

EMAGIN CORP
Form S-1
December 29, 2017

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As filed with the Securities and Exchange Commission on December 29, 2017

Registration No. 333-

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

eMAGIN CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3679
(Primary Standard Industrial
Classification Code Number)
2070 Route 52
Hopewell Junction, NY 12533
(845) 838-7900

56-1764501
(I.R.S. Employer
Identification Number)

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Andrew G. Sculley
Chief Executive Officer
eMagin Corporation
2070 Route 52
Hopewell Junction, NY 12533
(845) 838-7900

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Jocelyn M. Arel, Esq.
100 Northern Avenue

Robert Charron
Ellenoff Grossman & Schole LLP

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Boston, MA 02210
Phone: (617) 570-1000
Fax: (617) 523-1231

1345 Avenue of the Americas
New York, New York 10105
(212) 370-1300

**Approximate date of commencement of proposed sale to the public:
 As soon as practicable after the effective date of this registration statement.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large Accelerated Filer Accelerated Filer Non-Accelerated Filer Smaller Reporting Company

(Do not check if a
smaller reporting
company)

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common stock, par value \$0.001 per share	\$	
Warrants to purchase shares of common stock	\$	
Shares of common stock issuable upon exercise of the warrants	\$	
Total	\$10,000,000	\$1,245.00

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes the offering price of any additional shares of common stock and warrants that the underwriter has an option to purchase to cover over-allotments, if any.

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The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell or accept an offer to buy these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

Subject to Completion, Dated December 29, 2017

PRELIMINARY PROSPECTUS

\$10,000,000
Shares of Common Stock
Warrants to Purchase Shares of Common Stock

We are selling _____ shares of our common stock and warrants to purchase up to _____ shares of our common stock (and the shares of common stock issuable from time to time upon exercise of these warrants). Each share of common stock is being sold together with a warrant to purchase _____ shares of common stock at an exercise price of \$ _____ per whole share of common stock. The shares of common stock and warrants will be issued separately.

Our common stock is traded on the NYSE American under the symbol "EMAN." On December 28, 2017, the last reported sale price of our common stock on the NYSE American was \$1.60 per share. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any national securities exchange or other nationally recognized trading system.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "Risk Factors" beginning on page 11 of this prospectus.

	Per Share	Per Warrant	Total
Public offering price	\$	\$	\$
Underwriting discounts and commissions(1)			
Proceeds, before expenses, to us	\$	\$	\$

(1) We have agreed to reimburse the underwriters for certain of their expenses. See "Underwriting" on page 92 of this prospectus for a description of the compensation to be received by the underwriters.

We have granted the underwriters a 45-day option to purchase up to _____ additional shares of common stock and/or additional warrants to purchase up to _____ shares of common stock from us at the public offering price for each security, less underwriting discounts and commissions, to cover over-allotments, if any. See "Underwriting" on page 92 of this prospectus for a description of the over-allotment option.

The underwriters expect to deliver the shares and warrants on or about _____, 2018.

Neither the Securities and Exchange Commission nor any state securities commission 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.

Sole Book-Running Manager

Craig-Hallum Capital Group

Co-Manager

H.C. Wainwright & Co.

The date of this prospectus is _____, 2018.

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ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the Securities and Exchange Commission, or the SEC. We and the underwriters have not authorized anyone to provide you with information different from that contained in this prospectus or any free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. We and the underwriters are offering to sell, and seeking offers to buy, shares of our common stock and warrants to purchase 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 cover of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock and warrants to purchase common stock. Our business, financial condition, results of operating and prospects may have changed materially since those dates.

For investors outside of the United States: Neither we nor the underwriters have done anything that would permit this offering outside the United States or to permit the possession or distribution of this prospectus outside the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

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This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed or will be filed as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find Additional Information."

INDUSTRY AND MARKET DATA

We obtained the industry and market data in this prospectus from our own research as well as from industry and general publications, surveys and studies conducted by third parties. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors" 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. See "Cautionary Note Regarding Forward-Looking Statements."

TRADEMARKS

This prospectus includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included in this prospectus or any related free writing prospectus are the property of their respective owners.

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PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus and any related free writing prospectus, including the risks of investing in our securities referred to under the heading "Risk Factors" in this prospectus and any related free writing prospectus. You should also carefully read our financial statements and the related notes included in this prospectus and the exhibits to the registration statement of which this prospectus is a part. Unless otherwise mentioned or unless the context requires otherwise, throughout this prospectus and any related free writing prospectus, the words "eMagin Corporation," "eMagin," "the Company," "we," "us," and "our company" or similar references refer to eMagin Corporation and its wholly owned subsidiary, Virtual Vision, Inc. Unless otherwise stated, all information contained in this prospectus assumes or gives effect to no exercise of the warrants or options to purchase common stock and no exercise by the underwriters of their over-allotment option.

Overview

We are a leader in the manufacture of microdisplays using organic light emitting diode (OLED) technology. We design, develop, manufacture and market OLED miniature displays, which we refer to as OLED-on-silicon microdisplays, virtual imaging products that utilize OLED microdisplays, and related products. We also perform research in the OLED field. Our virtual imaging products integrate OLED technology with silicon chips to produce high-resolution microdisplays one-inch diagonally and smaller, which when viewed through a magnifier, create virtual images that appear comparable in size to that of a computer monitor or a large-screen television. Our products enable our original equipment manufacturer (OEM) customers to develop and market improved or new electronic products, especially products that are mobile and highly portable so that people have immediate access to information and can experience immersive forms of communications and entertainment. We believe that a key growth area for us is the consumer electronic OEM market for augmented reality (AR) and virtual reality (VR) hardware. Our potential channels to this market include licensing of our direct patterning technology and partnering for the mass production of microdisplays. We believe that our direct patterning technology is a key differentiator for enabling next generation AR/ VR hardware for the consumer and enterprise segments because of the brightness and the pixel density afforded by the technology. We also develop and manufacture night vision products for the consumer electronics, recreational, law enforcement and first responder markets, including a smart phone attachment and a wearable device.

We believe that our OLED microdisplays offer a number of significant advantages over comparable liquid crystal microdisplays, including higher contrast, greater power efficiency, less weight, more compact size, and negligible image smearing. Using our active matrix OLED technology, many computer and electronic system functions can be built directly into the OLED microdisplay silicon backplane, resulting in compact, high resolution and power efficient systems. Already proven in military and commercial systems, our portfolio of OLED microdisplays deliver high-resolution, flicker-free virtual images that perform effectively even in extreme temperatures and high-vibration conditions. We also believe that our direct patterning technology gives us a substantial advantage over other OLED microdisplays because it allows us to produce microdisplays with the high brightness required for VR and AR. Traditional OLED microdisplays utilize white emitting OLED with color filters that lessen the intensity of emitted light by as much as 85%, significantly reducing brightness. Microdisplays manufactured by direct patterning do not require color filters to achieve color variations and allow for the application of more efficient OLED structures which achieve high brightness.

We have developed our own intellectual property portfolio that includes patents, over 15 years of manufacturing know-how and proprietary technologies to create high performance OLED-on-silicon. We believe our technology, intellectual property portfolio and position in the marketplace give us a leadership position in OLED and OLED-on-silicon microdisplay technology. We believe that we are

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one of only a few companies to market and produce significant quantities of high resolution, small molecule OLED-on-silicon microdisplays.

We derive the majority of our revenue from sales of our OLED microdisplay products. We also earn revenue from government, commercial and consumer product development contracts that may complement and support our internal research and development programs. In addition, we generate sales from optics and microdisplays combined with optics. Beginning in the first quarter of fiscal 2017, we introduced two night vision consumer products, BlazeSpark and BlazeTorch, although revenue from these products to date has been minimal.

Our Technology Platforms

Small Molecule, Top-Emitting Active Matrix OLED Technology.

Our microdisplays are currently based upon active matrix small molecule OLED technology, which we refer to as active matrix OLED (AMOLED). Our AMOLED technology uniquely permits millions of individual low-voltage light sources to be built on low-cost, silicon computer chips to produce single color, white or full-color display arrays. Using our OLED technology, many computer and video electronic system functions can be built directly into the silicon chip, under the OLED film, resulting in a compact, integrated system with lower overall system costs relative to alternative technologies. Our OLED microdisplays use less power and deliver much higher contrast and fuller color than liquid crystal microdisplays. We believe that our AMOLED technology provides significant advantages over other microdisplay technologies in our targeted markets. We believe these key advantages include:

High brightness

Sharp contrast

Low power consumption for improved battery life and longer system life;

High-speed performance resulting in clear video images;

Compact form factor and light weight;

Wide angle light emission resulting in large apparent screen size and more immersive experience;

Wide operating temperature range;

Good environmental stability (vibration and humidity); and

Low manufacturing cost at higher volumes.

Prism Optics

We sell high quality, large viewing angle prism optics with a wide range for eye positioning, both of which are essential for using our displays in immersive near-eye systems. We have developed advanced molded plastic prism lenses that permit our AMOLED microdisplays to provide large field of view images that can be viewed for extended periods with reduced eye-fatigue. We have developed an additional prism optic for a project that will pair with our SXGA096 display.

Our Market Opportunities

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We target the military, aviation, industrial/medical, and consumer markets although many of our products cater to multiple markets. Within each of these market sectors we believe that our OLED microdisplays, when combined with compact optic lenses, can become a key component for a variety of mobile electronic products. Many of these products employ head-wearable displays that incorporate microdisplays mounted in or on eyeglasses, goggles, simple headbands, helmets, or hardhats, and are

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often referred to as head-mounted displays (HMDs) or headsets. Head-wearable displays may block out surroundings for a fully immersive experience, or be designed to "see-through" or "see-around" to the user's surroundings. They may contain one (monocular) or two (binocular) displays. We have leveraged our experience in developing for military and commercial aviation helmets and believe this experience will allow us to more rapidly introduce displays suitable for specialized/high-end mass market consumer VR/AR applications than our competitors.

Consumer. We believe that the most significant driver of the longer term near-eye virtual imaging microdisplay market is the growing consumer demand for mobile access to larger volumes of information and entertainment in smaller and more affordable packages. This desire for mobility has resulted in the development of mobile video personal viewer products in three general categories: (i) immersive VR headset-application platforms such as accessories for gaming computers, portable digital optical disc (DVD) systems and wearable telepresence systems; (ii) AR electronic viewers incorporated in products such as data glasses and personal viewers for cell phones; and (iii) low cost thermal and low light imaging and scopes for hunting and other outdoor activities. As we manufacture our OLED displays in higher volumes at reduced costs and capitalize on our direct patterning technology, we believe that our products will be increasingly well positioned to compete with and displace liquid crystal displays and cell phone size displays in the rapidly growing consumer market, particularly as demand expands for sophisticated mobile personal viewers offering higher resolution and better image quality for VR and AR applications.

Military/Aviation. Properly implemented, we believe that head-mounted systems incorporating our microdisplays increase the user's effectiveness by allowing hands-free operation and increasing situational awareness with sufficient brightness for use in daylight, yet controllable for nighttime light security. As a COTS (commercial off-the-shelf) component, OLED microdisplays possess performance characteristics important to military and other demanding commercial and industrial applications, including high contrast, wide dimming range, shock and vibration resistance and insensitivity to high G-forces. The design features and performance characteristics of our OLED microdisplays reduce the size, weight, and power required by current and future military systems, while also providing a wide operating temperature range. Our OLED microdisplays have been incorporated into a broad range of U.S. and foreign military tactical programs as well as aviation helmets that require the high brightness of the OLED technology that we have developed.

Our products' military applications primarily fall into three broad areas: (1) helmet-mounted and handheld displays for situational awareness and data; (2) night vision/thermal imaging goggles, rifles and targeting sights, and handheld viewers; and (3) training and simulation devices. These systems are also well suited for demanding operations such as urban security, homeland defense, and fire and rescue.

Situational Awareness. Our OLED microdisplays have been incorporated into a broad range of U.S. and foreign military situational awareness programs. Situational awareness products include head-mounted displays that are used to display images, including digital map, sensor imagery and pilot aviation information. In addition, handheld imagers provide improved situational awareness on the battlefield, as well as in training and simulation. These products can also be combined with a weapon system to give the user the capability to select targets without direct exposure.

Night Vision/Thermal Imaging. We believe the power efficiency and environmental ruggedness of our microdisplay products are strong competitive advantages in night vision and thermal imaging products, particularly for smaller handheld non-cooled systems. Fielded products incorporating our OLED microdisplays include Harris' and L3 Insight's Enhanced Night Vision Goggle II, the Enhanced Night Vision Goggle III, Family of Weapons Sights Individual and Crew Served for the U.S. Army, L-3's Javelin medium-range anti-tank missile system, Northrop Grumman's Lightweight Laser

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Designator Rangefinders, Thales' SOPHIE handheld thermal imagers, and Thales' MINIE , LUCIE , and MONIE night vision goggles.

Training and Simulation. Our OLED microdisplays are purchased by OEMs for use with their simulation and training products. The companies that incorporate our OLEDs into their training and simulation applications include Quantum 3D, Rockwell Collins, Intevac Vision Systems, and Sensics, among others. Our displays have been commercialized and prototyped for situational awareness and night vision/thermal imaging applications by military systems integrators, including Elbit, L-3 Communications, Intevac Vision Systems, Nivisys, BAE Systems Technology, DRS, Harris (formerly Excelis/ITT), Intevac Vision Systems, Qioptiq, Rockwell Collins, SA Photonics, Saab, Sagem DS, and Thales, among others.

Commercial, Industrial, and Medical. We believe that a wide variety of commercial and industrial markets offer significant opportunities for our products due to increasing demand for instant data accessibility in mobile workplace environments and due to the benefit of mobile displays to enhance visual performance. Examples of existing and potential microdisplay applications include enhanced visualization for ocular surgery, mobile ultrasound, mobile nondestructive testing, enhanced vision for those with visual impairments, immediate access to inventory or maintenance and construction manuals, routine quality assurance inspection, and real-time viewing of images and data for a variety of applications.

Our Products

OLED Microdisplays. We provide a wide variety of OLED microdisplays to our customers. We offer our products to OEMs and other buyers as both separate components, integrated bundles coupled with our own optics, or complete systems. We also offer engineering support to enable customers to quickly integrate our products into their own product development programs and design customized displays with resolutions or features to meet specific customer requirements.

Lens and Design Reference Kits. We offer a prism optic with mounting brackets or combined with OLED microdisplays to form an optic-display module. We provide design reference kits, which include a microdisplay and associated electronics to help OEMs evaluate our microdisplay products and to assist their efforts to build and test new products incorporating our microdisplays.

Integrated Modules. We provide near-eye virtual imaging modules that incorporate our OLED-on-silicon microdisplays with our lenses and electronic interfaces for integration into OEM products. We have shipped customized modules to several customers, some of which have incorporated our products into their own commercial products.

Headsets. We have developed and demonstrated a new Immersive Head Mounted Display (IHMD) with a different look and superior performance than other VR HMDs. Compared to other VR HMDs, it has four times the resolution, no pixelization, and a much smaller form factor. We entered into a nonexclusive license agreement in 2015 to allow an undisclosed company to use the technology in this IHMD for their own applications and may incorporate our 2K × 2K displays in headsets that use the technology. The retrofit of our latest 2K × 2K microdisplay prototypes into the original design of this IHMD is being considered as a means to showcase their superior performance and higher resolution.

Night Vision Smartphone Camera Attachment and Goggles. In 2016, we announced night vision products for the consumer market and began limited sales in the first quarter of 2017. A smartphone camera attachment allows consumers to see clear, high-resolution images in the dark. A companion application allows users to record and live stream content directly to our social media sites and share with other sites. We also developed a wearable device that utilizes our OLED microdisplay technology

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to provide hands-free operation for night-time activities with the capability to record and upload content. We are completing the development of these products and pursuing channels of distribution.

Our Strategy

Our strategy is to strengthen our leadership position as a worldwide supplier of microdisplays and virtual imaging technology solutions for applications in high growth segments of the consumer, military and commercial electronics industry by capitalizing on our experience and expertise in active matrix OLED technology and silicon wafer design. Key elements of our strategy to achieve these objectives include:

Develop OEM and mass production partnerships in the consumer HMD market.

Strengthen our technology leadership.

Optimize microdisplay manufacturing efficiencies while protecting proprietary processes and partner with large volume manufacturers to bring our technology into high volume production.

Build and maintain strong design capabilities.

Leverage strategic relationships.

Enter consumer electronics markets.

Selected Risk Factors

Our business is subject to many risks and uncertainties of which you should be aware before you decide to invest in our common stock and/or warrants to purchase common stock. These risks are discussed more fully under "Risk Factors" in this prospectus. Some of these risks are:

We have had losses in the past and may incur losses in the future.

If we are unable to meet our obligations as they become due over the next twelve months, we may not be able to continue our current operations.

Our operating results have significant fluctuations.

Our business strategy may fail if we cannot continue to form strategic relationships with companies that manufacture and use products that could incorporate our active matrix OLED technology.

The manufacture of active matrix OLED microdisplays encompasses several complex processes resulting in irregular production schedules, including production delays and interruptions, which could adversely affect our operating results.

Several steps of our production processes are dependent upon certain critical machines and tools which could result in delivery interruptions and foregone revenues.

We may not be successful in protecting our intellectual property and proprietary rights.

The success of the commercial and consumer microdisplay industry is dependent upon widespread acceptance of microdisplay systems products, including their incorporation into AR and VR systems and products.

The microdisplay market is highly competitive with several competing technologies.

Corporate Information

We were formed through the merger of Fashion Dynamics Corporation, which was organized on January 23, 1996 under the laws of the State of Nevada, and FED Corporation, a developer and

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manufacturer of optical systems and microdisplays for use in the electronics industry. Simultaneous with this merger, we changed our name to eMagin Corporation. We are incorporated in the State of Delaware. The address of our principal executive offices is 2070 Route 52, Hopewell Junction, NY 12533 and our telephone number is (845) 838-7900. Our website address is www.emagin.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website as part of this prospectus.

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THE OFFERING

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus. For a more complete description of the terms of our common stock and the warrants, see the "Description of Capital Stock" section in this prospectus.

Common stock we are offering	shares.
Common stock to be outstanding after this offering	shares (as more fully described in the notes following this table).
Warrants we are offering	We are offering warrants to purchase shares of common stock. Each warrant has an exercise price of \$ per share, is exercisable immediately upon issuance and has a term of five years from the initial exercise date. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants. There is currently no market for the warrants and none is expected to develop after this offering. We do not intend to list the warrants on any national securities exchange or other trading market. See "Description of Capital Stock" for additional information.
NYSE American symbol	Our common stock is quoted on the NYSE American under the symbol "EMAN."
Use of Proceeds	We estimate that the proceeds from this offering will be approximately \$ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and general corporate purposes. See "Use of Proceeds" below.
Risk Factors	Investing in our securities involves significant risks. Please read the information contained under the heading "Risk Factors" beginning on page 11 of this prospectus.

The number of shares of common stock shown above to be outstanding after this offering is based on 34,972,589 shares outstanding as of September 30, 2017 and excludes:

5,142,448 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at a weighted average exercise price of \$2.96 per share;

7,545,333 shares of common stock issuable upon conversion of our outstanding Series B Convertible Preferred Stock;

2,947,949 shares of our common stock issuable upon the exercise of warrants issued in August 2016 outstanding as of September 30, 2017, at an exercise price of \$2.60 per share; 383,500 shares of our common stock issuable upon the exercise of warrants issued in December 2015 outstanding as of September 30, 2017, at an exercise price of \$2.05 per share; 100,000 shares of our common stock issuable upon the exercise of warrants issued in March 2017 outstanding as of September 30, 2017, at an exercise price of \$2.25 per share and 1,650,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an exercise price of \$2.45 per share;

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99,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an exercise price of \$2.60 per share; and

shares of our common stock issuable upon the exercise of warrants offered hereby.

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The following tables set forth summary consolidated financial data of our company. The summary consolidated statements of operations data for the years ended December 31, 2015 and 2016 and the consolidated balance sheet data as of December 31, 2016 as set forth below are derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statements of operations data for the nine months ended September 30, 2016 and 2017 and the consolidated balance sheet data as of September 30, 2017 have been derived from our unaudited consolidated financial statements included elsewhere in this prospectus. These unaudited financial statements have been prepared on a basis consistent with our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal and recurring adjustments, necessary for a fair presentation of such financial data. The information is only a summary and you should read it in conjunction with our audited consolidated financial statements, including the related notes, and other financial information and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this prospectus. Historical results are not necessarily indicative of the results for future periods.

Consolidated Statements of Operations Data:

	Years Ended December 31,		Nine Months Ended September 30,	
	2016	2015	2017	2016
			(unaudited)	(unaudited)
	(in thousands, except share and per share data)			
Revenues:				
Product	\$ 17,265	\$ 20,912	\$ 13,050	\$ 13,612
Contract	3,132	4,230	2,559	2,227
License	1,000			1,000
Total revenues, net	21,397	25,142	15,609	16,839
Cost of revenues:				
Product	12,988	15,466	10,918	9,639
Contract	1,967	2,698	1,346	1,248
License				
Total cost of revenues	14,955	18,164	12,264	10,887
Gross profit	6,442	6,978	3,345	5,952
Operating expenses:				
Research and development	6,362	4,353	3,782	4,468
Selling, general and administrative	8,411	6,687	6,586	6,044
Total operating expenses	14,773	11,040	10,368	10,512
Loss from operations	(8,331)	(4,062)	(7,023)	(4,560)
Other income (expense):				
Interest expense, net	(30)	(43)	(249)	(28)
Other income, net	313		11	8
Total other income (expense), net	283	(43)	(238)	(20)

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	Years Ended December 31,		Nine Months Ended September 30,	
	2016	2015	2017 (unaudited)	2016 (unaudited)
(in thousands, except share and per share data)				
Loss before provision for income taxes	(8,048)	(4,105)	(7,261)	(4,580)
Provision for income taxes	(1)			(1)
Net (loss) income	(8,049) \$	(4,105)	(7,261) \$	(4,581)
Loss per share, basic	(0.27) \$	(0.16)	(0.22) \$	(0.15)
Loss per share, diluted	(0.27) \$	(0.16)	(0.22) \$	(0.15)
Weighted average number of shares outstanding:				
Basic	30,172,927	25,296,040	33,214,262	29,689,458
Diluted	30,172,927	25,296,040	33,214,262	29,689,458

Consolidated Balance Sheet Data:

	As of September 30, 2017 (unaudited)	As of December 31, 2016 (unaudited)
(in thousands)		
Cash, cash equivalents	\$ 1,964	\$ 5,241
Working capital	10,556	11,198
Total assets	25,122	27,213
Revolving credit facilities, net	920	1,689
Total liabilities	5,523	6,753
Total shareholders' equity	\$ 19,599	\$ 20,460

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RISK FACTORS

You should carefully consider the following risk factors and the other information included herein as well as the information included in other reports and filings made with the SEC before investing in our common stock. The following factors, as well as other factors affecting our operating results and financial condition, could cause our actual future results and financial condition to differ materially from those projected. The trading price of our common stock could decline due to any of these risks, should they materialize, and you may lose part or all of your investment.

Risks Related To Our Financial Position

We have had losses in the past and may incur losses in the future.

Our accumulated deficit is approximately \$226 million as of September 30, 2017. We can give no assurances that we will be profitable in the future. We cannot assure you that if we become profitable that we will be able to sustain profitability or that we will not continue to incur operating losses in the future.

If we are unable to meet our obligations as they become due over the next twelve months, we may not be able to continue our current operations.

Our ability to continue current operations and to execute on our plans is dependent on our ability to generate sufficient cash flows from operations, raise additional capital or refinance our indebtedness to meet our obligations. If adequate funds are not available to us on a timely basis, or at all, we may have to reduce current operations and delay capital expenditures in order to conserve cash.

Based on our current operating plan, we anticipate that, given our current working capital levels, our current financial projections and our ability to borrow under our working capital facility, we will be able to meet our financial obligations as they become due over the next twelve months. We have no additional committed external sources of funds and additional financing may not be available when we need it or may not be available on terms that are favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

We cannot provide assurance that we would be able to take any of these actions or that any effort to sell additional equity securities or borrow additional funds would be successful or would generate sufficient funds to meet our financial obligations, allow us to continue current operations or that these actions would be permitted under the terms of our existing or future debt agreements. If additional financing is not available when required or is not available on acceptable terms, we may need to delay, modify or abandon our current operations and we may be unable to take advantage of business opportunities or respond to competitive pressures which would likely have a material adverse effect on our product offerings, revenue, results of operations and financial condition.

Our operating results have significant fluctuations.

In addition to the variability resulting from the short-term nature of commitments from our customers, other factors contribute to significant periodic quarterly fluctuations in results of operations. These factors include, but are not limited to, the following:

the receipt and timing of orders and the timing of delivery of orders;

the inability to adjust expense levels or delays in adjusting expense levels, in either case in response to lower than expected revenues or gross margins;

the volume of orders relative to our manufacturing capacity;

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product introductions and market acceptance of new products or new generations of products;

changes in cost and availability of labor and components;

product mix;

variation in operating expenses; regulatory requirements and changes in duties and tariffs;

pricing and availability of competitive products and services; and

changes, whether or not anticipated, in economic conditions.

Accordingly, the results of any past periods should not be relied upon as an indication of our future performance.

We may incur substantial indebtedness which could adversely affect our business and limit our ability to plan for or respond to changes in our business.

Our ability to make payments on our debt obligations and to fund planned capital expenditures depends on our ability to generate cash from our future operations. This, to a certain extent, is subject to financial, competitive, legislative, regulatory and other factors that are beyond our control. In addition, if we cannot service our indebtedness, we may have to take actions such as selling assets, seeking additional equity or reducing or delaying capital expenditures, strategic acquisitions, investments and alliances, any of which could impede the implementation of our business strategy, prevent us from entering into transactions that would otherwise benefit our business and/or negatively affect our financial condition and results of operations. We may not be able to refinance our indebtedness or take such other actions, if necessary, on commercially reasonable terms, or at all.

Our ABL Facility contains various covenants limiting the discretion of our management in operating our business, which could prevent us from capitalizing on business opportunities and taking some corporate actions.

On December 21, 2016 we entered into an asset-based lending agreement with Rosenthal & Rosenthal, Inc., which is referred to herein as the ABL Facility. The ABL Facility imposes operating and financial restrictions on us. These restrictions will limit or restrict, among other things, our ability to:

incur additional indebtedness;

make restricted payments (including paying dividends on, redeeming, repurchasing or retiring our capital stock);

make investments;

create liens;

sell assets;

engage in transactions with affiliates; and

consolidate, merge or sell all or substantially all of our assets.

In addition, the ABL Facility also requires us to maintain compliance with certain financial covenants. These covenants are subject to important exceptions and qualifications. Our ability to comply with these covenants may be affected by events beyond our control, including those described in this "Risk Factors" section. A breach of any of the covenants contained in the ABL Facility could result in an event of default under one or more of the documents governing such obligations which would allow the lenders under the ABL Facility to declare all borrowing outstanding to be due and payable. In the event of an acceleration of payment obligations, we would likely be unable to pay our

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outstanding indebtedness with our cash and cash equivalents then on hand. We could be required to seek alternative sources of funding, which may not be available on commercially reasonable terms, or terms as favorable as our current agreement or at all. If we are unable to provide alternative means of financing our operations, we may be required to reduce our operations or take other actions that are inconsistent with our current business practices or strategy.

Our debt is variable rate debt, and increases in interest rates could adversely affect us by causing us to incur higher interest costs with respect to such variable rate debt.

The ABL Facility subjects us to interest rate risk. The rate at which we pay interest on amounts borrowed under such facility fluctuates with changes in interest rates. Accordingly, with respect to any amounts from time to time outstanding under the ABL Facility, we are and will be exposed to changes in interest rates. If we are unable to adequately manage our debt structure in response to changes in the market, our interest expense could increase, which would negatively affect our financial condition and results of operations. The outstanding borrowings under the ABL Facility as of September 30, 2017 were \$0.9 million.

Risks Related To Manufacturing

The manufacture of active matrix OLED microdisplays encompasses several complex processes resulting in irregular production schedules, including production delays and interruptions, which could adversely affect our operating results.

Our product technology and manufacturing processes are evolving which can result in production challenges and difficulties. We cannot assure you that we will be able to produce our products in sufficient quantity and quality to maintain existing customers and attract new customers. In addition, we cannot assure you that we will not experience manufacturing problems which could result in delays in delivery of orders or product introductions.

Several steps of our production processes are dependent upon certain critical machines and tools which could result in delivery interruptions and foregone revenues.

We currently have little equipment redundancy in our manufacturing facility. If we experience any significant disruption in the operation of our manufacturing facility or a serious failure of a critical piece of equipment, we may be unable to supply microdisplays to our customers in a timely manner. Interruptions in our manufacturing could be caused by equipment problems, the introduction of new equipment into the manufacturing process or delays in the delivery of new manufacturing equipment. Lead-time for delivery, installation, testing, repair and maintenance of manufacturing equipment can be extensive. We have experienced production interruptions in the past and no assurance can be given that we will not lose potential sales or be unable to meet production orders due to future production interruptions in our manufacturing line.

