

EMAGIN CORP
Form 10-K
March 29, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

or

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

For the transition period from _____ to _____

Commission file number 001-15751

eMAGIN CORPORATION

(Exact name of registrant as specified in its charter)

Delaware 56-1764501
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification No.)

2070 Route 52, Hopewell Junction, NY 12533

(Address of principal executive offices)

(845) 838-7900

(Registrant's telephone number, including area code)

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Securities registered pursuant to Section 12(b) of the Act: Common Stock, \$.001 Par Value Per Share

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer (Do not check if a smaller reporting company)

Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act)
Yes No

As of June 30, 2016, the last business day of the registrant's most recently completed second quarter, the aggregate market value of the issued and outstanding common stock held by non-affiliates of the registrant, based upon the closing price of the common stock as traded on the NYSE MKT of \$2.64 was approximately \$44.2 million. For purposes of the above statement only, all directors, executive officers and 10% shareholders are assumed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

The number of shares of common stock outstanding as of March 15, 2017 was 31,626,516.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this Report, to the extent not set forth herein, is incorporated herein by reference from the registrant's definitive proxy statement relating to the Annual Meeting of Stockholders to be held in 2017, which definitive proxy statement shall be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Report relates.

eMAGIN CORPORATION

FORM 10-K

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016

INDEX

| | Page |
|---|------|
| PART I | |
| Item 1 <u>Business</u> | 4 |
| Item 1A <u>Risk Factors</u> | 13 |
| Item 1B <u>Unresolved Staff Comments</u> | 24 |
| Item 2 <u>Properties</u> | 24 |
| Item 3 <u>Legal Proceedings</u> | 24 |
| Item 4 <u>Mine Safety Disclosures</u> | 24 |
| PART II | |
| <u>Market for Registrant’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity</u> | |
| Item 5 <u>Securities</u> | 25 |
| Item 6 <u>Selected Financial Data</u> | 26 |
| Item 7 <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u> | 27 |
| Item 7A <u>Quantitative and Qualitative Disclosures About Market Risk</u> | 38 |
| Item 8 <u>Financial Statements and Supplementary Data</u> | 39 |
| Item 9 <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u> | 40 |
| Item 9A <u>Controls and Procedures</u> | 40 |
| Item 9B <u>Other Information</u> | 40 |
| PART III | |
| Item 10 <u>Directors, Executive Officers and Corporate Governance</u> | 42 |
| Item 11 <u>Executive Compensation</u> | 42 |
| Item 12 <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u> | 42 |
| Item 13 <u>Certain Relationships and Related Transactions, and Director Independence</u> | 42 |
| Item 14 <u>Principal Accounting Fees and Services</u> | 42 |
| PART IV | |
| Item 15 <u>Exhibits and Financial Statement Schedules</u> | 43 |
| Item 16 Form 10-K Summary | |
| <u>Signatures</u> | 44 |

STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, or Report, contains forward-looking statements 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 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 in the section entitled "Risk Factors" and elsewhere in this Report. 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 Report and the documents that we reference in this Report and have filed with the Securities and Exchange Commission, or the SEC, as exhibits to this Report, 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 Report include statements about:

- Our ability to successfully develop and market our products to customers;
- Our ability to successfully implement resolutions related to customer stop orders;
- Our ability to generate customer demand for our products in our target markets;
- The development of our target markets and market opportunities, including our planned entry in the consumer market;
- Our potential exposure to product liability claims; our ability to manufacture suitable products at competitive cost;
- Our ability to successfully launch 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; and
- Our needs for additional financing, as well as our ability to obtain such additional financing on reasonable terms.

The forward-looking statements in this Report represent our views as of the date of this Report. 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 of this Report.

In this Report, references to “eMagin Corporation,” “eMagin,” “the Company,” “we,” “us,” and “our company” refer to eMagin Corporation and our wholly owned subsidiary, Virtual Vision, Inc.

3

PART I

ITEM 1. BUSINESS

Introduction

We are a leader in the manufacture of microdisplays using OLED (organic light emitting diode) technology. We design, develop, manufacture, and market 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 also develop and manufacture night vision products for the consumer market including a smart phone attachment and a wearable device.

We believe our OLED microdisplays offer a number of significant advantages over comparable liquid crystal microdisplays (“LCD” and “LCOS”) including sharply 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, 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 have developed our own intellectual property and accumulated over 15 years of manufacturing know-how to create high performance OLED microdisplays.

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 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.

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 (“microviewers”). Beginning in the first quarter of fiscal 2017, we introduced two consumer products, BlazeSpark and BlazeTorch.

Our Technology Platforms

Small Molecule, Top-Emitting Active Matrix OLED Technology

There are two basic classes of OLED technology, single molecule, or small molecule (monomer), and polymer. 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 (“LCD”), 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 LCD 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:

- Low power consumption for improved battery life and longer system life;
- High-speed performance resulting in clear video images;
- Wide angle light emission resulting in large apparent screen size and more immersive experience;
- Wide operating temperature range;
- Good environmental stability (vibration and humidity);
- Low manufacturing cost; and
- Low cost system solutions.

Prism Optics

High quality, large view lenses with a wide range for eye positioning are essential for using our displays in 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 engaged a firm to manufacture our lenses in order to provide them in larger quantities to our customers. We have developed an additional prism optic for a project that will pair with our SXGA096 display.

Our Market Opportunities

We target the military, industrial/medical, and consumer markets although many of our products cater to multiple markets (“dual use”). 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 pilot's aviation helmets and believe this experience will allow us to more rapidly introduce specialized/high-end mass market consumer virtual and augmented reality applications than our competitors

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. 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 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 very 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 desert conditions. 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.

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. Situational awareness products include head-mounted displays that are used to display things as digital map, sensor imagery and pilot aviation information. In addition, handheld imagers provide improved situational awareness for surveillance and training. These products can also be combined with a weapon system to give the user the capability to select targets without direct exposure. Our OLED microdisplays have been incorporated into a broad range of U.S. and foreign military situational awareness programs. Incorporating OLED microdisplays into aviation helmets has been made possible by the high brightness of the OLED technology that we developed.

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 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. 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's Enhanced Night Vision Goggle II 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 Sensics, among others.

Our displays have been commercialized or 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 Excelsis/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 during 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 Sensics, among others.

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 virtual reality (VR) headset-application platforms such as accessories for gaming computers, portable DVD systems and wearable telepresence systems; (ii) augmented reality (AR) electronic viewers incorporated in products such as data glasses and personal viewers for cell phones; and (iii) low cost thermal and low light images and scopes for hunting and other outdoor activities.

As we manufacture our OLED displays in higher volumes at reduced costs and capitalize on our dPd technology, we believe that our products will be increasingly well positioned to compete with and displace liquid crystal 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 dPd technology addresses the critical performance parameters for next generation VR HMD's 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 headsets. In December 2016, we entered into an agreement with a Tier One company interested in incorporating our proprietary dPd technology into potential headset products.

In the 2016 we introduced two night vision products, BrightSpark and BrightTorch; began selling directly to consumers in the first quarter of fiscal 2017, and anticipate sales to commercial customers and OEMs beginning in the second quarter. 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.

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 full 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 special 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, eMagin 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 the widest variety of OLED microdisplay options to our customers

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 x 600 display with 15 micron pixels and a 0.6 inch diagonal. It has all the benefits of eMagin's 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 x 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 x 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 OLED-XL includes a very 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 WF05 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 (“HMDs”). In 2014, we developed and demonstrated a new Immersive Head Mounted Display (IHMD) with a different look and superior performance than other Virtual Reality (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 to the technology used in this immersive HMD to an undisclosed company in late 2015. This company 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 higher performance and increased resolution.

We comply with all applicable 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 direct to 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 to provide hands-free operation for night-time activities with the capability to record and upload content.

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 United States 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 Under Secretary of Defense for Acquisition, Technology, and Logistics and will be administered by the US Army RDECOM CERDEC Night Vision and Electronic Sensors Directorate Science and Technology Division. eMagin earned a substantial portion of its R&D contract revenue in 2016 from this project and expects to complete it by June 2017.

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.

Also in 2015, we were awarded a contract for a feasibility study for a new microdisplay based on an improved backplane design. This contract has been extended to the next phase, and is expected to be worth over \$1.1 million if all phases are contracted.

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. We cannot assure you that we will receive the full contract price on any of these contracts. Approximately 14 % of 2016 revenue was derived from research contracts funded by the U.S. Government as compared to 14% in 2015.

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 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 US 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 Blaze Spark and Blaze Torch 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 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 2020's.
- 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.
- 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 Blaze Spark smart phone accessory and Blaze Torch night vision goggles in late 2016 and began limited sales in the first quarter of 2017. We plan to sell direct to consumers over our website and, in addition, 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 6 and 36 months, depending on the uniqueness of the market, the complexity of the end product or, in the case of military OEM customers, 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.

| | For the Years Ended December 31, | |
|------------|--|------|
| Market | 2016 | 2015 |
| Commercial | 29 % | 27 % |

| | | |
|-------------------------|------|------|
| Military | 47 % | 53 % |
| Commercial and Military | 24 % | 20 % |

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 |
| United States | 58 % | 63 % |
| International | 42 % | 37 % |

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 31, 2016, we had a backlog of approximately \$6.4 million. This backlog primarily consists of non-binding customer purchase orders and purchase agreements with expected delivery dates through 2017, 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.

