel, Nicolaus & Company, Incorporated and Needham & Company, LLC are acting as representatives of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement, each of the underwriters named below has severally agreed to purchase from us the aggregate number of shares of common stock set forth opposite their respective names below:

Name	Number of Shares
Stifel, Nicolaus & Company, Incorporated	2,000,000
Needham & Company, LLC	2,000,000
Canaccord Genuity Inc.	675,000
Craig-Hallum Capital Group LLC	325,000
Total	5,000,000

The underwriting agreement provides that the obligations of the several underwriters are subject to various conditions, including approval of legal matters by counsel. The nature of the underwriters' obligations commits them to purchase and pay for all of the shares of common stock listed above if any are purchased. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. Under the underwriting agreement, if an underwriter defaults in its commitment to purchase shares of common stock, the commitments of non-defaulting underwriters may be increased or the underwriting agreement may be terminated, depending on the circumstances.

#### **Option to Purchase Additional Shares of Common Stock**

We have granted an option to the underwriters, exercisable for 30 days from the date of this prospectus, to purchase up to a total of 750,000 additional shares of common stock from us at the initial public offering price, less the underwriting discount, solely to cover over-allotments. If the underwriters exercise their option in whole or in part, then each of the underwriters will be separately committed, subject to the conditions described in the underwriting agreement, to purchase the additional shares in proportion to their respective commitments set forth in the table above.

#### **Determination of Offering Price**

Prior to this offering, there was no public market for our common stock. The initial public offering price was determined through negotiations between us and the representatives. In addition to currently prevailing general conditions in the equity securities markets, including current market valuations of publicly traded companies considered comparable to our company, the factors considered in determining the initial public offering price included:

- our results of operations;
- our current financial condition;
- our future prospects;
- our management;
- the economic conditions in and future prospects for the industry in which we compete; and
- other factors we and the representatives deem relevant.

We cannot assure you that an active or orderly trading market will develop for our common stock or that our common stock will trade in the public markets subsequent to this offering at or above the initial public offering price.

#### **Commissions and Discounts**

The underwriters propose to offer the shares directly to the public at the initial public offering price set forth on the cover page of this prospectus, and at this price less a concession not in excess of \$0.336 per share to other dealers. After this offering, the offering price, concessions and other selling terms may be changed by the underwriters. The shares are offered subject to receipt and acceptance by the underwriters and to the other conditions, including the right to reject orders in whole or in part.

The following table summarizes the compensation to be paid to the underwriters and the proceeds, before expenses, payable to us:

			Total With
		Total Without	Exercise of
		Exercise of	Option to
	Per	Option to Purchase	Purchase
	Share	Additional Shares	Additional Shares
Public offering price	\$8.00	\$ 40,000,000.00	\$46,000,000.00
Underwriting discounts and commissions	\$0.56	\$ 2,800,000.00	\$ 3,220,000.00
Proceeds, before expenses, to us	\$7.44	\$ 37,200,000.00	\$ 42,700,000.00

We estimate that our total expenses in connection with this offering, excluding underwriting discounts and commissions, will be approximately \$3,125,000. We have also agreed to reimburse the underwriters up to \$30,000 for certain of their expenses relating to the clearance of the offering by the Financial Industry Regulatory Authority, Inc.

#### **Indemnification of Underwriters**

We will indemnify the underwriters against some civil liabilities, including liabilities under the Securities Act and liabilities arising from breaches of our representations and warranties contained in the underwriting agreement. If we are unable to provide this indemnification, we will contribute to payments the underwriters may be required to make in respect of those liabilities. We will also indemnify the underwriters for losses if the shares (other than those purchased pursuant to the underwriters' option to purchase additional shares) are not delivered to the underwriters' accounts on the initial settlement date.

#### **No Sales of Similar Securities**

We, our directors and executive officers and substantially all of our other securityholders have entered into lock-up agreements with Stifel, Nicolaus & Company, Incorporated and Needham & Company, LLC as representatives of the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, for a period of 180 days after the date of this prospectus, may not offer, sell, contract to sell (including any short sale), pledge, hypothecate, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act, grant any option, right or warrant for the sale of, purchase any option or contract to sell, sell any option or contract to purchase or otherwise encumber, dispose of or transfer, grant any rights with respect to, directly or indirectly, any shares of common stock or securities convertible into or exchangeable for shares of common stock, enter into a transaction which would have the same effect or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock, whether such aforementioned transaction is to be settled by delivery of the common stock or such other securities, in cash or otherwise, or publicly disclose the intention to make any such offer, sale, pledge or disposition, or to enter into any such transaction, swap hedge or other arrangement, subject to specified exceptions. These restrictions shall also apply to any common stock received upon exercise of options granted to or warrants owned by each of the persons or entities described in the immediately preceding sentence. These restrictions will not apply to us with respect to issuances of common stock or securities exercisable for, convertible into or exchangeable for common stock in connection with any acquisition, collaboration, merger,

licensing or other joint venture or strategic transaction involving our company, subject to certain limitations. Stifel, Nicolaus & Company, Incorporated and Needham & Company, LLC, as representatives of the underwriters, may release any of the securities subject to these lock-up agreements which, in the case of officers and directors, shall be with notice.

#### Listing

Our common stock has been approved for listing on the NASDAQ Global Market under the symbol "MRAM."

#### Short Sales, Stabilizing Transactions and Penalty Bids

In order to facilitate this offering, persons participating in this offering may engage in transactions that stabilize, maintain or otherwise affect the price of the shares during and after this offering. Specifically, the underwriters may engage in the following activities in accordance with the rules of the SEC.

#### **Short Sales**

Short sales involve the sales by the underwriters of a greater number of shares of common stock than they are required to purchase in the offering. Covered short sales are short sales made in an amount not greater than the underwriters' option to purchase additional shares of common stock. The underwriters may close out any covered short position by either exercising their option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of our common stock available for purchase in the open market as compared to the price at which they may purchase the shares through their option.

Naked short sales are any short sales in excess of such option to purchase additional shares of common stock. The underwriters must close out any naked short position by purchasing shares of our common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

#### **Stabilizing Transactions**

The underwriters may make bids for or purchases of shares of our common stock for the purpose of pegging, fixing or maintaining the price of our common stock, so long as stabilizing bids do not exceed a specified maximum.

#### **Penalty Bids**

If the underwriters purchase shares of our common stock in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from the underwriters and selling group members who sold those shares as part of this offering. Stabilization and syndicate covering transactions may cause the price of our common stock to be higher than it would be in the absence of these transactions. The imposition of a penalty bid might also have an effect on the price of the shares if it discourages presales of the shares.

The transactions above may occur on the NASDAQ Global Market or otherwise. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. If such transactions are commenced, they may be discontinued without notice at any time.

#### **Discretionary Sales**

The underwriters have informed us that they do not expect to confirm sales of the shares of common stock offered by this prospectus to accounts over which they exercise discretionary authority without obtaining the specific approval of the account holder.

#### **Electronic Distribution**

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters participating in this offering, or by their affiliates. Other than the prospectus in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter and should not be relied upon by investors.

#### Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their affiliates have in the past provided, and may in the future from time to time provide, investment banking and other financing and banking services to us, for which they have in the past received, and may in the future receive, customary fees and reimbursement for their expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments including bank loans for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments.

#### **Notice to Residents of the European Economic Area**

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state (the relevant implementation date), an offer of securities described in this prospectus may not be made to the public in that relevant member state other than:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 100, or if the relevant member state has implemented the relevant provision of the 2010 PD Amending Directive (2010/73/EU) 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives; or
- in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive,

provided that no such offer of securities shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive. For purposes of this provision, the expression an "offer of securities to the public" in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each relevant member state.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on their behalf, other than offers made by the underwriters with a view to the final placement of the securities as contemplated in this prospectus. Accordingly, no purchaser of the securities, other than the underwriters, is authorized to make any further offer of the securities on behalf of us or the underwriters.

#### Notice to Residents of the United Kingdom

This document is only being distributed to, and is only directed at (i) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 as amended, or the Order, (ii) persons falling within Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Order; or (iii) persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

#### Notice to Residents of Switzerland

The securities which are the subject of the offering contemplated by this prospectus may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. None of this prospectus or any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

None of this prospectus or any other offering or marketing material relating to the offering, us or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by the Swiss Financial Market Supervisory Authority, or FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of the securities.

#### **Notice to Residents of Japan**

The underwriters will not offer or sell any of the shares of common stock directly or indirectly in Japan or to, or for the benefit of, any Japanese person or to others, for reoffering or resale directly or indirectly in Japan or to any Japanese person, except in each case pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law of Japan and any other applicable laws and regulations of Japan. For purposes of this paragraph, "Japanese person" means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

#### **Notice to Residents of Hong Kong**

The underwriters and each of their affiliates have not (i) offered or sold, and will not offer or sell, in Hong Kong, by means of any document, any shares of common stock other than (a) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the

meaning of that Ordinance; and (ii) issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere any advertisement, invitation or document relating to the shares of common stock which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the shares of common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance and any rules made under that Ordinance. The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

#### **Notice to Residents of Singapore**

This document has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of common stock may not be circulated or distributed, nor may the shares of common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the Securities and Futures Act), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the Securities and Futures Act or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the Securities and Futures Act.

Where the shares of common stock are subscribed or purchased under Section 275 by a relevant person, which is:

- (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares of common stock under Section 275 except:
  - (1) to an institutional investor or to a relevant person, or to any person pursuant to an offer that is made on terms that such rights or interest are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets;
  - (2) where no consideration is given for the transfer; or
  - (3) by operation of law.

#### Notice to Residents of Canada

This document constitutes an "exempt offering document" as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of the shares. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this document or on the merits of the shares and any representation to the contrary is an offence.

Canadian investors are advised that this document has been prepared in reliance on section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* ("NI 33-105"). Pursuant to section 3A.3 of NI 33-105,

this document is exempt from the requirement that the Company and the underwriters provide investors with certain conflicts of interest disclosure pertaining to "connected issuer" and/or "related issuer" relationships that may exist between the Company and the underwriters as would otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

#### **Resale Restrictions**

The offer and sale of the shares in Canada is being made on a private placement basis only and is exempt from the requirement that the Company prepares and files a prospectus under applicable Canadian securities laws. Any resale of shares acquired by a Canadian investor in this offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the shares outside of Canada.

#### Representations of Purchasers

Each Canadian investor who purchases the shares will be deemed to have represented to the Company, the underwriters and to each dealer from whom a purchase confirmation is received, as applicable, that the investor (i) is purchasing as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) is an "accredited investor" as such term is defined in section 1.1 of National Instrument 45-106 *Prospectus Exemptions* ("NI 45-106") or, in Ontario, as such term is defined in section 73.3(1) of the *Securities Act* (Ontario); and (iii) is a "permitted client" as such term is defined in section 1.1 of National Instrument 31-103 *Registration Requirements*, *Exemptions and Ongoing Registrant Obligations*.