We rely on key sole source and limited source suppliers.

We depend on a number of sole source or limited source suppliers for certain raw materials, components, and services. These include silicon wafers, circuit boards, graphic integrated circuits, passive components, materials and chemicals, and equipment support. We maintain several single-source supplier relationships either because alternative sources are not available or because the relationship is advantageous to us due to performance, quality, support, delivery, capacity, or price considerations (or a combination thereof). Even where alternative sources of supply are available, qualification of the alternative suppliers and establishment of reliable supplies could result in delays and a possible loss of sales, which could materially and adversely affect our operating results. We do not manufacture the silicon integrated circuits on which we incorporate our OLED technology. Instead,

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we provide the design layouts to semiconductor contract manufacturers who manufactures the integrated circuits on silicon wafers. Our inability to obtain sufficient quantities of components and other materials or services on a timely basis could result in manufacturing delays, increased costs and ultimately in reduced or delayed sales or lost orders which could materially and adversely affect our operating results. Generally, we do not have long-term contracts or written agreements with our source suppliers but instead operate on the basis of short term purchase orders.

Our results of operations, financial condition and business would be harmed if we were unable to balance customer demand and capacity.

As customer demand for our products changes, and as we enter new markets which may require higher volume mass production, we must be able to ramp up or adjust our production capacity to meet demand or enter into relationships with high volume manufacturing partners. We are continually taking steps to address our manufacturing capacity needs for our products. If we are not able to expand our manufacturing capacity or enter into relationships with high volume manufacturing partners, our prospects may be limited and our business and results of operations could be adversely impacted. If we experience delays or unforeseen costs associated with adjusting our capacity levels, we may not be able to achieve our financial targets. For some of our products, vendor lead times exceed our customers' required delivery time, causing us to order to forecast rather than order based on actual demand. Ordering raw material, building finished goods, and scheduling contract manufacturer production for our consumer products based on forecasts exposes us to numerous risks, including potential inability to service customer demand within an acceptable timeframe, holding excess inventory or having unabsorbed manufacturing overhead.

Variations in our production yields impact our ability to reduce our costs and could cause our margins to decline and our operating results to suffer.

All of our products are manufactured using technologies that are highly complex. The number of usable items, or yield, from our production processes may fluctuate as a result of many factors, including but not limited to the following:

- variability in our manufacturing process and repeatability;
- changes in manufacturing personnel due to turnover or employee absences;
- contamination of the manufacturing environment or equipment;
- equipment failure, power outages, or modification to our manufacturing processes;
- lack of consistency and adequate quality and quantity of piece parts and other raw materials;
- defects in packaging either within or without our control;
- any transitions or changes in our production process, planned or unplanned; and
- certain customer requirements outside of our normal specifications.

Variations in our production yields impacts our costs and could cause our margins to decline and our operating results to suffer.

We could experience manufacturing interruptions, delays, or inefficiencies if we are unable to timely and reliably procure components from single-sourced suppliers.

We maintain several single-source supplier relationships, either because alternative sources are not available or because the relationship is advantageous due to performance, quality, support, delivery, capacity, or price considerations (or a combination thereof). If the supply of a critical single-source material or component is delayed or curtailed, we may not be able to ship the related product in

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desired quantities and in a timely manner. Even where alternative sources of supply are available, qualification of the alternative suppliers and establishment of reliable supplies could result in delays and a possible loss of sales, which would harm our operating results. Further, we utilize single source contract manufacturers to assemble our night vision consumer products. Inadequate line capacity or production capacity commitments to other products could affect our ability to build sufficient quantities of products to meet demand.

Risks Related To Our Intellectual Property

We may not be successful in protecting our intellectual property and proprietary rights.

We rely on a combination of patents, trade secret protection, licensing agreements and other arrangements to establish and protect our proprietary technologies. If we fail to successfully enforce our intellectual property rights, our competitive position could suffer, which could harm our operating results. Patents may not be issued for our current patent applications; third parties may challenge, invalidate or circumvent any patent issued to us; unauthorized parties could obtain and use information that we regard as proprietary despite our efforts to protect our proprietary rights; rights granted under patents issued to us may not afford us any competitive advantage; others may independently develop similar technology or design around our patents; and protection of our intellectual property rights may be limited in certain foreign countries. On April 30, 2007, the U.S. Supreme Court, in *KSR International Co. vs. Teleflex, Inc.*, mandated a more expansive and flexible approach towards a determination as to whether a patent is obvious and invalid, which may make it more difficult for patent holders to secure or maintain existing patents. Any future infringement or other claims or prosecutions we may bring against third parties based on our intellectual property could have a material adverse effect on our business. Any such claims could be time consuming to assert, result in costly litigation, divert management's attention and resources, or result in our entering into royalty or licensing agreements. Protection of intellectual property has historically been a large yearly expense for us. For a period prior to 2008, we were not in a financial position to properly protect all of our intellectual property, and may not be in a position to properly protect our position or stay ahead of competition in new research and the protecting of the resulting intellectual property.

In addition to patent protection, we also rely on trade secrets and other non-patented proprietary information relating to our product development and manufacturing activities. We try to protect this information through appropriate efforts to maintain its secrecy, including requiring employees and third parties to sign confidentiality agreements. We cannot be sure that these efforts will be successful or that the confidentiality agreements will not be breached. We also cannot be sure that we would have adequate remedies for any breach of such agreements or other misappropriation of our trade secrets or that our trade secrets and proprietary know-how will not otherwise become known or be independently discovered by others.

Third parties may assert claims against us which could harm our business.

We may face third party claims that our business practices or products infringe adversely held intellectual property rights. We may face third party claims that our employees or contractors have misappropriated and unlawfully disclosed to us for our benefit third party trade secrets or other proprietary information. Furthermore, we have agreed to indemnify customers for certain intellectual property claims brought against them. Defending any such claims, whether or not meritorious, would cause us to incur costs and may divert the attention of management and technical personnel. Resolution of any such claims by litigation or settlement may entail payment of damages, changes to our business practices or products, and changes in our relationships with our customers, employees, or contractors.

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Risks Related To The Microdisplay Industry

The success of the commercial and consumer microdisplay industry is dependent upon widespread acceptance of microdisplay systems products, including their incorporation into AR and VR systems and products.

The market for microdisplays is still emerging. Our long-term success will depend on widespread consumer acceptance of microdisplays as well as the success of the commercialization of the microdisplay market for consumer applications. As an OEM supplier, our customers' products must also be well accepted. At present, it is difficult to assess or predict with any assurance the potential size, timing and viability of market opportunities for our technology in this market.

Procurement of microdisplays for military systems is subject to changes in federal budget priorities and if government funding is discontinued or reduced, our ability to develop or enhance products could be limited and our business results, operations and financial conditions could be adversely affected.

Historically, a large portion of our revenue is from military contracts. Procurement of microdisplays for military systems is subject to changes in federal budget priorities. Government programs are subject to authorization, appropriation and allocation of funding on an annual basis. Additionally, funding can be shifted to other programs if the government changes budget priorities, such as in a time of war or for other reasons. Government contracts are also subject to the risk that the government may not appropriate and allocate all funding contemplated by the contract. Government contracts generally permit the contracting authority to terminate the contract for the convenience of the government and in the event of a premature termination of a contract, the full value of such contract will not be realized.

The research and development and product procurement contracts of the customers we supply may be similarly impacted by government budget decisions. If the government funding is discontinued or reduced, our ability to develop or enhance products could be limited and our business results, operations and financial conditions could be adversely affected.

In addition, we must comply with certain laws and regulations relating to the administration and performance of federal government contracts. These laws and regulations affect how we conduct business under our federal government contracts, including in our role as a subcontractor. In complying with these laws and regulations, we may incur additional costs, and non-compliance may lead to the assessment of fines and penalties, including contractual damages or the loss of business.

The microdisplay market is highly competitive with several competing technologies.

We do business in intensely competitive markets that are characterized by rapid technological change, changes in market requirements and competition from both other suppliers and our potential OEM customers. Such markets are typically characterized by price erosion. This intense competition could result in pricing pressures, lower sales, reduced margins, and lower market share. Our ability to compete successfully will depend on a number of factors, both within and outside our control. We expect these factors to include the following:

our success in designing, manufacturing and delivering expected new products, including those implementing new technologies on a timely basis;

our ability to address the needs of our customers;

the quality, performance, reliability, features, ease of use and pricing of our products;

successful expansion of our manufacturing capabilities;

our efficiency of production, and ability to manufacture and ship products on time;

the rate at which OEM customers incorporate our product solutions into their own products;

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the market acceptance of our customers' products; and

product or technology introductions by our competitors.

In addition, our customers may be reluctant to rely on a relatively small company such as eMagin for a critical component. We cannot assure you that we will be able to compete successfully against current and future competition, and the failure to do so would have a materially adverse effect upon our business, operating results and financial condition.

The display industry may be subject to cyclical demand and overcapacity.

Our business strategy is dependent on OEM manufacturers' building and selling products that incorporate our OLED displays as components into those products. Industry-wide fluctuations in demand could cause significant harm to our business. The OLED microdisplay sector may experience overcapacity if additional capacity comes on line which could lead to pricing pressures and a difficult market in which to sell our products.

Our competitors have many advantages over us.

As the microdisplay market develops, we expect to experience intense competition from numerous domestic and foreign companies, including well-established corporations possessing worldwide manufacturing and production facilities, greater name recognition and significantly greater financial, technical and marketing resources than us, as well as from emerging companies who may be subsidized by their governments. We cannot assure you that we will be able to compete successfully against current and future competition, and the failure to do so would have a materially adverse effect upon our business, operating results and financial condition.

Our products are subject to lengthy OEM development periods.

We sell most of our microdisplays to OEMs who will incorporate them into products they sell. OEMs determine during their product development phase whether they will incorporate our products. The time elapsed between initial sampling of our products by OEMs, the custom design of our products to meet specific OEM product requirements, and the ultimate incorporation of our products into OEM consumer products is significant, often with a duration of between one and three years. If our products fail to meet our OEM customers' cost, performance or technical requirements or if unexpected technical challenges arise in the integration of our products into OEM consumer products, our operating results could be significantly and adversely affected. Long delays in achieving customer qualification and incorporation of our products also could adversely affect our business.

In order to increase or maintain our profit margins we may have to continuously develop new products, product enhancements and new technologies.

In some markets, prices of established products tend to decline over time. In order to increase or maintain our profit margins over the long-term, we believe that we will need to continuously develop new products, product enhancements and new technologies that will either slow price declines of our products or reduce the cost of producing and delivering our products. While we anticipate many opportunities to reduce production costs over time, there can be no assurance that these cost reduction plans will be successful, that we will have the resources to fund the expenditures necessary to implement certain cost-saving measures, or that our costs can be reduced as quickly as any reduction in unit prices. We may also attempt to offset the anticipated decrease in our average selling price by introducing new products with higher selling prices that may or may not offset price declines in more mature products. If we fail to do so successfully, our results of operations could be materially and adversely affected.

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Risks Related To The Consumer Night Vision Products Industry

The commercial success of the consumer night vision industry depends on the widespread market acceptance of consumer night vision products.

The commercial market, if any, for consumer night vision products is still emerging. The success of our BlazeTorch and BlazeSpark night vision products may depend on the consumer acceptance of these products as well as the success of the commercialization of the night vision market. The existing nonmilitary night vision market is more narrowly focused on tactical, hunting, law enforcement and first responder markets. In order to achieve the sales levels necessary to achieve our plans in this area, we need to expand beyond these existing markets into broader based consumer acceptance, including hobbyists, outdoor sports enthusiasts, and social media users interested in capturing nighttime activities, who may not exist in sufficient numbers to make the consumer market viable for us.

The Company has limited experience in the consumer electronics industry and this is a highly competitive industry.

With the introduction of the consumer night vision products, we are seeking to do business in intensely competitive consumer-focused markets that are characterized by rapid technological change, changes in market requirements, price erosion and competition from other manufacturers and distributors. This intense competition is likely to result in pricing pressures, lower sales, reduced margins, and lower market share. Our ability to compete successfully will depend on a number of factors, both within and outside our control. We expect these factors to include the following:

our success in designing, manufacturing and delivering expected new products, including those implementing new technologies on a timely basis;

our ability to address the needs of our customers and the quality of our customer services;

the ability to effectively market and advertise our products;

the quality, performance, reliability, features, ease of use and pricing of our products;

the ability to market successfully to law enforcement, utility and first responder customers

the capacity of our outsourced production facilities, and ability to manufacture and ship products on time;

our ability to comply with country specific regulatory certifications for consumer products; and

product or technology introductions by our competitors.

Risks Related To Our Business

Our success depends on attracting and retaining highly skilled and qualified technical and consulting personnel.

We must hire highly skilled technical personnel as employees and as independent contractors in order to develop our products. The competition for skilled technical employees is intense and we may not be able to retain or recruit such personnel. We must compete with companies that possess greater financial and other resources than we do, and that may be more attractive to potential employees and contractors. To be competitive, we may have to increase the compensation, including salaries, bonuses, stock options and other fringe benefits, offered to employees in order to attract and retain such personnel. The costs of attracting and retaining new personnel may have a materially adverse effect on our business and our operating results.

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Our success depends in a large part on the continuing service of key personnel.

Changes in management could have an adverse effect on our business. We are dependent upon the active participation of several key management personnel and will also need to recruit additional management in order to expand according to our business plan. The failure to attract and retain additional management or personnel could have a material adverse effect on our operating results and financial performance.

Our operating results are substantially dependent on the development and acceptance of new products and technology innovations.

Our future success may depend on our ability to develop new and lower cost solutions for existing and new markets and for customers to accept those solutions. We must introduce new products in a timely and cost-efficient manner, and we must secure production orders for those products from our customers. The development of new products is a highly complex process, and we historically have experienced delays in completing the development and introduction of new products. Some or all of those technologies or products may not successfully make the transition from the research and development phase. Even when we successfully complete a research and development effort with respect to a particular product or technology, it may fail to gain market acceptance. The successful development and introduction of these products depends on a number of factors, including the following:

- achievement of technology advances required to make commercially viable devices;
- the accuracy of our predictions of market requirements;
- acceptance of our new product designs;
- acceptance of new technology in certain markets;
- the availability of qualified research and development and product development personnel;
- our timely completion of product designs and development;
- our ability and available resources to expand sales;
- our ability to develop repeatable processes to manufacture new products in sufficient quantities and at low enough costs for commercial sales;
- our customers' ability to develop competitive products incorporating our products; and
- acceptance of our customers' products by the market.

If any of these or other factors become problematic, we may not be able to develop and introduce these new products in a timely or cost-effective manner.

If government agencies or companies discontinue or curtail their funding for our research and development programs, our business may suffer.

Changes in federal budget priorities could adversely affect our contract and display product revenue. Historically, U.S. government agencies have funded a significant part of our research and development activities. Our funding has the risk of being redirected to other programs when the government changes budget priorities, such as in time of war or for other reasons. Government contracts are also subject to

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the risk that the government agency may not appropriate and allocate all funding contemplated by the contract. In addition our government contracts generally permit the contracting authority to terminate the contract for the convenience of the government. The full value of the contracts would not be realized if they were prematurely terminated. We may be unable to incur sufficient allowable costs to generate the full estimated contract values. Furthermore, the research and

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development and product procurement contracts of the customers we supply may be similarly impacted. If the government funding is discontinued or reduced, our ability to develop or enhance products could be limited and our business results or operations and financial conditions could be adversely affected.

Our business depends on new products and technologies.

The market for our products is characterized by rapid changes in product, design and manufacturing process technologies. Our success depends to a large extent on our ability to develop and manufacture new products and technologies to match the varying requirements of different customers in order to establish a competitive position and become profitable. Furthermore, we must adapt our products and processes to technological changes and emerging industry standards and practices on a cost-effective and timely basis. Our failure to accomplish any of the above could harm our business and operating results.

We generally do not have long-term contracts with our customers.

Our business has primarily operated on the basis of short-term purchase orders. We receive some longer term purchase agreements and procurement contracts, but we cannot guarantee that we will continue to do so. Our current purchase agreements, depending on the circumstances, can be cancelled or revised without penalty. We plan production primarily on the basis of internally generated forecasts of demand based on communications with customers, and available industry data which makes it difficult to accurately forecast revenues. If we fail to accurately forecast operating results, our business may suffer and the market price of our shares may decline.

Our business strategy may fail if we cannot continue to form strategic relationships with companies that manufacture and use products that could incorporate our active matrix OLED technology.

Our prospects could be significantly affected by our ability to develop strategic alliances with high volume manufacturers and with OEMs for incorporation of our active matrix OLED microdisplay technology into their products. While we intend to continue to establish strategic relationships with manufacturers of electronic consumer products, personal computers, chipmakers, lens makers, equipment makers, material suppliers and/or systems assemblers, there is no assurance that we will be able to continue to establish and maintain strategic relationships on commercially acceptable terms, or that the alliances we do enter into will realize their objectives. Failure to do so could have a material and adverse effect on our business.

Our business depends to some extent on international transactions.

We purchase needed materials and subcontract manufacturing processes from companies located abroad and may be adversely affected by political and currency risk, as well as the additional costs of doing business with foreign entities. Some customers in other countries have longer receivable periods as is customary in those countries. In addition, many of the foreign OEMs that are the most likely long-term purchasers of our microdisplays expose us to additional political and currency risk. We may find it necessary to locate manufacturing facilities abroad to be closer to our customers which could expose us to various risks, including management of a multi-national organization, the complexities of complying with foreign laws and customs, political instability and the complexities of taxation in multiple jurisdictions.

Our business may expose us to product liability claims.

Our business may expose us to potential product liability claims. Although no such claims have been brought against us to date, and to our knowledge no such claim is threatened or likely, we may face liability to product users for damages resulting from the faulty design or manufacture of our

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products. While we plan to maintain product liability insurance coverage, there can be no assurance that product liability claims will not exceed coverage limits, fall outside the scope of such coverage, or that such insurance will continue to be available at commercially reasonable rates, if at all.

Our business is subject to environmental regulations and possible liability arising from potential employee claims of exposure to harmful substances used in the development and manufacture of our products.

We are subject to various governmental regulations related to toxic, volatile, experimental and other hazardous chemicals used in our design and manufacturing process. Our failure to comply with these regulations could result in the imposition of fines or in the suspension or cessation of our operations. Compliance with these regulations could require us to acquire costly equipment or to incur other significant expenses. We develop, evaluate and utilize new chemical compounds in the manufacture of our products. While we attempt to ensure that our employees are protected from exposure to hazardous materials, we cannot assure you that potentially harmful exposure will not occur or that we will not be liable to employees as a result.

Some of our business is subject to U.S. government procurement laws and regulations.

We must comply with certain laws and regulations relating to the formation, administration and performance of federal government contracts, including the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR). These laws and regulations affect how we conduct business under our federal government contracts, including the business that we do as a subcontractor. In complying with these laws and regulations, we may incur additional costs, and non-compliance may lead to the assessment of fines and penalties, including contractual damages, or the loss of business.

Our international sales and operations are subject to export laws and regulations.

We must comply with all applicable export control laws, including the EAR and ITAR. Certain of our products may be deemed to be controlled for export by the U.S. Commerce Department's Bureau of Industry and Security under the EAR or by the U.S. State's Directorate of Defense Trade Controls (DDTC) under the ITAR. We believe certain of our new products with both high brightness and high resolution will be classified as defense articles and licenses from the DDTC will be required for exports. Failure to comply with these export control laws can lead to severe penalties, both civil and criminal, and can include debarment from contracting with the U.S. government.

Economic conditions may adversely impact our business, operating results and financial condition.

Economic conditions and market instability may affect our customers and suppliers. Any adverse financial or economic impact to our customers may impact their ability to pay timely, or result in their inability to pay. It may also impact their ability to fund future purchases, or increase the sales cycles which could lead to a reduction in revenue and accounts receivable. Our suppliers may increase their prices or may be unable to supply needed raw materials on a timely basis which could result in our inability to meet customers' demand or affect our gross margins. Our suppliers may also impose more stringent payment terms on us. The timing and nature of any recovery in the credit and financial markets remains uncertain, and there can be no assurance that market conditions will improve in the near future or that our results will not be materially and adversely affected.

We may be affected by recent tax legislation.

On December 20, 2017, Congress passed, and the President has indicated that he will sign (or may have already signed) an extensive overhaul of the U.S. federal tax code called the Tax Cuts and Jobs Act, or the Tax Legislation. The Tax Legislation makes significant changes to the taxation of

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individuals and corporations, which could significantly affect our business, our operations, our financial condition, or the taxation of our stockholders and warrant holders. Potential investors should consult their tax advisors about the Tax Legislation and its potential impact on making an investment in the Company.

Risks Related To This Offering And Our Common Stock And The Warrants

The market price of our common stock may be volatile.

The market price of our common stock has been subject to wide fluctuations. During our four most recently completed fiscal quarters, the closing price of our stock ranged from a low of \$1.55 in December 2017 to a high of \$2.85 in January 2018. The market price of our common stock in the future is likely to continue to be subject to wide fluctuations in response to various factors, including, but not limited to, the following:

variations in our operating results and financial conditions;

actual or anticipated announcements of technical innovations, commercial partnerships, new product developments, or design wins by us or our competitors;

general conditions in the semiconductor and flat panel display industries; and

worldwide economic and financial conditions.

In addition, the public stock markets have experienced extreme price and volume fluctuations that have particularly affected the market price for many technology companies and that have often been unrelated to the operating performance of these companies. The broad market fluctuations and other factors may continue to adversely affect the market price of our common stock.

There is no public market for the warrants to purchase common stock being offered in this offering.

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any national securities exchange or other trading market. Without an active market, the liquidity of the warrants will be limited.

Holder of our warrants will have no rights as a common stockholder until such holder exercises their warrants and acquires our common stock.

Until you acquire shares of our common stock upon exercise of your warrants, you will have no rights with respect to the shares of our common stock underlying such warrants, except as set forth in the warrants. Upon exercise of your warrants, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

The warrants may never have any value.

The warrants comprising part of the fixed combinations being sold in this offering, which have an exercise price of \$ _____ per whole share of common stock, will expire on the _____ year anniversary of the initial exercise date. In the event our common stock price does not exceed the per share exercise price of the warrants during the period when the warrants are exercisable, the warrants will not have any value.

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The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on the NYSE American.

Market conditions may result in volatility in the level of, and fluctuations in, market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. Concerns over global stability and economic conditions in the United States and abroad have contributed to the extreme volatility of the markets which may have an effect on the market price of our common stock.

The substantial number of shares that are or will be eligible for sale could cause our common stock price to decline even if we are successful.

Sales of significant amounts of common stock in the public market, or the perception that such sales may occur, could materially affect the market price of our common stock. These sales might also make it more difficult for us to sell equity or equity-linked securities in the future at a time and price that we deem appropriate. As of September 30, 2017, we have outstanding common shares of 34,972,589 plus (i) options to purchase 5,142,448 shares, (ii) warrants to purchase 5,081,449 shares and (iii) convertible preferred stock to acquire 7,545,333 shares of common stock. If a significant number of our outstanding options are exercised, our stockholders may experience a substantial dilution in their percentage ownership of our company.

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

Since the offering price per fixed combination of the securities being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the offering price of \$ per fixed combination and attributing no value to the warrants, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ per share in the net tangible book value of the common stock. In the event that you exercise your warrants, you will experience additional dilution to the extent that the exercise price of those warrants is higher than the book value per share of our common stock. See the section entitled "Dilution" below for a more detailed discussion of the dilution you would incur if you purchase securities in this offering.

Future issuances of our common stock could lower our stock price and dilute the interests of existing stockholders.

We may issue additional shares of our common stock in the future, including shares of our common stock in connection with acquisitions, strategic partnerships or joint ventures that we believe will allow us to complement our growth strategy, increase market share in our current markets and expand into adjacent markets, broaden our technology and intellectual property, and strengthen our relationships with distributors and OEMs. Any future issuances of shares of our common stock, including in connection with any future acquisition, partnership or joint venture, may result in the dilution of existing stockholders to the extent we are required to issue equity securities.

The issuance of a substantial amount of common stock could have the effect of substantially diluting the interests of our current stockholders. In addition, the sale of a substantial amount of common stock in the public market, either in the initial issuance or in a subsequent resale by investors who acquired such common stock in a private placement, could have a material adverse effect on the market price of our common stock.

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Concentration of ownership of our stock may enable one stockholder or a small number of stockholders to significantly influence matters requiring stockholder approval.

As of November 30, 2017, Stillwater Holdings LLC (f/k/a Stillwater LLC) owned approximately 16% of our outstanding voting stock, Flat Creek Fiduciary Management, as trustee of a trust which the sole member of Stillwater Holdings LLC has investment control, owned approximately 10% of our outstanding voting stock, Stillwater Trust LLC owned 7% of our outstanding voting stock and the sole member of Stillwater Holdings LLC is the investment manager of Rainbow Gate Corporation, which owned approximately 4% of our outstanding voting stock. Together such stockholders owned approximately 36% of our outstanding voting stock. As a result, these stockholders, if they act together, may be able to exert a significant degree of influence over matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. Further, if these stockholders act together with another stockholder, Ginola Limited, which has common directors with Mount Union Corp., Chelsea Trust Company and Crestflower Corporation, as of September 30, 2017, they would collectively have represented approximately 43% of our outstanding voting stock. This concentration of ownership may facilitate or hinder a change of control and might affect the market price of our common stock. Furthermore, the interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. Nevertheless, the ability to influence the election of our Board of Directors or otherwise have influence does not modify the fiduciary duties of our Board of Directors to represent the interests of all stockholders.

We will have broad discretion in how we use the net proceeds of this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We will have considerable discretion in the application of the net proceeds of this offering. We currently intend to use the net proceeds from this offering for working capital, capital expenditure and general corporate purposes. We have not yet determined the amount of net proceeds to be used specifically for any particular purpose or the timing of these expenditures. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from this offering. Pending any use, as described above, we intend to invest the net proceeds in high-quality, short-term, interest-bearing securities.

As a result, investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the net proceeds of this offering. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

We do not intend to pay cash dividends. We last paid a dividend on our capital stock in 2012 and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our securities will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our capital stock since 2012. We currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, our ABL Facility prohibits us from paying cash dividends on our common stock. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from your investment in our securities if the price of our common stock increases.

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A provision in our certificate of incorporation and by-laws may prevent or delay an acquisition of our Company, which could decrease the market value of our common stock.

Provisions of Delaware law, our certificate of incorporation and our by-laws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our Board of Directors. These provisions include:

limitations on the removal of directors;

advance notice requirements for stockholder proposals and nominations;

the inability of stockholders to act by written consent or to call special meetings;

the ability of our Board of Directors to make, alter or repeal our by-laws; and

the authority of our Board of Directors to issue preferred stock with such terms as our Board of Directors may determine.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits business combination transactions with stockholders of 15% or more of our outstanding voting stock that our Board of Directors has not approved. These provisions and other similar provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation. These provisions may apply even if some stockholders may consider the transaction beneficial to them. As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock. These provisions might also discourage a potential acquisition proposal or tender offer, even if the acquisition proposal or tender offer is at a premium over the then current market price for our common stock.

We are subject to significant corporate regulation as a public company and failure to comply with all applicable regulations could subject us to liability or negatively affect our stock price.

As a publicly traded company, we are subject to a significant body of regulation, including the Sarbanes-Oxley Act of 2002. While we have developed and instituted a corporate compliance program based on what we believe are the current best practices in corporate governance and continue to update this program in response to newly implemented or changing regulatory requirements, we cannot provide assurance that we are or will be in compliance with all potentially applicable corporate regulations. For example, we cannot provide assurance that, in the future, our management will not find a material weakness in connection with its annual review of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We also cannot provide assurance that we could remediate any such weakness; our failure to do so would prevent our management from concluding that our internal control over financial reporting as of the end of our fiscal year is effective. If we fail to comply with any of these regulations, we could be subject to a range of regulatory actions, fines or other sanctions or litigation. If we must disclose any material weakness in our internal control over financial reporting, our stock price could decline.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act, that are based on our management's belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect our results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the heading "Risk Factors" in this prospectus and in any free writing prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and any free writing prospectus, including the documents that we have filed as exhibits to the registration statement, of which this prospectus is part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements. In particular, forward-looking statements in this prospectus or any free writing prospectus about:

our ability to successfully develop and market our products to customers;

our ability to generate customer demand for our products in our target markets;

the development of our target markets and market opportunities, including our entry in the consumer market;

our potential exposure to product liability claims;

our ability to manufacture suitable products at competitive costs;

our ability to successfully implement new equipment on our manufacturing line;

market pricing for our products and for competing products;

the extent of increasing competition;

technological developments in our target markets and the development of alternate, competing technologies in them;

our anticipated cash needs and our estimates regarding our capital requirements;

our needs for additional financing, as well as our ability to obtain such additional financing on reasonable terms; and

other risks and uncertainties referenced under "Risk Factors" above and in any applicable free writing prospectus.

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Forward-looking statements contained in this prospectus or any free writing prospectus represents our views only as of the respective dates on which such statements were made. We anticipate that subsequent events and developments may cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. Therefore, these forward-looking statements do not represent our views as of any date other than the date on which they were made.