Manufacturing Facilities

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.

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 and \$1.2 million in 2016 and 2015, respectively, of additional equipment mainly related to manufacturing and we plan to add additional equipment in 2017 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.

Competition

The industry in which we operate is highly competitive. We face competition from legacy technologies such as transmissive LCDs and LCOS 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 OLIGHTTECK Opto-Electronic Technology Co., Ltd. (“Olightek”) 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 OLED’s 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.

In the future, we believe that competition will come from LCOS, small transmissive LCDs, 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 Blaze Spark and Blaze Torch night vision products and are primarily designed for commercial users.

Our Blaze Spark and Blaze Torch 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 a substantial intellectual property portfolio of patents, trade secrets and manufacturing know-how. 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

As of January 31, 2017, we had a total of 96 employees, of which 92 were full time. 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.

Available Information

Our website address is www.emagin.com. We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, our Proxy Statements and all amendments to such reports filed under the Securities Exchange Act of 1934, as amended, after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission (the "SEC"). These reports may be accessed from our website by following the links under "Investors," then "SEC Filings." The information found on our website is not part of this or any other report we file with or furnish to the SEC. We assume no obligation to update or revise any forward-looking statements in this Annual Report or in other reports filed with the SEC, whether as a result of new information, future events or otherwise, unless we are required to do so by law. A copy of this Annual Report and our other reports is available without charge upon written request to Investor Relations, eMagin Corporation, 2070 Route 52, Hopewell Junction, NY 12533.

We also post on our website the charters of our Audit, Compensation, Governance and Nominating committees, our Code of Ethics and any amendments of or waiver to such code of ethics, and other corporate governance materials recommended by the SEC as they occur, as well as earnings press releases and other business-related press releases.

ITEM 1A. 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 \$219 million as of December 31, 2016. 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 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, our ability to borrow under our working capital facility and our credit line facility with our largest investor, 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;
- 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;
- consumer acceptance of our night vision products;
- 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 have incurred 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. (the “ABL Facility”). The ABL Facility imposes significant 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.

These covenants are subject to important exceptions and qualifications. In addition, the ABL Facility also requires us to maintain compliance with certain financial covenants. 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 outstanding indebtedness with our cash and cash equivalents then on hand. We would, therefore, be required to draw on the credit line available from our largest investor, or seek alternative sources of funding, which may not be available on commercially reasonable terms, terms as favorable as our current agreements or at all. If remaining funds available from the credit line with our largest investor are not sufficient to repay our indebtedness or 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.

A portion of our debt may be variable rate debt, and changes 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 December 31, 2016 were \$1,852,000.

RISKS RELATED TO MANUFACTURING

The manufacture of active matrix OLED microdisplays continues to evolve as better methods are discovered and employed and therefore we may encounter manufacturing issues or delays.

Our technology is evolving and we have limited experience in active matrix OLED microdisplay manufacturing. 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.

We are dependent on a mostly non-redundant single manufacturing facility.

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. As a result, some OEMs have been reluctant to commit a broad line of products to our microdisplays without a second production facility in place. Interruptions in our manufacturing could be caused by manufacturing 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 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, we provide the design layouts to two 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. We are continually taking steps to address our manufacturing capacity needs for our products. If we are not able to expand or if we increase our capacity too quickly, 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;
- contamination of the manufacturing environment or equipment;
- equipment failure, power outages, or variations in the manufacturing process;
- 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. 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 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 related to our intellectual property could have a material adverse effect on our business. Any such claims, with or without merit, could be time consuming to defend, result in costly litigation, divert management's attention and resources, or require us to enter into royalty or licensing agreements. Such royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all. 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.

RISKS RELATED TO THE MICRODISPLAY INDUSTRY

The commercial success of the microdisplay industry depends on the widespread market acceptance of microdisplay systems products.

The commercial market for microdisplays is still emerging. Our long-term success may depend on consumer acceptance of microdisplays as well as the success of the commercialization of the microdisplay market. 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.

The microdisplay systems business is intensely competitive.

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 and the quality of our customer services;

- 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 original equipment manufacturing customers incorporate our product solutions into their own products;
- the market acceptance of our customers' products; and
- product or technology introductions by our competitors.

Our competitive position could be damaged if one or more potential OEM customers decide to manufacture their own microdisplays, using OLED or alternate technologies. 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, larger retail bases 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 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, our results of operations could be materially and adversely affected.

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 for consumer night vision products is still emerging. Our long-term success may depend on consumer acceptance of our Blaze Torch and Blaze Spark 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.

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 and competition from other manufacturers and distributors. 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 and the quality of our customer services;
- the ability to effectively market and advertise our products to consumers
- 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
- our capacity of our outsourced production facilities, and ability to manufacture and ship products on time; and
- product or technology introductions by our competitors.

Our competitive position could be damaged if other larger manufacturers decide to offer consumer night vision products with similar features. In addition, our customers may be reluctant to purchase product from a relatively small company such as eMagin without an established brand name in the consumer marketplace. 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.

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.

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 lab. 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 breakthroughs 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 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 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 adopt 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 can be cancelled or revised without penalty, depending on the circumstances. 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 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.

20

Our business currently depends largely on our ability to manufacture and sell displays.

Any interruption in our manufacturing processes or demand for our displays will negatively impact our business, including operations and financial condition.

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 or warranty periods. 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 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. 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 DDTC under the ITAR. We believe certain of our new products with both high brightness and high resolution will be classified as a 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.

RISKS RELATED TO OUR 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 December 31, 2016, we have outstanding common shares of 31,626,516 plus (i) options to purchase 5,055,741 shares, (ii) warrants to purchase 3,331,449 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 shareholders may experience a substantial dilution in their percentage ownership of our company.

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.

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 \$1.31 on January 4, 2016 to a high of \$3.07 on August 5, 2016. 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, 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.

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.

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.

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. 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.

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

As of December 31, 2016, Stillwater Holdings LLC (f/k/a Stillwater LLC) owned approximately 14% 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 9% 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 shareholders owned approximately 34% of our outstanding voting stock. As a result, these shareholders, if they act together, may be able to exert a significant degree of influence over matters requiring shareholder approval, including the election of directors and approval of significant corporate transactions. Further, if these shareholders act together with another shareholder, Ginola Limited, which has common directors with Mount Union Corp., Chelsea Trust Company and Crestflower Corporation, as of December 31, 2016, they would collectively have represented approximately 46% 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 shareholders. Nevertheless, the ability to influence the election of the Board of Directors or otherwise have influence does not modify the fiduciary duties of the Board of Directors to represent the interests of all shareholders.

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 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 to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. 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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our manufacturing facility and corporate headquarters are located in Hopewell Junction, NY, where we lease approximately 37,000 square feet. The NY facility houses our equipment for OLED microdisplay fabrication, assembly operations, research and development, and product development functions. The lease expires in 2024. We lease approximately 2,000 square feet of office space for design and product development in Santa Clara, CA and the lease expires in 2017. We lease approximately 1,800 square feet of office space for administrative functions in Bellevue, WA, and the lease expires in 2017.

We believe our facilities are adequate for our current and near-term needs. We believe we will be able to renew these leases or obtain alternative spaces or additional spaces as necessary under acceptable terms. See Note 11 to the Consolidated Financial Statements for more information about lease commitments.

ITEM 3. LEGAL PROCEEDINGS

On May 5, 2015, Kimchuk, Inc. ("Kimchuk"), a former supplier commenced action against the Company in the U.S. District Court, District of Connecticut, asserting breach of contract and seeking to recover approximately \$389,000 in alleged damages. The Company filed its response and counter-complaint on August 11, 2015 wherein the Company denied the material allegations asserted by Kimchuk and sought approximately \$3.5 million in damages from Kimchuk.

On June 1, 2016, the Company entered into a settlement agreement with Kimchuk whereby for consideration of approximately \$227,000, Kimchuk agreed to dismiss the matter, provide parts and material to us and settle outstanding accounts payable. On July 1, 2016 the Company wired the cash payment to Kimchuk and a related Court Order for Dismal was filed and approved on July 5, 2016.

During 2015, the Company 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. The Company believes the assertions contained in this action are baseless and without merit and will defend its position vigorously.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

24

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock trades on the NYSE MKT under the symbol "EMAN". The following table shows the quarterly high and low sale prices per share of our common stock for each period indicated and the cash dividend declared per share of our common stock.

| | High | Low |
|----------------|---------|---------|
| 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 |
| 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 |

As of January 31, 2017, there were 137 holders of record of our common stock. This does not include persons whose stock is in nominee or "street name" accounts through brokers.

Dividends

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

Recent Issuances of Unregistered Stock

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 (the "New Warrants") to purchase 2,947,949 shares of our common stock or 1.33 New Warrant shares for each warrant shares 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 warrants 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. A registration statement for the underlying shares was declared effective in January 2017.

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

Purchases of Equity Securities by the Issuer

There were no repurchases of our common stock during the year ended December 31, 2016.