#### Taxation and Eligibility for Investment

Any discussion of taxation and related matters contained in this document does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a Canadian investor when deciding to purchase the shares and, in particular, does not address any Canadian tax considerations. No representation or warranty is hereby made as to the tax consequences to a resident, or deemed resident, of Canada of an investment in the shares or with respect to the eligibility of the shares for investment by such investor under relevant Canadian federal and provincial legislation and regulations.

#### Rights of Action for Damages or Rescission

Securities legislation in certain of the Canadian jurisdictions provides certain purchasers of securities pursuant to an offering memorandum, including where the distribution involves an "eligible foreign security" as such term is defined in Ontario Securities Commission Rule 45-501 *Ontario Prospectus and Registration Exemptions* and in Multilateral Instrument 45-107 *Listing Representation and Statutory Rights of Action Disclosure Exemptions*, as applicable, with a remedy for damages or rescission, or both, in addition to any other rights they may have at law, where the offering memorandum, or other offering document that constitutes an offering memorandum, and any amendment thereto, contains a "misrepresentation" as defined under applicable Canadian securities laws. These remedies, or notice with respect to these remedies, must be exercised or delivered, as the case may be, by the purchaser within the time limits prescribed under, and are subject to limitations and defences under, applicable Canadian securities legislation. In addition, these remedies are in addition to and without derogation from any other right or remedy available at law to the investor.

#### Language of Documents

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.

#### **LEGAL MATTERS**

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. Pillsbury Winthrop Shaw Pittman LLP, Palo Alto, California, is acting as counsel for the underwriters in connection with certain legal matters relating to the shares of common stock offered by this prospectus.

#### **EXPERTS**

The financial statements of Everspin Technologies, Inc. at December 31, 2015 and 2014, and for each of the two years in the period ended December 31, 2015, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the company's ability to continue as a going concern as described in Note 1 to the financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

#### WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to Everspin Technologies, Inc. and the shares of common stock offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules filed therewith may be inspected without charge at the public reference room maintained by the SEC, located at 100 F Street N.E., Room 1580, Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from such offices upon the payment of the fees prescribed by the SEC. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address is www.sec.gov.

We maintain a website at www.Everspin.com. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common stock.

You may also request a copy of these filings, at no cost to you, by writing or telephoning us at the following address:

Everspin Technologies, Inc. 1347 N. Alma School Road Suite 220 Chandler, Arizona 85224 Attention: Chief Financial Officer (480) 347-1111

# EVERSPIN TECHNOLOGIES, INC INDEX TO FINANCIAL STATEMENTS

December 1 of the Control of the Con	<u> </u>
Report of Independent Registered Public Accounting Firm	F-3
Balance Sheets	F-:
Statements of Operations and Comprehensive Loss	F
Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit	F-:
Statements of Cash Flows	F-0
Notes to Financial Statements	F-

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Everspin Technologies, Inc.

We have audited the accompanying balance sheets of Everspin Technologies, Inc. (the "Company") as of December 31, 2014 and 2015, and the related statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' deficit and cash flows for each of the two years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Everspin Technologies, Inc. as of December 31, 2014 and 2015, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses from operations and has a net capital deficiency. Without access to additional liquidity, the Company does not expect it will be able to fund its obligations as they come due in 2016 and beyond, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ ERNST & YOUNG LLP

Phoenix, Arizona May 13, 2016, except for the effect of the reverse stock split as described in Note 13, as to which the date is September 21, 2016

# EVERSPIN TECHNOLOGIES, INC

# **Balance Sheets**

(In thousands, except share and per share amounts)

	December 31,		June 30.	Pro Forma June 30.
	2014	2015	2016	2016
Assets				(unaudited)
Current assets:				
Cash and cash equivalents	\$ 9,624	\$ 2,307	\$ 2,642	
Accounts receivable, net	2,248	1,909	2,730	
Amounts due from related parties	666	564	502	
Inventory	3,745	4,176	3,772	
Prepaid expenses and other current assets	73	190	677	
Total current assets	16,356	9,146	10,323	
Property and equipment, net	1,118	1,654	1,721	
Intangible assets, net	282	132	66	
Deferred offering costs	_	_	1,560	
Other assets	19	29	26	
Total assets	\$ 17,775	\$ 10,961	\$ 13,696	
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit				
Current liabilities:				
Accounts payable	\$ 929	\$ 1,162	\$ 2,883	
Accrued liabilities	1,327	1,755	2,235	
Amounts due to related parties	484	3,812	6,161	
Deferred income on shipments to distributors	1,802	1,440	1,643	
Derivative liability	_	_	388	\$ —
Convertible promissory notes payable-related party	_	_	4,861	_
Current portion of long-term debt	2,874	1,175	3,658	
Total current liabilities	7,416	9,344	21,829	
Redeemable convertible preferred stock warrant liability	145	437	416	_
Deferred revenue	_	229	125	
Long-term debt, net of current portion	_	6,739	5,388	
Total liabilities	7,561	16,749	27,758	
Commitments and contingencies				
Redeemable convertible preferred stock, \$0.0001 par value per share; 68,080,000 shares authorized as of				
December 31, 2014 and 2015, and June 30, 2016 (unaudited); 2,486,199 shares issued and outstanding as of				
December 31, 2014 and 2015, and June 30, 2016 (unaudited); aggregate liquidation preference of \$64,642 as				
of December 31, 2015, and June 30, 2016 (unaudited); no shares authorized, issued and outstanding, pro				
forma (unaudited)	64,642	64,642	64,642	_
Stockholders' deficit:	Í	•	Í	
Common stock, \$0.0001 par value per share; 175,000,000 shares authorized as of December 31, 2014 and				
2015, and June 30, 2016 (unaudited); 3,013,723, 3,015,281 and 3,019,807 (unaudited) shares issued and				
outstanding as of December 31, 2014 and 2015, and June 30, 2016, respectively; 100,000,000 shares				
authorized; 6,303,861 shares issued and outstanding, pro forma (unaudited)	_	_	_	1
Additional paid-in capital	7,120	9,301	10,983	81,146
Accumulated deficit	(61,548)	(79,731)	(89,687)	(89,544)
Total stockholders' deficit	(54,428)	(70,430)	(78,704)	\$ (8,397)
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$ 17,775	\$ 10,961	\$ 13,696	
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# **EVERSPIN TECHNOLOGIES, INC** Statements of Operations and Comprehensive Loss (In thousands except shares and per share amounts)

	Year Ended December 31,		Six Months June 3	
	2014	2014 2015		2016
Product sales (including related party sales of \$3,191 and \$3,472 for the years ended December 31, 2014 and 2015, and \$1,772 (unaudited) and \$735			(unaudi	nea)
(unaudited) for the six months ended June 30, 2015 and 2016	\$ 23,071	\$ 25,875	\$ 12,437	\$ 12,723
Licensing and royalty revenue	1,825	671	217	143
Total revenue	24,896	26,546	12,654	12,866
Cost of sales	11,806	12,568	5,231	5,704
Gross profit	13,090	13,978	7,423	7,162
Operating expenses:				
Research and development	12,664	21,126	9,642	11,231
General and administrative	7,085	6,565	3,574	3,295
Sales and marketing	3,259	3,823	1,454	1,688
Total operating expenses	23,008	31,514	14,670	16,214
Loss from operations	(9,918)	(17,536)	(7,247)	(9,052)
Interest expense	(263)	(653)	(183)	(1,184)
Other income (expense), net	(2)	6	9	280
Net loss and comprehensive loss	\$ (10,183)	\$ (18,183)	\$ (7,421)	\$ (9,956)
Net loss per common share, basic and diluted	\$ (4.00)	\$ (7.12)	\$ (2.91)	\$ (3.90)
Weighted-average shares used to compute net loss per common share, basic and diluted	2,544,578	2,552,205	2,552,185	2,555,397
Pro forma net loss per share, basic and diluted (unaudited)		\$ (3.61)		\$ (1.67)
Weighted-average shares used to compute pro forma net loss per share, basic and diluted (unaudited)		5,038,404		5,839,451

# EVERSPIN TECHNOLOGIES, INC Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit (In thousands, except share amounts)

	Convertible	emable Preferred Stock	Commo		Additional Paid-In	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Deficit
Balances at December 31, 2013	2,023,040	\$ 52,599	2,542,337	\$ —	\$ 6,172	\$ (51,365)	\$ (45,193)
Issuance of Series B redeemable convertible stock	385,641	10,027	_	_	_	_	_
Conversion of convertible promissory notes	77,518	2,016	_	_	_	_	_
Issuance of shares to GLOBALFOUNDRIES subject to vesting							
provisions	_	_	461,538	_	1	_	1
Issuance of common stock upon exercise of stock options	_	_	9,848	_	41	_	41
Compensation expense related to vesting of common stock issued to							
GLOBALFOUNDRIES	_	_	_	_	107	_	107
Stock-based compensation expense	_	_	_	_	799	_	799
Net loss						(10,183)	(10,183)
Balances at December 31, 2014	2,486,199	64,642	3,013,723	_	7,120	(61,548)	(54,428)
Issuance of common stock upon exercise of stock options			1,558		4	_	4
Compensation expense related to vesting of common stock issued to							
GLOBALFOUNDRIES	_	_	_	_	1,761	_	1,761
Stock-based compensation expense	_	_	_	_	416	_	416
Net loss	_	_	_	_	_	(18,183)	(18,183)
Balances at December 31, 2015	2,486,199	64,642	3,015,281		9,301	(79,731)	(70,430)
Issuance of common stock upon exercise of stock options (unaudited)			4,526	_	29	(· · · , · · · · )	29
Compensation expense related to vesting of common stock issued to			,				
GLOBALFOUNDRIES (unaudited)	_	_	_		1,442	_	1,442
Stock-based compensation expense (unaudited)	_	_	_	_	211	_	211
Net loss (unaudited)						(9,956)	(9,956)
Balances at June 30, 2016 (unaudited)	2,486,199	\$ 64,642	3,019,807	<u>\$</u>	\$ 10,983	\$ (89,687)	\$ (78,704)