Table of Contents**USE OF PROCEEDS**

We estimate that the proceeds from this offering will be approximately \$ million, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and general corporate purposes.

We have not yet determined the amount of net proceeds to be used specifically for any particular purpose or the timing of these expenditures. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from this offering. Pending any use, as described above, we intend to invest the net proceeds in high-quality, short-term, interest-bearing securities.

PRICE RANGE OF COMMON STOCK

Our common stock trades on the NYSE American under the symbol "EMAN". The following table shows the high and low sale prices per share of our common stock as reported on NYSE American for the periods indicated.

	High	Low
Year ending December 31, 2017		
First quarter	\$ 2.85	\$ 2.10
Second quarter	3.00	2.25
Third quarter	2.65	1.95
Fourth quarter (through December 28, 2017)	2.85	1.55
Year ended December 31, 2016		
First quarter	2.08	1.31
Second quarter	2.03	1.68
Third quarter	3.07	1.97
Fourth quarter	2.79	1.95
Year ended December 31, 2015		
First quarter	3.74	2.21
Second quarter	3.41	2.03
Third quarter	2.91	2.32
Fourth quarter	2.56	1.35

On December 28, 2017, the last reported sale price for our common stock on NYSE American was \$1.60 per share. As of December 1, 2017, there were approximately 142 record holders of our common stock. This does not include persons whose stock is in nominee or "street name" accounts through brokers.

DIVIDEND POLICY

We do not anticipate paying any dividends in the foreseeable future. Future decisions to pay cash dividends are at the discretion of our Board of Directors. We currently intend to retain any future profits for use in the development and expansion of our business and for general corporate purposes. In addition, our ABL Facility prohibits us from paying cash dividends on our common stock.

Table of Contents**CAPITALIZATION**

The following table sets forth our cash and capitalization as of September 30, 2017:

on an actual basis; and

on an as adjusted basis to give effect to our sale in this offering of shares of common stock and warrants to purchase shares of common stock at \$ _____ per combination and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table in conjunction with "Use of Proceeds" as well as our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, including the related notes, included in this prospectus.

	As of September 30, 2017	
	Actual	As Adjusted
	(unaudited)	
	(amounts in thousands,	
	except share data)	
Cash, cash equivalents	\$ 1,964	\$
Revolving credit facilities, net		920
Stockholders' equity:		
Series B Convertible Preferred stock, (liquidation preference of \$5,659,000) stated value \$1,000 per share, \$0.01 par value: 10,000 shares designated and 5,659 issued and outstanding as of September 30, 2017, actual and as adjusted		
Common stock, \$0.01 par value: authorized 200,000,000 shares, issued 34,972,589 shares as of September 30, 2017(1)	35	35
Additional paid-in capital	246,312	246,312
Accumulated deficit	(226,248)	(226,248)
Treasury stock, 162,066 shares as of September 30, 2017	(500)	(500)
Total stockholders' equity		19,599
Total capitalization	\$ 20,519	\$

(1)

The number of shares of our common stock in the table above excludes:

5,142,448 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at an average exercise price of \$2.96 per share;

7,545,333 shares of common stock issuable upon conversion of our outstanding Series B Convertible Preferred Stock;

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2,947,949 shares of our common stock issuable upon the exercise of warrants issued in August 2016 outstanding as of September 30, 2017, at an average exercise price of \$2.60 per share; 383,500 shares of our common stock issuable upon the exercise of warrants issued in December 2015 outstanding as of September 30, 2017, at an average exercise price of \$2.05 per share; 100,000 shares of our common stock issuable upon the exercise of warrants issued in March 2017 outstanding as of September 30, 2017, at an average exercise price of \$2.25 per share and 1,650,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an average exercise price of \$2.45 per share;

99,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an exercise price of \$2.60 per share; and

shares of our common stock issuable upon the exercise of warrants offered hereby.

Table of Contents**DILUTION**

If you invest in our common stock and warrants, you will experience dilution to the extent of the difference between the public offering price per fixed combination (attributing no value to the warrants) and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value as of September 30, 2017, was approximately \$19.5 million, or \$0.56 per share of our common stock, based upon shares of our common stock outstanding as of that date. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of September 30, 2017. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock and warrants in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of _____ shares of our common stock and warrants to purchase up to _____ shares of common stock in this offering at the public offering price of \$ _____ per fixed combination and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and excluding the proceeds, if any, from the exercise of warrants in this offering, our as adjusted net tangible book value as of September 30, 2017, would have been approximately \$ _____ million, or \$ _____ per share. This represents an immediate increase in net tangible book value of \$ _____ per share to existing stockholders and immediate dilution in net tangible book value of \$ _____ per share to new investors purchasing our common stock and warrants in this offering at the public offering price. The following table illustrates this dilution on a per share basis:

	(unaudited) (amounts in thousands except share data)
Offering price per fixed combination	\$
Net tangible book value per share as of September 30, 2017	\$ 0.56
Increase in net tangible book value per share attributable to new investors	\$
As adjusted net tangible book value per share as of September 30, 2017 after giving effect to this offering	\$
Dilution in net tangible book value per share to investors in this offering	\$

Each \$0.10 increase (decrease) in an assumed public offering price of \$ _____ per share, the last reported sale price of our common stock on the NYSE American on _____, 2018, would increase (decrease) dilution per share to new investors by approximately \$ _____ after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise in full their overallotment option at an assumed public offering price of \$ _____ per share, the last reported sale price of our common stock on the NYSE American on _____, 2018, the as adjusted net tangible book value after this offering would be \$ _____ per share of our common stock, representing an increase of as adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution of \$ _____ per share to new investors purchasing shares in this offering.

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The foregoing table and discussion is based on 34,972,589 shares outstanding as of September 30, 2017 and excludes:

5,142,448 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at an average exercise price of \$2.96 per share;

7,545,333 shares of common stock issuable upon conversion of our outstanding Series B Convertible Preferred Stock;

2,947,949 shares of our common stock issuable upon the exercise of warrants issued in August 2016 outstanding as of September 30, 2017, at an average exercise price of \$2.60 per share; 383,500 shares of our common stock issuable upon the exercise of warrants issued in December 2015 outstanding as of September 30, 2017, at an average exercise price of \$2.05 per share; 100,000 shares of our common stock issuable upon the exercise of warrants issued in March 2017 outstanding as of September 30, 2017, at an average exercise price of \$2.25 per share and 1,650,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an average exercise price of \$2.45 per share;

99,000 shares of our common stock issuable upon the exercise of warrants issued in May 2017 outstanding as of September 30, 2017, at an exercise price of \$2.60 per share; and

shares of our common stock issuable upon the exercise of warrants offered hereby.

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options to purchase our common stock or outstanding warrants to purchase shares of our common stock. The exercise of outstanding options and warrants having an exercise price less than the offering price will increase dilution to new investors. In addition, we may choose to raise additional capital depending on market conditions, our capital requirements and strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Introduction

The following discussion should be read in conjunction with our financial statements and notes thereto. Our fiscal year ends December 31. This prospectus contains certain forward-looking statements including, among others, anticipated trends in our financial condition and results of operations and our business strategy. These forward-looking statements are based largely on our current expectations and are subject to a number of risks and uncertainties. See the "Risk Factors" section of this prospectus. Actual results could differ materially from these forward-looking statements. Important factors to consider in evaluating such forward-looking statements include changes in external factors or in our internal budgeting process which might impact trends in our results of operations; unanticipated working capital or other cash requirements; changes in our business strategy or an inability to execute our strategy due to unanticipated changes in the industries in which we operate; and various competitive market factors that may prevent us from competing successfully in the marketplace.

Overview

We design, develop, manufacture and market organic light emitting diode (OLED) miniature displays, which we refer to as OLED-on-silicon-microdisplays, and microdisplay modules for virtual imaging, primarily for incorporation into the products of other manufacturers. Microdisplays are typically smaller than many postage stamps, but when viewed through a magnifier they can contain all of the information appearing on a high-resolution personal computer screen. Our microdisplays use organic OLEDs, which emit light themselves when a current is passed through the device. Our technology permits OLEDs to be coated onto silicon chips to produce high resolution OLED-on-silicon microdisplays.

We believe that our OLED-on-silicon microdisplays offer a number of advantages in near to the eye applications over other current microdisplay technologies, including higher contrast, lower power requirements, less weight, fast video speed without flicker, wide operating temperature and wider viewing angles. In addition, many computer and video electronic system functions can be built directly into the OLED-on-silicon microdisplay, resulting in compact systems with lower expected overall system costs relative to alternate microdisplay technologies. We also believe that our direct patterning technology gives us a substantial advantage over other OLED microdisplays because it allows us to produce microdisplays with the high brightness required for VR and AR. Traditional OLED microdisplays utilize white emitting OLED with color filters that lessen the intensity of emitted light by as much as 85%, significantly reducing brightness. Microdisplays manufactured by direct patterning do not require color filters to achieve color variations and allow for the application of more efficient OLED structures which achieve high brightness.

We have devoted significant resources to the development and commercial launch of our OLED microdisplay products into military, aviation, consumer, enterprise, industrial and medical applications. First sales of our SVGA+ microdisplay began in May 2001 and we launched the SVGA-3D microdisplay in February 2002. In 2008, the SXGA microdisplay became our first digital display and in 2011, we introduced the VGA OLED-XL, our lowest powered microdisplay, and the WUXGA OLED-XL which exceeds 1080p HD (High Definition) resolution.

We introduced new products throughout 2014, including a digital SVGA microdisplay and in 2016, a smaller pixel SXGA 096 display that provides for higher resolutions and increased functionality at the same compact size as the SVGA+ microdisplay. Other products such as the SXGA120 and WUXGA have also undergone upgrades improving image quality and manufacturability in 2016 and 2017, while remaining directly compatible with their earlier generation microdisplays.

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These products are being applied or considered for near-eye and headset applications in products such as thermal imagers, night vision goggles, aviation helmets, virtual reality and augmented reality devices to be manufactured by original equipment manufacturer (OEM) customers. In addition to marketing OLED-on-silicon microdisplays as components, we also offer microdisplays as an integrated package, which we call microviewer that includes a compact lens for viewing the microdisplay and electronic interfaces to convert the signal from our customer's product into a viewable image on the microdisplay.

We have developed our own intellectual property portfolio that includes patents, over 15 years of manufacturing know-how and proprietary technologies to create high performance OLED-on-silicon. We believe our technology, intellectual property portfolio and position in the marketplace give us a leadership position in OLED and OLED-on-silicon microdisplay technology. We believe that we are one of only a few companies to market and produce significant quantities of high resolution, small molecule OLED-on-silicon microdisplays.

We believe that a key growth opportunity for us is the consumer electronic OEM market. Our strategy for this segment is to secure channels to this market, including licensing of our direct patterning technology and partnering in the mass production of microdisplays. We believe that our direct patterning technology is a key differentiator for enabling next generation AR/ VR hardware for the consumer and enterprise segments because of the brightness and the pixel density afforded by the technology.

Our direct patterning technology is being optimized and significant improvements have been achieved during 2017, including lowering the power consumption by 20 percent for the same brightness and also demonstrating a maximum brightness of more than 5,300 cd/m² on a new advanced backplane 2Kx2K microdisplay. We believe that this high brightness OLED-on-silicon technology is gaining attention in the AR/VR industry, which requires high brightness displays, and has contributed to our signing an agreement with a Tier One consumer electronics company in October 2017.

During 2016, we developed handheld and wearable products that provide consumers' night vision capability at prices we believe are attractive to the mass market. Two products, BlazeSpark and BlazeTorch, were introduced in early 2017. The BlazeSpark is a smart phone attachment that provides for night vision of activities and, through a companion application, allows the user to record and live stream the content. The BlazeTorch is a wearable device that will utilize our advanced OLED microdisplay technology to provide hands-free operation during night-time activities with the capability to record the content. We have established the supply chain utilizing a variety of domestic and international suppliers and two contract manufacturers located in Asia.

We continue to make progress on our multi-year yield improvement initiative as we strengthen production resources, make key managerial and process engineering hires, and implement production equipment. We believe this initiative will enable us to increase production capacity, lower unit costs and achieve greater operating efficiencies, positioning us to meet expanding customer demand and earning higher gross profits. As part of our yield improvement initiative, we made capital equipment acquisitions over the past several quarters which we are currently implementing and qualifying. We expect that these additions will reduce our dependency on critical equipment at key stages of the production process and provide greater operating flexibility which we believe will permit us to address the increasingly demanding needs of our customers without compromising throughput volumes or unit profitability.

New Business

During 2017, we made progress towards our goals of securing new U.S. military programs while expanding our presence in foreign military, commercial and industrial markets. Under the U.S. Army's Enhanced Night Vision Goggle III (ENVG III) and Family of Weapon Sight-Individual (FWS-I)

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programs, delivery of displays for the Low Rate Initial Production (LRIP) phase of both programs began in the fourth quarter of 2016 and has continued into 2017. ENVG III is scheduled to be in production through 2021 with follow-on sustaining orders through 2032. FWS-I is scheduled to be in production through 2020 with follow-on sustaining orders through 2031. We also delivered displays for prototype systems for FWS-Crew Served program to two defense prime contractors.

During 2016 and 2017, we achieved the following:

Awarded a follow-on contract worth over \$3.7 million for the U.S. Army's Enhanced Night Vision Goggle III (ENVGIII) and Family of Weapons Sight-Individual (FWS-I) programs.

Received a multi-year \$1.7 million order from a European military prime contractor to provide displays for a see-through, AR head-mounted displays to support airborne and ground missions' requirements.

Received a \$1.5 million order to support the Light Weight Thermal Sight (LWTS) program with deliveries expected to begin in December 2017 and continuing through 2018.

Received funding for the design and development of support hardware that will be integral to new system designs utilizing eMagin's 2K x 2K microdisplays with the hardware anticipated to be available to defense and commercial integrators in mid-2018.

Completed a Critical Design Review (CDR) in October 2017 with a major aviation prime contractor for an OLED upgrade to a fixed wing production helmet.

Continued to support a major U.S. Army helicopter helmet upgrade program to retrofit high brightness microdisplays into the current fielded helmet. CDR was completed in August of 2017 and Testing Readiness Review (TRR) was completed in December 2017. Additional OLED display, taper, and lens assemblies were delivered for integration and testing in December 2017.

Received a production order from a foreign aviation prime contractor to supply high brightness microdisplays to upgrade an existing fixed wing helmet. It is expected that this will be a multi-year program with initial displays delivered in November 2017 and continuing through the fourth quarter of 2018.

Delivered high brightness 2K x 2K microdisplays to another major foreign contractor for use in a prototype aviation helmet.

Signed a multi-year agreement with a major European defense company that is expected to exceed \$3.5 million in display sales through 2018. Additionally, we have been in discussions with a company design staff with respect to a new display to meet requirements of a future defense system. Prototype displays were delivered during the first quarter of 2017.

Continued to deliver displays for a major U.S. Marine Corps contract in support of a common laser range finder program. This contract extends into 2020 and replaces currently fielded equipment that provides 24-hour observation capability.

Delivered our HD-plus resolution WUXGA display to a major medical device company for use in prototyping in their next generation surgical equipment. Prototyping was extended through 2017 with production decision likely in early 2018.

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Supplied displays for a large commercial rifle scope manufacturer which has a leading line of thermal weapon sights and thermal monoculars. We continue to work closely with their production development team to offer higher resolution displays for future products.

Designed and developed two night-vision products for the consumer and commercial markets: BlazeSpark, a smart-phone camera attachment that allows consumers to see clear, high-resolution images in the dark, and BlazeTorch, a wearable device that utilizes our OLED

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microdisplay technology to provide hands-free operation for night-time activities with the capability to record and upload content.

In addition, our development work under the Defense Manufacturing, Science and Technology program progressed during 2016 and the first nine months of 2017. We have met all milestones for the Office of Secretary of Defense-sponsored thirty-month program and believe we are on track to provide essential display technology for all service branches following the program's completion which is expected in May 2018.

On the commercial front, we entered into strategic partnerships with multiple Tier One consumer product companies for the design and development of microdisplays for consumer head mounted devices and, in partnership with these companies, negotiated with mass production manufacturers for higher volume production capabilities.

During the nine months ended September 2017, we made significant progress in our negotiations with multiple major consumer electronics companies to enter into strategic partnerships to develop displays for these companies' next generation VR/AR applications. We are pursuing what we believe to be the best paths to commercializing our direct patterning technology and establishing ourselves as the industry leader in microdisplays for the consumer market.

Our overarching goal is to secure partnerships with industry leaders in consumer electronics who can help us capitalize on our technology to meet the needs of end users from a cost and performance standpoint. Our partnership initiatives encompass scaling our product technology, entering into mass production agreements with manufacturing companies which possess capital resources and high volume production capability to enable us to manufacture the volumes required for the consumer market, and securing sales and distribution channels to end users.

During the nine months ended September 30, 2017, we experienced an improvement in booking activity as we made progress towards our goals of securing new, and expanding existing, U.S. and foreign military programs while expanding our presence in foreign military, commercial and industrial markets. We expect these efforts to result in greater bookings during the second half of 2017 as a whole than were achieved during the first half of 2017. As of December 31, 2016, we had a backlog of approximately \$6.4 million in products ordered for delivery through December 31, 2017. As of December 22, 2017, we had a backlog in products ordered for delivery in 2018 of \$11.1 million. Backlog consists of non-binding purchase orders and purchase agreements.

New Technology Development

We are continuing to make progress in our development of very high brightness full-color microdisplays incorporating our proprietary direct patterning technology. Recent improvements in the equipment and further optimization of the processes have led to brightness levels that surpass the threshold requirements for VR/AR applications for Tier One companies and satisfy the requirements of several pending military programs. Our demonstration of more than 5,300 cd/m² maximum brightness was a milestone towards the application of eMagin's microdisplays to AR/VR headsets.

In conjunction with our development work on direct patterning, we have upgraded our production equipment to further improve display performance and achieve higher production volumes. The upgraded equipment is currently being used to produce parts for various customers.

New Product Development

We continue to develop both small pixel and large area microdisplay architectures for wearable consumer applications. These efforts are being driven by consumer electronics companies and are aimed at leveraging our direct patterning technology for cost effective, large volume production systems.

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Our product development efforts on the 2K × 2K full color RGB microdisplay project that was initiated in 2015 produced functional samples, which were delivered to a leading consumer product company for evaluation in December 2016. This is our largest microdisplay design and expands our product offerings for the consumer and commercial marketplaces. We supplied these 2k × 2k displays to other customers during 2017.

Qualification of our 2K × 2K microdisplay is progressing as planned with expected completion in the first quarter 2018. In concert with this effort, we are developing a compact interface for the 2K × 2K microdisplay that will facilitate the integration of the display into optical solutions. This hardware is targeted to be completed and introduced to the market during the second quarter 2018.

Results of Operations**Year Ended December 31, 2016 Compared to Year Ended December 31, 2015***Revenues*

	Year Ended December 31,		
	2016	2015	Change
	(in thousands)		
Product	\$ 17,265	\$ 20,912	\$ (3,647)
Contract	\$ 3,132	\$ 4,230	\$ (1,098)
License	\$ 1,000	\$	\$ 1,000
Total revenue, net	\$ 21,397	\$ 25,142	\$ (3,745)

Revenues decreased approximately \$3.7 million to revenues of approximately \$21.4 million for the year ended December 31, 2016 from approximately \$25.1 million for the year ended December 31, 2015, representing a 15% decrease.

Product revenues are comprised primarily of sales of displays, as well as sales of other hardware. In 2016, product revenues decreased approximately \$3.6 million to revenues of approximately \$17.3 million for the year ended December 31, 2016 from approximately \$20.9 million for the year ended December 31, 2015, representing a 17% decrease. The decrease in product revenues in 2016 was primarily due to lower demand from maturing military programs, and a larger proportion of sales of displays with a lower average unit price, partially offset by lower product returns.

Contract revenues are comprised of revenues from research and development (R&D) or non-recurring engineering (NRE) contracts. In 2016, contract revenues decreased \$1.1 million to revenues of approximately \$3.1 million for the year ended December 31, 2016 from approximately \$4.2 million for the year ended December 31, 2015, representing a 26% decrease. The decrease in contract revenues was a result of a decrease in the number of active R&D contracts and the work completed on such contracts.

License revenues for 2016 was comprised of revenue from a \$1.0 million non-exclusive intellectual property license for our VR headset technology. In connection with the license agreement, we provided in late 2016 the licensee engineering samples of our 2K × 2K pixel full-color displays for evaluation in their next generation headset development efforts. We had no license revenues in 2015.

Table of Contents**Cost of Revenues**

	Year Ended December 31,		
	2016	2015	Change
	(in thousands)		
Product	\$ 12,988	\$ 15,466	(2,478)
Contract	\$ 1,967	\$ 2,698	(731)
License			
Total cost of revenues	\$ 14,955	\$ 18,164	(3,209)

Total cost of revenues are comprised of costs of product revenues and contract revenues. Cost of product revenue includes materials, labor and manufacturing overhead, warranty costs and depreciation related to our products. Cost of contract revenue includes direct and allocated indirect costs associated with performance on the contracts. Total cost of revenues for the year ended December 31, 2016 was \$15.0 million as compared to \$18.2 million for the year ended December 31, 2015, a decrease of \$3.2 million primarily due to the decrease in product and contract revenues. Cost of goods sold as a percentage of revenues was 70% for the year ended December 31, 2016, down slightly from 72% for the year ended December 31, 2015, primarily reflecting the product mix. In addition, there was no cost of revenues in 2016 associated with the license revenues.

The following table outlines product, contract and total gross profit and related gross margins for the years ended December 31, 2016 and 2015:

	Year Ended December 31,	
	2016	2015
	(\$ in thousands)	
Product revenues gross profit	\$ 4,277	\$ 5,446
Product revenues gross margin	25%	26%
Contract revenues gross profit	\$ 1,165	\$ 1,532
Contract revenues gross margin	37%	36%
License revenues gross profit	1,000	
License revenues gross margin	100%	%
Total gross profit	\$ 6,442	\$ 6,978
Total gross margin	30%	28%

In 2016, total gross profit decreased approximately \$0.5 million or 8%. Total gross margin was 30% for the year ended December 31, 2016 an increase from 28% for the year ended December 31, 2015, primarily due to \$1.0 million in license revenue that had no associated current year's cost.

Product gross profit decreased approximately \$1.2 million, primarily reflecting a 17% decrease in 2016 revenues and a slight decrease in average display selling prices due to product mix.

Product gross margin decreased from 26% in 2015 to 25% in 2016, reflecting decreased revenues in 2016 and a slight decrease in average display selling prices.

Contract gross profit decreased approximately \$0.4 million as a result a decrease in 2016 revenues of \$1.1 million. Contract gross margin increased slightly from 36% in 2015 to 37% in 2016. Contract gross margin is dependent upon the mix of internal versus external third party costs, with the external third party costs causing a lower gross margin and reducing the contract gross profit.

Table of Contents**Operating Expenses**

	Year Ended December 31,		
	2016	2015	Change
	(\$ in thousands)		
Research and development expense	\$ 6,362	\$ 4,353	\$ 2,009
Percentage of net revenue	30%	17%	
Selling, general and administrative expense	\$ 8,411	\$ 6,687	\$ 1,724
Percentage of net revenue	39%	27%	
Total operating expenses	\$ 14,773	\$ 11,040	\$ 3,733
Percentage of net revenue	69%	44%	

Research and Development Expenses

Research and development (R&D) expenses include salaries, development materials and other costs specifically allocated to the development of new microdisplay products, OLED technologies and production processes. Research and development expenses for the year ended December 31, 2016 were \$6.4 million as compared to \$4.4 million for the year ended December 31, 2015, an increase of \$2.0 million. The increase in company-funded R&D expenses was due to lower allocations of salary costs to contracts due to lower revenues, costs incurred for the development of a night vision consumer products and hiring additional engineers to support product and process development.

Selling, General and Administrative Expenses

Selling, general and administrative expenses (SG&A) consist primarily of personnel expenses, professional services fees, as well as other marketing, general corporate and administrative expenses. Selling, general and administrative expenses for the year ended December 31, 2016 were \$8.4 million as compared to \$6.7 million for the year ended December 31, 2015, an increase of approximately \$1.7 million. The increase in SG&A for 2016 was primarily due to higher spending for administrative expenses associated with our night vision consumer product activities, higher legal expenses, higher stock-based compensation costs and nonrecurring administrative transition costs associated with the consolidation of the Company's finance and procurement functions to our New York location.

Other Income (Expense)

Other income (expense), net primarily consists of interest expense, interest income on cash balances and other adjustments. Other income for 2016 is comprised of interest expense of \$30 thousand, interest income on cash balances of \$13 thousand, a reversal of a \$271 thousand liability and other adjustments of \$29 thousand. During the fourth quarter of 2016, we determined the statute of limitation had expired for potential claims related to liquidated damages payable under a 2008 registration rights agreement and reversed a related liability of \$271 thousand. For the year ended December 31 2015, interest expense net of capitalization was \$43 thousand and interest income was \$4 thousand, net of other expenses of \$4 thousand.

Income Tax Expense (Benefit)

For the years ended December 31, 2016 and 2015, income tax expense was approximately \$0, respectively. We have a full valuation allowance as we have determined that it was not more likely than not that we would generate sufficient future taxable income to realize the deferred tax assets.

Net Loss

As a result of the above, net loss was approximately \$8.0 million and \$4.1 million for the years ended December 31, 2016 and 2015, respectively.

Table of Contents**Nine Months Ended September 30, 2017 Compared To Nine Months Ended, September 30, 2016****Revenues**

	Nine Months Ended September 30,		
	2017	2016	Change
	(in thousands)		
Product	\$ 13,050	\$ 13,612	(562)
Contract	\$ 2,559	\$ 2,227	332
License	\$	\$ 1,000	(1,000)
Total revenue, net	\$ 15,609	\$ 16,839	(1,230)

Revenues for the nine months ended September 30, 2017 were \$15.6 million as compared to \$16.8 million for the nine months ended September 30, 2016.

Product revenue is comprised primarily of sales of displays, as well as sales of other hardware. For the nine months ended September 30, 2017, product revenue decreased by \$0.6 million as compared to the nine months ended September 30, 2016. This decrease was primarily due to lower demand from maturing military programs, and a larger proportion of sales of displays with lower average unit prices. Product revenue in the 2017 period was favorably impacted by sales of \$0.3 million of newly-developed Direct Patterned displays supported by R&D efforts.

Contract revenue is comprised of revenue from R&D, commercial contracts, or NRE contracts. For the nine months ended September 30, 2017, contract revenue increased by \$0.3 million as compared to the nine months ended September 30, 2016, primarily due to the addition of commercial contracts with several major consumer electronics companies in 2017.

License revenue for the nine months ended September 30, 2016 was comprised of revenue from a \$1.0 million non-exclusive intellectual property license for our VR headset technology. We produced engineering samples of our 2K x 2K pixel full-color displays in the fourth quarter of 2016 and expect that the licensee will use our 2K x 2K pixel full-color displays in their headsets upon their successful development.

Cost of Revenues

	Nine Months Ended September 30,		
	2017	2016	Change
	(in thousands)		
Product	\$ 10,918	\$ 9,639	\$ 1,279
Contract	\$ 1,346	\$ 1,248	\$ 98
License	\$	\$	\$
Total cost of revenues	\$ 12,264	\$ 10,887	\$ 1,377

Total cost of revenues is comprised of costs of product and contract revenues. Cost of product revenue includes materials, labor and manufacturing overhead, warranty costs and depreciation related to our products. Cost of contract revenue includes direct and allocated indirect costs associated with performance of deliverables under contracts. Total cost of revenues for the nine months ended September 30, 2017 increased by \$1.4 million as compared to the nine months ended September 30, 2016. Total cost of revenues as a percentage of revenues was 79% for the nine month period ended September 30, 2017 as compared to 65% for the nine month period ended September 30, 2016. Revenues for the nine months ended September 30, 2016 included \$1.0 million of license revenue that had no associated cost of revenues.

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The following table outlines product, contract and license total gross profit and related gross margins for the nine month period ended September 30, 2017 and 2016 (dollars in thousands):

	Nine Months Ended September 30,	
	2017	2016
	(\$ in thousands)	
Product revenues gross profit	\$ 2,132	\$ 3,973
Product revenues gross margin	16%	29%
Contract revenues gross profit	\$ 1,213	\$ 979
Contract revenues gross margin	47%	44%
License revenues gross profit	\$	\$ 1,000
License revenues gross margin	%	6%
Total gross profit	\$ 3,345	\$ 5,952
Total gross margin	21%	35%

Total gross profit is a function of revenues less cost of revenues. The total gross profit for the nine months ended September 30, 2017 decreased \$2.6 million as compared to the nine months ended September 30, 2016 primarily reflecting a decrease in product revenue gross profit in the nine month period. The gross margin of 21% for the nine months ended September 30, 2017 as compared to 35% for the prior year period primarily reflects the favorable impact of the \$1.0 million of license revenue in the first quarter of 2016 that had no associated costs of goods sold.

The product gross profit for the nine months ended September 30, 2017, decreased \$1.8 million as compared to the prior year period. Product gross margins of 16% for the nine months ended September 30, 2017 decreased from 29% in the prior year period due to lower average selling prices for certain product types in the current period and the favorable impacts of higher production volume in the first nine months of 2016.