Equity Compensation Plan Information

The following table sets forth the aggregate information of our equity compensation plans in effect as of December 31, 2016:

| Plan | Number of securities to be issued upon exercise of outstanding options and rights | Weighted-average exercise price of outstanding options and rights | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) |
|--|---|---|---|
| Equity compensations plans subject to approval by security holders - 2017 Incentive Stock Plan | 120,002 | \$ 2.55 | - |
| Equity compensation plans approved by security holders - 2013 Incentive Stock Plan | 1,403,783 | \$ 2.41 | 84,168 |
| Equity compensation plans approved by security holders - 2011 Incentive Stock Plan | 1,373,245 | \$ 3.44 | 22,882 |
| Equity compensation plans not approved by security holders - 2008 Incentive Stock Plan | 568,524 | \$ 1.70 | 1,378 |
| | 1,590,187 | \$ 3.63 | - |

Equity compensation plans
approved by security holders -
Amended and Restated 2003
Employee Stock Option Plan

5,055,741

108,428

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

26

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Introduction

The following discussion should be read in conjunction with the Financial Statements and Notes thereto. Our fiscal year ends December 31. This document 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 Part I, Item 1A, "Risk Factors ". 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, manufacture and supply 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 light emitting diodes, or 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 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 have devoted significant resources to the development and commercial launch of our OLED microdisplay products into military, 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 resolution.

These products are being applied or considered for near-eye and headset applications in products such as thermal imagers, night vision goggles, 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 a strong intellectual property portfolio that includes patents, manufacturing know-how and unique proprietary technologies to create high performance OLED-on-silicon. We believe our technology, intellectual property portfolio and position in the marketplace, gives us a leadership position in OLED and OLED-on-silicon microdisplay technology. We are one of only a few companies to market and produce significant quantities of high resolution full-color small molecule OLED-on-silicon microdisplays.

In 2015, we introduced the high brightness OLED platform for products termed as the OLED-XLS series. This set of products shows a lower voltage of operation and a higher luminance. The maximum luminance for the OLED-XLS based products can reach 1,000 nits in full color. During 2016, eMagin demonstrated the world's first highest brightness (~4,500 cd/m²) and highest resolution (1920x1200 pixels) microdisplay using our proprietary direct patterning method (dPd). The dPd technology is being further optimized and significant improvements are expected to be completed during 2017.

As of December 31, 2016 and 2015, we had a backlog of approximately \$6.4 million and \$7.3 million, respectively, in products ordered for delivery through December 31, 2017 and 2016, respectively. This backlog consists of non-binding purchase orders and purchase agreements.

We continue to make progress on our multi-year yield improvement initiative by strengthening production resources, making key supervisory and process engineering hires, and ordering production equipment with the objectives of achieving greater efficiencies, lower unit costs and higher production capacity. This initiative will position us to meet customer demand, provide better response time to customer orders and address the anticipated growth in the consumer products which we launched in the first quarter of 2017 although sales to date have not been significant. We are beginning to receive and put in place purchased equipment as part of our yield improvement initiative and expect the new equipment purchasing to be completed in March 2017. This equipment will improve production quantities and uptime and reduce particles, although the implementation and calibration of the equipment may temporarily affect production volumes.

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 announced during fourth quarter and released to the marketplace early in 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. During the year we incurred expenses associated with the development of these products and utilized working capital to fund the buildup of inventory and pay amounts to contract manufacturers, vendors and third party logistic providers in anticipation of the products' release. Working capital expenditures are expected to continue in 2017 along with marketing and promotional expenditures associated with the products' release.

New Business

During 2016, we continued to make 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) programs, delivery of displays for the Low Rate Initial Production (LRIP) phase of both programs accelerated in the fourth quarter and will continue 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.

During 2016, we achieved the following:

- 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 company design staff with respect to a new display to meet requirements of a future defense system. Prototype displays are expected to be delivered by the end of first quarter of 2017.
- Continued to deliver displays for a major United States 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 is expected to extend through the first quarter 2017 with production decision likely in second or third quarter.

- Supplied displays for Trijicon (formerly IR Defense) which has a leading line of thermal weapon sights and thermal monoculars. We continue to work closed with Trijicon product development to offer higher resolution displays for future products.
- Conducted formalized planning meetings with U.S. Army and a defense aviation prime contractor in preparation for initial display deliveries for a major aircraft helmet modernization program.
- 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 microdisplay technology to provide hands-free operation for night-time activities with the capability to record and upload content.

Our development work under the Defense Manufacturing, Science and Technology program progressed during the 2016. 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 in June 2017. We are also in negotiation with a defense prime contractor to continue work on the Army's Science and Technology Objectives program. After successfully meeting all program objectives for phases one through four, phase five will provide display system capabilities that will enhance the warfighting effectiveness in ground, dismounted and aviation systems.

On the commercial front, we are in negotiations with several Tier One companies about entering into strategic partnerships where we would design prototype displays for the companies' consumer head mounted devices and, in partnership with the companies and mass production manufacturers, works toward higher volume production capabilities.

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 are designed to lead to brightness levels that surpass the threshold requirements for virtual and augmented reality applications for Tier One companies and satisfy the requirements of several pending military programs. The production equipment for our direct patterning products has been upgraded by the equipment manufacturers to provide significant improvements in display performance and higher production volumes. The upgraded equipment is currently being used to produce parts for various customers. The direct patterning technology will be used to fabricate ultra high brightness 2Kx2K full color microdisplays during the second quarter of 2017. Additionally, recently developed advanced backplane technology will be used in conjunction with direct patterning technology to generate very high performance and ultra high brightness 2Kx2K displays during the second quarter of 2017.

New Product Development

Our product development efforts on the 2K x 2K full color RGB microdisplay project that was initiated in the fourth quarter of 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. Associated products are expected to be available for customers during the second quarter of 2017.

We are completing qualification of a new 0.48-inch diagonal full color XGA format microdisplay utilizing the same proven 9.6-micron color pixel used in its WUXGA and SXGA096 product lines. This new product will be targeted at industrial and commercial markets looking for a cost effective medium resolution microdisplay. Deliveries are scheduled to begin in the second quarter of 2017.

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 virtual reality headset technology. In connection with the license agreement, we provided in late 2016 the licensee engineering samples of our 2K x 2K pixel full-color displays for evaluation in their next generation headset

development efforts. We had no license revenues in 2015.

30

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 (dollars in thousands):

| | Year Ended December 31, | | | |
|--------------------------------|----------------------------|-------|------|-------|
| | 2016 | | 2015 | |
| 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.

Operating Expenses

| | Year Ended | | Change |
|---|----------------------|-----------|----------|
| | December 31, 2016 | 2015 | |
| | (\$ 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.

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 December 31, 2016, we had \$5.2 million of cash, cash equivalents, and investments as compared to \$9.3 million at December 31, 2015. The \$4.1 million decrease in cash 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.

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. For the year ended December 31, 2015, operating activities used \$1.3 million in cash, which was attributable to our net loss of \$4.1 million offset by approximately \$2.8 million from the net non-cash expenses and changes in operating assets and liabilities.

For the year ended December 31, 2016, investing activities used \$1.4 million in cash for equipment purchases primarily for upgrading our production line. For the year ended December 31, 2015, investing activities used \$0.4 million in cash, consisting of \$0.8 million cash generated from net investments maturing offset by \$1.2 million of equipment purchases primarily for upgrading our production line.

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. For the year ended December 31, 2015, financing activities provided \$5.7 million primarily due to \$5.5 million in proceeds from the sale of common stock and \$267 thousand in proceeds from the exercise of stock options.

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 (the "New 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 \$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 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 December 31, 2016, we had borrowings of \$1.9 million outstanding under the Financing Agreement and had unused borrowing availability of \$2.0 million. 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. Under the financing agreement, we may borrow, through June 30, 2018, 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. The agreement expires 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, cannot be reborrowed.

The amounts drawn on the line accrue interest at 6% per annum payable at maturity, and are 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 is still outstanding and then a 2% quarterly interest surcharge until the draws are 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 arrangement was executed. In the event we do not raise at least \$5 million in proceeds from an equity offering within 180 days of the first draw on the facility, we will be required to file a registered rights offering with the Securities and Exchange Commission within 45 days of the 180-day period to all holders of securities of the Company. In connection with the facility, we, our lender and the investor entered into an intercreditor agreement.

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. 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, 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 the next twelve months.

We considered the following:

- Our projections for 2017 and the first quarter 2018 compared to the operating losses we incurred during 2016;
- Our recurring operating losses and negative cash flow from operating activities during 2016;
- Our working capital requirements for 2017 and the first quarter 2018 compared to our working capital requirements for 2016, giving consideration to our cash expenditures in 2016 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:

- Higher 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;
- Higher 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.

As a result, management believes that the Company will 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 our 2016 financial statements on or about March 28, 2017.

We plan to take one or more of the following actions if our cash flow projections are not accurate:

- Increase our borrowings under our ABL Facility and borrow from the credit facility with our largest investor;
- Raise additional capital through a private placement or public offering of our equity securities; and/or
- Implement cost reductions or restructure our operations.

At December 31, 2016, we had \$5.2 million in cash and cash equivalents, \$11.2 million of working capital, and \$1.9 million outstanding and \$2.0 million of borrowing availability under our 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 September 2012. As of December 31, 2016, authorization to repurchase \$2.0 million in value of our common stock remained under this plan.