## EVERSPIN TECHNOLOGIES, INC Statements of Cash Flows (In thousands)

	Year Ended I	December 31, 2015	Six Months End	ed June 30, 2016
			(unaudi	ted)
Cash flows from operating activities	¢ (10.102)	¢ (10.102)	¢ (7.401)	¢ (0.05C)
Net loss	\$ (10,183)	\$ (18,183)	\$ (7,421)	\$ (9,956)
Adjustments to reconcile net loss to net cash used in operating activities:	1 517	1 240	677	200
Depreciation and amortization	1,517	1,340	6//	380 80
Loss on disposal of property and equipment Stock-based compensation	— 799	416	186	211
Change in fair value of redeemable convertible preferred stock warrant liability	(6)	(15)	(15)	(21)
Change in fair value of derivative liability	(0)	(13)	(13) —	(265)
Non-cash interest expense	98	232	126	783
Compensation expense related to vesting of common stock	107	1,761	533	1,442
Changes in operating assets and liabilities:	107	1,701	333	1,442
Accounts receivable	(579)	339	(305)	(821)
Amounts due from related parties	(455)	102	33	62
Prepaid expenses and other current assets	52	(77)	(884)	(507)
Inventory	(297)	(431)	(973)	404
Other assets	63	(10)	(9)	3
Accounts payable	514	233	(526)	967
Accrued liabilities	73	428	(122)	292
Amounts due to related parties	(142)	3,328	1,613	2,197
Deferred income on shipments to distributors	501	(362)	500	203
Deferred revenue	_	229	_	(104)
Net cash used in operating activities	(7,938)	(10,670)	(6,587)	(4,650)
	(7,330)	(10,070)	(0,307)	(4,030)
Cash flows from investing activities Purchases of property and equipment	(EDE)	(1.205)	(CCC)	(427)
	(525)	(1,295)	(666)	(427)
Net cash used in investing activities	(525)	(1,295)	(666)	(427)
Cash flows from financing activities				
Proceeds from convertible promissory notes-related party	_	_	_	5,000
Proceeds from debt	4,000	8,000	8,000	1,500
Payments on debt	(281)	(3,000)	(3,000)	(355)
Payment of debt issuance costs	(76)	(130)	(130)	(15)
Payments on capital lease obligation	_	(226)	(111)	(129)
Payments of deferred offering costs	_	_	_	(618)
Proceeds from issuance of convertible preferred stock	10,027	_	_	_
Proceeds from exercise of stock options	41	4	_	29
Proceeds from issuance of common stock	1			
Net cash provided by (used in) financing activities	13,712	4,648	4,759	5,412
Net increase (decrease) in cash and cash equivalents	5,249	(7,317)	(2,494)	335
Cash and cash equivalents at beginning of period	4,375	9,624	9,624	2,307
Cash and cash equivalents at end of period	\$ 9,624	\$ 2,307	\$ 7,130	\$ 2,642
Supplementary cash flow information:				
Interest paid	\$ 165	\$ 421	<b>\$</b> 57	\$ 401
Non-cash investing and financing activities:				
Purchase of property and equipment under capital lease obligations	\$ —	\$ 431	\$ 399	\$ 34
Conversion of convertible promissory notes	\$ 2,016	\$ —	\$ —	\$ —
Issuance of warrants with debt	\$ 106	\$ 307	\$ 307	\$ —
Deferred offering costs recorded in accounts payable and accrued liabilities	<u>\$</u>	<u> </u>	<u>\$</u>	\$ 942

# EVERSPIN TECHNOLOGIES, INC Notes to Financial Statements

#### 1. Organization and Operations

Everspin Technologies, Inc. (the "Company") was incorporated in Delaware on May 16, 2008. The Company's 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 and transportation, and enterprise storage markets to design high performance, power efficient and reliable systems without the need for bulky batteries or capacitors.

#### Need to Raise Additional Capital and Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates continuity of operations, the realization of assets and the satisfaction of liabilities and commitments in the normal course of business for the twelve month period following the date of these financial statements. The accompanying financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result should the Company be unable to continue as a going concern.

The Company has incurred net losses from operations since its inception and had an accumulated deficit of \$79.7 million and \$89.7 million (unaudited) as of December 31, 2015, and June 30, 2016, respectively. At December 31, 2015, and June 30, 2016, the Company's total liquidity to fund operations was \$6.3 million and \$5.5 million (unaudited), respectively, which consisted of cash and cash equivalent balances of \$2.3 million and \$2.6 million (unaudited), respectively, and availability under the Company's revolving loan of \$4.0 million and \$2.9 million (unaudited), respectively. The ability to access the revolving loan is dependent upon levels of accounts receivable, thus the full \$4.0 million may not be available. The Company expects to incur additional losses and negative operating cash flows and, as a result, it will require additional capital to fund its operations and to execute its business plan. Management plans to finance its operations in the future with equity and debt financing arrangements. However, if capital is not available at adequate levels or on acceptable terms, management believes that planned expenditures may need to be reduced, extending the time period over which the currently available resources will be adequate to fund the Company's operations. In January 2016, the Company issued convertible promissory notes to its stockholders for \$5.0 million in cash and drew down \$1.5 million from its revolving credit facility (see Notes 5, 9 and 13). In addition, in August 2016, the Company issued \$3.5 million principal amount of subordinated convertible promissory notes to its stockholders (see Note 14). Nevertheless, additional capital will be needed to whether the Company will be able to continue as a going concern for a reasonable period of time. Based upon the Company's current financial condition as discussed above, management believes that additional or replacement debt or equity capital will need to be raised in order for the Company to continue to operate as a going concern and to avoid filin

# 2. Summary of Significant Accounting Policies

#### Use of Estimates

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The preparation of the financial statements in conformity with U.S. 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 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, income taxes, redeemable convertible preferred stock and related warrants, common stock, and stock-based compensation. Actual results could differ from those estimates and assumptions.

#### **Unaudited Interim Financial Statements**

The accompanying balance sheet as of June 30, 2016, the statements of operations and comprehensive loss and cash flows for the six months ended June 30, 2015 and 2016, and the statement of redeemable convertible preferred stock and stockholders' deficit as of June 30, 2016, are unaudited. The financial data and other information disclosed in these notes to the financial statements related to June 30, 2016, and the six months ended June 30, 2015 and 2016, are also unaudited. The unaudited interim financial statements have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly the Company's financial position as of June 30, 2016, and the results of its operations and cash flows for the six months ended June 30, 2015 and 2016. The results for the six months ended June 30, 2016, are not necessarily indicative of results to be expected for the year ending December 31, 2016, or for any annual or interim period.

#### **Unaudited Pro Forma Financial Information**

The unaudited pro forma financial information as June 30, 2016 presents the Company's balance sheet information as though all of the Company's outstanding redeemable convertible preferred stock and the outstanding balance of the convertible promissory notes had converted into shares of common stock upon the completion of a qualifying initial public offering of the Company's common stock (an "IPO"). In addition, the pro forma balance sheet information assumes the reclassification of the redeemable convertible preferred stock warrant liability to stockholders' deficit upon completion of an IPO, as the warrants to purchase redeemable convertible preferred stock will be converted into warrants to purchase common stock. The unaudited pro forma balance sheet information does not assume any proceeds from the proposed IPO.

#### **Segments**

The Company's chief operating decision maker is its Chief Executive Officer. The Company operates its business as one operating segment for purposes of assessing performance and making operating decisions. All of the Company's assets are maintained in the United States. The Company derives its revenue from domestic and international markets, based on the billing address of the customer.

#### Cash and Cash Equivalents

The Company considers all highly liquid, short-term investments with remaining maturity dates of three months or less at the date of purchase to be cash equivalents. The Company's cash equivalents consist of money market funds.

#### Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company generally does not require collateral or other security in support of accounts receivable. Allowances are provided for individual accounts receivable when the Company becomes aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy, deterioration in the customer's operating results or change in financial position. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted. The Company also considers a number of factors in evaluating the sufficiency of its allowance for doubtful accounts, including the length of time receivables are past due, significant one-time events, creditworthiness of customers and historical experience. Account balances are charged off against the allowance

after all means of collection have been exhausted and the potential for recovery is considered remote. At December 31, 2014 and 2015, and June 30, 2016 (unaudited), there was no allowance for doubtful accounts.

The Company also establishes an allowance for product returns. The Company analyzes historical returns, current economic trends and changes in customer demand and acceptance of products when evaluating the adequacy of sales returns. As the returns are processed as credits on future purchases, the allowance is recorded against the balance of trade accounts receivable. The allowance was \$206,000, \$344,000 and \$190,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively.

#### 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 gross accounts receivable balance at each respective balance sheet date. 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:

	Revenu	ie	Revenu	ie	Ac	counts Receivable	, net
	Year Ended Dec	ember 31,	Six Months End	ed June 30,	As of Decei	nber 31,	June 30,
Customers	2014	2015	2015	2016	2014	2015	2016
			(unaudit	ted)			(unaudited)
Customer A	26%	26%	25%	24%	22%	28%	18%
Customer B	13	13	14	*	19	23	18
Customer C	15	*	*	10	12	*	16
Customer D	*	*	*	*	*	*	15
Customer E	*	*	11	*	*	*	*
Customer F	*	*	11	11	*	*	*
Customer G	*	*	10	*	*	*	*

<sup>\*</sup> Less than 10%

#### **Inventories**

Inventories are valued at the lower of cost, using the first-in, first-out or specific identification method, or market. The carrying value of inventory is adjusted for excess and obsolete inventory based on inventory age, shipment history and the forecast of demand over a specific future period. At the point of loss recognition, a new lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that new cost basis.

#### **Deferred Offering Costs**

Deferred offering costs, primarily consisting of legal, accounting, printer and other direct fees and costs relating to the proposed initial public offering, are capitalized. The deferred offering costs will be offset against the Company's planned initial public offering proceeds upon the closing of the offering. In the event the offering is terminated, all of the deferred offering costs will be expensed. As of June 30, 2016, the Company capitalized \$1.6 million (unaudited) of deferred offering costs on the balance sheets. No costs were capitalized as of December 31, 2015.

#### Fair Value of Financial Instruments

The Company discloses and recognizes the fair value of its assets and liabilities using a hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. Fair value is defined as the price that would be

received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The hierarchy gives the highest priority to valuations based upon unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to valuations based upon unobservable inputs that are significant to the valuation (Level 3 measurements). The guidance establishes three levels of the fair value hierarchy as follows:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted market prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

*Level 3*—Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

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. 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 and Level 3 liabilities. Where quoted prices are available in an active market, securities are classified as Level 1. Level 1 assets consist primarily of highly liquid money market funds that are included in cash equivalents. Level 3 liabilities consist of the redeemable convertible preferred stock warrant liability. Generally, increases or decreases in the fair value of the underlying redeemable convertible preferred stock would result in a directionally similar impact in the fair value measurement of the warrant liability.