Contract revenue gross profit of \$1.2 million and gross margin of 47% for the nine months ended September 30, 2017 increased from \$1.0 million and 44% in the comparable prior year period. Increased contract revenue gross profit in the first nine months of 2017 was due to a higher proportion of commercial contract work performed in the current period and to changes in the nature of both the individual contracts and the work completed during each period.

Operating Expenses

	Nine Months Ended September 30,		
	2017	2016	Change
	(\$ in thousands)		
Research and development expense	\$ 3,782	\$ 4,468	\$ (686)
Percentage of net revenue	24%	27%	
Selling, general and administrative expense	\$ 6,586	\$ 6,044	\$ 542
Percentage of net revenue	42%	36%	
Total operating expenses	\$ 10,368	\$ 10,512	\$ (144)
Percentage of net revenue	66%	62%	

Research and Development (R&D). R&D expenses are company-funded and include salaries and related benefits, development materials and other costs specifically allocated to the development of new technologies and microdisplay products, OLED materials and subsystems. R&D related costs associated with fulfilling contracts are categorized as contract cost of revenues. R&D expenses decreased on a percentage basis for the nine months ended September 30, 2017 compared to the prior year period. R&D costs in the current year reflected a decrease in consumer product R&D partially offset by the

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work performed on the Company's direct patterning technology, including product development and process development associated with the manufacture of the direct patterned displays.

Selling, General and Administrative (SG&A). SG&A expenses consist principally of salaries and related benefits, professional services fees and marketing, general corporate, and administrative expenses. SG&A expenses for the nine months ended September 30, 2017, increased \$0.5 million compared to the comparable prior year period.

The increase in SG&A for the nine months ended September 30, 2017 over the prior year period was largely due to higher spending on professional services, legal, and travel expenses associated with our negotiations with prospective consumer electronics and volume manufacturing partners, and promotional expenses related to our night vision consumer product activities.

Other Income (Expense), net. Other income (expense), net consists primarily of interest income earned on cash balances and interest expense. Other expense, net for the nine months ended September 30, 2017 of \$238 thousand reflects the write off of \$158 thousand of debt issuance costs related to our financing arrangement with Stillwater Trust LLC in May 2017 upon the termination of this financing arrangement.

Off-Balance Sheet Arrangements

We have no off balance sheet arrangements that are expected to have a current or future effect on our financial condition, revenues, results of operations, liquidity or capital expenditures.

Liquidity and Capital Resources

As of September 30, 2017, we had \$2.0 million of cash and cash equivalents, as compared to \$5.2 million as of December 31, 2016. The \$3.2 million decrease in cash during the nine months ended September 30, 2017 was primarily due to cash used in operating activities of \$6.9 million and investing activities of \$1.2 million, partially offset by cash provided by financing activities of \$4.8 million. The \$4.1 million decrease in cash from 2015 to 2016 was primarily due to cash used in operating activities of \$8.6 million and investing activities of \$1.4 million, partially offset by cash provided by financing activities of \$6.0 million.

Cash flow used in operating activities during the nine months ended September 30, 2017 was \$6.9 million, attributable to net loss of \$7.3 million partially offset by a net change in operating assets and liabilities of \$1.8 million and non-cash expenses of \$2.2 million. Cash flow used in operating activities during the nine months ended September 30, 2016 was \$5.7 million. For the year ended December 31, 2016, operating activities used \$8.6 million in cash, which was attributable to our net loss of \$8.0 million and changes in operating assets and liabilities of \$2.8 million primarily related to inventory for our consumer products launch, partially offset by the change in net non-cash expenses of \$2.2 million.

Cash used in investing activities during the nine months ended September 30, 2017 was \$1.2 million related to equipment purchases primarily to improve manufacturing yields and production capacity. As of September 30, 2017, we had outstanding commitments to purchase approximately \$0.2 million in capital expenditures, and expect to make additional capital expenditures during 2017 to improve our manufacturing and R&D capabilities. Cash used in investing activities during the nine months ended September 30, 2016 was \$1.0 million for equipment purchases. For the year ended December 31, 2016, investing activities used \$1.4 million in cash for equipment purchases primarily for upgrading our production line.

Cash provided by financing activities during the nine months ended September 30, 2017 of \$4.8 million included net repayments under our credit facility of \$0.9 million partially offset by \$69 thousand from the exercise of stock options, and proceeds of \$5.8 million from a public offering.

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There were no financing activities during the nine months ended September 30, 2016. For the year ended December 31, 2016, financing activities provided approximately \$6.0 million in cash of which approximately \$4.3 million was net proceeds from the exercise of warrants to purchase common stock, \$1.7 million from net borrowings under a new credit facility, net of debt issuance costs, and \$45 thousand of proceeds from the exercise of stock options.

If we are not able to reach our anticipated level of profitability and cash flows over the twelve months commencing on January 1, 2018, it may be necessary to take actions to maintain our current levels of operations, including additional borrowings under our credit facilities, raising capital through issuance of equity, debt or equity linked securities, or to reduce our current levels of operations and implement cost reductions or restructuring activities. As of September 30, 2017, we had cash and working capital of \$2.0 million and \$10.6 million, respectively, and borrowing availability under the ABL Facility, net of borrowings of \$0.9 million, of \$3.7 million.

Underwritten Public Offering

On May 24, 2017, we completed an underwritten offering of 3,300,000 shares of its common stock at an offering price of \$2.00 per share and warrants to purchase up to 1,650,000 shares of common stock and realized net proceeds of \$5.8 million dollars after underwriting discounts and offering expenses. The shares and warrants were purchased by a single institutional investor and by Stillwater, LLC, an affiliate. The warrants have an exercise price of \$2.45 per common share and a term of five years.

The underlying shares of common stock and warrants issued in the May 2017 offering completed the allotment of shares allowable for issuance pursuant to a shelf registration statement filed in 2014. In June 2017, we filed a replacement shelf registration statement that will provide us with the flexibility, subject to certain limitations as a result of our current unaffiliated market capitalization, to raise capital over the next three years from the offering of common stock, preferred stock, warrants, units and debt securities, or any combination of these securities, in one or more future offerings.

Warrant Transaction

On August 18, 2016, we entered into letter agreements with certain of our warrant holders pursuant to which they agreed to exercise warrants to purchase a total of 2,216,500 shares of our common stock, at an exercise price of \$2.05 per share, which they acquired in December 2015.

On August 24, 2016, in consideration for the exercise of the 2,216,500 warrant shares, we issued new common stock purchase warrants to purchase 2,947,949 shares of our common stock or 1.33 new warrant share for each warrant share exercised, with an exercise price of \$2.60 per share, the approximate market price of the Company's shares at the date of the letter agreement. The terms of the warrants are substantially similar to the warrants issued in December 2015. Similar to the earlier warrants, they are not exercisable for six months from the date of issuance; and have a term of five and a half years from the issuance date.

We raised approximately \$4.3 million in net proceeds from the transaction, which was used for general corporate purposes.

ABL Facility

On December 21, 2016, we entered into an asset based revolving credit facility with a lender that provides for up to a maximum amount of \$5 million based on a borrowing base equivalent of 85% of eligible accounts receivable plus the lesser of \$2 million or 50% of eligible inventory. The interest on the ABL Facility is equal to the Prime Rate plus 3% but may not be less than 6.5% with a minimum monthly interest payment of \$2,000. We are obligated to pay the lender a monthly administrative fee of

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\$1,000 and an annual facility fee equal to 1% of the maximum amount borrowable under the facility. The ABL Facility will automatically renew on December 31, 2019 for a one-year term unless written notice to terminate the financing agreement relating to the ABL Facility is provided by either party.

The ABL Facility is secured by a lien on all receivables, property and the proceeds thereof, credit insurance policies and other insurance relating to the collateral, books, records and other general intangibles, inventory and equipment, proceeds of the collateral and accounts, instruments, chattel paper, and documents. The ABL Facility contains customary representations and warranties, affirmative and negative covenants and events of default, including a provision that we maintain a minimum tangible net worth of \$13 million and a minimum working capital balance of \$4 million. As of September 30, 2017, we had borrowings of \$0.9 million outstanding under the ABL Facility and had unused borrowing availability of \$3.7 million under the ABL Facility. We were in compliance with all debt covenants.

Unsecured Financing Arrangement

On March 24, 2017, we entered into an unsecured debt financing arrangement with Stillwater Trust LLC, an investor who with affiliates collectively control approximately 46% of our outstanding common stock. This arrangement expired on May 24, 2017 upon the completion of an equity offering as provided under the terms of the financing agreement. Under the financing agreement, through June 30, 2018, we could borrow up to \$2 million for general working capital purposes and up to an additional \$3 million should our lender not provide borrowing availability under its normal terms and conditions through its ABL Facility. Pursuant to the financing agreement, the agreement would expire and borrowings become due upon the earlier of June 30, 2020; the completion of one or a series of equity financings which raise collectively \$5 million or greater; or an event of default, as defined in the agreement. Amounts borrowed under the financing agreement, once repaid, could not be reborrowed.

The amounts drawn on the line accrued interest at 6% per annum payable at maturity, and were subject to an upfront drawdown fee of 2% of the amount drawn and a quarterly interest surcharge of 2% paid upfront and due commencing on the 180-day anniversary of each draw regardless of whether the draw was still outstanding and then a 2% quarterly interest surcharge until the draws were repaid. In connection with the financing commitment, the investor received a \$50,000 commitment fee and a warrant to purchase 100,000 shares of common stock at an exercise price of \$2.25 per share, the closing market price of our common stock on the date the financing agreement was executed. In connection with the facility, we, our lender and the investor entered into an intercreditor agreement.

Upon termination of this facility, the Company wrote off \$158 thousand of related debt issuance costs, and recorded a charge to interest expense in the second quarter of 2017.

Mr. Christopher Brody, a member of our board of directors, is also the President and Managing Director of Stillwater Holdings LLC and is the Vice President of Stillwater Trust LLC, which is our largest stockholder. The decision of Stillwater Trust LLC to enter into the financing arrangement was made independently of Mr. Brody and the financing was not required or suggested by Mr. Brody. The terms of the financing were determined solely by negotiation among us and Stillwater Trust LLC. Mr. Brody did not participate in the deliberations of our board or the special committee of our board formed to review the terms of the financing with respect to the approval of the financing and abstained from voting thereon.

Former Credit Facility

Our former credit facility with a lender expired on August 31, 2016 and was not renewed. The facility provided for up to a maximum of \$3 million in borrowings based on 75% of eligible accounts receivable, as defined in the agreement. The interest on the credit facility was equal to the prime rate plus 4% but could not be less than 7.25% with a minimum monthly interest payment of \$1 thousand.

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The credit facility contained customary representations and warranties as well as affirmative and negative covenants. We were in compliance with all debt covenants. We did not draw on the credit facility at any time since its inception in September 2010 and there was no outstanding balance at the expiration date.

Evaluation of Ability to Maintain Current Level of Operations

In connection with preparing our consolidated financial statements for the year ended December 31, 2016, and for the nine months ended September 30, 2017, we evaluated whether there were conditions and events, considered in the aggregate, that raised substantial doubt about our ability to maintain our current level of operations for twelve months following the issuance of the respective dates covered by the financial statements.

For the consolidated financial statements for the year ended December, 31, 2016, we considered the following:

Our projections for 2017 and 2018 compared to the operating losses we incurred during 2016 and the first nine months of 2017;

Our recurring operating losses and negative cash flow from operating activities during 2016 and the first nine months of 2017;

Our working capital requirements for 2017 and the first quarter 2018 compared to our working capital requirements for 2016 and the first nine months of 2017, giving consideration to our cash expenditures in 2016 and the first nine months of 2017 to build our infrastructure and to build inventory of our consumer products which were launched in the first quarter of 2017; and

The availability of cash and cash equivalents, including our borrowing capacity, to fund our requirements through 2017 and the first quarter of 2018.

As part of this evaluation, we considered the following:

The projected level of product revenues during 2017 and the first quarter 2018 compared to 2016 as we ramp up shipments to new military programs following the wind down in 2016 of other military programs from which we have historically achieved a higher level of revenues;

Contract revenues in 2017 and first quarter 2018 from fulfillment of existing and expected R&D contracts with several Tier One consumer technology companies in comparison to no revenues from such companies in 2016;

Anticipated revenues from the introduction in the first quarter of 2017 of our night vision products for the consumer market; and

The availability to borrow under our ABL Facility and our credit facility with our largest investor.

Upon completion of its evaluation, management believed that the Company could generate sufficient cash from operations and borrow sufficient funds from its credit facilities to satisfy its obligations for at least the next twelve months from the issuance of its 2016 financial statements on or about March 28, 2017.

Management planned to take one or more of the following actions if the Company's cash flow projections were not accurate:

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Increase its borrowings under its ABL Facility and borrow from the credit facility;

Raise additional capital through a private placement or public offering of its equity securities; and/or

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Implement cost reductions or restructure our operations.

At December 31, 2016, the Company had \$5.2 million in cash and cash equivalents, \$11.2 million of working capital, \$1.9 million of borrowings under its ABL Facility and unused borrowing availability of \$2.0 million under its ABL Facility.

For the consolidated financial statements for the nine months ended September 30, 2017, we evaluated whether the conditions above raised substantial doubt about our ability to continue as a going concern. As part this evaluation, we also considered our ability to continue current operations, which was dependent on our existing cash and working capital balances and the ability to generate sufficient cash flows from operations. We expected that we may need additional capital to fund our operations over the next twelve months from the date of issuance of these financial statements. If we were unable to raise additional capital or obtain debt when required or on acceptable terms, we considered that we may have to reduce or delay operating expenses as deemed appropriate in order to conserve cash.

On March 24, 2017, we entered into an unsecured debt financing arrangement with Stillwater Trust LLC, a significant investor in the Company. Under the financing agreement, through June 30, 2018, we may borrow up to \$2 million for general working capital purposes and up to an additional \$3 million should our lender not provide borrowing availability under its normal terms and conditions through its ABL Facility. In accordance with the terms of the unsecured debt financing agreement, this arrangement expired on May 24, 2017 upon the completion of an equity offering.

On May 24, 2017, we completed an underwritten offering of 3,300,000 shares of our common stock and warrants to purchase up to 1,650,000 shares of common stock and realized net proceeds of \$5.8 million dollars after underwriting discounts and offering expenses.

Upon completion of its evaluation, management believed that the Company's current operating plan, current working capital levels, including proceeds from its May public offering, current financial projections, and the ability to borrow under its ABL Facility, had alleviated substantial doubt about its ability to continue as a going concern.

As of September 30, 2017, the Company had an accumulated deficit of \$226.2 million. The Company incurred a net loss of \$7.3 million and used cash in operating and investing activities of \$8.1 million during the first nine months of 2017. In addition, at September 30, 2017, the Company had cash and cash equivalents of \$2.0 million, \$0.9 million of borrowings under its ABL Facility and unused borrowing availability of \$3.7 million under its ABL Facility.

Dividends and Stock Repurchase Plan

In the years ended December 31, 2016 and 2015, no dividends were declared or paid. It is our intention to retain any future profits for use in the development and expansion of our business and for general corporate purposes. Future decisions to pay cash dividends are at the discretion of our Board of Directors.

In August 2011, our Board of Directors approved a stock repurchase plan authorizing us to repurchase our common stock not to exceed \$2.5 million in total value. No shares were repurchased subsequent to September 2012. As of December 31, 2016, authorization to repurchase \$2.0 million in value of our common stock remained under this plan.

Table of Contents**Contractual Obligations**

The following chart describes the outstanding contractual obligations of the Company as of December 31, 2016 (in thousands):

	Payments Due by Period				
	Total	1 Year	2 - 3 Years	4 - 5 Years	Thereafter
Operating lease obligations	\$ 6,869	\$ 970	\$ 1,822	\$ 1,830	\$ 2,247
Revolving credit facility(a)	1,852	1,852			
Equipment purchase obligations	630	630			
Purchase obligations(b)	3,829	3,829			
Total	\$ 13,180	\$ 7,281	\$ 1,822	\$ 1,830	\$ 2,247

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- (a) The Company's revolving credit facility matures in 2019 and is classified as a current liability
- (b) The majority of purchase orders outstanding contain no cancellation fees except for minor re-stocking fees or reimbursements due to contract manufacturers for components purchased in anticipation of a scheduled production run that are subsequently cancelled.

Critical Accounting Policies

The SEC defines "critical accounting policies" as those that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Not all of the accounting policies require management to make difficult, subjective or complex judgments or estimates. However, the following policies could be deemed to be critical within the SEC definition.

Revenue and Cost Recognition

Revenue on product sales is recognized when persuasive evidence of an arrangement exists, such as when a purchase order or contract is received from the customer; the price is fixed; title and risk of loss to the goods has changed and there is a reasonable assurance of collection of the sales proceeds. We obtain written purchase authorizations from our customers for a specified amount of product at a specified price and consider delivery to have occurred at the time of shipment.

Revenues from research and development activities relating to firm fixed-price contracts and cost-type contracts are generally recognized on the percentage-of-completion method of accounting as costs are incurred (cost-to-cost basis). Progress is generally based on a cost-to-cost approach; however, an alternative method may be used such as physical progress, labor hours or others depending on the type of contract. Physical progress is determined as a combination of input and output measures as deemed appropriate by the circumstances. Contract costs include all direct material, labor and subcontractor costs and an allocation of allowable indirect costs as defined by each contract, as periodically adjusted to reflect revised agreed upon rates. These rates are subject to audit by the other party.

Product Warranty

We offer a one-year product replacement warranty. In general, our standard policy is to repair or replace the defective products. We accrue for estimated returns of defective products at the time revenue is recognized based on historical activity as well as for specific known product issues. The determination of these accruals requires us to make estimates of the frequency and extent of warranty activity and estimate future costs to replace the products under warranty. If the actual warranty activity

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and/or repair and replacement costs differ significantly from these estimates, adjustments to cost of revenue may be required in future periods.

Use of Estimates

In accordance with accounting principles generally accepted in the United States of America, management utilizes certain estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments related to, among others, allowance for doubtful accounts, warranty reserves, inventory reserves, stock-based compensation expense, deferred tax asset valuation allowances, fair value of financial instruments, litigation and other loss contingencies. Management bases its estimates and judgments on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

Fair Value of Financial Instruments

The Company's cash, cash equivalents, accounts receivable, short-term investments, and accounts payable are stated at cost which approximates fair value due to the short-term nature of these instruments.

Stock-based Compensation

We maintain several stock equity incentive plans.

The 2008 Incentive Stock Plan, which is referred to herein as the 2008 Plan, adopted and approved by the Board of Directors on November 5, 2008 provides for grants of common stock and options to purchase shares of common stock to employees, officers, directors and consultants. The 2008 Plan has an aggregate of 2 million shares. In 2016, there were 221,024 options granted from this plan.

The 2011 Incentive Stock Plan adopted and approved by the stockholders on November 3, 2011 provides for grants of common stock and options to purchase shares of common stock to employees, officers, directors and consultants. On June 7, 2012, at the annual meeting of our stockholders, the stockholders approved an Amended and Restated 2011 Incentive Stock Plan, which is referred to herein as the 2011 Plan. The 2011 Plan has an aggregate of 1.4 million shares. In 2016, there were 458,000 options granted from this plan.

The 2013 Incentive Stock Plan, which is referred to herein as the 2013 Plan, adopted and approved by the stockholders on May 17, 2013 provides for grants of common stock and options to purchase shares of common stock to employees, officers, directors and consultants. The 2013 Plan has an aggregate of 1.5 million shares. In 2016, there were 635,097 options granted from this plan.

During 2016, the Company also granted 125,000 options under the 2017 Incentive Stock Plan, which was adopted and approved by the stockholders on May 25, 2017. The plan provides for grants of common stock and options to purchase shares of common stock to employees, officers, directors and consultants.

We account for the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors by estimating the fair value of stock awards at the date of grant using the Black-Scholes option valuation model. Stock-based compensation expense is reduced for estimated forfeitures and is amortized over the vesting period using the straight-line method. For a further discussion on stock-based compensation, see Note 10 to our consolidated financial statements appearing elsewhere in this prospectus.

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Income Taxes

We are required to estimate income taxes in each of the jurisdictions in which we operate. The process involves estimating our current tax expense together with assessing temporary differences resulting from the differing treatment of items for accounting and tax purposes. These differences result in deferred tax assets and liabilities. Operating losses and tax credits, to the extent not already utilized to offset taxable income also represent deferred tax assets. We must assess the likelihood that any deferred tax assets will be realized from future taxable income, and to the extent we believe that realization is not likely, we must establish a valuation allowance. Significant judgment is required in determining our provision for income taxes, deferred tax assets and liabilities and any valuation allowance recorded against our deferred tax assets.

In determining future taxable income, assumptions are made to forecast operating income, the reversal of temporary timing differences and the implementation of tax planning strategies. Management uses significant judgment in the assumptions it uses to forecast future taxable income which are consistent with the forecasts used to manage the business. Realization of the deferred tax asset is dependent upon future earnings, with respect to which there is uncertainty as to the timing.

In assessing the realizability of deferred tax assets, we evaluate both positive and negative evidence that may exist and consider whether it is more likely than not that some portion or all of the deferred tax assets will be realized. At December 31, 2016 and 2015, we provided a full valuation allowance against our deferred tax assets as we determined that it was more likely than not that none of the deferred tax assets would be realized.

Our effective income tax rate was 0% in 2016 and 2015.

Effect of Recently Issued Accounting Pronouncements

For a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, see Note 2 of our consolidated financial statements appearing elsewhere in this prospectus.

Quantitative and Qualitative Disclosures About Market Risk

Market Rate Risk

We are exposed to market risk related to changes in interest rates.

Interest Rate Risk

We hold our cash in cash and cash equivalents and certificates of deposits. We do not hold derivative financial instruments or equity securities. At December 31, 2016, we had \$1.9 million of borrowings under our ABL Facility. A hypothetical 10% increase in borrowing interest rates at December 31, 2016 would not have had a material effect on our consolidated financial position, results of operations, or cash flows in the year ended December 31, 2016.

Foreign Currency Exchange Rate Risk

We do not have any material foreign currency exchange rate risk because the majority of our transactions are denominated in U.S. dollars.

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BUSINESS

Overview

We are a leader in the manufacture of microdisplays using organic light emitting diode (OLED) technology. We design, develop, manufacture and market OLED miniature displays, which we refer to as OLED-on-silicon microdisplays, virtual imaging products that utilize OLED microdisplays, and related products. We also perform research in the OLED field. Our virtual imaging products integrate OLED technology with silicon chips to produce high-resolution microdisplays one-inch diagonally and smaller, which when viewed through a magnifier, create virtual images that appear comparable in size to that of a computer monitor or a large-screen television. Our products enable our original equipment manufacturer (OEM) customers to develop and market improved or new electronic products, especially products that are mobile and highly portable so that people have immediate access to information and can experience immersive forms of communications and entertainment. We believe that a key growth area for us is the consumer electronic OEM market. Our potential channels to this market include licensing of our direct patterning technology and partnering for the mass production of microdisplays. We believe that our direct patterning technology is a key differentiator for enabling next generation AR/ VR hardware for the consumer and enterprise segments because of the brightness and the pixel density afforded by the technology. We also develop and manufacture night vision products for the consumer electronics, recreational, law enforcement and first responder markets, including a smart phone attachment and a wearable device.

We believe that our OLED microdisplays offer a number of significant advantages over comparable liquid crystal microdisplays, including higher contrast, greater power efficiency, less weight, more compact size, and negligible image smearing. Using our active matrix OLED technology, many computer and electronic system functions can be built directly into the OLED microdisplay silicon backplane, resulting in compact, high resolution and power efficient systems. Already proven in military and commercial systems, our portfolio of OLED microdisplays deliver high-resolution, flicker-free virtual images that perform effectively even in extreme temperatures and high-vibration conditions. We also believe that our direct patterning technology gives us a substantial advantage over other OLED microdisplays because it allows us to produce microdisplays with the high brightness required for VR and AR. Traditional OLED microdisplays utilize white emitting OLED with color filters that lessen the intensity of emitted light by as much as 85%, significantly reducing brightness. Microdisplays manufactured by direct patterning do not require color filters to achieve color variations and allow for the application of more efficient OLED structures which achieve high brightness.

We have developed our own intellectual property portfolio that includes patents, over 15 years of manufacturing know-how and proprietary technologies to create high performance OLED microdisplays. We believe our technology, intellectual property portfolio and position in the marketplace give us a leadership position in OLED and OLED-on-silicon microdisplay technology. We believe that we are one of only a few companies to market and produce significant quantities of high resolution, small molecule OLED-on-silicon microdisplays.

We derive the majority of our revenue from sales of our OLED microdisplay products. We also earn revenue from government, commercial and consumer product development contracts that may complement and support our internal research and development programs. In addition, we generate sales from optics and microdisplays combined with optics. Beginning in the first quarter of fiscal 2017, we introduced two consumer night vision products, BlazeSpark and BlazeTorch, although revenue from these products to date has been minimal.

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Our Technology Platforms

Small Molecule, Top-Emitting Active Matrix OLED Technology

Our microdisplays are currently based upon active matrix small molecule OLED technology, which we refer to as active matrix OLED (AMOLED). Our AMOLED technology uniquely permits millions of individual low-voltage light sources to be built on low-cost, silicon computer chips to produce single color, white or full-color display arrays. Using our OLED technology, many computer and video electronic system functions can be built directly into the silicon chip, under the OLED film, resulting in a compact, integrated system with lower overall system costs relative to alternative technologies.

OLEDs are thin films of stable organic materials that emit light of various colors when a voltage is impressed across them. OLEDs are emissive devices, which means that they create their own light, as opposed to liquid crystal displays, which require a separate light source. As a result, our OLED microdisplays use less power and deliver much higher contrast and fuller color than liquid crystal microdisplays. Unlike liquid crystal displays which use crossed polarizers to generate black level, OLED displays exhibit an extremely high contrast ratio which results in very vivid images. Because the light they emit is Lambertian, which means that it appears equally bright from most forward directions, a moderate movement in the eye does not change the image brightness or color as it does in other technologies.

Our technology is based on integrating a proprietary OLED device with a specially designed silicon backplane to produce efficient and high performance AMOLED microdisplays. Our OLED displays incorporate a proprietary, top-emitting structure for our OLED devices that enables OLED displays to be built on opaque silicon integrated circuits rather than only on glass. Our OLED microdisplays emit full visible spectrum (white) light that is isolated with color filters to create color images. Our microdisplays have a brightness that can be greater than that of a typical notebook computer and can have a potential useful life of over 50,000 operating hours in certain applications. New processes and device improvements, such as our OLED-XLS technology, offer even better performance for brightness, efficiency, and lifespan. We have developed extremely bright OLED microdisplays using our patented and copyrighted direct patterning (dPd) technology and have demonstrated color high resolution (WUXGA) microdisplays with brightness in excess of 4,500 nits, which is the world's highest resolution and brightness. In addition to our AMOLED technology, we have developed compact optic and lens enhancements, which when coupled with the microdisplay, provide the high quality large screen appearance that we believe a large proportion of the marketplace demands.

We believe that our AMOLED technology provides significant advantages over other microdisplay technologies in our targeted markets. We believe these key advantages include:

High brightness

Sharp contrast

Low power consumption for improved battery life and longer system life;

High-speed performance resulting in clear video images;

Compact form factor and light weight;

Wide angle light emission resulting in large apparent screen size and more immersive experience;

Wide operating temperature range;

Good environmental stability (vibration and humidity); and

Low manufacturing cost at higher volumes.

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Prism Optics

We sell high quality, large viewing angle prism optics with a wide range for eye positioning, both of which are essential for using our displays in immersive near-eye systems. We have developed advanced molded plastic prism lenses that permit our AMOLED microdisplays to provide large field of view images that can be viewed for extended periods with reduced eye-fatigue. We have developed an additional prism optic for a project that will pair with our SXGA096 display.

Our Market Opportunities

We target the military, aviation, industrial/medical, and consumer markets although many of our products cater to multiple markets. Within each of these market sectors we believe that our OLED microdisplays, when combined with compact optic lenses, can become a key component for a variety of mobile electronic products. Many of these products employ head-wearable displays that incorporate microdisplays mounted in or on eyeglasses, goggles, simple headbands, helmets, or hardhats, and are often referred to as head-mounted displays (HMDs) or headsets. Head-wearable displays may block out surroundings for a fully immersive experience, or be designed to "see-through" or "see-around" to the user's surroundings. They may contain one (monocular) or two (binocular) displays. We have leveraged our experience in developing for military and commercial aviation helmets and believe this experience will allow us to more rapidly introduce displays suitable for specialized/high-end mass market consumer VR/AR applications than our competitors.

Consumer

We believe that the most significant driver of the longer term near-eye virtual imaging microdisplay market is the growing consumer demand for mobile access to larger volumes of information and entertainment in smaller and more affordable packages. This desire for mobility has resulted in the development of mobile video personal viewer products in three general categories: (i) immersive VR headset-application platforms such as accessories for gaming computers, portable digital optical disc (DVD) systems and wearable telepresence systems; (ii) AR electronic viewers incorporated in products such as data glasses and personal viewers for cell phones; and (iii) low cost thermal and low light imaging and scopes for hunting and other outdoor activities.