Contractual Obligations

The following chart describes the outstanding contractual obligations of eMagin 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 |

- (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 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

eMagin'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 (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 shareholders 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 our Annual Meeting, the shareholders approved an Amended and Restated 2011 Incentive Stock Plan (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 (the "2013 Plan") adopted and approved by the shareholders 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 that is subject to shareholder approval. If approved, the plan will provide 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. See Note 10 of the Consolidated Financial Statements – Stock Compensation for a further discussion on stock-based compensation.

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 have provided a full valuation allowance against its deferred tax assets as we have determined that it is more likely than not that none of the deferred tax assets will be realized.

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

Effect of Recently Issued Accounting Pronouncements

See Note 2 of the Consolidated Financial Statements in Item 8 for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition.

ITEM 7A. 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 in borrowings under our revolving line of credit. 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 US dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The report of the independent registered public accounting firm and financial statements are included in Item 15 of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of the principal executive and principal financial officers, have evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a – 15(e) and 15d – 15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), as of the end of the period covered by this Annual Report. They have concluded that, based on such evaluation, our disclosure controls and procedures were effective as of December 31, 2016.

(b) Management’s Annual Report on Internal Control Over Financial Reporting

Overview

Internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) refers to the process designed by, or under the supervision of, our principal executive officer and principal financial officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Management is responsible for establishing and maintaining adequate internal control over financial reporting for eMagin.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Management has used the framework set forth in the report entitled “Internal Control -- Integrated Framework (2013)” published by the Committee of Sponsoring Organizations (“COSO”) of the Treadway Commission to evaluate the effectiveness of eMagin’s internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Management’s Assessment

As of December 31, 2016, our management has assessed the effectiveness of our internal control over financial reporting and has determined that our internal control over financial reporting was effective.

(c) Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. These conclusions were communicated to the Audit Committee.

ITEM 9B. OTHER INFORMATION

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. Under the financing agreement, we may borrow, through June 30, 2018, 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. The agreement expires 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 in gross proceeds; or an event of default, as defined in the agreement. Amounts borrowed under the financing agreement, once repaid, cannot be reborrowed.

The amounts drawn on the line accrue interest at 6% per annum payable at maturity, and are 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 is still outstanding and then a 2% quarterly interest surcharge until the draws are 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 arrangement was executed. In the event we do not raise at least \$5 million in gross proceeds from an equity offering within 180 days of the first draw on the facility, we will be required to file a registered rights offering with the Securities and Exchange Commission within 45 days of the 180-day period to all holders of securities of the Company. In connection with the facility, we, our lender and the investor entered into an intercreditor agreement.

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.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item will be included in the Company's 2017 Proxy Statement to be filed with the U.S. Securities and Exchange Commission ("SEC") in connection with the solicitation of proxies for the Company's 2017 Annual Meeting of Shareholders ("2017 Proxy Statement") and is incorporated herein by reference. Such Proxy Statement will be filed with the SEC within 120 days after the end of the fiscal year to which this report relates.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item will be included in the Company's 2017 Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item will be included in the Company's 2017 Proxy Statement and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be included in the Company's 2017 Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item will be included in the Company's 2017 Proxy Statement and is incorporated herein by reference.

42

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements and Schedules

1. Financial Statements

The following consolidated financial statements are filed as part of this report under Item 8 of Part II “Financial Statements and Supplementary Data:

F-2 Consolidated Balance Sheets at December 31, 2016 and 2015.

F-3 Consolidated Statements of Operations for the Years Ended December 31, 2016 and 2015.

F-4 Consolidated Statements of Changes in Shareholders’ Equity for the Years Ended December 31, 2016 and 2015.

F-5 Consolidated Statements of Cash Flows for the Years Ended December 31, 2016 and 2015.

F-6 Notes to the Consolidated Financial Statements

2. Financial Statement Schedules

Financial statement schedules not included herein have been omitted because they are either not required, not applicable, or the information is otherwise included herein.

(b) Exhibits

The exhibits listed in the accompanying Index to Exhibits on pages 43 to 45 are filed or incorporated by reference as part of this Annual Report on Form 10-K.

43

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 28th day of March, 2017.

eMAGIN CORPORATION

By: /s/ Andrew G. Sculley
Andrew G. Sculley
Chief Executive Officer

In accordance with the Exchange Act, this report has been signed below by the following persons on March 28, 2017, on behalf of the registrant and in the capacities indicated.

| Signature | Title |
|--|---|
| /s/ Andrew G. Sculley Andrew G. Sculley | President and Chief Executive Officer, Director (Principal Executive Officer) |
| /s/ Jeffrey P. Lucas Jeffrey P. Lucas | Chief Financial Officer (Chief Accounting Officer and Principal Financial Officer) |
| /s/ Jill J. Wittels Jill J. Wittels | Chair of the Board |
| /s/ Ellen Richstone Ellen Richstone | Director |
| /s/ Christopher Brody Christopher Brody | Director |
| /s/ Paul Cronson Paul Cronson | Director |
| /s/ Leslie Polgar Leslie Polgar | Director |
| /s/ Stephen Seay Stephen Seay | Director |

eMAGIN CORPORATION

INDEX TO EXHIBITS

| Exhibit Number | Description |
|----------------|---|
| 2.1 | Agreement and Plan of Merger between Fashion Dynamics Corp., FED Capital Acquisition Corporation and FED Corporation dated March 13, 2000 (incorporated by reference to exhibit 2.1 to the Registrant's Current Report on Form 8-K/A filed on March 17, 2000). |
| 3.1 | Amended and Restated Certificate of Incorporation (incorporated by reference to an appendix to the Registrant's Definitive Proxy Statement filed on September 21, 2006). |
| 3.2 | Certificate of Amendment of Amended and Restated Certificate of Incorporation (incorporated by reference to an appendix to the Registrant's Definitive Proxy Statement filed on October 26, 2010). |
| 3.3 | Bylaws of the Registrant (incorporated by reference to exhibit 99.3 to the Registrant's Definitive Proxy Statement filed on June 14, 2001). |
| 3.4 | Certificate of Designations of Series B Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 of the Registrant's current report on Form 8-K filed on December 23, 2008). |
| 4.1 | Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's current report on Form 8-K filed on December 23, 2008). |
| 4.2 | Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's current report on Form 8-K filed on December 18, 2015). |
| 4.3 | Form of Letter Agreement (incorporated by reference to exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on August 24, 2016). |
| 4.4 | Form of Common Stock Purchase Warrant (incorporated by reference to exhibit 4.2 of the Registrant's Current Report on Form 8-K filed on August 24, 2016). |
| 4.5 | |
| 10.1 | Form of Agreement for Stock Option Grant pursuant to 2003 Stock Option Plan (incorporated by reference to exhibit 99.2 to the Registrant's Registration Statement on Form S-8 filed on March 14, 2000).* |
| 10.2 | Nonexclusive Field of Use License Agreement relating to OLED Technology for miniature, high resolution displays between the Eastman Kodak Company and FED Corporation dated March 29, 1999 (incorporated by reference to exhibit 10.6 to the Registrant's Annual Report on Form 10-K/A for the year ended December 31, 2000 filed on April 30, 2001). |
| 10.3 | |

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Amendment Number 1 to the Nonexclusive Field of Use License Agreement relating to the LED Technology for miniature, high resolution displays between the Eastman Kodak Company and FED Corporation dated March 16, 2000 (incorporated by reference to exhibit 10.7 to the Registrant's Annual Report on Form 10-K/A for the year ended December 31, 2000 filed on April 30, 2001).

- 10.4 Lease between International Business Machines Corporation (“IBM”) and FED Corporation dated May 28, 1999 (incorporated by reference to exhibit 10.9 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001).
- 10.5 Amendment Number 1 to the Lease between IBM and FED Corporation dated July 9, 1999 (incorporated by reference to exhibits 10.8 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001)
- 10.6 Amendment Number 2 to the Lease between IBM and FED Corporation dated January 29, 2001 (incorporated by reference to exhibit 10.11 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000 filed on March 30, 2001).
- 10.7 Amendment Number 3 to Lease between IBM and FED Corporation dated May 28, 2002 (incorporated by reference to the Company's Form S-1A as filed November 12, 2008).
- 10.8 Amendment Number 4 to Lease between IBM and FED Corporation dated December 14, 2004 (incorporated by reference to the Registrant's Current Report on Form 8-K filed on December 20, 2004).
- 10.09 Amended and Restated 2003 Stock Option Plan, filed September 1, 2005, as filed in the Registrant's Definitive Proxy Statement, incorporated herein by reference.*
- 10.10 2005 Employee Stock Purchase Plan, filed September 1, 2005, as filed in the Registrant's Definitive Proxy Statement, incorporated herein by reference.*
- 10.11 2004 Amended and Restated Non-Employee Compensation Plan, filed September 21, 2006, as filed in the Registrant's Definitive Proxy Statement incorporated herein by reference.*