The following table sets forth the fair value of the Company's financial assets and liabilities measured at fair value on a recurring basis based on the three-tier fair value hierarchy (in thousands):

		Decembe	r 31, 2014	
	Level 1	Level 2	Level 3	Total
Assets				
Money market funds	\$6,492	<u>\$ —</u>	<u>\$ —</u>	\$6,492
Total assets measured at fair value	\$6,492	<u>\$ —</u>	\$ —	\$6,492
Liabilities		<u> </u>	<u> </u>	
Redeemable convertible preferred stock warrant liability	\$ —	\$ —	\$ 145	\$ 145
Total liabilities measured at fair value	<u> </u>	<u>\$ —</u>	\$ 145	\$ 145
		Decembe	r 31, 2015	
	Level 1	Decembe Level 2	r 31, 2015 <u>Level 3</u>	Total
Assets	Level 1			Total
Assets Money market funds	<u>Level 1</u> \$2,354		Level 3 \$ —	\$2,354
	\$2,354			\$2,354
Money market funds			Level 3 \$ —	
Money market funds Total assets measured at fair value	\$2,354		Level 3 \$ —	\$2,354

		June 30, 2016			
	Level 1	Level 2	Level 3	Total	
		(unau	dited)		
Assets					
Money market funds	\$3,009	\$ —	\$ —	\$3,009	
Total assets measured at fair value	\$3,009	\$ —	\$ —	\$3,009	
Liabilities	<del></del>	<del></del>		<del></del>	
Redeemable convertible preferred stock warrant liability	\$ —	\$ —	\$ 416	\$ 416	
Derivative liability	_		388	388	
Total liabilities measured at fair value	<del>\$</del> —	<del>\$</del> —	\$ 804	\$ 804	

The following table sets forth a summary of the changes in the fair value of the redeemable convertible preferred stock warrant liability, the Company's Level 3 financial liability, which is measured on a recurring basis (in thousands):

	Decemb	December 31,	
	2014	2015	2016 (unaudited)
Beginning balance	\$ 45	\$145	<b>\$</b> 437
Issuance of redeemable convertible preferred stock warrants	106	307	_
Change in fair value recorded in other income (expense), net	(6)	(15)	(21)
Ending balance	\$145	\$437	\$ 416

The key assumptions used in the Black-Scholes option-pricing model for the valuation of the redeemable convertible preferred stock warrants were:

	Year Ended December 31,		Six Months Ended June 30,	
	2014	2015	2015	2016
			(unaudi	ted)
Expected volatility	52.8 – 53.8%	43.6 - 52.9%	45.7 - 51.8%	41.5 - 52.5%
Risk-free interest rate	1.81 - 2.17%	1.76 - 2.27%	1.76 - 2.27%	1.33 - 1.98%
Expected term (in years)	6 - 10	5 - 10	5.5 - 10	4.5 - 9.0
Exercise price	\$ 26.00	\$ 26.00	\$ 26.00	\$ 26.00
Dividend yield	— %	— %	— %	— %

The following table sets forth a summary of the changes in the fair value of the derivative liability, the Company's Level 3 financial liability, which is measured on a recurring basis (in thousands):

	June 30, 2016
Beginning balance	<del>\$</del> —
Issuance of derivative liability (unaudited)	653
Change in fair value (unaudited)	(265)
Ending balance (unaudited)	\$ 388

The Company estimates the fair value of the derivative liability using a with- and without-model and the probability-weighted expected return method, which estimates a discounted value based upon analyses of various future outcomes, such as an equity financing with proceeds greater than \$5.0 million, an IPO, a merger or sale,

and staying private. The with- and without-model calculates the value of the Company's convertible debt with the features being evaluated for separate accounting, and an identical instrument without those features. The outcomes of each scenario in the probability-weighted expected return method are based upon a market multiple approach, that involves various market multiples and projected financial information, as well as option-pricing models, to reflect optionality within features of the convertible debt instrument. The change in fair value is recognized as a gain or loss in the other income (expense), net line on the statements of operations and comprehensive loss. See below and Note 9 for additional information regarding the derivative liability in connection with the convertible promissory notes.

#### **Property and Equipment**

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation begins at the time the asset is placed in service. Maintenance and repairs are charged to operations as incurred. Depreciation is computed using the straight-line method over the following estimated useful lives of the assets:

	Useful Lives
Computer and network equipment	2 years
Manufacturing equipment	2-7 years
Furniture and fixtures	7 years
Software	3 years

Leasehold improvements are amortized over the shorter of the lease term or useful life. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is reflected in operations. Amortization expense of assets acquired through capital leases is included in depreciation and amortization expense in the statements of operations.

#### Impairment of Long-lived Assets

The Company evaluates its long-lived assets, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. There have been no impairments of the Company's long-lived assets during any of the periods presented.

#### **Intangible Assets**

Intangible assets consist of the cost of acquired technology for use in research and development activities. Costs associated with patent applications, patent prosecution, patent defense and maintenance of patents are charged to expense as incurred.

## Redeemable Convertible Preferred Stock Warrant Liability

Warrants for shares that are contingently redeemable are classified as liabilities on the balance sheet at their estimated fair value because the shares underlying the warrants may obligate the Company to transfer assets to the holders at a future date under certain circumstances such as a deemed liquidation event. The warrants are subject to re-measurement at each balance sheet date and the change in fair value, if any, is recognized as other income (expense), net in the statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of (i) exercise or expiration of the warrants, or (ii) the completion of an IPO, at which time all redeemable convertible preferred stock warrants will be converted into warrants to purchase common stock and the liability will be reclassified to additional paid-in capital.

#### **Derivative Liability**

The convertible promissory notes contain certain redemption features that meet the definition of a derivative. The redemption of the convertible promissory notes upon an equity financing with proceeds in excess of \$5.0 million and in the event of an IPO are contingent redemption features that are not clearly and closely related to the debt instrument and have been bifurcated and recognized as a derivative liability on the balance sheet as of June 30, 2016. The derivative liability is subject to re-measurement at each balance sheet date and the change in fair value, if any, is recognized as other income (expense), net in the statements of operations and comprehensive loss. The Company will continue to adjust the liability for changes in fair value until the earlier of: (i) maturity of the convertible promissory notes; (ii) the completion of an IPO; or (iii) the completion of an equity financing with proceeds in excess of \$5.0 million; or (iv) the optional conversion into Series B preferred stock.

#### Revenue Recognition

The Company recognizes revenue when the following criteria are met: persuasive evidence of an arrangement exists; the price is fixed or determinable; delivery has occurred and title passed; and collectibility is reasonably assured. For sales to OEMs and contract manufacturers, this occurs generally upon shipment. Provisions for product returns and allowances are recorded in the same period as related revenues. The Company analyzes historical returns, current economic trends and changes in customer demand and acceptance of product when evaluating the adequacy of sales returns and other allowances, which are netted against accounts receivable, as these are processed as credits against future purchases or balances outstanding.

The Company sells the majority of its products to its distributors at a uniform list price. However, distributors resell the Company's products to end customers at a very broad range of individually negotiated price points. Distributors are provided with price concessions subsequent to delivery of product to them depending on their end customer and sales price. These concessions are based on a variety of factors, including customer, product, quantity, geography and competitive differentiation. Price protection rights grant distributors the right to a credit in the event of declines in the price of the Company's products. Under these circumstances, the Company remits back to the distributor a portion of their original purchase price after the resale transaction is completed in the form of a credit against the distributors' outstanding accounts receivable balance. The credits are on a per unit basis and are not given to the distributor until the distributor provides information regarding the sale to their end customer. Revenue on shipments to distributors is deferred as the price is not fixed or determinable until delivery has been made by the distributor to its customer and the final sales price has been established.

At the time of shipment to distributors, the Company records a trade receivable for the selling price as there is a legally enforceable obligation of the distributor to pay for the product delivered, inventory is reduced by the carrying value of goods shipped, and the net of these amounts, the gross profit, is recorded as deferred income on shipments to distributors on the balance sheet. The amount of gross profit that will be ultimately recognized in the statements of operations on such sales could be lower than the deferred income recorded on the balance sheets as a result of credits granted to distributors from the price protection rights. The Company is unable to estimate the credits to the distributors due to the wide variability of negotiated price concessions granted to them.

Thus, a portion of the "deferred income on shipments to distributors" balance represents the amount of distributors' original purchase price that will be credited back to the distributor in the future. The wide range and variability of negotiated price concessions granted to distributors does not allow the Company to accurately estimate the portion of the balance in the deferred income on shipments to distributor accounts that will be credited back to the distributor. Therefore, the Company does not reduce deferred income on shipments to distributors or accounts receivable by anticipated future price concessions rather, price concessions are recorded against deferred income on shipments to distributors when incurred, which is generally at the time the distributor sells the product.

At December 31, 2014, the Company had \$3.4 million of deferred revenue and \$1.6 million of deferred cost of sales recognized as \$1.8 million of deferred income on shipments to distributors. At December 31, 2015, the

Company had \$2.6 million of deferred revenue and \$1.2 million of deferred cost of sales recognized as \$1.4 million of deferred income on shipments to distributors. At June 30, 2016, the Company had \$3.0 million (unaudited) of deferred revenue and \$1.4 million (unaudited) of deferred cost of sales recognized as \$1.6 million (unaudited) of deferred income on shipments to distributors.

Products returned by distributors and subsequently scrapped have historically been immaterial to the Company's results of operations. The Company routinely evaluates the risk of impairment of the deferred cost of sales component of the deferred income on shipments to distributors account. Because of the historically immaterial amounts of inventory that have been scrapped, and historically rare instances where discounts given to a distributor result in a price less than our cost, the Company believes the deferred costs are recorded at their approximate carrying values.

For licenses of technology, recognition of revenue is dependent upon whether the Company delivered rights to the technology, and whether there are future performance obligations. In some instances, the license agreements call for future milestones to be met for amounts to be due from the customer. In such scenarios, revenue is recognized using the milestone method, whereby revenue is recognized upon the completion of substantive milestones once the customers acknowledge the milestones have been met and the collection of the amounts are reasonably assured. Royalties received are recognized when reported to the Company, which generally coincides with the receipt of payment.

#### **Product Warranty**

The Company generally sells products with a limited warranty of product quality and a limited indemnification of customers against intellectual property infringement claims related to the Company's products. The Company accrues for known warranty and indemnification issues if a loss is probable and can be reasonably estimated, and accrues for estimated losses incurred for unidentified issues based on historical experience. A warranty liability was not recorded at December 31, 2014 and 2015, and June 30, 2016 (unaudited), as the estimated future warranty costs were insignificant based on the Company's historical experience.

#### Research and Development

Research and development expenses are incurred in support of internal development programs or as part of our joint development agreement with GLOBALFOUNDRIES (see Note 9). Research and development expenses include personnel-related costs (including stock-based compensation), circuit design costs, purchases of materials and laboratory supplies, fabrication and packaging of experimental integrated circuit products, depreciation of research and development related capital equipment and overhead, and are expensed as incurred.

#### Stock-based Compensation

The Company measures its stock-based awards made to employees based on the estimated fair values of the awards 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 and is based on the value of the portion of stock-based payment awards that is ultimately expected to vest. As such, the Company's stock-based compensation is reduced for the estimated forfeitures at the date of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

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 periodically remeasured as the underlying options vest.

#### **Income Taxes**

The Company uses the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company must then assess the likelihood that the resulting deferred tax assets will be realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. Due to the Company's lack of earnings history, the net deferred tax assets have been fully offset by a valuation allowance.

The Company recognizes benefits of uncertain tax positions if it is more likely than not that such positions will be sustained upon examination based solely on their technical merits, as the largest amount of benefit that is more likely than not to be realized upon the ultimate settlement. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit. To date, there have been no interest or penalties charged in relation to the unrecognized tax benefits.