As we manufacture our OLED displays in higher volumes at reduced costs and capitalize on our direct patterning technology, we believe that our products will be increasingly well positioned to compete with and displace liquid crystal displays and cell phone size displays in the rapidly growing consumer market, particularly as demand expands for sophisticated mobile personal viewers offering higher resolution and better image quality for VR and AR applications. Users of VR HMD's are demanding a fully immersive experience. We believe our direct patterning technology addresses the critical performance parameters for next generation VR HMDs, including higher brightness, sharper resolution, lower power consumption and longer life. Our strategy for addressing the consumer mass market includes developing partnerships with both Tier One consumer companies and high volume production manufacturing companies.

Potential applications for these personal viewers include handheld personal computers and mobile devices, such as smartphones, whose small, direct view screens limit the amount of information that can be displayed but which are now capable of running more complex software applications. Examples encompass applications where hands-free viewing is desired such as maintenance activities; entertainment and gaming video headset systems; and night time or thermal imaging devices for hunting, camping, and other outdoor activities. Current commercial products equipped with our OLED microdisplays in these sectors include those produced by Trijicon (IR Defense), among others. In addition, in late 2015, we entered into a HMD technology licensing agreement with a Tier One consumer electronics company which includes the use of our 2K x 2K displays in its consumer

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headsets. In December 2016, we entered into an agreement with a Tier One company interested in incorporating our proprietary direct patterning technology into potential headset products.

In the first quarter 2017, we introduced two night vision products, BlazeSpark and BlazeTorch. These products were designed for recreational use as well as hobbyists, and outdoor enthusiasts. Additionally, the products can be used by utilities and law enforcement agencies to expand or enhance their night-time activities.

Military/Aviation

Properly implemented, we believe that head-mounted systems incorporating our microdisplays increase the user's effectiveness by allowing hands-free operation and increasing situational awareness with sufficient brightness for use in daylight, yet controllable for nighttime light security. As a COTS (commercial off-the-shelf) component, OLED microdisplays possess performance characteristics important to military and other demanding commercial and industrial applications, including high contrast, wide dimming range, shock and vibration resistance and insensitivity to high G-forces. The design features and performance characteristics of our OLED microdisplays reduce the size, weight, and power required by current and future military systems, while also providing a wide operating temperature range. The image does not suffer from flicker or color breakup in vibrating environments and the microdisplay's wide viewing angle allows ease of viewing for long periods of time. Most importantly, our OLED's low power consumption reduces battery weight and, for military applications, increases allowed mission length. The OLED's wide operating temperature range is of special interest for military applications because the display can turn on instantly at temperatures far below freezing and can operate at very high temperatures, such as in desert conditions. We believe that our microdisplay products provide power advantages over other microdisplay technologies, particularly liquid crystal displays which require backlights and heaters and cannot provide instant-on capabilities at low temperatures. Incorporating OLED microdisplays into aviation helmets has been made possible by the high brightness of the OLED technology that we have developed.

Our products' military applications primarily fall into three broad areas: (1) helmet-mounted and handheld displays for situational awareness and data; (2) night vision/thermal imaging goggles, rifles and targeting sights, and handheld viewers; and (3) training and simulation devices. These systems are also well suited for demanding operations such as urban security, homeland defense, and fire and rescue.

Situational Awareness

Our OLED microdisplays have been incorporated into a broad range of U.S. and foreign military situational awareness programs. Situational awareness products include head-mounted displays that are used to display images, including digital map, sensor imagery and pilot aviation information. In addition, handheld imagers provide improved situational awareness on the battlefield, as well as in training and simulation. These products can also be combined with a weapon system to give the user the capability to select targets without direct exposure.

Night Vision/Thermal Imaging

Night vision goggles allow the user to see in low light conditions. Most versions include two different technologies: infrared/thermal and image intensification. Third and fourth generation military devices generally use some combination of the two technologies. Thermal imagers detect infrared energy (heat) and convert it into an electronic signal. The resulting signal needs to be presented on a display. Heat sensed by an infrared camera can be very precisely quantified, or measured, allowing the user to not only monitor thermal performance, but also identify and evaluate the relative severity of heat-related problems. Thermal imaging systems can be stand-alone handheld systems or integrated as

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part of the aiming mechanism for a larger system. Advances in sensor technology, both in sensitivity and resolution as well as economic efficiency, have been the driving factors in the adoption of thermal technologies for military applications. We believe the power efficiency and environmental ruggedness of our products are strong competitive advantages, particularly for smaller handheld non-cooled systems. Fielded products incorporating our OLED microdisplays include Harris' and L3 Insight's Enhanced Night Vision Goggle II, the Enhanced Night Vision Goggle III, Family of Weapons Sights Individual and Crew Served for the U.S. Army, L-3's Javelin medium-range anti-tank missile system, Northrop Grumman's Lightweight Laser Designator Rangefinders, Thales' SOPHIE handheld thermal imagers, and Thales' MINIE, LUCIE, and MONIE night vision goggles.

Training and Simulation

Our OLED microdisplays are purchased by OEMs for use with their simulation and training products. The companies that incorporate our OLEDs into their training and simulation applications include Quantum 3D, Rockwell Collins, Intevac Vision Systems, and Sencis, among others. Our displays have been commercialized and prototyped for situational awareness and night vision/thermal imaging applications by military systems integrators, including Elbit, L-3 Communications, Intevac Vision Systems, Nivisys, BAE Systems Technology, DRS, Harris (formerly Excelis/ITT), Intevac Vision Systems, Qioptiq, Rockwell Collins, SA Photonics, Saab, Sagem DS, and Thales, among others.

Commercial, Industrial, and Medical

We believe that a wide variety of commercial and industrial markets offer significant opportunities for our products due to increasing demand for instant data accessibility in mobile workplace environments and due to the benefit of mobile displays to enhance visual performance. Examples of existing and potential microdisplay applications include enhanced visualization for ocular surgery, mobile ultrasound, mobile nondestructive testing, enhanced vision for those with visual impairments, immediate access to inventory or maintenance and construction manuals, routine quality assurance inspection, and real-time viewing of images and data for a variety of applications. As an example, a user wearing an HMD while operating test equipment, such as an oscilloscope, can view technical data while simultaneously probing printed circuit boards. Current commercial products equipped with our OLED microdisplays in these sectors include those produced by BCF, Liteye, FLIR Systems, Nordic NeuroLab, VRmagic GmbH, and Sencis, among others.

Our Products

Our first commercial microdisplay, the SVGA+ OLED, was introduced in 2001. In 2008, we introduced engineering samples of our SXGA120 OLED microdisplays and began selling significant quantities of the product in 2010. In late 2011, we began selling pre-production samples of the WUXGA OLED microdisplay which is now qualified and in production. In 2014, we released our Digital SVGA, and in 2015, we released our smaller pixel pitch digital SXGA, SXGA096, as well as an upgrade to the SXGA120 and WUXGA. Our OLED display products are being designed in products to be manufactured by OEM customers for a wide variety of military, medical, industrial, and consumer applications. We offer our products to OEMs and other buyers as both separate components, integrated bundles coupled with our own optics, or complete systems. We also offer engineering support to enable customers to quickly integrate our products into their own product development programs and design customized displays with resolutions or features to meet specific customer requirements. In 2015, we announced the development of a prototype 2K x 2K immersive headset that uses our prototype 2K x 2K display. During 2016, we demonstrated the world's first highest brightness (~4,500 cd/m²) and highest resolution (1920x1200 pixels) microdisplay using our proprietary direct patterning method. With the addition of these new displays, we now offer a wide variety of OLED microdisplay options to our customers.

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SVGA+ OLED Microdisplay Series (Super Video Graphics Array of 852x600)

The SVGA+ OLED Microdisplay Series is a 0.62 inch diagonal microdisplay that has a resolution of 852x600 triad pixels (1.53 million picture elements). The display also has an internal NTSC monochrome video decoder for low power night vision systems. The SVGA+ Rev3 OLED-XL microdisplay is a power efficient OLED display solution for near-eye personal viewer applications which uses less than 115 mW power in monochrome for thermal imaging applications, and lower than 175 mW at 200 cd/m² for full color video.

Digital SVGA OLED-XL

The Digital SVGA or DSVGA OLED-XL was released for production in 2014. This is an 800 × 600 display with 15 micron pixels and a 0.6 inch diagonal. It has all the benefits of our other digital displays, including lower power (100 mW monochrome and 135 mW color), high (10,000 to 1) contrast, and also features a digital composite signal interface, enabling a minimal physical interface for color applications.

SXGA096 OLED-XL/XLS (Super eXtended Graphics Array, 1280 x 1024)

The SXGA096 display was introduced in 2015. It features a 9.6-micron color pixel and was designed with the same level of feature integration as the DSVGA microdisplay, as well as a low pin-count, high speed LVDS (Low Voltage Differential Signaling) data interface. The compactness and high information content of the SXGA096 makes it ideal for small form factor applications such as commercial headsets and smart weapon sights. This microdisplay incorporates OLED XLS technology more than doubling the OLED XL brightness. This expands the range of optical solutions that can be used with this display to result in smaller and lighter display modules.

SXGA OLED-XL (Super eXtended Graphics Array, 1280 x 1024)

Our SXGA OLED microdisplay with a 0.77 inch diagonal active area provides 3,932,160 sub-pixels in an active area. The display's pixel array comprises triads of vertical sub-pixels stacked side by side to make up each 12 × 12mm color pixel. The SXGA OLED-XL microdisplay offers digital signal processing, requiring less than 200mW under typical operation. The supported video formats are SXGA, 720p, DVGA (through 1280 × 960 pixel doubling), and both frame sequential and field sequential stereovision.

VGA OLED-XL (Video Graphics Array, 640 x 480)

The VGA OLED-XL microdisplay was introduced to our product line in 2011 and is our smallest (0.5 inches) and lowest powered (<60 mW monochrome/<100 mW color). The VGA OLED-XL utilizes the same voltage pixel drive architecture and "Deep Black" technology as the SXGA and WUXGA designs and includes motion artifact reduction technology like the WUXGA. Also like the SXGA and WUXGA, the VGA provides a FPGA driver design for maximum flexibility and versatility. The VGA interface is 30-bit digital RGB.

WUXGA OLED-XL (Widescreen Ultra eXtended Graphics Array, 1920 x 1200)

Our WUXGA OLED-XL microdisplay provides higher resolution than most HD (High Definition) flat screen televisions. With a triad sub-pixel structure this display is built of 7,138,360 active dots at 3.2 microns each. The WUXGA OLED-XL is built upon the voltage pixel drive approach first developed for the SXGA OLED-XL, which provides improved uniformity, ultra-high contrast (measured at greater than 100,000:1) and lower power. The advanced WUXGA design features our proprietary "Deep Black" architecture that ensures that off-pixels are truly black, automatically optimizes contrast under all conditions, and delivers better pixel to pixel uniformity. The WUXGA

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OLED-XL includes a low-power, low-voltage-differential-signaling (LVDS) serial interface and the overall display power requirement is typically less than 350 mW running standard video. Also included is our proprietary motion enhancement technology which smooths video display and virtually eliminates unwanted artifacts. Like the SXGA, the WUXGA provides a FPGA driver design available on a separate, lower power driver board, or as source code for integration into end product electronics giving OEM developers maximum versatility and flexibility. On-board circuitry ensures consistent color and brightness over a wide range of operating temperatures.

Lens and Design Reference Kits

We offer a prism optic with mounting brackets or combined with OLED microdisplays to form an optic-display module. We provide design reference kits, which include a microdisplay and associated electronics, to help OEMs evaluate our microdisplay products and to assist their efforts to build and test new products incorporating our microdisplays.

Integrated Modules

We provide near-eye virtual imaging modules that incorporate our OLED-on-silicon microdisplays with our lenses and electronic interfaces for integration into OEM products. We have shipped customized modules to several customers, some of which have incorporated our products into their own commercial products.

Headsets

In 2014, we developed and demonstrated a new Immersive Head Mounted Display (IHMD) with a different look and superior performance than other VR HMDs. Compared to other VR HMDs, it has four times the resolution, no pixelization, and a much smaller form factor. It incorporated our earlier 2K by 2K high-resolution OLED microdisplay prototype and patented optics, giving it significantly sharper resolution than a cell phone display and conventional optics. The field of view (FOV) of the IHMD exceeds one hundred (100) degrees and it has a resolution of four (4) megapixels per eye. We entered into a nonexclusive license agreement in 2015 to allow an undisclosed company to use the technology in this IHMD for their own applications and may incorporate our 2K x 2K displays in headsets that use the technology. The retrofit of our latest 2K x 2K microdisplay prototypes into the original design of this IHMD is being considered as a means to showcase their superior performance and higher resolution.

We are subject to certain export control laws, including the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR). Certain of our products may be deemed to be controlled for export by the U.S. Commerce Department's Bureau of Industry and Security under the EAR or by the U.S. State Department's Directorate of Defense Trade Controls (DDTC) under the ITAR. Most of our ITAR products are custom displays developed for a specific military program or purpose. Failure to comply with these export control laws can lead to severe penalties, both civil and criminal, and can include debarment from contracting with the U.S. government.

Night Vision Smartphone Camera Attachment and Goggles

In 2016, we announced night vision products for the consumer markets and began limited sales in the first quarter of 2017. A smartphone camera attachment allows consumers to see clear, high-resolution images in the dark. A companion application allows users to record and live stream content directly to our social media sites and share with other sites. We also developed a wearable device that utilizes our OLED microdisplay technology to provide hands-free operation for night-time

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activities with the capability to record and upload content. We are completing the development of these products and pursuing channels of distribution.

Government Contract Funding

We derive a portion of our revenue from funding that we receive pursuant to research contracts or subcontracts funded by various agencies of the U.S. government.

In 2014, we were awarded a \$5 million contract to develop and produce an ultra-high resolution, high brightness, high contrast, full color OLED microdisplay at a low unit cost. This Defense-wide Manufacturing Science & Technology award, also known as ManTech, is funded by the Undersecretary of Defense for Acquisition, Technology, and Logistics and will be administered by the U.S. Army RDECOM CERDEC Night Vision and Electronic Sensors Directorate Science and Technology Division. We earned a substantial portion of our R&D contract revenue in 2016 from this project and we expect to complete it by May 2018.

In 2015, we were awarded two new development programs that continued into 2016. The first program is a Small Business Technology Transfer program with the Air Force Research Laboratory and the second is a Small Business Innovation Research program with the United States Special Operations Command. Both programs were for investigating improved OLED micro display design and performance and were completed in 2016.

Our contracts with the U.S. government require us to conduct the research effort described in the statement of work section of the contract. These contracts may be modified or terminated at the discretion of the government and are subject to authorization, appropriation and allocation of the required funding on an annual basis.

Our Strategy

Our strategy is to strengthen our leadership position as a worldwide supplier of microdisplays and virtual imaging technology solutions for applications in high growth segments of the consumer, military and commercial electronics industry by capitalizing on our experience and expertise in active matrix OLED technology and silicon wafer design. We also plan to continue our participation in U.S. government funded Contract Research and Development programs which allows us to continue to enhance our technology. We aim to provide microdisplays and complementary accessories to enable OEM customers serving a variety of markets, including commercial, military and medical, to develop and manufacture new and enhanced electronic products. With the announcement of our BlazeSpark and BlazeTorch consumer night vision products, we have also entered the consumer electronics, recreational, law enforcement and first responder markets. Some key elements of our strategy to achieve these objectives include the following:

Develop OEM and mass production partnerships in the consumer HMD market. As the consumer VR market matures, eMagin technology is positioned well to address the requirements of this segment. Developing customer partners is key to establishing eMagin as the market leader for next generation displays for the consumer HMD market. In addition, executing on mass production partnerships will position us to capture a market predicted to experience significant growth through the 2020s.

Strengthen our technology leadership. As the first to exploit AMOLED microdisplays and the only participant in U.S. government contract research and development programs for OLED microdisplays, we believe that we enjoy a significant advantage in bringing this technology to market. By continuing to invest in research and development, and protecting our intellectual property, we expect to further develop performance improvements and provide a competitive edge for our customers who integrate our displays into their end products.

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Optimize microdisplay manufacturing efficiencies while protecting proprietary processes and partner with large volume manufacturers to bring our technology into high volume production. We intend to reduce our production costs primarily by improving manufacturing yields and lowering fixed costs through reduced cycle time and increased automation as well as equipment upgrades. We outsource certain portions of microdisplay production, such as chip fabrication, to minimize our costs and time to market. We intend to retain the OLED-related processes in-house, where we have a core competency and manufacturing expertise. We also believe that by keeping these processes under tight control we can better protect our proprietary technology and process know-how. We believe that this strategy will also enhance our ability to continue to optimize and customize processes and devices to meet customer needs. In order to address emerging high volume consumer electronics OLED microdisplay requirements, we are actively seeking manufacturing partners who can help us realize that objective.

Build and maintain strong design capabilities. We employ in-house design capabilities supplemented by outsourced design services. Building and maintaining this capability allows us to reduce engineering costs, accelerate the design process and enhance design accuracy to respond to our customers' needs as new markets develop. Contracting third party design support to meet demand and for specialized design skills may also remain a part of our overall long term strategy. Given these capabilities, we continue to look for opportunities to add value to our displays to increase revenue.

Leverage strategic relationships. External relationships serve an important role in our research and development efforts. Suppliers, equipment vendors, government organizations, contract research groups, external design companies, customer and corporate partners, consortia, and university relationships all enhance the overall research and development effort and bring us new ideas and solutions. In addition, we participate in industry associations such as the Society for Information Display; SPIE, the international society for optics and photonics; the Army Aviation Association of America; and the National Defense Industrial Association; among others. We believe that strategic relationships allow us to determine better the demands of the marketplace and, as a result, allow us to focus our research and development activities on satisfying our customers' evolving requirements.

Enter consumer electronics markets. We announced the launch of our consumer night vision products, the BlazeSpark smart phone accessory and BlazeTorch night vision goggles in late 2016 and began limited sales in the first quarter of 2017. We plan to sell to consumers and to build relationships with commercial, law enforcement and first responder customers who have expressed interest in our products.

Sales and Marketing

We primarily provide our OLED display and optics components to OEMs to incorporate into their branded products and sell through their own well-established distribution channels. We have traditionally marketed and sold our products to customers through targeted selling, promotions, select advertising and attendance at trade shows. We identify companies with end products and applications for which we believe our products will provide a key differentiator. Marketing efforts focus on identifying prospects and communicating the product performance attributes foremost in the minds of purchasing decision-makers. We believe that this approach positions us to achieve the highest possible return on investment for our marketing expense.

We market our products in North America, Asia, and Europe directly from our sales office located at our Hopewell Junction, NY facilities. We also have distributors in China and Korea.

An OEM design cycle typically requires between six and 36 months, depending on the uniqueness of the market, the complexity of the end product or, in the case of military OEM customers,

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government procurement schedules. Because our microdisplays are the main functional component that defines many of our customers' end products, we work closely with customers to provide technical assistance throughout the product evaluation and integration process.

Our consumer night vision products, which became available for sale in the first quarter of 2017, are marketed directly to the consumer through leveraging social media, trade shows, coverage by industry and consumer publications, and through our web site. We also market our products directly to recreational venues which may purchase our products for use by and sale to their customers and directly to industrial and commercial end users.

Customers

Customers for our products include both large multinational and smaller OEMs. We maintain relationships with OEMs in a diverse range of industries encompassing the military, industrial, medical, and consumer market sectors. The following table estimates net product revenues in the market sectors.

Market	For the Years Ended December 31,		
	2016	2015	2014
Commercial	29%	27%	23%
Military	47%	53%	58%
Commercial and Military	24%	20%	19%

The following table represents the domestic and international revenues as a percentage of total net revenues:

Geographic Location	For the Years Ended December 31,		
	2016	2015	2014
United States	58%	63%	51%
International	42%	37%	49%

In 2016, there was one customer that accounted for 11% of total revenues. In 2015, there were 2 customers that accounted for 12% and 11% of total revenues.

Backlog

As of December 22, 2017, we had a backlog of approximately \$11.1 million. This backlog primarily consists of non-binding customer purchase orders and purchase agreements with expected delivery dates during 2018, but does not include expected revenue from research and development contracts or expected NRE (non-recurring engineering) programs under development. Most purchase orders are subject to rescheduling or cancellation by the customer with no or limited penalties. We believe that the backlog metric is of limited utility in predicting future sales because many of our OEM customers operate on a ship-to-order basis. Variations in the magnitude and duration of purchase orders and customer delivery requirements may result in substantial fluctuations in backlog from period to period.

Facilities***Manufacturing***

Our manufacturing facilities are located about 70 miles north of New York City in Hopewell Junction, NY. We lease approximately 37,000 square feet of space which houses our own equipment for OLED microdisplay fabrication and research and development, includes a 16,300 square foot class 10 clean room space, additional lower level clean room testing space, assembly space and administrative offices. The lease expires in 2024.

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Facilities services provided by the lessor include our clean room, pure gases, high purity de-ionized water, compressed air, chilled water systems, and waste disposal support. This infrastructure provided by our lease provides us with many of the resources of a larger corporation without the added overhead costs. It further allows us to focus our resources more efficiently on our product development and manufacturing goals.

We believe manufacturing efficiency is an important factor for success, especially in the consumer markets. Although we currently have the equipment needed for profitable production in place, we purchased \$1.4 million, \$1.2 million and \$1.1 million in 2016, 2015 and the first nine months of 2017, respectively, of additional equipment mainly related to manufacturing to increase capacity and yield and to meet expected demand for our microdisplays.

Our consumer night vision products are manufactured at contract manufacturing facilities located in Singapore and China and incorporate displays manufactured at our facilities in Hopewell Junction, NY, and components and subassemblies manufactured by domestic and foreign suppliers.

Other

We lease approximately 2,000 square feet of office space for design and product development in Santa Clara, CA and the lease expires in 2019.

Competition

The industry in which we operate is highly competitive. We face competition from legacy technologies such as transmissive liquid crystal displays and liquid crystal on silicon displays as well as from alternative flat panel display technologies such as virtual scanning retinal displays. There are many large and small companies that manufacture or have in development products based on these technologies.

There are a few manufacturers of high resolution OLED microdisplays that produce microdisplays that compete with our microdisplay products. They are Yunnan OLIGHTECK Opto-Electronic Technology Co., Ltd. in China and MicroOLED in France. Both are shipping OLED microdisplays into the market. Sony Mobile Display Corp., in Japan, produces OLED microdisplays for integration into Sony's own higher-level systems such as digital cameras and HMDs and is now selling microdisplays to some commercial customers. In addition, in early 2017, Kopin Corporation announced a 2k x 2k microdisplay which includes OLEDs sourced from an existing manufacturer.

If other new OLED-based companies enter our markets with directly relevant display designs and without manufacturing and reliability issues, we will face additional competition, although we believe that our progress to date in this area gives us a significant advantage.

We believe that competition will come from liquid crystal on silicon displays, small transmissive liquid crystal displays, and OLED microdisplays manufactured by competitors. While we believe our OLED technology is technically superior by providing higher quality images, greater environmental ruggedness, reduced electronics cost and complexity, and improved power efficiency microdisplays, there is no assurance that we will continue to be the dominant OLED microdisplay supplier. Competition can also come from inorganic micro LEDs, a technology still in the development stage but which could become a major competitor if all the technological hurdles are overcome.

Our consumer night vision products may face competition from a variety of electronics manufacturers that primarily offer thermal imaging cameras and monoculars. These include manufacturers of thermal imaging video cameras and monoculars. These devices are traditionally more expensive, heavier and larger than our BlazeSpark and BlazeTorch night vision products and are primarily designed for commercial users.

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Our BlazeSpark and BlazeTorch products rely on a less expensive digital CMOS sensor and software image processing to produce viewable images through either smart phone displays or our proprietary OLED display and prism technology. While we believe our digital process technology, compact size, appealing designs, and streaming platforms offer advantages for serving consumer markets, it is possible that existing manufacturers of military and tactical night vision systems may offer consumer products, or other manufacturers may develop innovative technologies, that create increased competition.

Intellectual Property

We believe we have developed our own intellectual property portfolio of patents, trade secrets and manufacturing know-how. Our intellectual property includes 34 patents and 29 patent applications. It is important to protect our investment in technology by obtaining and enforcing intellectual property rights, including rights under patent, trademark, trade secret and copyright laws. We seek to protect inventions we consider significant by applying for patents in the United States and other countries when appropriate. The U.S. government holds licenses to much of our technology as a result of its funding a significant portion of our research and development.

Our intellectual property covers a wide range of materials, device structures, processes, and fabrication techniques, primarily concentrated in the following areas:

OLED Devices, Architecture, Structures, and Processes;

Display Color Processing and Sealing;

Active Matrix Circuit Methodologies and Designs;

Lenses and Tracking (Eye and Head);

Ergonomics and Industrial Design;

Wearable Computer Interface Methodology;

Legacy Field Emission and General Display Technologies; and

Head-mounted display technology.

We believe that, in addition to patent protection, our success is dependent upon trade secrets, technical expertise and know-how. To protect this information and know-how from unauthorized use or disclosure, we use nondisclosure agreements and other measures to protect our proprietary rights, and we require all employees, and where appropriate, contractors, consultants, advisors and collaborators to enter into confidentiality and non-competition agreements. We believe that our intellectual property portfolio, coupled with our strategic relationships and accumulated manufacturing know-how in OLED, gives us a significant advantage over potential competitors.

Employees

At September 30, 2017, we had a total of 98 employees, of whom 95 were full-time employees. None of our employees are represented by a labor union. We have not experienced any work stoppages and consider our relations with our employees to be good.

Legal Proceedings

From time to time and in the ordinary course of business, we are subject to various claims, charges and litigation. The outcome of litigation cannot be predicted with certainty and some lawsuits, claims or proceedings may be disposed of unfavorably to us, which could materially affect

our financial condition or results of operations.

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During 2015, we received a letter from an attorney representing a former employee claiming damages for age discrimination and wrongful termination. In September 2016, this former employee commenced action against the Company in Superior Court for the State of Washington. In February 2017, the former employee's counsel sent a discovery request to the Company. In October 2017, the parties reached a tentative settlement, subject to payment of an amount not material to the Company, documentation of the terms and the expiration of a revocation period.

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The following table sets forth information regarding our executive officers and directors as of December 1, 2017:

Name	Age	Position
Andrew G. Sculley	66	Chief Executive Officer, President and Director
Jeffrey P. Lucas	57	Chief Financial Officer and Chief Accounting Officer
Amalkumar Ghosh	63	Senior Vice President, Research and Development
Olivier Prache	58	Senior Vice President, Product Development
Stephen Costello	51	Senior Vice President, Strategic Partnerships
Christopher Brody(2)(3*)	49	Director
Paul Cronson(1)(4)	60	Director
Dr. Leslie G. Polgar(1)(3)(4)	74	Director
Ellen Richstone(1*)(2)	66	Director
Brig. General Stephen M. Seay, U.S. Army (Ret.)(1)(2*)(3)	71	Director
Dr. Jill J. Wittels	68	Director, Chair of the Board

- (1) Audit Committee
- (2) Governance & Nominating Committee
- (3) Compensation Committee
- * Committee Chair

Andrew G. Sculley

Andrew G. Sculley became the Company's Chief Executive Officer and President on June 1, 2008 and was appointed to the Board of Directors on November 2, 2009. Mr. Sculley served as the General Manager of Kodak's OLED systems Business Unit and Vice President of Kodak's Display Business from 2004 to 2008. From 2003 to 2006, he served on the Board of Directors of SK Display, a joint venture between Sanyo and Kodak. From 1996 to 2001, Mr. Sculley served as the Manager of Operations, Chief Financial Officer and member of the Board of Directors of Kodak Japan Ltd., where he led the effort to improve performance. Previously, he held positions in strategic planning and finance at Eastman Kodak Company. Mr. Sculley holds an M.B.A. from Carnegie-Mellon University, an M.S. in physics from Cornell University and a B.S. in physics from Stevens Institute of Technology. He attended Harvard University's Advanced Management Program/International Senior Management Program while an executive at Kodak. Mr. Sculley's experience as the Company's Chief Executive Officer and technical and business management experience at Kodak's Display Business, SK Display and Kodak Japan Ltd., led to the conclusion that Mr. Sculley should serve on the Board of Directors, given the Company's business and structure.

Jeffrey P. Lucas

Jeffrey P. Lucas became the Company's Chief Financial Officer on September 14, 2015. Mr. Lucas was the Chief Financial Officer and a member of the Board of Directors of Transfreight companies from 2013 to 2015. From 2010 to 2013, Mr. Lucas was the Managing Director of Neptune Advisors, LLC, a strategy consulting firm. From 2006 to 2010, he was the Chief Financial Officer of GPX International Tire Corporation. Mr. Lucas is a Certified Public Accountant and a Chartered

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Financial Analyst. He earned a M.B.A. from Harvard Business School and a B.A. in Economics from Tufts University.