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- 10.12 Securities Purchase Agreement, dated December 18, 2008 (incorporated by reference to exhibit 99.1 of the Registrant's Current Report on Form 8-K filed on December 22, 2008).
- 10.13 Registration Rights Agreement, dated December 18, 2008 (incorporated by reference to exhibit 99.2 of the Registrant's Current Report on Form 8-K filed on December 22, 2008).
- 10.14 Exchange Agreement, dated December 18, 2008 (incorporated by reference to exhibit 99.3 of the Registrant's Current Report on Form 8-K filed on December 22, 2008).
- 10.15 Amendment Number 6 to the lease between IBM and eMagin Corporation dated May 27, 2009 (incorporated by reference to the Registrant's Current Report on Form 8-k filed on June 19, 2009).
- 10.16 Lease between Northup Building LLC and eMagin dated May 28, 2009 (incorporated by reference to the Registrant's Current Report on Form 8-K filed on June 19, 2009).
- 10.17 Amended and Restated Employment Agreement between the Company and Andrew G. Sculley dated as of December 31, 2013 (incorporated by reference to exhibit 99.1 of the Registrant's Current Report on Form 8-K filed on January 3, 2014).
- 10.18 Amended and Restated Employment Agreement between the Company and Paul Campbell dated as of December 31, 2013 (incorporated by reference to exhibit 99.2 of the Registrant's Form 8-K filed on January 3, 2014).
- 10.19 2011 Incentive Stock Plan (incorporated by reference to exhibit 99.1 of the Registrant's Current Report on Form 8-K filed on November 8, 2011).*
- 10.20 2013 Incentive Stock Plan, filed April 2, 2013, as filed in the Registrant's Definitive Proxy Statement incorporated herein by reference.*
- 10.21 Employment Agreement, dated as of April 30, 2013, by and between the Company and Gabriel G. Matus (incorporated by reference to exhibit 99.1 of the Registrant's Form 8-K filed on May 6, 2013).
- 10.22 Amendment Number 7 to the lease between IBM and eMagin Corporation dated May 2, 2014 (incorporated by reference to the Registrant's Current Report on Form 8-K filed on May 8, 2014).
- 10.23 Amended and Restated Employment Agreement between the Company and Jerome T. Carollo dated as of May 13, 2014 (incorporated by reference to exhibit 10.1 of the Registrant's Form 8-K filed on May 16, 2014).
- 10.24 At the Market Offering Agreement, dated as of September 16, 2015, by and between the Company and Craig-Hallum Capital Group LLC (incorporated by reference to exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on September 3, 2015).
- 10.25 Lucas Offer Letter, dated as of September 10, 2015, by and between the Company and Jeffrey P. Lucas (incorporated by reference to exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on September 17, 2015).
- 10.26 Separation Agreement and General Release, dated as of September 16, 2015, by and between the Company and Paul C. Campbell (incorporated by reference to exhibit 10.2 of the Registrant's Current Report on Form 8-K filed on September 17, 2015).
- 10.27

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Securities Purchase Agreement, dated as of December 17, 2015 (incorporated by reference to exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on December 18, 2015).

- 10.28 Placement Agency Agreement, dated as of December 17, 2015 (incorporated by reference to exhibit 10.2 of the Registrant's Current Report on Form 8-K filed on December 18, 2015).
- 10.29 8th Lease Amendment between International Global Foundries U.S. 2 LLC and eMagin Corporation, effective as of March 21, 2016 (incorporated by reference to exhibit 99.1 of the Registrant's Current Report on Form 8-K filed on May 9, 2016).
- 10.30 Executive Employment Agreement, dated as of July 1, 2016, by and between the Company and Andrew G. Sculley, Jr. (incorporated by reference to exhibit 99.1 of the Registrant's Current Report on Form 8-K filed on July 7, 2016).
- 10.31 Financing Agreement, dated as of March 24, 2017, by and between the Company and Rosenthal & Rosenthal, Inc. (filed herewith).
- 10.32 Letter Agreement re: Line of Credit, dated as of March 24, 2017, by and between the Company and Stillwater Trust LLC (filed herewith).
- 10.33 Promissory Note, dated as of March 24, 2017, by and between the Company and Stillwater Trust LLC (filed herewith).
- 10.34 Subordination Agreement, dated as of March 24, 2017, by and among the Company, Stillwater Trust LLC and Rosenthal & Rosenthal, Inc. (filed herewith).
- 21.1 Subsidiaries of the Company (filed herewith).
- 23.1 Consent of Independent Registered Public Accounting Firm (filed herewith).
- 31.1 Certification by Chief Executive Officer pursuant to Sarbanes Oxley Section 302 (filed herewith).

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- 31.2 Certification by Chief Financial Officer pursuant to Sarbanes Oxley Section 302 (filed herewith).
- 32.1 Certification by Chief Executive Officer pursuant to 18 U.S.C. Section 1350 furnished herewith).
- 32.2 Certification by Chief Financial Officer pursuant to 18 U.S.C. Section 1350 (furnished herewith).
- 101.INS XBRL Instance Document (filed herewith).
- 101.SCH XBRL Taxonomy Extension Schema Document (filed herewith).
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document (filed herewith).
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document (filed herewith).
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document (filed herewith).
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document (filed herewith).

* Each of the Exhibits noted by an asterisk is a management compensatory plan or arrangement.

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 auditing 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

F-1

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.

F-2

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.

F-3

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.

F-4

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.

F-5

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.

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.

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.

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.

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 |

Comprehensive income (loss)

Comprehensive income (loss) refers to net income (loss) and other revenue, expenses, gains and losses that, under generally accepted accounting principles, are recorded as an element of shareholders’ equity but are excluded from the calculation of net income (loss).

The Company's operations did not give rise to any material items includable in comprehensive income (loss), which were not already in net income (loss) for the years ended December 31, 2016 and 2015. Accordingly, the Company's comprehensive income (loss) is the same as its net income (loss) for the periods presented.

Stock-based compensation

The Company uses the fair value method of accounting for share-based compensation arrangements. The fair values of stock options are estimated 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.

Concentration of credit risk

The majority of eMagin's products are sold throughout North America, Asia, and Europe. Sales to the Company's recurring customers are generally made on open account while sales to occasional customers are typically made on a prepaid basis. eMagin performs periodic credit evaluations on its recurring customers and generally does not require collateral. An allowance for doubtful accounts is maintained for credit losses.

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents and short-term investments. The Company's cash and cash equivalents are deposited with financial institutions which, at times, may exceed federally insured limits. The Company invests surplus cash in a government money market fund that consists of U.S Government obligations and repurchase agreements collateralized by U.S. Government Obligations, which is not insured. To date, the Company has not experienced any loss associated with this risk.

Evaluation of Ability to Maintain Current Level of Operations

In connection with preparing the consolidated financial statements for the year ended December 31, 2016, management evaluated whether there were conditions and events, considered in the aggregate, that raised substantial doubt about the Company's ability to continue as a going concern and meet its obligations as they became due for the next twelve months from the date of issuance of its 2016 financial statements. Management assessed that there were such conditions and events, including a history of recurring operating

losses and negative cash flows from operating activities. The Company incurred a net loss of \$8.0 million and used cash in operating activities of \$8.6 million for 2016. In addition, at December 31, 2016, the Company had cash and cash equivalents of \$5.2 million, outstanding borrowings under its ABL debt facility of \$1.9 million, gross of debt issuance costs, and borrowing availability under the facility of \$2.0 million.

Management evaluated the significance of these conditions in relation to the Company's ability to meet its obligations as they become due. The Company's ability to continue current operations and to execute on management's plans is dependent on its ability to generate sufficient cash flows from operations. The Company expects that it may need additional capital to fund its operations in the next twelve months from the date of issuance of its 2016 financial statements. In March 2017, the Company entered into an unsecured debt financing arrangement with Stillwater Trust LLC, a significant investor in the Company (see Note 14). Under the financing agreement, the Company may borrow through June 30, 2018, up to \$2 million for general working capital purposes and up to an additional \$3 million should the Company's existing lender not provide borrowing availability under its normal terms and conditions through its ABL debt facility. Management's plans also include the ability to reduce certain discretionary expenses and delay capital expenditures if necessary to provide additional sources of capital.

Management believes that its plan of obtaining this additional source of capital under the Stillwater Trust LLC agreement, and its ability to take actions to reduce certain discretionary expenses and delay capital expenditures if necessary to provide additional sources of capital, alleviates the substantial doubt about the Company's ability to continue as a going concern. Based on the Company's current operating plan, management anticipates that, given current working capital levels, current financial projections, and the ability to borrow under its ABL debt facility and its credit facility with its largest investor, the Company will be able to meet its financial obligations as they become due over the next twelve months from the date of issuance of its 2016 financial statements and to continue as a going concern over the same period.

Recently issued accounting standards

In March 2016, the Financial Accounting Standards Board ("FASB") issued guidance which simplifies the accounting for share-based payment transactions including the income tax consequences, classification of awards as either equity or liabilities, financial statement presentation of excess tax benefits or deficiencies, and classification in the Consolidated Statement of Cash Flows. The guidance is effective for interim and annual reporting periods beginning after December 15, 2016, although early adoption is permitted. The Company has elected to early adopt this guidance on a prospective basis as of December 31, 2016. The adoption of the new accounting guidance did not have a material impact on its financial statements.