### Comprehensive Loss

Comprehensive loss represents all changes in stockholders' deficit except those resulting from and distributions to stockholders. The Company's comprehensive loss was equal to its net loss for the years ended December 31, 2014 and 2015, and for the six months ended June 30, 2015 and 2016 (unaudited).

#### Net Loss per Common Share

Basic net loss per common share is calculated by dividing the net loss by the weighted-average number of shares of common stock outstanding for the period, without consideration of potentially dilutive securities. Diluted net loss per common share is the same as basic net loss per common share since the effect of potentially dilutive securities is anti-dilutive.

#### Unaudited Pro Forma Net Loss per Share

The unaudited pro forma basic and diluted net loss per share has been computed to give effect to the conversion of the shares of redeemable convertible preferred stock into common stock as if such conversion had occurred at the earlier of the beginning of the period or the date of issuance, if later. Also, the numerator in the pro forma basic and diluted net loss per share calculation has been adjusted to remove gains or losses resulting from the remeasurement of the redeemable convertible preferred stock warrant liability as it will be reclassified to additional paid-in capital upon the completion of an IPO of the Company's common stock. The unaudited pro forma net loss per share does not include the shares to be sold and related proceeds to be received from an IPO.

## **Recent Accounting Pronouncements**

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. In August 2015, the FASB issued an accounting update to defer the effective date by one year such that it is now applicable for annual periods beginning after December 15, 2018. The Company is currently evaluating the potential impact of the adoption of this standard on its financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements-Going Concern: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern.* This new standard gives a

company's management the final responsibilities to decide whether there is substantial doubt about the company's ability to continue as a going concern and to provide related footnote disclosures. The standard provides guidance to management, with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that companies commonly provide in their footnotes. Under the new standard, management must decide whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the company's ability to continue as a going concern within one year after the date that the financial statements are issued, or within one year after the date that the financial statements are available to be issued when applicable. This guidance is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 31, 2016. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company's financial statements and related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, *Interest-Imputation of Interest*, *Simplifying the Presentation of Debt Issuance Costs*, which requires that the debt issuance costs related to a recognized debt liability be presented on the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. This ASU is effective retrospectively for fiscal years and interim periods within those years beginning after December 15, 2015. Early adoption is permitted and the Company has elected to early adopt this guidance retrospectively on January 1, 2014.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*, which requires an entity to measure in scope inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2016. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

In November 2015, FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes*, which is intended to simplify and improve how deferred taxes are classified on the balance sheet. The guidance in this ASU eliminates the current requirement to present deferred tax assets and liabilities as current and noncurrent in a classified balance sheet and now requires entities to classify all deferred tax assets and liabilities as noncurrent. The guidance is effective for annual periods beginning after December 15, 2016, and for interim periods within those annual periods. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, 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 right-of-use asset for leases with a lease-term of more than twelve months. The Company is currently evaluating the impact that the adoption of ASU 2016-02 will have on its financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718) Improvements to Employee Share-Based Payment Accounting*, which is intended to simplify several aspects of the accounting for employee share-based payment transactions, including the income tax consequences, the determination of forfeiture rates, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years and interim periods within those years beginning after December 15, 2016, and early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2016-09 will have on its financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326)*, which is intended to provide financial statement users with more useful information about expected credit losses on financial assets held by a reporting entity at each reporting date. The new standard replaces the existing incurred

loss impairment methodology with a methodology that requires consideration of a broader range of reasonable and supportable forward-looking information to estimate all expected credit losses. The amended guidance is effective for fiscal years and interim periods within those years beginning after December 15, 2019, and early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2016-13 will have on its financial statements and related disclosures.

## 3. Balance Sheet Components

#### Inventory

Inventory consists of the following (in thousands):

	De	cember 31,	June 30,
	2014	2015	2016 (unaudited)
Raw materials	\$ 210	\$ 361	\$ 610
Work-in-process	2,308	2,205	2,088
Finished goods	1,227	1,610	1,074
Total inventory	\$3,745	\$4,176	\$ 3,772

# Property and Equipment, Net

Property and equipment, net consists of the following (in thousands):

	Decem	ber 31,	June 30,	
	2014	2015	2016	
			(unaudited)	
Manufacturing equipment	\$ 7,065	\$ 8,256	\$ 8,509	
Computer and network equipment	468	546	568	
Furniture and fixtures	146	184	184	
Software	322	227	257	
Leasehold improvements	13	13	13	
Total property and equipment, gross	8,014	9,226	9,531	
Less: accumulated depreciation	(6,896)	(7,572)	(7,810)	
Total property and equipment, net	\$ 1,118	\$ 1,654	\$ 1,721	

Depreciation and amortization expense during the years ended December 31, 2014 and 2015, was \$1.3 million and \$1.2 million, respectively, and \$587,000 (unaudited) and \$314,000 (unaudited) for the six months ended June 30, 2015 and 2016, respectively.

## Intangible Assets, Net

In 2008, the Company spun-out of Freescale Semiconductor, Inc. ("Freescale," a wholly-owned subsidiary of NXP Semiconductors N.V.) and acquired certain intellectual property assets and related licenses used in the MRAM business of Freescale. The value assigned to these acquired intangible assets was \$910,000. Intangible assets, net consists of the following (in thousands):

	Decemb	December 31,		ne 30,
	2014	2015		2016
			(una	udited)
Acquired technology	\$ 910	\$ 910	\$	910
Less: accumulated amortization	(628)	(778)		(844)
Total intangible assets, net	\$ 282	\$ 132	\$	66

Amortization expense was \$182,000 and \$150,000 for the years ended December 31, 2014 and 2015, respectively, and \$90,000 (unaudited) and \$66,000 (unaudited) for the six months ended June 30, 2015 and 2016, respectively. The carrying value of the intangible assets will be fully amortized during the year ending December 31, 2016.

## **Accrued Liabilities**

Accrued liabilities consist of the following (in thousands):

	December 31,		June 30,
	2014	2015	2016 (unaudited)
Accrued payroll-related expenses	\$ 688	\$ 636	\$ 1,188
Accrued manufacturing-related costs	305	339	_
Deferred licensing revenue	_	250	229
Deferred rent	154	220	233
Accrued sales commissions payable to sales representatives	96	165	169
Other	84	145	416
Total accrued liabilities	\$1,327	\$1,755	\$ 2,235

## 4. Commitments and Contingencies

## **Operating Leases**

The Company leases office space for its corporate headquarters located in Chandler, Arizona and for its design facility located in Austin, Texas. The leases expire in October 2018 and September 2016, respectively. Rent expense is recognized on a straight-line basis over the term of the leases and accordingly, the Company records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability.

The Company has an operating lease for its Arizona manufacturing facility lease, as amended, for certain of the fabrication, laboratory and office premises of Freescale, a related party. This lease is cancellable upon 24 months' notice by either of the parties. Under the terms of the lease, the base annual rent is increased by 4% per year on the anniversary date of the lease through its expiration in June 2020. In April 2015, Freescale exercised its termination rights and accordingly, the lease will terminate effective April 14, 2017. The Company is currently in the process of negotiating the fabrication portion of the lease and moving 6,000 square feet of office and lab space to alternate facilities.

The following is a schedule of minimum rental commitments under the Company's operating leases at December 31, 2015 (in thousands):

	Amount
Year Ending December 31,	
2016	\$1,301
2017	589
2018	207
Total minimum lease payments	\$2,097

Total rent expense was \$1.3 million and \$1.4 million for the years ended December 31, 2014 and 2015, respectively, and \$672,000 (unaudited) and \$696,000 (unaudited) for the six months ended June 30, 2015 and 2016, respectively.

#### Legal Proceedings

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of its business. Management is currently not aware of any matters that will have a material adverse effect on the financial position, results of operations or cash flows of the Company.

## Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance.

#### 5. Debt and Related Warrants

#### **Prior Facilities**

In December 2010, the Company executed a Loan and Security Agreement with Silicon Valley Bank ("SVB Credit Facility"). The SVB Credit Facility included a \$2.0 million term loan and a \$2.0 million revolving line of credit. The term loan provided for interest at a floating rate equal to the prime rate plus 2.25% and had a term of four years. The revolving line of credit loan provided for interest at a floating rate equal to the greater of (a) 5% or (b) the prime rate plus 2.75% and had a term of two years, with a limit on advances based on a percentage of domestic and foreign qualified receivables outstanding. Security for the SVB Credit Facility included all of the Company's assets except for intellectual property and leased equipment.

The Company was required to comply with certain covenants under the SVB Credit Facility, including requirements to maintain a minimum liquidity ratio, perform below a specified maximum loss, raise additional equity financing, and restrictions on certain actions without the consent of the lender, such as the disposal and acquisition of its business or property, changes in business, ownership or location of collateral, and mergers or acquisitions. The Company was in violation of its financial covenants as of December 31, 2014, and, accordingly, has classified the SVB Credit Facility as a current liability.

In connection with the SVB Credit Facility, the Company issued to Silicon Valley Bank a warrant to purchase 3,076 shares of the Company's Series A redeemable convertible preferred stock at an exercise price of \$26.00 per share. The warrant can be exercised at any time and expires on December 14, 2019. In the event of an IPO of the Company's common stock, at which time the Series A redeemable convertible preferred stock would convert into common stock, the warrant will become exercisable for 3,076 shares of the Company's common stock. The Company recorded the warrant as a debt discount of \$63,000 and as a liability on the balance sheet at its fair value. The fair value of the warrant was \$41,000, \$32,000 and \$29,000 (unaudited) as of December 31, 2014 and 2015, and June 30, 2016, respectively.

In February 2014, the Company executed an Amended and Restated Loan and Security Agreement ("Amended SVB Credit Facility"). The Amended SVB Credit Facility included a \$4.0 million term loan and a \$4.0 million revolving line of credit. The term loan provided for interest at a floating rate equal to the greater of (a) 5% or (b) the prime rate plus 3.75%, and had a term of four years. The revolving line of credit loan provided for interest at a floating rate equal to the greater of (a) 5% or (b) the prime rate plus 1.75% and had a term of two years. All other terms of the agreement were essentially unchanged.

In connection with the Amended SVB Credit Facility, the Company issued to Silicon Valley Bank a warrant to purchase 6,153 shares of the Company's Series B redeemable convertible preferred stock at an exercise price of \$26.00 per share. The warrant can be exercised at any time and expires 10 years after the date of issuance. In the event of an IPO of the Company's common stock, at which time the Series B redeemable convertible preferred stock would convert into common stock, the warrant will become exercisable for 6,153 shares of the Company's common stock. The Company recorded the warrant as a debt discount and as a liability on the balance sheet at its fair value of \$106,000 on the date of issuance using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, an estimated life equal to 10 years, a risk-free interest rate of 2.75%, and volatility of 54.7%. The fair value of the warrant was \$104,000, \$98,000 and \$94,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively.