Dr. Amalkumar Ghosh

Dr. Amalkumar Ghosh was appointed Senior Vice President of Research and Development in April 2009, after serving as Vice President of OLED Research and Development at the Company since 2005. He is responsible for new microdisplay technology development, government programs, intellectual property and manufacturing process engineering. Dr. Ghosh has more than thirty years of leading industrial research and development experience. From 2002 to 2005, he was at Eastman Kodak Company where he played a key role towards OLED display technology development. From 1995 to 2002, he was employed by the Company. His work during this period laid the foundations for OLED microdisplay technology. From 1985 to 1995, he was with IBM Corporation where he was a leader in various aspects of semiconductor and liquid crystal display technologies. He has many publications and patents to his credit and has received numerous awards and recognitions from the Society for Information Display, including being nominated a Fellow of the Society. Dr. Ghosh was the President of the Society for Information Displays from 2014 to 2016. Currently, he is a board director for the society. Dr. Ghosh earned a Bachelor of Science and Master of Science in physics from Poona University and a Ph.D. degree in Physics from Massachusetts Institute of Technology.

Olivier Prache

Olivier Prache was appointed Senior Vice President, Product Development in September 2012. His current responsibilities encompass managing OLED product development and product engineering. He served as Senior Vice President of Display Operations and Development from 2005 to 2012, after overseeing microdisplay product development at the Company since 1995 when he joined the Company's predecessor, FED Corporation. He was employed by Philips-LCOS from 2002 until 2004 when he rejoined the Company. Prior to joining the Company's predecessor in 1995, he worked for Pixtech in France and OIS Optical Imaging Systems in Troy, Michigan. He earned an M.S. degree in electronics from E.N.S.E.R.G., in Grenoble, France in 1983.

Stephen Costello

Stephen Costello was appointed Senior Vice President, Strategic Partnerships in September 2016. He has extensive experience in sales, partner development and marketing. He served from May 2015 to September 2016 as Vice President of Community Development for Aras Corp. From 2010 to 2014, he served as Head of Sales at SpaceClaim Corp. Steve has successfully commercialized military technology in Industrial, Enterprise and Consumer segments with multiple companies, including BAE Systems and DigitalGlobe. He earned a B.S. in Marketing and Economics from Babson College and a M.S. in Marketing from Bentley University.

Christopher Brody

Since February of 2012, Mr. Brody has served as the President and Managing Director of Stillwater LLC and as the Vice President of Stillwater Trust LLC. Both Stillwater LLC and Stillwater Trust LLC are affiliates of Stillwater Holdings LLC, our largest stockholder, which originally nominated him in 2012. From 2008 to 2011, Mr. Brody was the Chief Investment Officer of BAWAG P.S.K. Bank Fur Arbeit und Wirtschaft Und Osterreichische Sparkasse Aktiengesellschaft, a large Austrian commercial bank, and as a member of the management committee of its stockholder, BAWAG Holdings GmbH. He served on the boards of both companies. From 2001 to 2008, he served as Managing Director of Cerberus Capital Management L.P., an alternate asset hedge fund. He previously served on the boards of Scottish Re Group LTD (NYSE traded), and numerous other boards of private companies in the portfolio of Cerberus Capital Management L.P. Mr. Brody holds a B.A. from

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Brandeis University. Mr. Brody's U.S. and international business and financial knowledge and experience led to the conclusion that he should serve on the Board of Directors, given the Company's business and structure.

Paul Cronson

Paul Cronson has served as a director since July of 2003. Mr. Cronson is Managing Director of Larkspur Capital Corporation, which he co-founded in 1992. Larkspur is a broker dealer that is a member of FINRA and advises companies seeking private equity or debt. Mr. Cronson's career in finance began in 1979 at Laidlaw, Adams, & Peck where he worked in asset management and corporate finance. From 1983 to 1985, Mr. Cronson worked with Samuel Montagu Co., Inc. in London, where he marketed Eurobond issuers and structured transactions. Subsequently from 1985 to 1987, he was employed by Chase Investment Bank Ltd., where he structured international debt securities and developed synthetic asset products using derivatives. Returning to the U.S., he joined Peter Sharp Co., where he managed a real estate portfolio, structured financings and assisted with capital market investments until 1992. Mr. Cronson received his B.A. from Columbia College in 1979, and his M.B.A. from Columbia College in 1982. He is on the board of the Evelyn Sharp Foundation in New York, a private foundation supporting various not-for-profit endeavors. Mr. Cronson's business management and financial experience and knowledge led to the conclusion that he should serve on the Board of Directors, given the Company's business and structure.

Leslie G. Polgar

Dr. Leslie G. Polgar has served as a director since November of 2010. Dr. Polgar is an Adjunct Professor at St. Mary's College of California (2008 present), where he teaches Entrepreneurship in the Professional M.B.A. Program and Management of Innovation and Technology in the Executive M.B.A. Program. From 2005 to 2007, Dr. Polgar was chief executive officer and a member of the board of directors of Forth Dimension Displays Ltd. in Dalgety Bay, Scotland. From 2000 to 2003, Dr. Polgar was the founding president of Eastman Kodak's Display Products Business Unit, where he led the successful commercialization of the world's first full color, direct-view organic light emitting diode display (OLED). Dr. Polgar's board experience includes: Shotgun Players Theater Company (not-for-profit, US) and for-profits Interschola (US), Forth Dimension Displays (UK), SK Display (Japan), Bertram Labs/Chemetall GmbH (US-Germany), and Chemical Suppliers Inc. (US). Dr. Polgar earned an M.B.A. (U. of Connecticut), a Ph.D. and M.S. in physics (Carnegie Mellon University) and a B.S. in physics/math (U. of Michigan). Dr. Polgar's scientific and technical knowledge and his experience in the industry led to the conclusion that he should serve on the Board of Directors, given the Company's business and structure.

Ellen Richstone

Ellen Richstone began service as a director in July 2014. Ms. Richstone served as the Chief Financial Officer of several public and private companies between 1989 and 2012, including Rohr Aerospace, a Fortune 500 company. From 2002 to 2004, Ms. Richstone was the President and Chief Executive Officer of the Entrepreneurial Resources Group. From 2004 until its sale in 2007, Ms. Richstone served as the financial expert on the board of directors of American Power Conversion, an S&P 500 company. Ms. Richstone currently serves on, and was designated a financial expert by, the board of directors of BioAmber Inc., a publicly traded industrial biotechnology company producing sustainable chemicals, and Superior Industries. She also sits on the board of the National Association of Corporate Directors (NACD) in New England, as well as other non-profit organizations. In April 2013, Ms. Richstone was given the first annual Distinguished Director Award from the Corporate Directors Group. Ms. Richstone graduated from Scripps College in Claremont, California and holds graduate degrees from the Fletcher School of Law and Diplomacy at Tufts University. Ms. Richstone

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also completed the Advanced Professional Certificate in Finance at New York University's Graduate School of Business Administration and attended the Executive Development program at Cornell University's Business School. Ms. Richstone holds an Executive Master's Certification in Director Governance from the American College of Corporate Directors. Ms. Richstone's broad industry experience in technology and corporate governance expertise led to the conclusion that she should serve on the Board of Directors, given the Company's business and structure.

Stephen M. Seay

Brigadier General Stephen M. Seay, U.S. Army (Ret.) began service as a director in January 2006. In March 2016, Brig. General Seay became Director, Leadership and Career Development Strategies at the University of Central Florida Department of Athletics. His responsibilities include mentoring, coaching and advising students and student-athletes in career development opportunities in academia, government and industry, and toward successful employment upon graduation. He founded Seay Business Solutions, LLC, a Florida veteran-owned small business, in 2006, specializing in providing assistance to entrepreneurs and small businesses focused on working in defense. Retired Brig. General Seay provides expertise in high technology operational and integrated modeling, simulation, training and education, mission command, cyber operations, strategic planning, resource management/allocation/analysis, operations research and system life cycle planning, programming, execution, sustainment and life cycle system design. He held a wide variety of command and staff positions during his over thirty-three year Army career, culminating as the Commanding General, Joint Contracting Command-Iraq/Head of Contracting Authority, Operation Iraqi Freedom (2004-2005) and Program Executive Officer, Simulation, Training and Instrumentation (PEO STRI) from 2000-2005. He performs corporate and independent director responsibilities as a member of strategy, audit, compensation, finance, governance and executive committees. Brig. General Seay is the senior mentor/advisor for Talon Simulations, LLC, an entrepreneurial Florida small business, University of Central Florida graduate degree program and National Science Foundation grant awardee, focused on aviation simulation for training, and gaming, simulation focused on smaller aviation schools and instructional facilities. Additionally, in 2016, Brig. General Seay was selected to join the Proxy Board of Quantum 3D, Government Systems, Milpitas, CA. He serves on the Board of Directors and as Secretary, formerly Treasurer, Kid's House of Seminole County, Florida (children's advocacy), Orlando Science Center, Orlando, Florida (STEM) Director and on its Finance Committee, and is Secretary, National Modeling and Simulation Coalition (Industry professional). Brig. General Seay received his B.S. from the University of New Hampshire, where he was a three-sport student-athlete, and an M.S. from North Carolina State University. He taught Chemistry and coached lacrosse at the United States Naval Academy. Brig. General Seay is a recognized expert in operational training systems and programs. His Army operational experience and understanding of high technology devices, optics and digital displays, his business knowledge and experience in transitioning emerging technology into practical applications led to the conclusion that he should serve on the Board of Directors, given the Company's business and structure.

Jill J. Wittels

Dr. Wittels has served as a director and Chair of the Board since August, 2011. She served on the Board of Directors previously from 2003 to 2006. Dr. Wittels is currently the principal in Sostenuto Strategic Advisors, in which capacity she consults on business strategy and serves as a strategy advisor. She served on the Board of the Fermi National Accelerator Laboratory, a laboratory of the U.S. Department of Energy Office of High Energy Physics from 2013 to 2014 and also from June 1995 through June 2011. From 2001 until July 2011, Dr. Wittels was Corporate Vice President, Business and Technology Strategy of L-3 Communications. Her responsibilities at L-3 included strategies for growth, oversight of R&D, diligence support for M&A, and cross-company business development coordination. From 1979 to 2001, she held a variety of positions with BAE Systems, including Vice President and General Manager, Acting President and Vice President of Engineering. She served on the board of

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Innovative Micro Technology, Inc. from 2002 through July 2011 and on the board of Millivision, Inc. from 2002 to 2006. Dr. Wittels holds a B.S. and a Ph.D. in Physics, both from the Massachusetts Institute of Technology. Dr. Wittels' business management experience, her scientific knowledge, her knowledge of the Company, and her experience in developing strategy and strategic alliances led to the conclusion that she should serve on the Board of Directors, given the Company's business and structure.

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

Involvement in Certain Legal Proceedings

Pursuant to an Order Instituting Cease-and-Desist Proceedings Pursuant to Section 21C of the Exchange Act, Making Findings, and Imposing a Cease-and-Desist Order and Civil Penalty dated September 10, 2014, the entry to which Mr. Cronson consented, the SEC found that Mr. Cronson had violated Section 16(a) of the Exchange Act and Rule 16a-3 promulgated thereunder by virtue of having failed to timely file a Form 4 reporting transactions in our Company's securities on numerous occasions during the calendar years 2010 through 2013. The SEC ordered Mr. Cronson to (i) cease and desist from committing or causing any future violations Section 16(a) of the Exchange Act and Rule 16a-3 promulgated thereunder, and (ii) pay a civil money penalty in the amount of \$47,250. Other than the foregoing, there are currently no legal proceedings, and during the past 10 years there have been no legal proceedings, that are material to the evaluation of the ability or integrity of any of our directors or director nominees.

Committees Established by the Board

The Board of Directors has standing Audit, Compensation, and Governance and Nominating Committees. Information concerning the function of each Board committee follows.

Audit Committee

The Audit Committee is responsible for overseeing management's implementation of effective internal accounting and financial controls, supervising matters relating to audit functions, reviewing and setting internal policies and procedures regarding audits, accounting and other financial controls, reviewing the results of our audit performed by the independent public accountants, and evaluating and selecting the independent public accountants. The Audit Committee has adopted an Audit Committee Charter which is posted on our Corporate Governance landing page under the tab labeled "Investors" on our website at <http://www.emagin.com>. The information on our website is not part of this prospectus. The current members of the Audit Committee are Ellen Richstone (Chair), Paul Cronson, Leslie G. Polgar and Stephen M. Seay. The Board has determined that Ms. Richstone is an "audit committee financial expert" as defined by the SEC. During 2016, the Audit Committee held nine meetings in person or through conference calls.

Compensation Committee

The Compensation Committee determines matters pertaining to the compensation of our executive officers and outside directors and administers our stock option and incentive compensation plans. The Compensation Committee has adopted a Compensation Committee Charter which is posted on our Corporate Governance landing page under the tab labeled "Investors" on our website at <http://www.emagin.com>. The information on our website is not part of this prospectus. The current members of the Compensation Committee are Christopher Brody (Chair), Leslie G. Polgar and Stephen M. Seay. During 2016, the Compensation Committee held 6 meetings in person or through conference calls.

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Governance and Nominating Committee

The Governance and Nominating Committee is responsible for considering potential Board members, nominating Directors for election to the Board, implementing the Company's corporate governance policies, and for all other purposes outlined in the Governance and Nominating Committee Charter, which is posted on our Corporate Governance landing page under the tab labeled "Investors" on our website at <http://www.emagin.com>. The information on our website is not part of this prospectus. The current members of the Governance and Nominating Committee are Stephen M. Seay (Chair), Christopher Brody and Ellen Richstone. During 2016, the Governance and Nominating Committee held six meetings in person or through conference calls.

Board Meetings During Fiscal 2016

During 2016, the Board of Directors held six meetings. Each director attended all of the meetings of the Board and all of the meetings held by all committees on which such director served. The Board also approved certain actions by unanimous written consent. In addition, all of the directors were present in person at the annual meeting of our stockholders in 2016.

Board Leadership Structure, Independence and Role in Risk Oversight

The Company has separated the positions of Chair of the Board of Directors and Chief Executive Officer. Given the demanding nature of these positions, the Board believes it is appropriate to separate the positions of Chair and Chief Executive Officer. Our Chair presides over all meetings of the Board of Directors, including executive sessions of the independent directors which are held at each Board meeting. She briefs the Chief Executive Officer on issues arising in executive sessions and communicates frequently with him on matters of importance. She has responsibility for shaping the Board's agenda and consults with all directors to ensure that the board agendas and board materials provide the Board with the information needed to fulfill its responsibilities. From time to time she may also represent the Company in interactions with external stakeholders at the discretion of the Board.

The Board of Directors has determined that each of our current directors, except for Mr. Sculley, is an "independent director" as that term is defined in the listing standards of the NYSE American LLC. The Board of Directors has also determined that each member of the Audit Committee, Compensation Committee and Governance and Nominating Committee meets the independence standards applicable to those committees prescribed by the NYSE American LLC and the SEC. In making this decision, the Board considered all relationships between the Company and the directors. The Board determined each such relationship, and the aggregate of such relationships, to be immaterial to the applicable director's ability to exercise independent judgment.

Our Board has overall responsibility for risk oversight. The oversight is conducted primarily through committees of the Board of Directors, as disclosed in each of the descriptions of each of the committees above and in the charters of each of the committees, but the full Board of Directors has retained responsibility for general oversight of risks.

Code of Ethics and Business Conduct

We have adopted a Code of Ethics and Business Conduct that applies to all of our directors, officers and employees, including our Chief Executive Officer and Chief Financial Officer and principal accounting officer. The Code of Ethics and Business Conduct is posted on our website at <http://www.emagin.com>. The information on our website is not part of this prospectus.

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EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Executive Compensation Objectives

The objectives of our compensation program are as follows:

Attract, hire and retain well-qualified executives.

Reward performance that drives substantial increases in shareholder value, as evidenced through both future operating profits and increased market price of our common shares.

Compensation Setting Process

Role of Compensation Committee. The role of the Compensation Committee is to oversee the Company's executive compensation strategy, oversee the administration of its executive compensation and its equity based compensation plans, review and approve the compensation of the Company's Chief Executive Officer, and oversee the Company's compensation plan for the Board of Directors. The Compensation Committee is comprised exclusively of independent outside directors and includes members with executive level experience in other companies. In addition, the Compensation Committee compares executive compensation practices of similar companies at similar stages of development.

Role of Compensation Consultant. The Compensation Committee has the authority to engage its own advisors to assist in carrying out its responsibilities. Towers Watson, a global professional services company, was previously engaged by Compensation Committee to assist in the identification and selection of peer companies for purposes of comparing compensation practices and to provide guidance regarding the amount and types of compensation that we provide to our executives and Board of Directors, and on other compensation-related matters. In 2016, the Compensation Committee did not engage or receive services from Towers Watson or any other compensation consultant.

Role of Management. In setting compensation for 2017, our Chief Executive Officer worked closely with the Compensation Committee and attended the meetings of the Compensation Committee. Our Chief Executive Officer made recommendations to the Compensation Committee regarding compensation of our executive officers other than himself. No executive officer participated directly in the final deliberations regarding his own compensation package.

Use of Comparative Market Data. The Compensation Committee approved the 2016 peer group consisting of the following 17 companies. These companies were selected as peers based on their being in a similar industry, primarily manufacturers of electronic components or electronic equipment and instruments, and of a generally similar size, based mainly on revenue.

Clearfield, Inc.	Microvision Inc.
Digital Ally Inc.	Murata Manufacturing Co. Ltd.
Inrad Optics Inc.	NVE Corporation
Intricon Corporation	SPI Energy Co., Ltd.
Kopin Corporation	Supertex, Inc.
LightPath Technologies Inc.	The LGL Group, Inc.
Luna Inc.	Universal Display Corporation
LRAD Corporation	
Mercury Computer Systems, Inc.	
Micropac Industries Inc.	

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Elements of Executive Compensation

The compensation level of our executives generally reflects their level of experience and is designed to provide an incentive to positively affect our future operating performance and shareholder value.

Base Salary. Base salary is the primary fixed element in the Company's compensation program and is intended to provide an element of certainty and security to the Company's executive officers on an ongoing basis. Base salaries are determined based on the executive's level of experience, specialty and responsibility. Executive base salaries are reviewed on an annual basis by the Compensation Committee. Any increases in base salary are based on an evaluation of the individual's performance, level of responsibility and, when such information is available, the level of pay compared to the salaries paid to persons in similar positions in the Company's peer group or as shown in survey data.

Mr. Sculley's base salary for 2016 was increased from \$410,000 to \$440,000, a 7.4% increase. Mr. Sculley's base salary had not been increased since 2014. In 2016, Dr. Ghosh received an increase in his base annual salaries of 6.7% from \$300,000 to \$320,000 and Mr. Lucas received an increase in his base annual salary of 2.9% from \$345,000 to \$355,000. Dr. Ghosh had not received an increase in his base annual salary since 2014 and Mr. Lucas had not received an increase in his base annual salary since joining the Company in September 2015.

Equity. Part of the compensation paid to our executives is in the form of equity, which to date has been exclusively through stock option grants. The stock option exercise price is generally equal to the fair market value of our common stock on the date of grant. Therefore, a gain is only recognized if the value of the stock increases, which promotes a long term alignment between the interests of the Company's executives and its stockholders. In 2016, the Compensation Committee awarded option grants to several employees and to the named executive officers. In addition, the time-based vesting features of our stock options contribute to executive retention. During 2016, the Compensation Committee awarded Mr. Sculley an option to purchase 150,000 shares of our common stock and an option to purchase 100,000 shares of common stock to each of Dr. Ghosh and Mr. Lucas.

Bonus. Our named executive officers are eligible to receive cash incentive awards that are tied to achieving performance metrics established by the Compensation Committee at the beginning of each year, with input from the Chief Executive Officer. Target bonuses for the named executive officers are set as a percentage of base salary. The program is funded by establishing a pool based on a percentage of annual EBITDA, which is then adjusted by an overall company performance modifier based on company performance to reach the final bonus pool. The program creates incentive for the named executive officers to direct their efforts toward achieving specified company goals and individual goals. For 2016 annual cash incentive bonuses, the Compensation Committee established goals related to the Company's financial performance and attainment of strategic milestones and approved individual goals for executives. In 2016, we fell short of reaching the Company's financial performance goals. Although we did not achieve the pre-determined financial performance and strategic milestone goals, we achieved other strategic milestones related to the development of certain technologies and attainment of certain production milestones and certain individual milestones were achieved. Accordingly, our named executive officers were awarded discretionary cash bonuses totaling \$40,000 for 2016 performance.

Anti-Hedging Policy

Our insider trading policy prohibits directors and employees from engaging in short-term or speculative transactions such as trading in eMagin stock on a short-term basis, purchasing eMagin stock on the margin or engaging in short sales.

Table of Contents**Clawback Policy**

Our Clawback Policy provides that the Company will seek to recover, under the direction of the Compensation Committee, any compensation paid to an executive officer of the Company which is subject to recovery under any law, government regulation or stock exchange listing requirement, through such deductions or clawback as may be required to be made pursuant to such law, government regulation or stock exchange listing requirement.

Summary Compensation Table

The following table sets forth information regarding compensation paid to our named executive officers for the years indicated.

Name and principal position	Year	Salary (\$)	Bonus (\$)	Option awards(1) (\$)	All other compensation (\$)	Total (\$)
Andrew G. Sculley, <i>President and Chief Executive Officer</i>	2016	426,692	10,000	183,015		619,707
	2015	410,000				410,000
Amalkumar Ghosh, <i>Senior Vice President, Research and Development</i>	2016	304,500	20,000	122,010		446,510
	2015	295,000				295,000
Jeffrey P. Lucas, <i>Chief Financial Officer and Chief Accounting Officer(2)</i>	2016	349,673	10,000	122,010		481,683
	2015	92,855		71,108	13,000	176,963

(1) Amounts in this column represent the grant date fair value of options granted to the named executive officers during 2016, computed in accordance with FASB ASC Topic 718. These amounts do not necessarily correspond to the actual value that may be realized by the named executive officers. The assumptions made in valuing the options reported in this column are discussed in Note 10 to our financial statements for the year ended December 31, 2016, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

(2) Mr. Lucas was appointed Chief Financial Officer effective September 14, 2015. His annual base salary for 2015 was \$345,000.

Table of Contents**Outstanding Equity Awards at Fiscal Year-End**

The following table sets forth information with respect to the outstanding equity awards held by our named executive officers as of December 31, 2016.

Name	Number of securities underlying unexercised options (#) Exercisable	Number of securities underlying unexercised options (#) Unexercisable	Options exercise price (\$)	Option expiration Date
Andrew G. Sculley	25,796(1)		1.94	March 3, 2017
	188,333(2)		4.03	November 3, 2018
	22,000(3)		3.59	March 13, 2017
	120,000(4)	30,000	2.66	August 12, 2023
Amalkumar Ghosh	18,974(1)		1.94	March 3, 2017
	15,000(3)		3.59	March 13, 2017
	80,000(4)	20,000	2.66	August 12, 2023
Jeffrey P. Lucas	25,000(5)	50,000	2.50	September 14, 2020
	20,000(4)	80,000	2.66	August 12, 2023

- (1) The shares underlying this stock option vested as follows: one half of the shares vested on March 3, 2010 and one half vested on March 3, 2011.
- (2) The shares underlying this stock option vested as follows: one third on June 1, 2012; one third on June 1, 2013; and the balance on December 31, 2013.
- (3) The shares underlying these stock options vested as follows: one third of the shares vested on March 13, 2013 and one third of the shares vests on each of the following two anniversaries of March 13, 2013.
- (4) The shares underlying these stock options vest as follows: 20% of shares vested on the grant date of August 12, 2016 and 20% of the shares vest on each of the following four anniversaries of September 12, 2016.
- (5) The shares underlying this stock option vest as follows: one third of the shares vested on September 14, 2016 and one third of the shares vests on each of the following two anniversaries of September 14, 2016.

Employment Agreements*Employment Agreement with Andrew G. Sculley*

On July 1, 2016, the Company and Andrew G. Sculley, Jr. entered into an Amended and Restated Employment Agreement, which is referred to herein as the Sculley Employment Agreement. The term of the Sculley Employment Agreement will continue until December 31, 2018 unless it is terminated sooner pursuant to its terms. Mr. Sculley's current annual base salary is \$440,000.

If Mr. Sculley's (i) employment is terminated without Cause (as defined in the Sculley Employment Agreement), (ii) employment is terminated or his position is significantly changed or salary decreased as a result of a Change of Control (as defined in the Sculley Employment Agreement) or (iii) if he terminates his employment for Good Reason (as defined in the Sculley Employment Agreement), then Mr. Sculley shall, at the Company's sole discretion, be entitled to the lesser of (i) the total amount of his base salary that remains unpaid under the Sculley Employment Agreement, which shall be paid monthly, or (ii) monthly salary payments for twelve (12) months, based on Mr. Sculley's monthly rate of base salary at the date of such termination, provided, however in lieu of the

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aforementioned monthly payments, the Company may in its sole discretion pay such payments in a lump-sum. Payment by the Company of the foregoing severance amounts is contingent upon Mr. Sculley's executing a release agreement substantially in the form attached as an exhibit to the Sculley Employment Agreement, and such release becoming effective, and only so long as Mr. Sculley does not revoke or breach the provisions of the such release or the restrictive covenants set forth in Sections 4 and 5 of the Sculley Employment Agreement. Mr. Sculley shall also be entitled to: (i) payment for accrued and unused vacation; (ii) the immediate vesting of any non-vested equity-related instruments granted pursuant to Section 2.6 of the Sculley Employment Agreement; and (iii) any bonuses which have accrued but remain unpaid prior to the date of Mr. Sculley's termination.

The Company has also agreed to amend any equity-related instruments granted to Mr. Sculley to permit the full exercise thereof following the termination of his employment without Cause, because of his Disability (as defined in the Sculley Employment Agreement) or death and to amend any equity-related instruments granted to him to permit the immediate full vesting and exercise thereof at any time after termination Mr. Sculley's employment without Cause or because of his Disability or death, to the same extent as Mr. Sculley's employment had not terminated. Mr. Sculley or his personal representative may accept either or both of such offers at any time before such equity-related instruments otherwise expire by giving written notice to the Company.

Offer Letter with Jeffrey P. Lucas

On September 14, 2015, the Company and Jeffrey P. Lucas entered into an offer letter. Mr. Lucas's current base salary is \$355,000 and he is eligible for an annual incentive bonus targeted at 20% of his base salary. In the event that Mr. Lucas's employment is terminated by the Company for any reason other than for unsatisfactory performance or gross misconduct, he will receive severance equal to six months his salary at the time of termination.

Change of Control Agreements

On November 8, 2017, the Company entered into Change in Control Agreements with four of its executive officers, Steve Costello, Amalkumar Ghosh, Olivier Prache and Jeffrey P. Lucas, each of which is referred to herein as an Executive. The Change in Control Agreements provide that if, within the twelve-month period following a Change in Control of the Company (as defined in the Change in Control Agreements), the Executive suffers a Terminating Event (as defined below and in the Change in Control Agreements), he will be entitled to receive a lump sum cash payment in an amount equal to the Executive's annual base salary in effect immediately prior to the Terminating Event (or the Executive's annual base salary in effect immediately prior to the Change in Control, if higher), payable in a lump sum on the termination date, provided that the Executive executes and does not revoke a separation agreement and release in favor of the Company. In addition, if the Executive was participating in the Company's group health plan immediately prior to termination and elects COBRA health continuation, then the Company will pay the Executive a monthly cash payment for 12 months or the Executive's COBRA health continuation period, whichever ends earlier, in an amount equal to the monthly employer contribution that the Company would have made to provide health insurance to the Executive if he had remained employed by the Company.

A "Terminating Event" shall be deemed to have occurred under the Change in Control Agreements if the Executive (i) is terminated by the Company other than for Cause (as defined in the Change in Control Agreements), death or Disability (as defined in the Change in Control Agreements) or (ii) terminates his employment with the Company for Good Reason (as defined in the Agreements).

The Change in Control Agreements became effective as of November 8, 2017 and shall terminate upon the earliest of (a) the termination of the Executive's employment for any reason prior to a Change in Control, (b) the termination of the Executive's employment with the Company after a

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Change in Control for any reason other than the occurrence of a Terminating Event or (c) the date which is twelve months and a day after a Change in Control if the Executive is still employed by the Company.

Director Compensation

The following table sets forth compensation information for our non-employee directors for the year ended December 31, 2016.

Name	Fees earned or paid in cash (\$)	Option awards (\$)(1)	Total (\$)
Christopher Brody	40,000	50,000	90,000
Paul Cronson	40,000	50,000	90,000
Leslie G. Polgar	40,000	50,000	90,000
Ellen Richstone	45,000	50,000	95,000
Stephen M. Seay	40,000	50,000	90,000
Jill J. Wittels	70,000	98,750	168,750

- (1) Amounts in this column represent the grant date fair value of options granted to the non-employee directors during 2016, computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, which is referred to herein as FASB ASC Topic 718. These amounts do not necessarily correspond to the actual value that may be realized by the non-employee directors. The assumptions made in valuing the options reported in this column are discussed in Note 10 to our financial statements for the year ended December 31, 2016, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.
- (2) The following table sets forth the aggregate number of shares of our common stock underlying unexercised stock options held as of December 31, 2016 by each of the persons who served as a non-employee director during 2016:

	Number of Shares Underlying Options Outstanding as of December 31, 2016
Christopher Brody	204,393
Paul Cronson	425,475
Leslie G. Polgar	290,075
Ellen Richstone	131,320
Stephen M. Seay	488,975
Jill J. Wittels	499,529

Fees Earned or Paid in Cash

Board Retainer. Each non-employee director, except the Chair, received an annual cash retainer of \$40,000 for his or her service as a member of the Board of Directors in 2016. The Audit Committee Chair received an additional annual retainer of \$5,000 for her service in such role in 2016.