In February 2016, the FASB issued guidance which changes the accounting for leases. The guidance requires lessees to recognize a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term and, a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis for all leases (with the exception of short-term leases). Under the new guidance, leases previously defined as operating leases will be presented on the balance sheet. As a result, these leases will be recorded as an asset and a corresponding liability at the present value of the total lease payments. The asset

will be decremented over the life of the lease on a pro-rata basis resulting in lease expense while the liability will be decremented using the interest method (ie. principal and interest). As such, the Company expects the new guidance will materially impact the asset and liability balances of the Company's financial statements and related disclosures at the time of adoption. Since the new guidance is effective January 1, 2019, there will be no immediate impact on the Company's financial statements.

In November 2015, the FASB issued guidance which requires deferred tax liabilities and assets be classified as noncurrent in the statement of financial position. This guidance requires entities with a classified balance sheet to present all deferred tax assets and liabilities as non-current. The guidance is effective for annual and interim periods beginning after December 15, 2016 and can be applied prospectively or retrospectively to adjustments with early adoption permitted at the beginning of an interim or annual reporting period. The Company does not expect the adoption of the new accounting guidance to have a material impact on its financial statements.

In July 2015, the FASB issued guidance on the measurement of inventory, which requires that inventory be measured at the lower of cost or net realizable value. The updated standard should be adopted prospectively and is effective for annual reporting periods (including interim periods therein) beginning after December 15, 2016 with early adoption permitted. The Company does not expect the adoption of the new accounting guidance to have a material impact on its financial statements.

In April 2015, the FASB issued guidance about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a services contract. All software licenses recognized under this guidance will be accounted for consistent with other licenses of intangible assets. The guidance was effective January 1, 2016 and the Company adopted it on a prospective basis. The guidance did not have a material impact on the Company's financial statements.

In April 2015, the FASB issued guidance that simplifies the presentation of debt issuance costs. The guidance requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The Company adopted this guidance in the first quarter of 2016 and has presented its revolving credit facility debt net of unamortized debt issuance costs in the accompanying consolidated balance sheet.

In November 2014, the FASB issued guidance to eliminate the diversity in practice for the accounting for hybrid financial instruments issued in the form of a share. The guidance requires management to consider all terms and features, whether stated or implied, of a hybrid instrument when determining whether the nature of the instrument is more akin to a debt instrument or an equity instrument. Embedded derivative features, which are accounted for separately from host contracts, should also be considered in the analysis of the hybrid instrument. The Company adopted the guidance effective January 1, 2016 and it did not have an impact on its financial statements.

In August 2014, the FASB issued guidance which defines management's responsibility to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures if there is substantial doubt about its ability to continue as a going concern. The pronouncement was effective for annual reporting periods ending after December 15, 2016 with early adoption permitted. The Company has provided an assessment and related disclosures in Note 2 to the Consolidated Financial Statements.

In May 2014, the FASB issued guidance on the recognition of revenue from contracts with customers, which will require an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The updated standard will replace most existing revenue recognition guidance in U.S. Generally Accepted Accounting Principles (GAAP) when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. In July 2015, the FASB voted to defer the effective date for annual reporting periods beginning after December 15, 2017 (including interim reporting periods within those periods) and permitted early adoption of the standard, but not before the original effective date of December 15, 2016. The Company expects the updated standard to become effective for it in the first quarter of fiscal 2018. The Company has not yet selected a transition method and is currently evaluating the effect that the updated standard will have on its financial statements.

Note 3 – Accounts Receivable, net

Accounts receivable consisted of the following (in thousands):

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| | December 31, 2016 | December 31, 2015 |
|--------------------------------------|----------------------|----------------------|
| Accounts receivable | \$ 2,961 | \$ 3,635 |
| Less allowance for doubtful accounts | (127) | (127) |
| Accounts receivable, net | \$ 2,834 | \$ 3,508 |

Note 4 – Inventories, net

The components of inventories were as follows (in thousands):

| | December 31 2016 | December 31, 2015 |
|------------------------|---------------------|----------------------|
| Raw materials | \$ 3,619 | \$ 2,595 |
| Work in process | 1,576 | 1,369 |
| Finished goods | 3,740 | 1,486 |
| Total inventories | 8,935 | 5,450 |
| Less inventory reserve | (1,500) | (1,549) |
| Total inventories, net | \$ 7,435 | \$ 3,901 |

F-11

Note 5 – Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

| | December 31, | |
|---|--------------|--------|
| | 2016 | 2015 |
| Vendor prepayments | \$ 601 | \$ 51 |
| Other prepaid expenses | 439 | 438 |
| Total prepaid expenses and other current assets | \$ 1,040 | \$ 489 |

Note 6 – Equipment, Furniture and Leasehold Improvements

Equipment, furniture and leasehold improvements consist of the following (in thousands):

| | December 31, | |
|---|--------------|----------|
| | 2016 | 2015 |
| Computer hardware and software | \$ 1,471 | \$ 1,440 |
| Lab and factory equipment | 16,369 | 15,868 |
| Furniture, fixtures and office equipment | 344 | 344 |
| Assets under capital leases | 66 | 66 |
| Construction in progress | 1,180 | 277 |
| Leasehold improvements | 473 | 473 |
| Total equipment, furniture and leasehold improvements | 19,903 | 18,468 |
| Less: accumulated depreciation | (10,923) | (9,337) |
| Equipment, furniture and leasehold improvements, net | \$ 8,980 | \$ 9,131 |

Depreciation expense was \$1.6 million and \$1.5 million for the years ended December 31, 2016 and 2015, respectively. Assets under capital leases are fully amortized.

Note 7– Debt

| | December 31 2016 | December 31, 2015 |
|--------------------------------------|---------------------|----------------------|
| Revolving credit facility | \$ 1,852 | \$ — |
| Less unamortized debt issuance costs | (163) | — |
| Revolving credit facility, net | \$ 1,689 | \$ — |

On December 21, 2016, the Company entered into a 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 “ABL facility”). 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 thousand. The Company shall pay the lender a monthly administrative fee of \$1 thousand 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 agreement is provided by either party. In conjunction with entering into the financing, the Company incurred \$163 thousand of debt issuance costs including lender and legal costs that will be amortized over the life of the ABL facility. In accordance with recently issued accounting guidance, the revolving credit facility balance is presented net of these unamortized debt issuance costs on the accompanying Consolidated Balance Sheet.

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. Collections received on accounts receivable are directly used to pay down the outstanding borrowings on the credit facility.

The ABL facility contains customary representations and warranties, affirmative and negative covenants and events of default. The Company is required to maintain a minimum tangible net worth of \$13 million and a minimum working capital balance of \$4 million at all times. As of December 31, 2016, we had unused borrowing availability of \$2.0 million and were in compliance with all debt covenants.

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. 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.

For the years ended December 31, 2016 and 2015, interest expense includes interest paid, capitalized or accrued of approximately \$30 thousand and \$43 thousand, respectively, on outstanding debt.

Note 8 – Income Taxes

Net loss before income taxes consists of the following (in thousands):

| | For the Years Ended December 31, | |
|-------------------|-------------------------------------|------------|
| | 2016 | 2015 |
| Domestic, current | \$ (8,048) | \$ (4,105) |
| Total | \$ (8,048) | \$ (4,105) |

The tax effects of significant items comprising the Company's deferred taxes as of December 31 are as follows (numbers are in thousands):

| | For the Years Ended December 31, | |
|---|-------------------------------------|-----------|
| | 2016 | 2015 |
| Deferred tax assets: | | |
| Federal and state net operating loss carryforwards | \$ 43,083 | \$ 38,943 |
| Research and development tax credit carryforwards | 2,196 | 2,279 |
| Stock based compensation | 4,438 | 4,057 |
| Other provision and expenses not currently deductible | 1,335 | 1,297 |
| Total deferred tax assets | 51,052 | 46,576 |
| Deferred tax liabilities: | | |
| Depreciation and amortization | (1,141) | (965) |
| Prepaid expenses | (95) | (116) |
| Total deferred liabilities | (1,236) | (1,081) |
| Less valuation allowance | (49,816) | (45,495) |
| Net deferred tax asset | \$ — | \$ — |

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.

As of December 31, 2016, the Company's deferred tax assets were generated primarily from the federal and state net operating loss, stock based compensation and research and development tax credits. In assessing the realizability of deferred tax assets, management determined that it is more likely than not that none of the deferred tax assets will be realized. Therefore, the Company has provided a full valuation allowance against the deferred tax assets at December 31, 2016 and 2015.

As of December 31, 2016 and 2015, the Company had net deferred tax assets before its valuation allowance of approximately \$50 million and \$45 million, respectively.

During the year ended December 31, 2016, the Company did not utilize its prior years' net operating loss carryforwards. As of December 31, 2016, eMagin has federal and state net operating loss carryforwards of approximately \$125.7 million and \$7.6 million, respectively. The federal research and development tax credit carryforwards are approximately \$2.2 million. The federal net operating losses and tax credit carryforwards will expire as follows:

| | Net Operating Losses | Research and Development Tax Credits |
|-----------|----------------------------|--|
| | (in thousands) | |
| 2018-2021 | \$ 44,639 | \$ 809 |
| 2022-2025 | 42,814 | - |
| 2026-2036 | 38,294 | 1,387 |
| | \$ 125,747 | \$ 2,196 |

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The utilization of net operating losses is subject to a limitation due to the change of ownership provisions under Section 382 of the Internal Revenue Code and similar state provisions. Such limitation may result in the expiration of the net operating losses before their utilization. The Company has done an analysis regarding prior year ownership changes, and it has been determined that the Section 382 limitation on the utilization of net operating losses will currently not materially affect the Company's ability to utilize its net operating losses.