The carrying value of the Amended SVB Credit Facility at December 31, 2014, was as follows (in thousands):

	_Total
Debt	\$3,000
Less:	
Discount attributable to warrants and debt issuance costs	(126)
Net carrying value of debt	\$2,874

In June 2015, the outstanding principal balance on the Amended SVB Credit Facility of \$2.8 million was repaid, at which time the unamortized balance of the debt discount of \$114,000 and a prepayment penalty of \$20,000 were recognized as interest expense.

## 2015 Facility

In June 2015, the Company executed a Loan and Security Agreement with Ares Venture Finance ("2015 Credit Facility") comprising an \$8.0 million term loan and a \$4.0 million revolving loan. The term loan provides for interest at a floating rate equal to the greater of (a) 8.75% or (b) LIBOR plus 7.75% and has a term of four years. The term loan is payable in 15 monthly installments of interest only and 33 payments of principal and interest with an end-of-term fee of \$180,000 due upon maturity. The revolving loan provides for interest at a floating rate equal to the prime rate plus 3.75% and has a term of two years. The Company may draw upon the loan facility for working capital purposes as required depending upon accounts receivable balances and other required conditions. In January 2016, the Company borrowed \$1.5 million from the revolving loan. (See Note 13) A portion of the proceeds was used to pay off the outstanding balance on the Amended SVB 2014 Credit Facility.

Security for the 2015 Credit Facility includes all of the Company's assets except for leased equipment. The 2015 Credit Facility contains customary covenants restricting the Company's activities, including limitations on its ability to sell assets, engage in mergers and acquisitions, 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 dividends with respect to its capital stock. The Company was in compliance with all covenants at December 31, 2015, and June 30, 2016.

In connection with the 2015 Credit Facility, the Company issued to Ares Venture Finance a warrant to purchase 18,461 shares of the Company's Series B redeemable convertible preferred stock at an exercise price of \$26.00 per share. The warrant can be exercised at any time and expires 10 years after the date of issuance. In the event of an IPO of the Company's common stock at which time the Series B redeemable convertible preferred stock would convert into common stock, the warrant will become exercisable for 18,461 shares of the Company's common stock. The Company recorded the warrant as a debt discount and as a liability on the balance sheet at its fair value of \$307,000 on the date of issuance using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, an estimated life equal to ten years, a risk-free interest rate of 2.41%, and

volatility of 51.8%. The fair value of the warrant was \$307,000 and \$293,000 (unaudited) at December 31, 2015, and June 30, 2016, respectively.

The carrying value of the Company's 2015 Credit Facility at December 31, 2015, was as follows (in thousands):

	Current portion	Long-term debt	Total
Debt, including end of term fee	\$ 970	\$ 7,210	<u>Total</u> \$8,180
Less:			
Discount attributable to warrants, end of term fee and debt issuance costs	_	(471)	(471)
Net carrying value of debt	\$ 970	\$ 6,739	\$7,709

The carrying value of the Company's 2015 Credit Facility at June 30, 2016, was as follows (in thousands):

	Current portion	Long-term debt	Total
		(unaudited)	
Debt, including end of term fee	\$3,570	\$ 5,756	\$9,326
Less:			
Discount attributable to warrants, end of term fee and debt issuance costs	(22)	(367)	(389)
Net carrying value of debt	\$3,548	\$ 5,389	\$8,937

The table below shows the principal repayments of the 2015 Credit Facility as of December 31, 2015 (in thousands):

2016	\$ 970
2017	2,909
2018	2,909
2019	1,392
Total	$\frac{1,392}{\$8,180}$

## **Capital Lease Obligations**

The Company leases certain equipment under capital lease obligations expiring at various dates in 2016.

Future minimum lease payments of the capital lease obligations as of December 31, 2015, are as follows (in thousands):

Total payments in 2016	\$209
Less: interest portion	(4)
Total capital lease obligations	\$205

Property and equipment under capital leases amounted to \$0, \$431,000, and \$463,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively. Accumulated depreciation and amortization on these assets was \$0, \$256,000, and \$353,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively.

#### 6. Redeemable Convertible Preferred Stock and Stockholders' Deficit

## Redeemable Convertible Preferred Stock

The following table summarizes the authorized, issued and outstanding redeemable convertible preferred stock of the Company as of December 31, 2014 and 2015, and June 30, 2016 (unaudited) (in thousands, except share amounts):

	Shares Authorized	Shares Issued and Outstanding	Carrying Value	Liquidation Preference
Series A	35,580,000	1,365,379	\$35,500	\$ 35,500
Series B	32,500,000	1,120,820	29,142	29,142
Total	68,080,000	2,486,199	\$64,642	\$ 64,642

Significant provisions of the Series A and Series B redeemable convertible preferred stock are as follows:

#### Conversion

At any time and at the option of the holder, each share of Series A and Series B redeemable convertible preferred stock (Series Preferred) is convertible into common stock at a rate of one share of common stock for each share of redeemable convertible preferred stock, subject to adjustment for certain dilutive stock issuances and stock splits. The shares of redeemable convertible preferred stock will be converted to shares of common stock upon (a) the closing of a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$55.0 million of gross proceeds and a price of at least \$65.00 per share; or (b) the vote of at least 60% of the then outstanding shares of Series Preferred voting together as a single class.

#### Voting

Each share of redeemable convertible preferred stock has voting rights equal to the number of common shares into which it is convertible. The holders of Series Preferred, voting together as a single class, are entitled to elect three directors of the Company.

#### Dividends

The holders of Series Preferred are entitled to receive noncumulative dividends at a rate per annum equal to \$2.08 per share, subject to adjustment, if and when declared by the board of directors. These dividends are to be paid in advance of any distributions to common stockholders. No dividends have been declared through December 31, 2015, and June 30, 2016.

# Liquidation Preferences

In the event of any voluntary or involuntary liquidation, the holders of the Series Preferred are entitled, before any distribution or payment is made to the holders of common stock, to receive payment based on the original issue price of the Series Preferred of \$26.00 per share, plus all declared but unpaid dividends. If upon liquidation, the assets to be distributed to the holders of Series Preferred are insufficient to permit payment of the full amounts distributable, the entire assets of the Company shall be distributed ratably among the holders of Series Preferred. After the payment of the Series Preferred liquidation preference, the holders of Series Preferred are also entitled to share any remaining available funds on a pro-rata basis with holders of common stock. A liquidation may be deemed to be occasioned by or to include (i) a consolidation or merger of the Company with or into any other corporation in which the Company's stockholders of record as constituted immediately prior to such transaction will, immediately after such transaction, fail to hold at least 50% of the voting power of the result of the surviving corporation; or (ii) a sale, lease, exclusive license or other disposition of all or substantially all of the assets of the Company.

# Redemption

Shares of Series Preferred are redeemable by the Company at a per share price equal to the original issue price, plus any declared but unpaid dividends, in three installments commencing not more than 60 days after receipt by the Company of a written request for redemption from the holders of at least 60% of the outstanding shares of the Series Preferred at any time on or after July 17, 2018.

## Classification

The Company has classified the redeemable convertible preferred stock as mezzanine equity on the balance sheets as the shares can be redeemed by the Company after receipt by the Company, at any time on or after July 17, 2018, of written notice requesting redemption of such stock by the holders of the Series Preferred, as discussed above. The carrying values of the redeemable convertible preferred stock have been adjusted to their redemption value.

#### Common Stock

Common stockholders are entitled to dividends if and when declared by the board of directors subject to the prior rights of the preferred stockholders. As of December 31, 2015, no dividends on common stock had been declared by the board of directors.

The Company had reserved shares of common stock for future issuance as follows:

	Decen	December 31,	
	2014	2015	2016 (unaudited)
Redeemable convertible preferred stock	2,486,199	2,486,199	2,486,199
Options issued and outstanding	852,639	927,175	862,383
Shares available for future option grants	106,468	55,330	463,259
Redeemable convertible preferred stock warrants	9,229	27,690	27,690
Total	3,454,535	3,496,394	3,839,531

#### 7. Stock-Based Compensation

#### 2008 Employee Incentive Plan

In July 2008, the board of directors of the Company adopted the 2008 Equity Incentive Plan (the "2008 Plan"). The 2008 Plan provides for the issuance of incentive stock options ("ISO"), nonqualified stock options, and other stock compensation awards. As of December 31, 2015, and June 30, 2016, the Company's board of directors had authorized the issuance of up to 1,005,725 and 1,353,388 shares of common stock to be issued to employees, consultants, and members of the board of directors under the 2008 Plan, respectively. All such shares authorized for issuance under the 2008 Plan have been reserved. Under the terms of the 2008 Plan, the exercise price of an ISO shall be not less than 100% of the fair value of the stock at the date of grant, as determined by the board of directors, or in the case of certain ISOs, at 110% of the fair market value at the date of grant. The fair value of the Company's common stock is determined by the Company's board of directors at each option measurement date based on a variety of factors including the Company's financial position and historical financial performance, the status of technological developments within the Company, the prevailing market conditions, the illiquid nature of the common stock, arm's length sales of the Company's capital stock (including redeemable convertible preferred stock) and the effect of the rights and preferences of the Company's preferred stockholders, among others.

The term and vesting periods for options granted under the 2008 Plan are determined by the Company's board of directors. Options granted generally vest over four years. Options must be exercised within a 10-year period or sooner if so specified within the option agreement.

The following table summarizes the stock option activity for all grants under the 2008 Plan:

		Options Outstanding				
	Options Available <u>for Grant</u>	Number of Options	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Life (years)	In	gregate strinsic Value nousands)
Balances at December 31, 2013	495,822	338,518	\$ 8.70	6.7	\$	1,630
Options authorized	134,615	_				•
Options granted	(559,335)	559,335	4.42			
Options exercised	_	(9,848)	4.42		\$	_
Options cancelled/forfeited	35,366	(35,366)	4.42			
Balances at December 31, 2014	106,468	852,639	4.42	8.0	\$	_
Options authorized	24,956	_				
Options granted	(123,830)	123,830	4.50			
Options exercised	_	(1,558)	4.42		\$	11
Options cancelled/forfeited	47,736	(47,736)	4.42			
Balances at December 31, 2015	55,330	927,175	4.43	7.3	\$	6,500
Options authorized (unaudited)	347,663	_				
Options exercised (unaudited)	_	(4,526)	4.44		\$	32
Options cancelled/forfeited (unaudited)	60,266	(60,266)	4.42			
Balances at June 30, 2016 (unaudited)	463,259	862,383	4.43	6.8	\$	6,045
Options exercisable—December 31, 2015		590,847	4.42	6.4	\$	4,148
Options vested and expected to vest—December 31, 2015		927,175	4.43	7.3	\$	6,500
Options exercisable—June 30, 2016 (unaudited)		631,763	4.43	6.3	\$	4,433
Options vested and expected to vest—June 30, 2016 (unaudited)		862,383	4.43	6.8	\$	6,045

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock, as determined by the board of directors, as of December 31, 2015, and June 30, 2016

During the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015, the Company granted options with a weighted-average grant date fair value of \$1.82, \$4.42 per share and \$3.64, respectively. The Company did not grant any options in the six months ended June 30, 2016.