Meeting Fees. Members of the Board of Directors do not receive any additional fees for meeting attendance.

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Option Awards

Each non-employee director, except the Chair, received equity compensation in the form of a stock option with a grant date fair value of \$50,000 in 2016.

Chair of the Board

The Chair received an annual cash retainer of \$70,000 and equity compensation in the form of a stock option with a grant date fair value of \$98,750 in 2016.

2017 Non-Employee Director Compensation

On April 20, 2017, the Compensation Committee approved the following 2017 compensation for non-employee directors, excluding the Chair:

Annual Cash Retainer of \$40,000

Stock Option with a grant date fair value of \$50,000

No meeting fees

For service in 2017, the Chair will receive an annual cash retainer of \$70,000 and a stock option with a grant date fair value of \$98,750. The Chair of the Audit Committee will receive an annual cash retainer of \$5,000 in addition to the \$40,000 annual cash retainer for service on the Board of Directors.

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CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Transactions with Related Persons

At no time during 2015 or 2016 has any executive officer, director or any member of these individuals' immediate families, any corporation or organization with whom any of these individuals is an affiliate or any trust or estate in which any of these individuals serves as a trustee or in a similar capacity or has a substantial beneficial interest been indebted to the Company or been involved in any transaction in which the amount exceeded \$120,000 and such person had a direct or indirect material interest.

On March 24, 2017, the Company entered into an unsecured debt financing arrangement, which is referred to herein as the Line Letter Agreement, with our largest stockholder Stillwater Trust LLC, which is referred to herein as Stillwater. Pursuant to the Line Letter Agreement, the Company may borrow up to \$2 million for general working capital purposes and up to an additional \$3 million should the Company's primary lender not provide borrowing availability under its normal terms and conditions, which is referred to herein as the Line.

Advances against the Line are available for working capital needs of the Company and for general corporate purposes. The Company may only borrow up to \$2,000,000 unless the Company is unable to borrow further amounts under its financing agreement with Rosenthal & Rosenthal. All loans under the Line Letter Agreement mature and become immediately repayable upon the date that is the earliest to occur of (i) June 30, 2020, (ii) the closing date of any issuance or related issuance of securities of the Company by the Company or any of its subsidiaries in which the Company or such subsidiary receives gross proceeds of at least \$5,000,000, and (iii) the occurrence of an Event of Default (as defined in the Line Letter Agreement). Loans under the Line Letter Agreement shall bear interest at 6.00% per annum, payable in kind. Upon the occurrence and during the continuance of an Event of Default, all loans under the Line Letter Agreement shall bear interest at a fixed rate of 11.00% per annum.

As additional consideration for the Line, the Company paid Stillwater a non-refundable origination fee of \$50,000 and issued warrants to Stillwater to purchase up to 100,000 shares of the Company's common stock at an exercise price of \$2.25 per share, the closing market price of the Company's common stock on the date the arrangement was executed. As additional consideration for the Line, with respect to each loan made under the Line Letter Agreement, the Company agreed to pay Stillwater, 180 days after each loan is made, which is referred to herein as the First Anniversary Date, and then each 90 days thereafter (each referred to herein as a Renewal Date and, together with the First Anniversary Date, an Anniversary Date), a non-refundable fee, equal to 2% of the principal balance of such loan outstanding on such Anniversary Date. As additional consideration for the Line, the Company also agreed to pay Stillwater a non-refundable fee in the amount of 2% of each loan. On May 24, 2017, the Company voluntarily terminated its unsecured debt financing arrangement with Stillwater. The Company did not incur any early termination penalties in connection with the termination of the Line. As of the date of its termination, there were no amounts outstanding under the Line.

Procedures for Approval of Related Party Transactions

Our Board of Directors is charged with reviewing and approving all potential related party transactions. All such related party transactions must then be reported to the extent required under applicable SEC rules. We have not adopted other procedures for review, or standards for approval, of such transactions, but instead review them on a case-by-case basis.

Table of Contents**PRINCIPAL STOCKHOLDERS**

The following table sets forth information with respect to the beneficial ownership of our capital stock, as of November 30, 2017, by:

each person, or group of affiliated persons, known by us to beneficially own more than 5% of our capital stock;

each of our directors;

each of our named executive officers; and

all of our executive officers and directors as a group.

The number of shares beneficially owned by each stockholder is determined under rules of the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants or other rights held by such person that are currently exercisable or will become exercisable within 60 days after November 30, 2017 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

We have based our calculation of the percentage of beneficial ownership prior to this offering on 35,020,523 shares of our common stock outstanding as of November 30, 2017. The calculation of the percentage of beneficial ownership after this offering gives effect to the issuance by us of shares of common stock and warrants to purchase shares of common stock in this offering. The percentage ownership information assumes no exercise of the underwriter's over-allotment option.

Unless otherwise indicated, the address of all listed stockholders is c/o eMagin Corporation, 2070 Route 52, Hopewell Junction, New York 12533. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise.

Name of Beneficial Owner	Common Stock Beneficially Owned**	Percentage of Common Stock Before this Offering**	Percentage of Common Stock After this Offering**
Stillwater Holdings LLC (f/k/a Stillwater LLC)(1)	16,159,159	37.92%	
Ginola Limited(2)	4,980,693	13.39%	
Rainbow Gate Corporation(3)	1,720,658	4.79%	
Paul Cronson(4)	811,122	2.87%	
Andrew G. Sculley(5)	537,133	1.52%	
Jill J. Wittels(6)	542,317	1.03%	
Stephen Seay(7)	546,151	1.54%	
Leslie G. Polgar(8)	642,978	*	
Christopher Brody(9)	261,569	*	
Ellen Richstone(10)	188,496	*	
Amalkumar Ghosh(11)	60,485	*	
Olivier Prache(12)	40,181	*	
Jeffrey P. Lucas(13)	89,950	*	
Stephen Costello			0%
All executive officers and directors as a group (consisting of 11 individuals)	3,437,132		6.53%

*

Less than 1% of the outstanding common stock.

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Beneficial Ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options, warrants, or preferred shares exercisable or convertible within 60 days of November 30, 2017 are deemed outstanding for computing the percentage of the person holding such option or warrant.

(1)

This figure represents: (i) 8,556,826 shares of common stock owned by Stillwater Holdings LLC (f/k/a Stillwater LLC), which includes 4,250,000 shares of common stock placed with Flat Creek Fiduciary Management LLC as trustee of a trust for the benefit of minor beneficiaries of the sole member of Stillwater Holdings LLC, in which the sole member of Stillwater Holdings LLC has investment control; 2,250,000 shares of common stock held by Stillwater Trust LLC in which the sole member of Stillwater Holdings LLC has investment control; and 783,325 shares of common stock owned by Rainbow Gate Corporation of which the sole member of Stillwater Holdings LLC is the investment manager; (ii) 6,314,666 shares of common stock underlying Series B Convertible Preferred Stock which includes 937,333 shares of common stock underlying Series B Convertible Preferred Stock held by Rainbow Gate Corporation of which the sole member of Stillwater Holdings LLC is the investment manager; and (iii) 1,277,667 shares underlying common stock warrants. Mortimer D. A. Sackler exercises sole voting power with respect to the shares held in the name of Stillwater Holdings LLC as sole member, Mortimer D. A. Sackler exercises sole voting power with respect to the shares held in the name of Rainbow Gate Corporation as investment manager, Mortimer D. A. Sackler exercises sole voting power with respect to the shares held in the name of Stillwater Trust LLC as sole member and President and Mortimer D.A. Sackler has investment control with respect to the shares held in the name of Flat Creek Fiduciary Management LLC, as trustee; therefore Stillwater Holdings LLC is deemed to beneficially own the shares held by Rainbow Gate Corporation and Flat Creek Fiduciary Management LLC.

(2)

This figure represents: (i) 2,799,360 shares of common stock owned by Ginola Limited, which include: 783,325 shares of common stock held indirectly by Rainbow Gate Corporation; 78,478 shares of common stock owned by Mount Union Corp.; and 57,372 shares of common stock owned by Chelsea Trust Company Limited, as trustee (Ginola Limited disclaims beneficial ownership of the shares owned by Rainbow Gate Corporation, Mount Union Corp. and Chelsea Trust Company Limited, as trustee); and (ii) 173,333 shares underlying common stock warrants; and (iii) 2,008,000 shares of common stock underlying Series B Convertible Preferred Stock, which includes 937,333 shares of common stock underlying Series B Convertible Preferred Stock held by Rainbow Gate Corporation. Stillwater Holdings LLC (f/k/a Stillwater LLC) and Ginola Limited are beneficially owned by separate parties and therefore do not exert voting control over one another. However, the figure for Stillwater Holdings LLC includes the shares held by Rainbow Gate Corporation and the sole member of Stillwater Holdings LLC is the investment manager and sole director of Rainbow Gate Corporation that exerts voting control over such shares. Jonathan White, Philip Le Cornu and Joerg Fischer exercise shared voting power with respect to the shares held in the name of Mount Union Corp. Stuart Baker, Joerg Fischer, Christopher Mitchell, Leslie Schreyer and Jonathan White exercise shared voting power with respect to the shares held in the name of Chelsea Trust Company Limited. Jonathan White, Joerg Fischer and Philip Le Cornu are the directors of Ginola Limited and exercise shared voting power with respect to the shares held in the name of Ginola Limited.

(3)

This figure represents 783,325 shares of common stock owned by Rainbow Gate Corporation and 937,333 shares of common stock underlying Series B Convertible Preferred Stock held by Rainbow Gate Corporation. Mortimer D. Sackler exercises the sole voting power with respect to the shares held in the name of Rainbow Gate Corporation.

(4)

This figure represents 168,471 shares of common stock owned by Mr. Cronson, 482,651 shares of common stock underlying options, and 160,000 shares of common stock underlying Series B Convertible Preferred Stock held directly and indirectly by Paul Cronson. This includes (i) 13,294 shares of common stock held indirectly by a family member of Paul Cronson; and (ii) 155,177 shares of common stock and 160,000 shares of common stock underlying Series B Convertible Preferred Stock held indirectly by Navacorp III, LLC. Mr. Cronson exercises sole voting power with respect to the shares held in the name of Navacorp III, LLC.

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- (5) This figure represents 288,800 shares of common stock owned by Andrew G. Sculley and 248,333 shares underlying options.
- (6) This figure represents shares underlying options.
- (7) This figure represents shares underlying options.
- (8) This figure represents shares underlying options.
- (9) This figure represents shares underlying options.
- (10) This figure represents shares underlying options.
- (11) This figure represents 20,585 shares of common stock owned by Amalkumar Ghosh and 40,000 shares underlying options.
- (12) This figure represents 181 shares of common stock owned by Olivier Prache and 40,000 shares underlying options.
- (13) This figure represents shares underlying options.

There are no arrangements known to the Company, including any pledge by any person of securities of the Company, the operation of which may at a subsequent date result in a change in control of the Company.

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DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 200,000,000 shares of common stock, \$0.001 par value per share, and 10,000,000 shares of preferred stock, \$0.001 par value per share. As of November 30, 2017, there were 35,020,523 shares of our common stock outstanding, 5,659 shares of our preferred stock outstanding, warrants issued in December 2015 to purchase 383,500 shares of our common stock, warrants issued in August 2016 to purchase 2,947,949 shares of our common stock outstanding, warrants issued in March 2017 to purchase 100,000 shares of our common stock outstanding and warrants issued in May 2017 to purchase 1,749,000 shares of our common stock outstanding.

The following summary description of our capital stock is based on the provisions of our amended and restated certificate of incorporation, amended and restated bylaws, outstanding warrants and the applicable provisions of the Delaware General Corporation Law. This summary does not purport to be complete and is qualified entirely by reference to the applicable provisions of our amended and restated certificate of incorporation, amended and restated bylaws, outstanding warrants and the Delaware General Corporation Law. For information on how to obtain copies of our amended and restated certificate of incorporation and amended and restated bylaws, which are exhibits to the registration statement of which this prospectus is a part, see "Where You Can Find Additional Information".

Common Stock

We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Subject to the preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by our Board of Directors out of funds legally available therefor. Upon the liquidation, dissolution, or winding up of our company, holders of common stock are entitled to share ratably in all of our assets which are legally available for distribution after payment of all debts and other liabilities and liquidation preference of any outstanding preferred stock. There are no sinking fund provisions applicable to our common stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

Warrants

As of November 30, 2017, we had warrants outstanding and exercisable for 5,563,949 shares of our common stock. Below is a summary of our outstanding warrants.

2015 Warrants

The material terms and provisions of the 2015 warrants are summarized below. The following description is subject to, and qualified in its entirety by, the form of 2015 warrant, which is filed as an exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of 2015 warrant for a complete description of the terms and conditions applicable to the 2015 warrants.

Term. The 2015 warrants became exercisable commencing six months after the date of issuance, for five years, but not thereafter.

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Exercise Price. The exercise price of the 2015 warrants is \$2.05 per share. The exercise price and number of shares of our common stock issuable upon the exercise of the 2015 warrants is subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction.

Exercisability. The 2015 warrants became exercisable commencing six months after the date of issuance and are exercisable at any time during the applicable term of the 2015 warrant. The 2015 warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise. If there is no effective registration statement registering the issuance of the shares underlying the 2015 warrants, then the 2015 warrants may be exercised by means of a cashless exercise.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the 2015 warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the 2015 warrant or round up to the next whole share.

Transferability. Subject to applicable laws, the 2015 warrants may be transferred at the option of the holder upon surrender of the 2015 warrants to us together with the appropriate instruments of transfer.

Authorized Shares. During the period the 2015 warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the 2015 warrants upon the exercise of the 2015 warrants.

Fundamental Transactions. In the event of any fundamental transaction, as described in the 2015 warrants and generally, including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a 2015 warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of us, if we are the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the 2015 warrant is exercisable immediately prior to such event.

Right as a Stockholder. Except as otherwise provided in the 2015 warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the 2015 warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their 2015 warrants.

Waivers and Amendments. The terms of any 2015 warrant may be amended or waived with our written consent and the written consent of the holder of such 2015 warrant.

Beneficial Ownership Limitation. Subject to limited exceptions, a holder of 2015 warrants does not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

2016 Warrants

The material terms and provisions of the 2016 warrants are summarized below. The following description is subject to, and qualified in its entirety by, the form of 2016 warrant, which is filed as an

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exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of 2016 warrant for a complete description of the terms and conditions applicable to the 2016 warrants.

Term. The 2016 warrants became exercisable six months after the date of issuance for five years, but not thereafter.

Exercise Price. The exercise price of the 2016 warrants is \$2.60 per share. The exercise price and number of shares of our common stock issuable upon the exercise of the 2016 warrants is subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction. The exercise price can also be lowered by us, with the prior written consent of the holders of a majority in interest of the 2016 warrants then outstanding, unless prohibited by the listing rules of the exchange on which our common stock is listed.

Exercisability. The 2016 warrants became exercisable commencing six months after the date of issuance and are exercisable at any time during the applicable term of the 2016 warrant. The 2016 warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise. If there is no effective registration statement registering the issuance of the shares underlying the 2016 warrants, then the 2016 warrants may be exercised by means of a cashless exercise.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the 2016 warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the 2016 warrant or round up to the next whole share.

Transferability. Subject to applicable laws, the 2016 warrants may be transferred at the option of the holder upon surrender of the 2016 warrants to us together with the appropriate instruments of transfer, provided that we may require an opinion of counsel in connection with certain transfers.

Authorized Shares. During the period the 2016 warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the 2016 warrants upon the exercise of the 2016 warrants.

Fundamental Transactions. In the event of any fundamental transaction, as described in the 2016 warrants and generally, including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a 2016 warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of us, if we are the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the 2016 warrant is exercisable immediately prior to such event.

Right as a Stockholder. Except as otherwise provided in the 2016 warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the 2016 warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their 2016 warrants.

Waiver and Amendments. The terms of any 2016 warrant, other than a lowering of the exercise price as described above, may be amended or waived with our written consent and the written consent of the holder of such 2016 warrant.

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Beneficial Ownership Limitation. Subject to limited exceptions, a holder of 2016 warrants does not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

Financing Warrants

On March 24, 2017, we entered into an unsecured debt financing arrangement with Stillwater Trust LLC, or Stillwater, an investor who with affiliates collectively control approximately 42% of our outstanding common stock. In connection with the financing arrangement, Stillwater received a warrant to purchase 100,000 shares of our common stock at an exercise price of \$2.25 per share, the closing market price of our common stock on the date the financing arrangement was executed. On May 24, 2017, we voluntarily terminated the financing arrangement. As of the date of its termination, there were no amounts outstanding under the financing arrangement.

The material terms and provisions of the financing warrant are summarized below. The following description is subject to, and qualified in its entirety by, the form of financing warrant, which is filed as an exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of financing warrant for a complete description of the terms and conditions applicable to the financing warrant.

Term. The financing warrants became exercisable six months after the date of issuance for five years, but not thereafter.

Exercise Price. The exercise price of the financing warrants is \$2.25 per share. The exercise price and number of shares of our common stock issuable upon the exercise of the financing warrants is subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction. The exercise price can also be lowered by us, with the prior written consent of the holders of a majority in interest of the financing warrants then outstanding, unless prohibited by the listing rules of the exchange on which our common stock is listed.

Exercisability. The financing warrants became exercisable commencing six months after the date of issuance and are exercisable at any time during the applicable term of the financing warrant. The financing warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the financing warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the financing warrant or round up to the next whole share.

Transferability. Subject to applicable laws, the financing warrants may be transferred at the option of the holder upon surrender of the financing warrants to us together with the appropriate instruments of transfer, provided that we may require an opinion of counsel in connection with certain transfers.

Authorized Shares. During the period the financing warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the financing warrants upon the exercise of the financing warrants.

Fundamental Transactions. In the event of any fundamental transaction, as described in the financing warrants and generally, including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock,

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then upon any subsequent exercise of a financing warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of us, if we are the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the financing warrant is exercisable immediately prior to such event.

Right as a Stockholder. Except as otherwise provided in the financing warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the financing warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their financing warrants.

Waiver and Amendments. The terms of any financing warrant, other than a lowering of the exercise price as described above, may be amended or waived with our written consent and the written consent of the holder of such financing warrant.

2017 Warrants

The material terms and provisions of the 2017 warrants are summarized below. The following description is subject to, and qualified in its entirety by, the form of 2017 warrant, which is filed as an exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of 2017 warrant for a complete description of the terms and conditions applicable to the 2017 warrants.

Term. The 2017 warrants are immediately exercisable upon issuance for five years from the date of issuance, but not thereafter.

Exercise Price. The exercise price of the 2017 warrants is \$2.45 per share. The exercise price and number of shares of our common stock issuable upon the exercise of the 2017 warrants is subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction. The exercise price can also be lowered by us, with the prior written consent of the holders of a majority in interest of the 2017 warrants then outstanding, unless prohibited by the listing rules of the exchange on which our common stock is listed.

Exercisability. The 2017 warrants are immediately exercisable upon issuance and are exercisable at any time during the applicable term of the 2017 warrant. The 2017 warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise. If there is no effective registration statement registering the issuance of the shares underlying the 2017 warrants, then the 2017 warrants may be exercised by means of a cashless exercise.

No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the 2017 warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the 2017 warrants or round up to the next whole share.

Transferability. Subject to applicable laws, the 2017 warrants may be transferred at the option of the holder upon surrender of the 2017 warrants to us together with the appropriate instruments of transfer, provided that we may require an opinion of counsel in connection with certain transfers.

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Authorized Shares. During the period the 2017 warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the 2017 warrants upon the exercise of the 2017 warrants.

Fundamental Transactions. In the event of any fundamental transaction, as described in the 2017 warrants and generally, including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a 2017 warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of us, if we are the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the 2017 warrant is exercisable immediately prior to such event. Any successor to us or surviving entity is obligated to assume the obligations under the 2017 warrants.

Right as a Stockholder. Except as otherwise provided in the 2017 warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the 2017 warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their 2017 warrants.

Waiver and Amendments. The terms of any 2017 warrant, other than a lowering of the exercise price as described above, may be amended or waived with our written consent and the written consent of the holder of such 2017 warrant.

Beneficial Ownership Limitation. Subject to limited exceptions, a holder of 2017 warrants does not have the right to exercise any portion of its warrants if the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of our common stock outstanding immediately after giving effect to such exercise.

Warrants to be Issued in this Offering

The material terms and provisions of the warrants being issued in this offering are summarized below. The following description is subject to, and qualified in its entirety by, the form of warrant, which will be filed as an exhibit to the registration statement of which this prospectus is a part. You should review a copy of the form of warrant for a complete description of the terms and conditions applicable to the warrants.

Term. The warrants are immediately exercisable upon issuance for five years from the date of issuance, but not thereafter.

Exercise Price. The exercise price of the warrants is \$ _____ per share. The exercise price and number of shares of our common stock issuable upon the exercise of the warrants is subject to adjustment in the event of any stock dividends and splits, reverse stock split, stock dividend, recapitalization, reorganization or similar transaction. The exercise price can also be lowered by us, with the prior written consent of the holders of a majority in interest of the warrants then outstanding, unless prohibited by the listing rules of the exchange on which our common stock is listed.

Exercisability. The warrants are immediately exercisable upon issuance and are exercisable at any time during the applicable term of the warrant. The warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise. If there is no effective registration statement registering the issuance of the shares underlying the warrants, then the warrants may be exercised by means of a cashless exercise.

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No Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the warrants. As to any fraction of a share which the holder would otherwise be entitled to purchase upon such exercise, we shall, at our election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price of the warrant or round up to the next whole share.

Transferability. Subject to applicable laws, the warrants may be transferred at the option of the holder upon surrender of the warrants to us together with the appropriate instruments of transfer, provided that we may require an opinion of counsel in connection with certain transfers.

Authorized Shares. During the period the warrants are outstanding, we will reserve from our authorized and unissued common stock a sufficient number of shares to provide for the issuance of shares of common stock underlying the warrants upon the exercise of the warrants.

Fundamental Transactions. In the event of any fundamental transaction, as described in the warrants and generally, including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, then upon any subsequent exercise of a warrant the holder shall have the right to receive as alternative consideration, for each share of our common stock that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of shares of common stock of the successor or acquiring corporation or of us, if we are the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of shares of our common stock for which the warrant is exercisable immediately prior to such event. Any successor to us or surviving entity is obligated to assume the obligations under the warrants.

Right as a Stockholder. Except as otherwise provided in the warrants or by virtue of such holder's ownership of shares of our common stock, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Waiver and Amendments. The terms of any warrant, other than a lowering of the exercise price as described above, may be amended or waived with our written consent and the written consent of the holder of such warrant.

Beneficial Ownership Limitation. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of its warrants if the holder (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of our common stock in excess of 4.99% (or, at the election of the holder, 9.99%) of the shares of our common stock then outstanding immediately after giving effect to such exercise (the "Beneficial Ownership Limitation"); provided, however, that upon notice to us, the holder may increase or decrease the Beneficial Ownership Limitation; provided, further, that in no event shall the Beneficial Ownership Limitation exceed 9.99% and in no event shall any increase in the Beneficial Ownership Limitation be effective until 61 days following notice of such increase from the holder to us.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. The 10,000,000 shares of preferred stock authorized are undesignated as to preferences, privileges and restrictions. Our Board of Directors will determine the rights, preferences and privileges of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation

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preferences, sinking fund terms and the number of shares constituting any series or the designation of any series.

On December 19, 2008, we filed a Certificate of Designations with the State of Delaware which designates 10,000 shares of our preferred stock as Series B Convertible Preferred Stock. The preferred stock has a stated value of \$1,000 and has a conversion price of \$0.75 per share. The preferred stock does not pay interest. The holders of the preferred stock are not entitled to receive dividends unless the Board of Directors declares a dividend for holders of our common stock and then the dividend shall be equal to the amount that such holder would have been entitled to receive if the holder converted its preferred stock into shares of our common stock. Each share of preferred stock has voting rights equal to (i) the number of shares of our common stock issuable upon conversion of such shares of preferred stock at such time (determined without regard to the shares of common stock so issuable upon such conversion in respect of accrued and unpaid dividends on such share of preferred stock) when the preferred stock votes together with our common stock or any other class or series of our capital stock and (ii) one vote per share of preferred stock when such vote is not covered by the immediately preceding clause. In the event of our liquidation, dissolution, or winding up, the preferred stock is entitled to receive liquidation preference before the common stock. We may at our option redeem the preferred stock by providing the required notice to the holders of the preferred stock and paying an amount equal to \$1,000 multiplied by the number of shares for all of such holder's shares of outstanding preferred stock to be redeemed.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our amended and restated certificate of incorporation if the amendment would change the par value, the number of authorized shares of the class or the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Delaware Law and Certain Charter and By-law Provisions

Provisions of Delaware law, our certificate of incorporation and our by-laws may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable. These provisions may also prevent or delay attempts by stockholders to replace or remove our current management or members of our Board of Directors. These provisions include:

limitations on the removal of directors;

advance notice requirements for stockholder proposals and nominations;

the inability of stockholders to act by written consent or to call special meetings;

the ability of our Board of Directors to make, alter or repeal our by-laws; and

the authority of our Board of Directors to issue preferred stock with such terms as our Board of Directors may determine.

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In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law statute. Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within the prior three years did own, 15% or more of the corporation's voting stock.

Our certificate of incorporation contains certain provisions permitted under Delaware General Corporation Law relating to the liability of directors. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty, except in certain circumstances where such liability may not be eliminated under applicable law. Further, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by Delaware General Corporation Law.

Transfer Agent and Registrar

Our transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company, 1 State Street, 30th Floor, New York, NY 10004.

Listing

Our common stock is listed on the NYSE American under the symbol "EMAN."

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CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR U.S. HOLDERS

This section summarizes certain U.S. federal income tax considerations relating to the purchase, ownership and disposition of common stock and warrants by "U.S. Holders" (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof (subject to the discussion of the Tax Legislation in the succeeding paragraph). These authorities may be changed or subject to differing interpretations, possibly with retroactive effect, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local or any non-U.S. jurisdiction, the Medicare tax on net investment income or any alternative minimum tax consequences. Furthermore, it is anticipated as of this writing that the Tax Legislation may be signed by the President in the days or hours surrounding the date of this prospectus, and this summary may not fully account for all changes that may have been made by the Tax Legislation (particularly if there are changes that may not have been anticipated based on drafts of the Tax Legislation). In addition, this discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

a broker, dealer or trader in securities, currencies, commodities, or notional principal contracts;

a bank, financial institution or insurance company;

a regulated investment company, a real estate investment trust or grantor trust;

a tax-exempt entity or organization, including an individual retirement account or Roth IRA as defined in Section 408 or 408A of the Code, respectively;

a person holding the common stock or warrants as part of a hedging, integrated, or conversion transaction or a straddle, or a person deemed to sell common stock or warrants under the constructive sale provisions of the Code;

a trader in securities that has elected the mark-to-market method of tax accounting for securities

an entity that is treated as a partnership or other pass-through entity for U.S. federal income tax purposes;

a person who is a partner or investor in a partnership or other pass-through entity that holds the common stock or warrants;

a U.S. person whose "functional currency" is not the U.S. dollar;

persons who do not hold our common stock or warrants units as capital assets within the meaning of Section 1221 of the Code (generally, for investment purposes);

persons that acquire our common stock or warrants through the exercise of employee stock options or otherwise as compensation for services;

certain U.S. expatriates; or

non-U.S. holders.

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For purposes of this discussion, a "U.S. holder" is a beneficial owner of a warrant or a share of common stock that is, for U.S. federal income tax purposes:

an individual who is a citizen or resident of the United States;

a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust if (1) it is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If a partnership holds shares of common stock or warrants, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. A partnership holding shares of common stock or warrants or a partner therein should consult its own tax advisors as to the tax consequences of holding and disposing of the warrants or shares of common stock.

YOU ARE URGED TO CONSULT YOUR TAX ADVISOR WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK OR WARRANTS ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY U.S. STATE OR LOCAL OR ANY NON-U.S. OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Investment Unit

The common stock and warrants should be treated for U.S. federal income tax purposes as an investment unit consisting of one share of our common stock and one warrant to acquire _____ shares of our common stock. For U.S. federal income tax purposes, the purchase price paid for each investment unit will be allocated between the shares of common stock and the warrants based on their respective relative fair market values. This allocation will be based upon our determination of the relative values of the warrants and of our common stock, which we will complete following the closing of this offering. Pursuant to this treatment, a holder's initial tax basis in the common stock and the warrants included in each unit should equal the portion of the purchase price of the unit allocated thereto. While uncertain, the IRS, by analogy to the rules relating to the allocation of the purchase price to components of a unit consisting of debt and equity, may take the position that this allocation is binding on you unless you explicitly disclose in a statement attached to your timely filed U.S. federal income tax return for the tax year that includes your acquisition date of the unit that your allocation of the purchase price is different than our allocation. This allocation is not binding, however, on the IRS or the courts. Prospective investors are urged to consult their tax advisors regarding the U.S. federal income tax consequences of an investment in a unit, and the allocation of the purchase price paid for a unit.