The difference between the statutory federal income tax rate on the Company's pre-tax loss and the Company's effective income tax rate is summarized as follows:

| | For the Years Ended December 31, | |
|---|--|------|
| | 2016 | 2015 |
| U.S. Federal income tax benefit at federal statutory rate | 34 % | 34 % |
| Change in valuation allowance | (37) | (36) |
| Credits | 3 | 2 |
| Effective tax rate | - % | - % |

The Company did not have unrecognized tax benefits at December 31, 2016 and 2015. The Company recognizes interest accrued and penalties related to unrecognized tax benefits in tax expense. During the years ended December 31, 2016 and 2015, the Company recognized no interest and penalties.

The Company files income tax returns in the U.S. federal jurisdiction, California, Florida, New York and Massachusetts. Due to the Company's operating losses, all tax years remain open to examination by major taxing jurisdictions to which the Company is subject.

Note 9 – Shareholders' Equity

Preferred Stock - Series B Convertible Preferred Stock (“the Preferred Stock – Series B”)

The Company has designated 10,000 shares of the Company's preferred stock as Preferred Stock – Series B at a stated value of \$1,000 per share. The Preferred Stock – Series B is convertible into common stock at a conversion price of \$0.75 per share. The holders of the Preferred Stock – Series B are not entitled to receive dividends unless the Company's Board of Directors declare a dividend for holders of the Company's 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 – Series B into shares of the Company's common stock. In the event of a liquidation, dissolution, or winding up

of the Company, the Preferred Stock – Series B is entitled to receive liquidation preference before the Common Stock. The Company may at its option redeem the Preferred Stock – Series B by providing the required notice to the holders of the Preferred Stock – Series B 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 – Series B to be redeemed.

As of December 31, 2016 and 2015, there were 5,659 shares of Preferred Stock – Series B issued and outstanding.

Common Stock

On December 17, 2015, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) pursuant to which the Company sold and issued 3,999,996 shares of the Company’s common stock, par value of \$0.001 per share, at a price of \$1.50 per share. The net proceeds received after expenses were \$5.5 million. In connection with the sale of the shares, the Company issued warrants to purchase an additional 2,600,000 shares of common stock exercisable at a price of \$2.05 per share beginning June 23, 2016 and expiring on June 23, 2021.

On September 3, 2015, the Company entered into an at the Market Offering Agreement (the “agreement”) with an investment bank as sales agent, pursuant to which the Company was to offer and sell shares of its common stock having an aggregate offering price of up to \$4,500,000. The agreement was terminated effective December 17, 2015. As of December 17, 2015, the Company sold 100,716 shares at sales prices ranging from \$2.25 to \$2.49 per share, resulting in \$90 thousand in net proceeds.

The Company received approximately \$45 thousand and \$267 thousand from the exercise of 21,912 and 254,351 stock options during the years ended December 31, 2016 and 2015, respectively.

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 September 2012. As of December 31, 2016, authorization to repurchase \$2.0 million in value of our common stock remained under this plan.

Warrant Transactions

On August 18, 2016, we entered into letter agreements with certain of our warrant holders pursuant to which such warrant holders 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 (the “New Warrants”) to purchase 2,947,949 shares of our common stock which is equal to 133% of the 2,216,500 warrant shares exercised. The New Warrants have an exercise price of \$2.60 per share, and 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 will be used for general corporate purposes.

The issuance of the New Warrants was exempt from federal and state registration requirements. During 2016, the Company filed a resale registration statement to register the shares of our common stock issuable upon the exercise of the New Warrants.

At December 31, 2016, there were New Warrants outstanding to purchase 2,947,949 shares of our common stock at an exercise price of \$2.60 per share, which expire in February 2022. In addition, warrants to purchase 383,500 shares remaining from the December 2015 issuance were outstanding at December 31, 2016 at an exercise price of \$2.05 per share, which expire in June 2021.

Note 10 – Stock Compensation

Employee stock purchase plan

In 2005, the shareholders approved the 2005 Employee Stock Purchase Plan (“ESPP”). The ESPP provides the Company’s employees with the opportunity to purchase common stock through payroll deductions. Employees may purchase stock semi-annually at a price that is 85% of the fair market value at certain plan-defined dates. At December 31, 2016, the number of shares of common stock available for issuance was 300,000. As of December 31, 2016, the plan had not been implemented.

Incentive compensation plans

The Amended and Restated 2003 Employee Stock Option Plan (the “2003 Plan”) provided for grants of shares of common stock and options to purchase shares of common stock to employees, officers, directors and consultants. The 2003 Plan terminated July 2, 2013. No additional options can be granted from the plan though options granted before the 2003 Plan terminated may be exercised until the grant expires.

The 2008 Incentive Stock Plan (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 the 2008 Plan.

The 2011 Incentive Stock Plan (the “2011 Plan”) was approved by the Company’s shareholders on November 3, 2011. The 2011 Plan provides for grants of common stock and options to purchase common stock to employees, officers, directors and consultants. The Board of Directors reserved 1.4 million shares of common stock for issuance under the 2011 Plan. On June 7, 2012, at the Company’s Annual Meeting, the shareholders approved an Amended and Restated 2011 Incentive Stock Plan which eliminated the evergreen provision and prohibits the repricing or exchange of stock options without shareholder approval. In 2016, there were 458,000 options granted from the 2011 Plan.

The 2013 Incentive Stock Plan (the “2013 Plan”) adopted and approved by the shareholders 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 631,073 options granted from this plan.

During the fourth quarter of 2016, the Company granted options to purchase 125,000 shares of common stock to employees, that are subject to approval of a 2017 plan by the shareholders at the next annual meeting.

Vesting terms of the options range from immediate vesting to a ratable vesting period of 5 years. Option activity for the year ended December 31, 2016 and 2015 is summarized as follows:

| | Number of Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Life (In Years) | Aggregate Intrinsic Value |
|---|------------------|---------------------------------|--|---------------------------|
| Outstanding at December 31, 2015 | 4,218,139 | \$ 3.75 | | |
| Options granted | 1,435,097 | 2.45 | | |
| Options exercised | (21,912) | 2.10 | | |
| Options forfeited | (52,781) | 2.02 | | |
| Options cancelled or expired | (522,802) | 7.44 | | |
| Outstanding at December 31, 2016 | 5,055,741 | \$ 3.00 | 4.46 | \$ 875,225 |
| Vested or expected to vest at December 31, 2016 (1) | 5,035,622 | \$ 3.00 | 4.46 | \$ 875,030 |
| Exercisable at December 31, 2016 | 4,049,888 | \$ 3.08 | 4.01 | \$ 865,475 |

(1) The expected to vest options are the result of applying the pre-vesting forfeiture rate assumptions to total unvested options.

At December 31, 2016, there were 108,428 shares available for grant under the 2013, 2011, and 2008 Plans.

The aggregate intrinsic value in the table above represents the difference between the exercise price of the underlying options and the quoted price of the Company's common stock on December 31, 2016 for the options that were in-the-money. As of December 31, 2016 there were 1,824,351 options that were in-the-money. The Company's closing stock price was \$2.15 as of December 31, 2016. The Company issues new shares of common stock upon exercise of stock options. The intrinsic value of the 2016 options exercised was \$7 thousand.

Stock- based compensation

The Company uses the fair value method of accounting for share-based compensation arrangements. The fair value of stock options is estimated 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.

The following table summarizes the allocation of non-cash stock-based compensation to the Company's expense categories for the years ended December 31, 2016 and 2015 (in thousands):

| | For the Year Ended December 31, | |
|-------------------------------------|---------------------------------------|--------|
| | 2016 | 2015 |
| Cost of revenues | \$ 25 | \$ 51 |
| Research and development | 164 | 118 |
| Selling, general and administrative | 582 | 437 |
| Total stock compensation expense | \$ 771 | \$ 606 |

At December 31, 2016, total unrecognized compensation costs related to stock options was approximately \$1.0 million, net of estimated forfeitures. Total unrecognized compensation cost will be adjusted for future changes in estimated forfeitures and is expected to be recognized over a weighted average period of approximately 3.1 years.

F-17

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The following key assumptions were used in the Black-Scholes option pricing model to determine the fair value of stock options granted:

| | For the Year Ended December 31, | | | |
|--------------------------|------------------------------------|---|--------------|---|
| | 2016 | | 2015 | |
| Dividend yield | 0 | % | 0 | % |
| Risk free interest rates | 0.71-1.41 | % | 0.84 – 1.56 | % |
| Expected volatility | 49.1 to 59.4 | % | 51.2 to 63.9 | % |
| Expected term (in years) | 3.5 to 5.0 | | 3.5 to 5.0 | |

The weighted average fair value per share for options granted in 2016 and 2015 was \$1.00 and \$1.17, respectively.