The total fair value of options vested during the year was \$332,000 and \$353,000 for the years ended December 31, 2014 and 2015, respectively. The total fair value of options vested during the six months ended June 30, 2015 and 2016, was \$169,000 (unaudited) and \$276,000 (unaudited), respectively.

## **Stock-based Compensation Expense**

The Company recognized stock-based compensation expense as follows (in thousands):

		Year Ended December 31,		x Months ed June 30,
	2014	2014 2015		2016
			(ur	naudited)
Research and development	\$304	\$169	\$ 74	\$ 89
General and administrative	392	190	85	100
Sales and marketing	103	57	27	22
Total	\$799	\$416	\$186	\$211

As of December 31, 2015, and June 30, 2016, there was \$924,000 and \$710,000 (unaudited), respectively, of total unrecognized compensation expense related to unvested options. These expenses are expected to be recognized over a weighted-average period of 2.4 years and 2.1 years, respectively.

#### **Employee Stock-based Compensation**

Stock-based compensation expense for employees was \$776,000 and \$407,000 for the years ended December 31, 2014 and 2015, respectively, and \$181,000 (unaudited) and \$201,000 (unaudited) for the six months ended June 30, 2015 and 2016, respectively. In May 2014, the Company modified the terms of 333,774 vested and unvested stock option awards, affecting 75 employees, by reducing their exercise price from \$7.54 and \$13.52 per share to \$4.42 per share. There was no change in any of the other terms of the option awards. The modification resulted in an incremental value of \$939,000 being allocated to the options, of which \$207,000 was recognized to expense immediately based on options that were vested at the time of the modification. The remaining incremental value of \$732,000 attributable to unvested options is being recognized over their remaining vesting term.

The Company estimated the fair value of each option using the Black-Scholes option-pricing model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards. The fair value of employee stock options was estimated using the assumptions below. Each of these inputs is subjective and its determination generally requires significant judgment.

			Six Months E	nded	
	Year Ended De	cember 31,	June 30,		
	2014	2015 2015		2016	
			(unaudited	d)	
Expected volatility	36.4 - 53.2%	44.1 - 48.9%	45.9 – 48.7%	_	
Risk-free interest rate	0.43 - 2.04%	1.51 - 1.79%	1.51 - 1.79%		
Expected term (in years)	2.1 - 6.1	5.6 - 6.1	6.0 - 6.1		
Dividend yield	— %	— %	— %	_	

*Expected term.* The expected term represents the period that the stock-based awards are expected to be outstanding. The Company used the simplified method to determine the expected term, which is calculated as the average of the time to vesting and the contractual life of the options.

*Expected volatility.* As the Company's common stock has never been publicly traded, the expected volatility is derived from the average historical volatilities of publicly traded companies within a similar industry that are considered to be comparable to the Company's business over a period approximately equal to the expected term for employees' options.

*Risk-free interest rate.* The risk-free interest rate is based on the U.S. Treasury yield with a maturity equal to the expected term of the option in effect at the time of grant.

*Dividend yield.* The Company has never paid dividends on its common stock and is prohibited from paying dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

## Non-employee Stock-based Compensation

Stock-based compensation expense related to stock options granted to non-employees is recognized as the stock options vest. During the year ended December 31, 2014, the Company granted options to purchase 23,606 shares of common stock to non-employees with a weighted-average exercise price of \$4.42 per share. During the year ended December 31, 2015, and the six months ended June 30, 2016 (unaudited), the Company did not grant any options to non-employees. As of December 31, 2014 and 2015, and June 30, 2016, options to purchase 15,498 shares, 15,498 shares and 10,691 shares (unaudited) of common stock were outstanding with a weighted-average exercise price of \$4.42 per share. Stock-based compensation expense for non-employees was \$23,000 and \$9,000 for the years ended December 31, 2014 and 2015, respectively, and \$5,000 (unaudited) and \$10,000 (unaudited) for the six months ended June 30, 2015 and 2016, respectively.

The Company believes that the fair value of the stock options is more reliably measurable than the fair value of services received. The fair value of the stock options granted is calculated at each reporting date using the Black-Scholes option pricing model with the following assumptions:

	Year Ended Do	ecember 31.	Six Months Ended June 30,		
	2014			2016	
			(unaudited)		
Expected volatility	52.8 – 53.8%	51.6 - 52.9%	49.8 - 53.0%	_	
Risk-free interest rate	2.17 - 2.48%	1.72 - 2.02%	1.71 - 2.04%	_	
Expected term (in years)	7.3 - 9.8	6.6 - 9.1	6.5 - 9.2	_	
Dividend vield	— %	— %	— %	_	

#### 8. 401(k) Plan

The Company has a defined contribution employee benefit plan pursuant to Section 401(k) of the Internal Revenue Code. The plan allows eligible employees to defer a portion of their annual compensation up to certain statutory limits. At the election of the Board of Directors, the Company may elect to match employee contributions but has not done so to date.

### 9. Related Party Transactions

## **Convertible Promissory Notes**

In August 2014, the Company entered into a Note Purchase Agreement with several of its stockholders for the issuance of convertible promissory notes (the "2014 Notes") for an aggregate amount of \$2.0 million. The 2014 Notes bear interest at 5% per annum and have a one year term. The outstanding principal amount and accrued interest on the Notes were convertible into shares of Series B redeemable convertible preferred stock, at any time, upon written election of the holders of at least a majority of the outstanding principal balance of the 2014 Notes ("Majority Holders"). In the event of an equity financing with proceeds in excess of \$5.0 million prior to the maturity of the 2014 Notes, the Majority Holders could elect to convert the outstanding principal and accrued interest on the 2014 Notes into shares of stock issued in the equity financing based on a price per share equal to the price per share paid by investors in said financing. On October 21, 2014, contemporaneously with the Series B redeemable convertible preferred stock issuance, the outstanding principal balance of the 2014 Notes, including accrued interest of \$2.0 million, was converted into 77,518 shares of Series B redeemable convertible preferred stock.

In January 2016, the Company entered into a Note Purchase Agreement with several of its stockholders for the issuance of convertible promissory notes (the "2016 Notes") for an aggregate amount of \$5.0 million. The 2016

Notes bear interest at 5.0% per annum and have a maturity date of September 30, 2016. The outstanding principal amount and accrued interest on the 2016 Notes are convertible into shares of Series B redeemable convertible preferred stock, at any time, upon written election of the holders of at least a majority of the outstanding principal balance of the 2016 Notes. In the event of an equity financing with proceeds in excess of \$5.0 million ("Qualified Financing") prior to the maturity of the 2016 Notes, the outstanding principal and accrued interest convert into shares of stock issued in the equity financing based on a price per share equal to the price per share paid by investors in said financing. In the event of an IPO, the outstanding principal and accrued interest convert into shares of common stock at a price per share equal to 80% of the per share price of the common stock issued in the IPO. In the event of a deemed liquidation event occurring before the maturity date, the 2016 Notes will be repaid in cash in an amount equal to three times the outstanding principal amount. The redemption of the 2016 Notes upon a deemed liquidation event and in the event of an IPO are contingent redemption features that are not clearly and closely related to the debt instrument and thus have been bifurcated and recognized as a derivative liability on the balance sheet as of June 30, 2016. The compound derivative was recorded as a debt discount at fair value of \$653,000 on the issuance date of the 2016 Notes and is being amortized over the term of the 2016 Notes using the effective interest method. At June 30, 2016, the carrying values of the 2016 Notes and the derivative liability were \$4.9 million and \$388,000, respectively.

#### Joint Development Agreement—GLOBALFOUNDRIES

On October 17, 2014, the Company entered into a Joint Development Agreement ("JDA") with GLOBALFOUNDRIES, Inc. ("GF"), a related party due to its equity ownership in the Company, for the joint development of the Company's Spin Torque MRAM ("ST-MRAM") technology. The term of the agreement is the later of four years from the effective date or until the completion, termination or expiration of the last statement of work entered into pursuant to the JDA. The JDA also states that the specific terms and conditions for the production and supply of the developed ST-MRAM technology would be pursuant to a separate manufacturing agreement entered into between the parties.

Under the JDA, 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 ST-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, equally under the JDA. If GF manufactures, sells or transfers to customers wafers containing production quantified ST-MRAM devices that utilize certain design information, GF will be required to pay the Company a royalty. The term of the agreement is four years and is extended until the completion of any development work, if later.

In May 2016, the Company entered into an amendment to the JDA to modify the payment schedule and clarify its payment obligations for certain past project costs. Under the amendment, GF has the right to terminate the JDA if the Company does not pay the project costs, with interest, by an agreed-upon date.

As of December 31, 2014 and 2015, and June 30, 2016, \$0, \$3.5 million, and \$5.6 million (unaudited), respectively, were payable to GF for the Company's share of the project costs under the JDA and the Company prepaid \$125,000 to GF in 2014. The Company incurred project costs, recognized as in research and development expense, of \$0 and \$3.6 million during the years ended December 31, 2014 and 2015, respectively, and of \$1.8 million (unaudited), and \$2.0 million (unaudited) during the six months ended June 30, 2015 and 2016, respectively.

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 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. Although the shares issued do not commence vesting until the achievement of the product qualification (the "Initial Measurement Date"), the Company has deemed it probable that the qualification requirement will be met and compensation expense related to the shares issued is being recognized prior to the Initial Measurement Date. Due to the vesting conditions, there will be multiple measurement dates, occurring on the Initial Measurement Date and at the end of each month thereafter. The fair value of vesting shares is effectively fixed at each measurement date while the fair value of the remaining unvested shares will be remeasured each subsequent measurement date until the shares are fully vested.

During the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, the Company recognized non-cash compensation expense of \$107,000, \$1.8 million, \$533,000 (unaudited) and \$1.4 million (unaudited), respectively, in research and development expense, related to the vesting of the shares of common stock. The Company recognizes compensation expense based on the estimated fair value of the common stock at each reporting period, which was \$13.52 and \$16.90 (unaudited) per share as of December 31, 2015, and June 30, 2016, respectively.

#### Transactions with Freescale

The Company has entered into various transactions with Freescale (a wholly-owned subsidiary of NXP), a related party due to its equity ownership in the Company. The Company leases its manufacturing facility in Chandler, Arizona, from Freescale and total rent payments made during the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, were \$1.0 million, \$1.0 million, \$582,000 (unaudited) and \$520,000 (unaudited), respectively. Freescale also performs processing of the Company's products in its facility which are capitalized as part of the cost of inventory. The total processing costs incurred by the Company were \$3.3 million, \$3.9 million, \$1.9 (unaudited) and \$1.3 million (unaudited) for the years ended December 31, 2014 and 2015, and the six months ended June 30, 2015 and 2016, respectively. In addition, Freescale is one of the Company's largest customers for the sale of embedded wafers, and total revenue from Freescale was \$3.2 million, \$3.5 million, \$1.8 million (unaudited) and \$735,000 (unaudited) for the years ended December 31, 2014, and 2015, and the six months ended June 30, 2015 and 2016, respectively. Amounts due from Freescale were \$541,000, \$564,000 and \$502,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively. Amounts due to Freescale were \$484,000, \$207,000 and \$569,000 (unaudited) at December 31, 2014 and 2015, and June 30, 2016, respectively.