Certain U.S. Federal Income Tax Considerations for U.S. Holders of Common Stock and Warrants

Dividends on our Common Stock

We do not expect to declare or pay any distributions on our common stock in the foreseeable future. If we do make any distributions on shares of our common stock, however, such distributions will be includible in the gross income of a U.S. holder as ordinary dividend income to the extent paid out

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of current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Any portion of a distribution in excess of current or accumulated earnings and profits would be treated as a return of the holder's tax basis in its common stock and then as gain from the sale or exchange of the common stock. Under current law, if certain requirements are met, a preferential U.S. federal income tax rate will apply to any dividends paid to a holder of common stock who is a U.S. individual.

Distributions to U.S. holders that are corporate stockholders, constituting dividends for U.S. federal income tax purposes, may qualify for the dividends received deduction, or DRD, which is generally available to corporate stockholders. No assurance can be given that we will have sufficient earnings and profits (as determined for U.S. federal income tax purposes) to cause any distributions to be eligible for a DRD. In addition, a DRD is available only if certain holding periods and other taxable income requirements are satisfied.

Sale or Other Disposition of Common Stock or Warrants

A U.S. holder of common stock or warrants will generally recognize gain or loss on the taxable sale, exchange, or other taxable disposition of such stock or warrants in an amount equal to the difference between such U.S. holder's amount realized on the sale and its adjusted tax basis in the common stock or warrants sold. A U.S. holder's amount realized should equal the amount of cash and the fair market value of any property received in consideration of its stock or warrants. The gain or loss should be capital gain or loss and should be long-term capital gain or loss if the common stock or warrants are held for more than one year at the time of disposition. The deductibility of capital losses for U.S. federal income tax purposes is subject to limitations under the Code. Under current law, long-term capital gain recognized by an individual U.S. holder is generally eligible for a preferential U.S. federal income tax rate.

Exercise of Warrants

Except as discussed below with respect to a cashless exercise of a warrant or with respect to cash in lieu of a fractional share, upon the exercise of a warrant for common stock, a U.S. holder generally will not recognize gain or loss and will have a tax basis in the common stock received upon exercise equal to the U.S. holder's tax basis in the warrant, plus the exercise price of the warrant less any portion of the tax basis attributable to receipt of cash in lieu of a fractional share. The holding period for the common stock purchased pursuant to the exercise of a warrant will begin on the date following the date of exercise and will not include the period during which the U.S. holder held the warrant. Your receipt of cash in lieu of a fractional share of common stock will generally be treated as if you received the fractional share and then received such cash in redemption of such fractional share. Such redemption will generally result in the recognition of capital gain or loss equal to the difference between the amount of cash received and your adjusted U.S. federal income tax basis in the warrant that is allocable to the fractional share you are deemed to have received.

The tax treatment of a cashless exercise of a warrant (i.e., where a portion of the holder's warrants are surrendered (the "Surrendered Warrants") as the exercise price for other warrants to be exercised (the "Exercised Warrants") is uncertain. Although the matter is not free from doubt, we intend to treat a cashless exercise as a tax-free transaction in which a holder's tax basis in the common stock received equals the sum of the U.S. holder's tax basis in the Surrendered Warrants and the Exercised Warrants. It is also possible, however, that a cashless exercise could be treated as a taxable transaction, and a U.S. Holder could recognize taxable gain or loss in an amount equal to the difference between the exercise price deemed paid and such U.S. holder's tax basis in the Surrendered Warrants. In this case, a U.S. Holder's tax basis in the common stock received would equal the sum of the exercise price deemed paid and the U.S. Holder's tax basis in the warrants exercised.

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The holding period for common stock acquired in a cashless exercise will depend on the U.S. federal income tax treatment of a cashless exercise. The holding period for a share of common stock acquired in a cashless exercise would include the holding period of the Surrendered Warrants and Exercised Warrants if the cashless exercise is treated as a tax-free transaction. The holding period for a share of common stock acquired in a cashless exercise would begin on the day following the date of exercise if the cashless exercise is treated as a taxable exchange or treated similarly to a cash exercise (even if otherwise a tax-free transaction). Due to the absence of authority on the U.S. federal income tax treatment of a cashless exercise, there can be no assurance which, if any, of the alternative tax consequences and holding periods described above would be adopted by the IRS or a court of law. Accordingly, holders are urged to consult their tax advisors as to the tax consequences of a cashless exercise.

Lapse of Warrants

If a warrant is allowed to lapse unexercised, a U.S. holder will recognize a capital loss in an amount equal to its tax basis in the warrant. Such loss will be long-term capital loss if the warrant has been held for more than one year as of the date the warrant lapsed. The deductibility of capital losses is subject to limitations.

Certain Adjustments to Warrants

Under Section 305 of the Code, an adjustment to the number of shares of common stock that will be issued on the exercise of the warrants, or an adjustment to the exercise price of the warrants, may be treated as a constructive distribution to a U.S. holder of the warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. holder's proportionate interest in our "earnings and profits" or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our shareholders). In this regard, adjustments to the exercise price of a warrant made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the warrants should generally not result in a constructive distribution. Any deemed distribution would be taxable as a dividend, return of capital, or capital gain in accordance with the earnings and profits rules under the Code. It is not clear whether a constructive dividend deemed paid would be eligible for the preferential rates of U.S. federal income tax applicable to certain dividends paid to non-corporate beneficial owners. It is also not clear whether corporate beneficial owners would be entitled to claim the DRD with respect to any such constructive dividends.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to payments of dividends on shares of common stock and may apply to the proceeds of a sale of common stock, in each case unless a U.S. holder is an exempt recipient, such as a corporation. Backup withholding will apply to those payments if a U.S. holder fails to provide its correct taxpayer identification number and certification of exempt status. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

THE PRECEDING DISCUSSION OF U.S. FEDERAL TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY. IT IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK OR WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

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UNDERWRITING

Pursuant to the underwriting agreement with Craig-Hallum Capital Group LLC, as representative of the underwriters named below, we have agreed to issue and sell, and the underwriters have severally and not jointly agreed to purchase, as principals, subject to compliance with all necessary legal requirements and the terms and conditions contained in the underwriting agreement, a total of fixed combinations, each consisting of a share and a warrant to purchase one half share, at the public offering price of \$ _____ per fixed combination, less the underwriting discount, on the closing date. The public offering price shown on the cover of this prospectus was determined by negotiation between us and the representative and based on market conditions. The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the securities sold in this offering. That price is subject to change as a result of market conditions and other factors and we cannot assure you that the securities sold in this offering can be resold at or above the public offering price. A copy of the underwriting agreement will be filed as an exhibit to the registration statement of which this prospectus is a part. The shares of common stock and warrants we are offering are being offered by the underwriters pursuant to the underwriting agreement, subject to certain conditions specified in the underwriting agreement. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discount set forth on the cover page of this prospectus, the number of fixed combinations listed next to its name in the following table:

	Number of Fixed Combinations
Craig-Hallum Capital Group LLC	[REDACTED]
H.C. Wainwright & Co., LLC	[REDACTED]

Total

The underwriters propose to offer the fixed combinations initially at the public offering price. After a reasonable effort has been made to sell all of the combinations at the public offering price, the underwriters may subsequently reduce the selling price to investors from time to time in order to sell any of the combinations remaining unsold. Any such reduction will not affect the proceeds received by us. Any securities sold by the underwriters to securities dealers will be sold at the public offering price less a selling concession not in excess of \$ _____ per share. The underwriters may allow and these selected dealers may re-allow a concession of not more than \$ _____ per share to other brokers and dealers

The obligations of the underwriters under the underwriting agreement are several, and not joint, and may be terminated at their discretion at any time prior to any closing date upon the occurrence of certain events specified in the underwriting agreement, including standard "material adverse effect out" and "market out" rights of termination. In the event the underwriting agreement is terminated pursuant to its terms, we shall be obligated to pay the underwriters their actual and accountable out of pocket expenses related to the transactions contemplated therein then due and payable, including the fees and disbursements of underwriters' legal counsel, provided, however, that such expense cap in no way limits or impairs the indemnification and contribution provisions of the underwriting agreement.

Table of Contents**Underwriting Discount and Expenses**

The following table summarizes the underwriting discount and commission to be paid to the underwriters by us.

	Per Fixed Combination of share and warrant	Total
Offering price	\$	\$
Underwriting discounts and commissions(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1)

The underwriters will receive a reduced underwriting discount in respect to shares and warrants sold to certain existing stockholders and certain investors identified by us, if such stockholders or investors participate in this offering.

The underwriters are obligated to take up and pay for all the combinations offered by this prospectus if any are purchased under the underwriting agreement, subject to certain exceptions.

We estimate the total expenses payable by us for this offering to be approximately \$ _____ which amount includes (i) the underwriting discount of \$ _____ (\$ _____ if the underwriters' over-allotment option is exercised in full), (ii) reimbursement of the expenses of the representative up to \$100,000, including the legal fees of the representative being paid by us and (iii) other estimated company expenses of approximately \$ _____, which includes legal, accounting, printing costs and various fees associated with the registration and listing of our shares.

As a condition precedent to the underwriters' obligation to close the offering, subject to customary exemptions permitting dispositions to trusts for the direct or indirect benefit of the director or officer and/or the immediate family of such person and pursuant to any existing 10b5-1 plans, all directors and officers of the Company shall be required to execute and deliver written undertakings in favor of the underwriters agreeing not to sell, transfer, pledge (other than as disclosed to the underwriters in writing), assign, or otherwise dispose of any of our securities owned, directly or indirectly by such directors or officers, until 90 days following the closing date, without the prior written consent of the representative.

Over-allotment Option

We have granted to the representative an option exercisable not later than 45 days after the date of this prospectus to purchase up to a number of additional shares of common stock and/or warrants equal to 15% of the number of shares of common stock sold in the primary offering at the public offering price per share of common stock sold in the primary offering (excluding any shares of common stock underlying the warrants issued in this offering and any shares of common stock issued upon any exercise of the underwriters' over-allotment option) and/or 15% of the warrants sold in the primary offering at the public offering price per share of common stock and the public offering price per warrant set forth on the cover page hereto less the underwriting discounts and commissions. The representative may exercise the option to cover over-allotments, if any, made in connection with this offering. If any additional shares of common stock and/or warrants are purchased, the representative will offer these shares of common stock and/or warrants on the same terms as those on which the other securities are being offered

Lock-up Agreements

Our officers, directors, and certain stockholders and each of their respective affiliates and associated partners have agreed with the underwriters to be subject to a lock-up period of 90 days

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following the date of this prospectus. This means that, during the applicable lock-up period, such persons may not offer for sale, contract to sell, sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate or otherwise dispose of, directly or indirectly, any shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. We have also agreed in the underwriting agreement that from the date of the underwriting agreement until 90 days thereafter, neither the Company nor any subsidiary of the Company shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of common stock or common stock equivalents.

Stabilization, Short Positions and Penalty Bids

The underwriters may engage in syndicate covering transactions, stabilizing transactions and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of our securities:

Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Such a naked short position would be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specific maximum.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These syndicate covering transactions, stabilizing transactions and penalty bids may have the effect of raising or maintaining the market prices of our securities or preventing or retarding a decline in the market prices of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. 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 securities. These transactions may be effected on the NYSE American, in the over-the-counter market or on any other trading market and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriters also may engage in passive market making transactions in our securities in accordance with Regulation M during a period before the commencement of offers or sales of shares of our securities in this offering and extending through the completion of the distribution. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for that security. However, if all independent bids are lowered below the passive market maker's bid that bid must then be lowered when specific purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the prices of our securities. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transactions, once commenced will not be discontinued without notice.

Indemnification

We have agreed, pursuant to the underwriting agreement, to indemnify the underwriters, and each dealer selected by each underwriter that participated in the offering (each, a "Selected Dealer") and

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each of their respective directors, officers and employees and each person, if any who controls such underwriter or any Selected Dealer against certain liabilities, including liabilities under U.S. securities laws in certain circumstances or to contribute to payments the underwriters may have to make because of such liabilities.

Other Relationships

Upon completion of this offering, we have granted the representative a right of first refusal to act as lead bookrunner, placement agent or manager in connection with any subsequent public or private offering of equity securities, debt financing or refinancing, or other capital markets financing by us. This right of first refusal extends until March 31, 2018. The terms of any such engagement of the representative will be determined by separate agreement.

Our common stock is listed on the NYSE American under the symbol "EMAN."

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. Other than the prospectus in electronic format, the information on the websites of any such underwriter or selling group member is not part of this prospectus. The representative may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations.

Selling Restrictions

European Economic Area

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), an offer to the public of any securities which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any securities may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

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, 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 underwriters or the underwriters nominated by us for any such offer; or

in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of securities shall require us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of securities to the public" in relation to the securities 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 to the securities, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the

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Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated (each such person being referred to as a "relevant person").

This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;

a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the Company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

a person associated with the Company under Section 708(12) of the Corporations Act; or

a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to professional investors, as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong ("SFO") and any rules made under that Ordinance; or in other circumstances which do not result in the document being a prospectus, as defined in the Companies Ordinance (Cap. 32) of Hong Kong ("CO") or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or

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advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors, as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the initial purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities 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 "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) 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

a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months

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after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

where no consideration is or will be given for the transfer;

where the transfer is by operation of law;

as specified in Section 276(7) of the SFA; or

as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The securities 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 document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a of the CO 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. Neither this prospectus nor any other offering or marketing relating to the securities or this offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to this offering, the Company or the securities has been or will be filed with or approved by any Swiss regulatory authority.

Canada

The securities may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

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LEGAL MATTERS

The validity of the securities offered hereby has been passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Ellenoff Grossman & Schole LLP is representing the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of eMagin Corporation as of December 31, 2016 and 2015 and for each of the years in the two-year period ended December 31, 2016 have been audited by RSM US LLP, an independent registered public accounting firm, as stated in their report thereon and included in this prospectus and registration statement in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We post on our public website (www.emagin.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

You can find, copy and inspect information we file with the SEC at the SEC's public reference room, which is located at 100 F Street, N.E. Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. You can also review our electronically filed reports and other information that we file with the SEC on the SEC's website at <http://www.sec.gov>.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contained more information than this prospectus regarding us and the securities, including exhibits and schedules. You can obtain a copy of the registration statement from the SEC at any address listed above or from the SEC's website. You should review the information and exhibits in the registration statement for further information on us and our consolidated subsidiary and the securities we are offering. Statements in this prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

Andrew G. Sculley, Chief Executive Officer
eMagin Corporation
2070 Route 52
Hopewell Junction, NY 12533
(845) 838-7900

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders
eMagin Corporation

We have audited the accompanying consolidated balance sheets of eMagin Corporation and Subsidiary (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of operations, changes in shareholders' equity and cash flows for the years then ended. 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. The Company is not required to have, nor were we engaged to perform, an audit of its 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of eMagin Corporation and Subsidiary as of December 31, 2016 and 2015, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ RSM US LLP
Seattle, Washington
March 28, 2017

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eMAGIN CORPORATION

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)

	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 5,241	\$ 9,273
Accounts receivable, net	2,834	3,508
Unbilled accounts receivable	1,401	1,445
Inventories	7,435	3,901
Prepaid expenses and other current assets	1,040	489
Total current assets	17,951	18,616
Equipment, furniture and leasehold improvements, net	8,980	9,131
Intangibles and other assets	282	336
Total assets	\$ 27,213	\$ 28,083
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,432	\$ 1,636
Accrued compensation	1,528	1,246
Revolving credit facility, net	1,689	
Other accrued expenses	1,513	1,193
Other current liabilities	591	602
Total current liabilities	6,753	4,677
Commitments and contingencies (Note 11)		
Shareholders' equity:		
Preferred stock, \$.001 par value: authorized 10,000,000 shares:		
Series B Convertible Preferred stock, (liquidation preference of \$5,659,000) stated value \$1,000 per share, \$.001 par value: 10,000 shares designated and 5,659 issued and outstanding as of December 31, 2016 and 2015		
Common stock, \$.001 par value: authorized 200,000,000 shares, issued 31,788,582 shares as of December 31, 2016 and 29,550,170 shares as of December 31, 2015	32	30
Additional paid-in capital	239,915	234,814
Accumulated deficit	(218,987)	(210,938)
Treasury stock, 162,066 shares as of December 31, 2016 and 2015	(500)	(500)
Total shareholders' equity	20,460	23,406
Total liabilities and shareholders' equity	\$ 27,213	\$ 28,083

See notes to Consolidated Financial Statements.

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eMAGIN CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share data)

	Year Ended December 31,	
	2016	2015
Revenues:		
Product	\$ 17,265	\$ 20,912
Contract	3,132	4,230
License	1,000	
Total revenues, net	21,397	25,142
Cost of revenues:		
Product	12,988	15,466
Contract	1,967	2,698
License		
Total cost of revenues	14,955	18,164
Gross profit	6,442	6,978
Operating expenses:		
Research and development	6,362	4,353
Selling, general and administrative	8,411	6,687
Total operating expenses	14,773	11,040
Loss from operations	(8,331)	(4,062)
Other income (expense):		
Interest expense, net	(30)	(43)
Other income, net	313	
Total other income (expense), net	283	(43)
Loss before provision for income taxes	(8,048)	(4,105)
Provision for income taxes	(1)	
Net Loss	\$ (8,049)	\$ (4,105)
Loss per share, basic	\$ (0.27)	\$ (0.16)
Loss per share, diluted	\$ (0.27)	\$ (0.16)

Weighted average number of shares outstanding:

Basic	30,172,927	25,296,040
Diluted	30,172,927	25,296,040

See notes to Consolidated Financial Statements.

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eMAGIN CORPORATION

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(In thousands, except share data)

	Preferred Shares	Preferred Stock	Common Shares	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Treasury Stock	Total Shareholders' Equity
Balance, December 31, 2014	5,659	\$	25,195,107	\$ 25	\$ 228,380	\$ (206,833)	\$ (500)	\$ 21,072
Exercise of common stock options			254,351	1	266			267
Stock based compensation					606			606
Common stock issued for cash, net of issuance costs			4,100,712	4	5,562			5,566
Net loss						(4,105)		(4,105)
Balance, December 31, 2015	5,659		29,550,170	30	234,814	(210,938)	(500)	23,406
Exercise of common stock options			21,912		45			45
Exercise of Warrants			2,216,500	2	4,285			4,287
Stock based compensation					771			771
Net loss						(8,049)		(8,049)
Balance, December 31, 2016	5,659	\$	31,788,582	\$ 32	\$ 239,915	\$ (218,987)	\$ (500)	\$ 20,460

See notes to Consolidated Financial Statements.

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eMAGIN CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,	
	2016	2015
Cash flows from operating activities:		
Net loss	\$ (8,049)	\$ (4,105)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,641	1,530
Reduction in provision for doubtful accounts		(543)
Increase (reduction) in inventory reserve	(49)	1,253
Stock-based compensation	771	606
Loss on sale of asset	1	12
Changes in operating assets and liabilities:		
Accounts receivable	674	(87)
Unbilled accounts receivable	44	(279)
Inventories	(3,485)	(567)
Prepaid expenses and other current assets	(551)	155
Accounts payable, accrued expenses, and other current liabilities	387	764
Net cash used in operating activities	(8,616)	(1,261)
Cash flows from investing activities:		
Purchase of equipment	(1,437)	(1,189)
Maturities of investments		750
Net cash used in investing activities	(1,437)	(439)
Cash flows from financing activities:		
Proceeds from warrant exercise, net	4,287	
Proceeds from sale of common stock		5,566
Borrowings under revolving line of credit, net	1,689	
Payments made in financing of intangibles		(150)
Proceeds from exercise of stock options	45	267
Net cash provided by financing activities	6,021	5,683
Net increase (decrease) in cash and cash equivalents	(4,032)	3,983
Cash and cash equivalents, beginning of period	9,273	5,290
Cash and cash equivalents, end of period	\$ 5,241	\$ 9,273
Cash paid for interest	\$ 29	\$ 13
Cash paid for income taxes	\$ 1	\$

See notes to Consolidated Financial Statements.

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eMAGIN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 Nature Of Business

eMagin Corporation and its wholly owned subsidiary, Virtual Vision, Inc. (the "Company") designs, manufactures and supplies OLED-on-silicon microdisplays and virtual imaging products which utilize OLED microdisplays. The Company's products are sold mainly in North America, Asia, and Europe.

Note 2 Significant Accounting Policies

Basis of presentation

The accompanying consolidated financial statements include the accounts of eMagin Corporation and its wholly owned subsidiary. All intercompany transactions have been eliminated in consolidation. The Company manages its operations on a consolidated, integrated basis in order to optimize its equipment and facilities and to effectively service its global customer base, and concludes that it operates in a single business segment.

Use of estimates

In accordance with accounting principles generally accepted in the United States of America, management utilizes certain estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments related to, among others, allowance for doubtful accounts, warranty reserves, inventory reserves, stock-based compensation expense, deferred tax asset valuation allowances, litigation and other loss contingencies. Management bases its estimates and judgments on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

Revenue and cost recognition

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, selling price is fixed or determinable and collection is reasonably assured. Product revenue is generally recognized when products are shipped to customers.

The Company also earns revenues from certain research and development ("R&D") activities (contract revenues) under both firm fixed-price contracts and cost-type contracts. Revenues relating to firm fixed-price contracts and cost-type contracts are generally recognized on the percentage-of-completion method of accounting as costs are incurred (cost-to-cost basis). Progress is generally based on a cost-to-cost approach; however, an alternative method may be used such as physical progress, labor hours or others depending on the type of contract. Physical progress is determined as a combination of input and output measures as deemed appropriate by the circumstances. Contract costs include all direct material and labor costs and an allocation of allowable indirect costs as defined by each contract, as periodically adjusted to reflect revised agreed upon rates. These rates are subject to audit by the other party.

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eMAGIN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 2 Significant Accounting Policies (Continued)***Product warranty***

The Company offers a one-year product replacement warranty. In general, the standard policy is to repair or replace the defective products. The Company accrues for estimated returns of defective products at the time revenue is recognized based on historical experience as well as for specific known product issues. The determination of these accruals requires the Company to make estimates of the frequency and extent of warranty activity and estimate future costs to replace the products under warranty. If the actual warranty activity and/or repair and replacement costs differ significantly from these estimates, adjustments to cost of revenue may be required in future periods.

The following table provides a summary of the activity related to the Company's warranty liability, included in other current liabilities, during the years ended December 31, 2016 and 2015 (in thousands):

	Year Ended December 31,	
	2016	2015
Beginning balance	\$ 599	\$ 663
Warranty accruals	375	455
Warranty claims	(390)	(519)
Ending balance	\$ 584	\$ 599

Research and development expenses

Research and development costs are expensed as incurred.

Cash and cash equivalents

All highly liquid instruments with an original maturity of three months or less at the date of purchase are considered to be cash equivalents.

Accounts receivable

The majority of the Company's commercial accounts receivable are due from Original Equipment Manufacturers ("OEM's"). Credit is extended based on an evaluation of a customer's financial condition and, generally, collateral is not required. Accounts receivable are payable in U.S. dollars, are due within 30-90 days and are stated at amounts due from customers net of an allowance for doubtful accounts. Any account outstanding longer than the contractual payment terms is considered past due.

Unbilled accounts receivable

Unbilled receivables principally represent revenues recorded under the percentage-of-completion method of accounting that have not been billed to customers in accordance with the contractual terms of the arrangement. We anticipate that the majority of the balance at December 31, 2016 will be collected during the 2017 fiscal year. As of December 31, 2016 and 2015, unbilled accounts receivable was \$1.4 million and \$1.4 million, respectively.

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eMAGIN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 2 Significant Accounting Policies (Continued)

Allowance for doubtful accounts

The allowance for doubtful accounts reflects an estimate of probable losses inherent in the accounts receivable balance. The allowance is determined based on a variety of factors, including the length of time receivables are past due, historical experience, the customer's current ability to pay its obligation, and the condition of the general economy and the industry as a whole. The Company will record a specific reserve for individual accounts when the Company becomes aware of a customer's inability to meet its financial obligations, deterioration in the customer's operating results or financial position, or deterioration in the customer's credit history. If circumstances related to customers change, the Company would further adjust estimates of the recoverability of receivables. Account balances, when determined to be uncollectible, are charged against the allowance.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the first-in first-out method. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. The Company regularly reviews inventory quantities on hand, future purchase commitments with the Company's suppliers, and the estimated utility of the inventory. If the Company review indicates a reduction in utility below carrying value, the inventory is reduced to a new cost basis.

Equipment, furniture and leasehold improvements

Equipment, furniture and leasehold improvements are stated at cost. Depreciation on equipment is calculated using the straight-line method of depreciation over the estimated useful life ranging from three to 10 years. Amortization of leasehold improvements is calculated by using the straight-line method over the shorter of their estimated useful lives or lease terms. Expenditures for maintenance and repairs are charged to expense as incurred.

The Company performs impairment tests on its long-lived assets when circumstances indicate that their carrying amounts may not be recoverable. If required, recoverability is tested by comparing the estimated future undiscounted cash flows of the asset or asset group to its carrying value. Impairment losses, if any, are recognized based on the excess of the assets' carrying amounts over their estimated fair values.

Intangible assets

Included in the Company's intangible assets are patents that are recorded at purchase price as of the date acquired and amortized over the expected useful life which is generally the remaining life of the patent. In 2014, the Company purchased several patents for \$290 thousand which are being amortized over their remaining useful life. As of December 31, 2016 and 2015, intangible assets were \$355 thousand less accumulated amortization of \$166 thousand and \$112 thousand, respectively. As of December 31, 2016, the weighted average remaining useful life of the patents was approximately 5.3 years.

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eMAGIN CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 2 Significant Accounting Policies (Continued)

Total intangible amortization expense was approximately \$54 thousand and \$58 thousand for each of the years ended December 31, 2016 and 2015, respectively. Estimated future amortization expense as of December 31, 2016 is as follows (in thousands):

Fiscal Years ending December 31,	Total Amortization
2017	\$ 54
2018	54
2019	32
2020	9
2021	8
Later years	32
	\$ 189

Advertising

Costs related to advertising and promotion of products are charged to sales and marketing expense as incurred. There was no advertising expense for the years ended December 31, 2016 and 2015.

Shipping and handling fees

The Company includes costs related to shipping and handling in cost of goods sold.

Income taxes

The Company accounts for income taxes under an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns. The effect on deferred tax assets and liabilities of changes in tax rates will be recognized as income or expense in the period that the change occurs. A valuation allowance for deferred tax assets is recorded when it is more likely than not that some or all of the benefit from the deferred tax asset will not be realized. Changes in circumstances, assumptions and clarification of uncertain tax regimes may require changes to any valuation allowances associated with the Company's deferred tax assets.

Due to the Company's operating loss carryforwards, all tax years remain open to examination by the major taxing jurisdictions to which the Company is subject. In the event that the Company is assessed interest or penalties at some point in the future, it will be classified in the financial statements as tax expense.

Income (loss) per common share

Basic income (loss) per share ("Basic EPS") is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the reporting period. Diluted income (loss) per share ("Diluted EPS") is computed by dividing the net income (loss) by the weighted average number of common shares outstanding during the reporting period while also giving effect to all potentially dilutive common shares that were outstanding during the reporting period.

Table of Contents**eMAGIN CORPORATION****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****Note 2 Significant Accounting Policies (Continued)**

In accordance with ASC 260, entities that have issued securities other than common stock that participate in dividends with the common stock ("participating securities") are required to apply the two-class method to compute basic EPS. The two-class method is an earnings allocation method under which EPS is calculated for each class of common stock and participating security as if all such earnings had been distributed during the period. On December 22, 2008, the Company issued Convertible Preferred Stock Series B which participates in dividends with the Company's common stock and is therefore considered to be a participating security. The participating convertible preferred stock is not required to absorb any net loss. The Company uses the more dilutive method of calculating the diluted earnings per share, either the two class method or "if-converted" method. Under the "if-converted" method, the convertible preferred stock is assumed to have been converted into common shares at the beginning of the period.

For the years ended December 31, 2016 and 2015, the Company reported a net loss and as a result, basic and diluted loss per common share are the same. Therefore, in calculating net loss per share amounts, shares underlying the potentially dilutive common stock equivalents were excluded from the calculation of diluted net income per common share because their effect was anti-dilutive.

The following is a table of the potentially dilutive common stock equivalents for the years ended December 31, 2016 and 2015 that were not included in diluted EPS as their effect would be anti-dilutive:

	For the Year Ended December 31,	
	2016	2015
Options	5,055,741	4,218,139
Warrants	3,331,449	2,600,000
Convertible preferred stock	7,545,333	7,545,333
Total potentially dilutive common stock equivalents	15,932,523	14,363,472