There were no dividends declared or paid in 2016 or 2015. Though the Company paid a special one-time dividend in 2012, the Company does not expect to pay dividends in the near future; therefore, it used an expected dividend yield of 0%. The risk-free interest rate used in the Black-Scholes option pricing model is based on the implied yield at the time of grant available on U.S. Treasury securities with an equivalent term. Expected volatility is based on the weighted average historical volatility of the Company's common stock for the equivalent term. The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding and was determined based on historical experience and vesting schedules of similar awards.

Note 11 – Commitments and Contingencies

Operating Leases

The Company leases office facilities and office, lab and factory equipment under operating leases. Certain leases provide for payments of monthly operating expenses. The Company currently has lease commitments for space in Hopewell Junction, New York, Santa Clara, California and Bellevue, Washington.

The Company's corporate headquarters and manufacturing facilities are located in Hopewell Junction, New York. The Company leases approximately 37,000 square feet to house its equipment for OLED microdisplay fabrication, for research and development, and for administrative offices. The lease expires in May 2024. The Company leases approximately 2,000 square feet of office space for design and product development in Santa Clara, California and the lease expires in October 2017. In Bellevue, Washington, eMagin leases approximately 1,800 square feet of office space for administrative offices and the lease expires in October 2017.

Rent expense was approximately \$1.0 million and \$0.9 million for the years ended December 31, 2016 and 2015, respectively. The future minimum lease payments for the years 2017 through 2023 are \$0.9 million annually and for 2024, \$0.4 million.

Equipment Purchase Commitments

The Company has committed to equipment purchases of approximately \$0.6 million at December 31, 2016.

Employee benefit plans

eMagin has a defined contribution plan (the 401(k) Plan) under Section 401(k) of the Internal Revenue Code, which is available to all employees who meet established eligibility requirements. Employee contributions are generally limited to 15% of the employee's compensation. Under the provisions of the 401(k) Plan, eMagin may match a portion of the participating employees' contributions. For the years ended December 31, 2016 and 2015, there was no employer match.

Employment and separation agreements

On September 14, 2015, Jeffrey P. Lucas was elected to serve as eMagin's Chief Financial Officer by the Company's Board of Directors. Pursuant to an offer letter, Mr. Lucas (i) is paid a base salary of \$345,000; (ii) is eligible for a bonus of up to 20% of his base salary based on the Company's performance; (iii) was granted options to purchase 75,000 shares at a exercise price of \$2.50 with a term of 5 years and vesting over 3 years; (iv) has a relocation allowance of \$13 thousand; and (v) in the event of termination, will receive severance pay equal to 6 months of Mr. Lucas's salary at the time of termination.

Effective September 14, 2015, Paul C. Campbell resigned as Chief Financial Officer. Mr. Campbell and eMagin entered into a Separation Agreement and General Release in which the Company agreed to pay the remainder of the compensation, \$103 thousand, due to Mr. Campbell under his employment agreement and an additional six months of Mr. Campbell's base salary, \$168 thousand, paid on June 30, 2016. These amounts were expensed in the quarter ended September 30, 2015.

Litigation

From time to time, the Company is subject to various legal proceedings and claims that arise in the ordinary course of business. The Company accrues for losses related to litigation when a potential loss is probable and the loss can be reasonably estimated. Significant judgment is required to determine the probability that a liability has been incurred and whether such liability is reasonably estimable. All estimates are based on the best information available at the time which can be highly subjective.

On May 5, 2015, Kimchuk, Inc. ("Kimchuk"), a former supplier, commenced action against the Company in the U.S. District Court, District of Connecticut, asserting breach of contract and seeking to recover approximately \$389,000 in alleged damages. The Company filed its response and counter-complaint on August 11, 2015 wherein the Company denied the material allegations asserted by Kimchuk and sought approximately \$3.5 million in damages from Kimchuk. The Company recorded an accrual for the litigation and estimated settlement in the quarter ended September 30, 2015.

On June 1, 2016, the Company entered into a settlement agreement with Kimchuk whereby, eMagin paid Kimchuk \$227,000, and Kimchuk agreed to dismiss the matter, provide parts and material to eMagin and settle outstanding accounts payable. The Company did not incur any additional settlement expense during 2016.

During 2015, the Company 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. The Company believes the assertions contained in this action are baseless and without merit and will defend its position vigorously.

Note 12 – Concentrations

The following is a schedule of revenue by geographic location (in thousands):

| | Year Ended December 31, | |
|---------------------------------|----------------------------|-----------|
| | 2016 | 2015 |
| North and South America | \$ 12,664 | \$ 16,182 |
| Europe, Middle East, and Africa | 7,293 | 6,950 |
| Asia Pacific | 1,440 | 2,010 |
| Total | \$ 21,397 | \$ 25,142 |

| | Year Ended December 31, | |
|---------------|----------------------------|------|
| | 2016 | 2015 |
| Domestic | 58 % | 63 % |
| International | 42 % | 37 % |

The Company purchases principally all of its silicon wafers from two suppliers supplier located in Taiwan and Korea, respectively.

In 2016, there was one customer that accounted for 11% of total revenues and 4% of accounts receivable as of December 31, 2016. In 2015, there were 2 customers that accounted for 12% and 11% of total revenues and 5% and zero, respectively, of accounts receivable at December 31, 2015.

At December 31, 2016 and 2015, there were ten customers who comprised 65% and 62%, respectively, of accounts receivable. At December 31, 2016, the Company had 2 customers that accounted for 17% and 12% of accounts receivable and, at December 31, 2015, one customer that accounted for 12% of accounts receivable.

Note 13 – Quarterly Financial Information (Unaudited)

Summarized quarterly financial information for 2016 and 2015 are as follows (in thousands except share data):

| | Quarters Ended | | | |
|---|-------------------|------------------|-----------------------|----------------------|
| | March 31, 2016 | June 30, 2016 | September 30, 2016 | December 31, 2016 |
| Revenues | \$ 7,001 | \$ 5,533 | \$ 4,305 | \$ 4,558 |
| Gross profit | \$ 3,335 | \$ 1,335 | \$ 1,282 | \$ 490 |
| Net (loss) income before income tax | \$ 14 | \$ (2,164) | \$ (2,430) | \$ (3,468) |
| Net (loss) income | \$ 14 | \$ (2,164) | \$ (2,431) | \$ (3,468) |
| Net (loss) income per share - basic | \$ - | \$ (0.07) | \$ (0.08) | \$ (0.11) |
| Net (loss) income per share - diluted | \$ - | \$ (0.07) | \$ (0.08) | \$ (0.11) |
| Weighted average number of shares outstanding - basic | 29,388,104 | 29,388,104 | 30,292,166 | 31,623,334 |
| Weighted average number of shares outstanding - diluted | 29,637,804 | 29,388,104 | 30,292,166 | 31,623,334 |

| | Quarters Ended | | | |
|---|-------------------|------------------|-----------------------|----------------------|
| | March 31, 2015 | June 30, 2015 | September 30, 2015 | December 31, 2015 |
| Revenues | \$ 5,989 | \$ 7,034 | \$ 5,405 | \$ 6,714 |
| Gross profit | \$ 2,360 | \$ 2,608 | \$ 1,106 | \$ 904 |
| Net (loss) income before income tax | \$ 320 | \$ (66) | \$ (2,234) | \$ (2,125) |
| Net (loss) income | \$ 320 | \$ (66) | \$ (2,234) | \$ (2,125) |
| Net (loss) income per share - basic | \$ 0.01 | \$ — | \$ (0.09) | \$ (0.08) |
| Net (loss) income per share - diluted | \$ 0.01 | \$ — | \$ (0.09) | \$ (0.08) |
| Weighted average number of shares outstanding - basic | 25,041,380 | 25,142,371 | 25,287,849 | 25,712,562 |
| Weighted average number of shares outstanding - diluted | 25,747,631 | 25,142,371 | 25,287,849 | 25,712,562 |

Note 14 – Subsequent Events

On March 24, 2017, the Company entered into an unsecured debt financing arrangement with Stillwater Trust LLC, an investor who with affiliates collectively control approximately 46% of the Company's outstanding common stock. Under the financing agreement, the Company may borrow, through June 30, 2018, up to \$2 million for general working capital purposes and up to an additional \$3 million should the Company's lender not provide borrowing availability under its normal terms and conditions through its ABL facility. The agreement expires 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 of gross proceeds; or an event of default, as defined in the agreement. Amounts borrowed under the financing agreement, once repaid, cannot be reborrowed.

The amounts drawn on the line accrue interest at 6% per annum payable at maturity, and are 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 is still outstanding and then a 2% quarterly interest surcharge until the draws are 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 the Company's common stock on the date the arrangement was executed. In the event the Company does not raise at least \$5 million in gross proceeds from an equity offering within 180 days of the first draw on the facility, it will be required to file a registered rights offering with the Securities and Exchange Commission within 45 days of the 180-day period to all holders of securities of the Company. In connection with the facility, the Company, its lender and the investor entered into an intercreditor agreement.

Mr. Christopher Brody, a member of the Company's 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 the Company's 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 the Company and Stillwater Trust LLC. Mr. Brody did not participate in the deliberations of the Company's board of directors or the special committee of the Company's board formed to review the terms of the financing with respect to the approval of the financing and abstained from voting thereon.