# 10. Geographic Information

Revenue from customers is designated based on the geographic region or country to which the product is delivered or licensee is located. Revenue by country was as follows (in thousands):

	Year Ended December 31,		Six Months Ende		ed June 30,	
		2014	 2015	2015		2016
		-	 	 (u	naudited)	
United States	\$	6,055	\$ 5,362	\$ 2,049	\$	2,757
Singapore		3,399	4,614	2,671		1,726
Taiwan		3,097	3,759	1,846		1,009
Germany		2,933	3,546	2,045		1,302
Hong Kong		3,133	2,744	1,110		1,911
Japan		4,408	2,280	967		1,724
All other		1,871	4,241	1,966		2,437
Total revenue	\$	24,896	\$ 26,546	\$ 12,654	\$	12,866

## 11. Income Taxes

For both the years ended December 31, 2014 and 2015, the Company recorded no provision for income taxes primarily due to losses incurred. For the six months ended June 30, 2016, the Company did not record an income tax provision due to the expected loss for the year. The Company has incurred net operating losses for all the periods presented. The Company has not reflected any benefit of the net operating loss carryforwards in the accompanying financial statements. The Company has established a full valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets.

The reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

	Decembe	er 31,
	2014	2015
Tax at statutory federal rate	(34.0)%	(34.0)%
State taxes, net of federal benefit	(2.7)	(1.9)
Stock-based compensation	2.8	8.0
Change in valuation allowance	37.9	34.3
Other	(4.1)	0.8
Provision for income taxes	<del></del> %	<del></del> %

The tax effects of temporary differences and carryforwards that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	Dec	ember 31,
	2014	2015
Deferred tax assets:		
Net operating loss carryforwards	\$ 19,593	\$ 23,526
Inventory	1,197	1,309
Accruals	399	1,693
Depreciation and amortization	51	290
Other	87	752
Gross deferred tax assets	21,327	27,570
Valuation allowance	(21,307)	(27,554)
Deferred tax assets	20	16
Deferred tax liabilities:		
Prepaid expenses	(20)	(16)
Deferred tax liabilities	(20)	(16)
Net deferred tax assets	<del>\$</del> —	\$ —

The Company is required to reduce its deferred tax assets by a valuation allowance if it is more likely than not that some or all of its deferred tax assets will not be realized. Management must use judgment in assessing the potential need for a valuation allowance, which requires an evaluation of both negative and positive evidence. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. In determining the need for and amount of the valuation allowance, if any, the Company assesses the likelihood that it will be able to recover its deferred tax assets using historical levels of income, estimates of future income and tax planning strategies. As a result of historical cumulative losses, the Company determined that, based on all available evidence, there was substantial uncertainty as to whether it will recover recorded net deferred taxes in future periods. Accordingly, the Company recorded a valuation allowance against all of its net deferred tax assets as of December 31, 2014 and 2015. The net valuation allowance increased by \$3.9 million and \$6.2 million and in 2014 and 2015, respectively.

As of December 31, 2015, the Company had federal net operating loss carryforwards of approximately \$66.1 million which will begin to expire in the year of 2028 if not utilized. In addition, the Company had state net operating loss carryforwards of approximately \$28.6 million, which will begin to expire in 2015 if not utilized.

The Tax Reform Act of 1986 (the "Act") provides for a limitation on the annual use of net operating loss and research and development tax credit carryforwards following certain ownership changes (as defined by the Act) that could limit the Company's ability to utilize these carryforwards.

The Company files income tax returns in the U.S. federal and various state jurisdictions. The Company is subject to U.S. federal and state income tax examinations by authorities for all tax years due to the accumulated net operating losses that are being carried forward for tax purposes.

The Company has not identified any unrecognized tax benefits as December 31, 2014 and 2015. As the Company has a full valuation allowance on its deferred tax assets, any unrecognized tax benefits would reduce the deferred tax assets and the valuation allowance in the same amount. The Company does not expect the amount of unrecognized tax benefits to materially change in the next twelve months.

### 12. Net Loss Per Common Share and Pro Forma Net Loss Per Share (unaudited)

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

	Year Ended December 31,		Six Months E	nded June 30,
	2014	2015	2015	2016
			(unau	dited)
Numerator:				
Net loss	\$ (10,183)	\$ (18,183)	\$ (7,421)	\$ (9,956)
Denominator:				
Weighted-average common shares outstanding	2,635,621	3,013,743	3,013,723	3,016,935
Less: weighted-average unvested common shares subject to repurchase	(91,043)	(461,538)	(461,538)	(461,538)
Weighted-average common shares outstanding used to calculate net loss per	·			
common share, basic and diluted	2,544,578	2,552,205	2,552,185	2,555,397
Net loss per common share, basic and diluted	\$ (4.00)	\$ (7.12)	\$ (2.91)	\$ (3.90)

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:

	Decemb	December 31,		ns Ended : 30,
	2014	2014 2015		2016
			(unau	dited)
Redeemable convertible preferred stock on an as-converted basis	2,486,199	2,486,199	2,486,199	2,486,199
Options to purchase common stock	852,639	927,175	936,862	862,383
Common stock subject to repurchase	461,538	461,538	461,538	461,538
Redeemable convertible preferred stock warrants on an as-converted basis	9,229	27,690	27,690	27,690
Total	3,809,605	3,902,602	3,912,289	3,837,810

The following table sets forth the computation of the Company's unaudited pro forma basic and diluted net loss per share after giving effect to the conversions of redeemable convertible preferred stock and the conversion of the 2016 Notes into common stock using the as-if converted method into common stock as though the conversions had occurred at the beginning of the respective period, or the date of issuance, if later (In thousands, except share and per share amounts):

	Year Ended December 31, 2015 (unaudited)	Ended June 30,  2016  (unaudited)
Numerator:	(========)	(======================================
Net loss	\$ (18,183)	\$ (9,956)
Less: change in fair value of convertible preferred stock warrant liability	15	21
Less: change in fair value of derivative liability	_	273
Less: interest expense and amortization of discount on 2016 Notes		(515)
Net loss used in computing pro forma net loss per share	\$ (18,198)	\$ (9,735)
Denominator:		
Weighted-average common shares outstanding used to calculate net loss per common share	2,552,205	2,555,397
Pro forma adjustment to reflect assumed conversion of convertible preferred stock	2,486,199	2,486,199
Pro forma adjustment to reflect assumed conversion of the 2016 Notes		797,855
Weighted-average shares of common stock used in computing pro forma net loss per share	5,038,404	5,839,451
Pro forma net loss per share, basic and diluted	\$ (3.61)	\$ (1.67)

# 13. Subsequent Events

In January 2016, the Company sold an aggregate of \$5.0 million in convertible promissory notes to existing investors at a price equal to the principal amount of such notes. The notes have an annual interest rate of 5.0% and a maturity date in September 2016.

In January 2016, the Company drew down \$1.5 million from the available funds under its revolving credit facility.

In September 2016, the Company's board of directors and its stockholders approved an amendment to the Company's amended and restated certificate of incorporation to effect a reverse split of the Company's issued and outstanding common stock and redeemable convertible preferred stock at a 26-to-1 ratio, which was effected on September 21, 2016. The par value and authorized shares of common stock and redeemable convertible preferred stock were not adjusted as a result of the reverse split. All issued and outstanding common stock and redeemable convertible preferred stock, warrants to purchase redeemable convertible preferred stock, options to purchase common stock, and the related per share amounts contained in the financial statements have been retroactively adjusted to reflect the reverse stock split for all periods presented.

The Company evaluated subsequent events through May 13, 2016, the date at which the financial statements were available for issuance.

## 14. Subsequent Events (Unaudited)

In July 2016, the Company's Board of Directors and stockholders approved the Certificate of Amendment of Amended and Restated Certificate of Incorporation to increase the authorized capital stock of the Company from 243,080,000 shares, consisting of 175,000,000 shares of common stock, par value \$0.0001 (the "Common Stock") and 68,080,000 shares of preferred stock, par value \$0.0001 (the "Preferred Stock"), to an authorized capital stock of 281,080,000 shares consisting of 204,000,000 shares of Common Stock and 77,080,000 shares of Preferred Stock.

In August 2016, the Company entered into a Note Purchase Agreement with existing stockholders for the issuance of subordinated convertible promissory notes (the "2016 Bridge Notes") for an aggregate principal amount of \$3.5 million. The 2016 Bridge Notes bear interest at 5.0% per annum and have a maturity date of September 30, 2016. In the event of an equity financing with proceeds in excess of \$5.0 million ("Qualified Financing") prior to the maturity of the 2016 Bridge Notes, the outstanding principal and accrued interest convert into shares of stock issued in the Qualified Financing based on a price per share equal to the price per share paid by investors in such financing. In the event of an IPO, the outstanding principal and accrued interest convert into shares of common stock at a price per share equal to 80% of the per share price of the common stock issued in the IPO. In the event of a deemed liquidation event occurring before the maturity date, the 2016 Bridge Notes will be repaid in cash in an amount equal to three times the outstanding principal amount. The Company may not prepay the 2016 Bridge Notes without the consent of the Company and the majority holders of the outstanding balance of the promissory notes. The redemption of the 2016 Bridge Notes upon a deemed liquidation event and in the event of an IPO are contingent redemption features that are not clearly and closely related to the debt instrument and will be bifurcated and recognized as a derivative liability on the balance sheet at date of issuance and will be remeasured to fair value at each reporting date.

In August 2016, the Company entered into an amendment to the facility lease for its design facility located in Austin, Texas to increase the leased space from 5,002 square feet to 11,084 square feet and extend the lease term from September 2016 to January 2022. The aggregate amount of payments due under the amended lease is \$1.1 million.

In September 2016, entered into an amendment to its January 2016 and August 2016 convertible promissory notes for \$5.0 million and \$3.5 million, respectively, to extend the maturity date of the notes from September 30, 2016 to December 15, 2016.

On September 23, 2016, the Company entered into a binding agreement for the sale of \$5.0 million of the Company's common stock in a private placement concurrent with the completion of the Company's IPO, at a price equal to the IPO price. The shares of common stock purchased in the concurrent private placement will be subject to a placement agent fee.

The Company evaluated subsequent events through August 16, 2016, the date these unaudited interim financial statements were available to be issued, and subsequently through September 26, 2016.

# 5,000,000 Shares



# **Common Stock**

# **PROSPECTUS**

Stifel Needham & Company

Co-Managers

Canaccord Genuity Craig-Hallum Capital Group

October 7, 2016