

xG TECHNOLOGY, INC.  
Form S-1/A  
August 04, 2015

As filed with the Securities and Exchange Commission on August 4, 2015

**Registration No. 333-203853**

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

**AMENDMENT NO. 3  
TO  
FORM S-1  
REGISTRATION STATEMENT  
UNDER THE SECURITIES ACT OF 1933**

**xG Technology, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

519100  
(Primary Standard Industrial  
Classification Code Number)

20-585-6795  
(I.R.S. Employer  
Identification No.)

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240 S. Pineapple Avenue, Suite 701  
Sarasota, FL 34236**

**(941) 953-9035**

(Address, including zip code, and telephone number,  
including area code, of registrant's principal executive offices)

**The Company Corporation**  
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**(800) 474-8135**

(Name, address, including zip code, and telephone number,  
including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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

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

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

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

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

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

Accelerated Filer   
Smaller Reporting Company

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Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price <sup>(1)</sup>	Amount of Registration Fee <sup>(4)</sup>
Class A Units, each consisting of one share of common stock, par value \$0.00001 per share, and half of a Series A Warrant to purchase one share of common stock	\$2,147,600	\$ 249.55
Common stock, par value \$0.00001 per share, underlying the Class A Units <sup>(2)(3)</sup>	\$	\$
Series A Warrants to purchase common stock, underlying the Class A Units <sup>(3)</sup>	\$	\$
Common stock underlying Series A Warrants <sup>(2)</sup>	\$1,073,800	\$ 124.78
Class B Units, each consisting of one pre-funded Series B Warrant to purchase one share of common stock and half of a Series A Warrant to purchase one share of common stock	\$3,752,400	\$ 436.03
Pre-funded Series B Warrants to purchase common stock underlying the Class B Units <sup>(3)</sup>	\$	\$
Series A Warrants to purchase common stock underlying the Class B Units <sup>(3)</sup>	\$	\$
Common stock underlying the pre-funded Series B Warrants <sup>(2)(3)</sup>	\$	\$
Common stock underlying the Series A Warrants <sup>(2)</sup>	\$1,876,200	\$ 218.01
Series C Warrants to purchase additional Class A Units <sup>(3)</sup>	\$	\$
Class A Units underlying Series C Warrants, each consisting of one share of common stock and half of a Series A Warrant to purchase one share of common stock	\$1,610,700	\$ 187.16
Common stock, par value \$0.00001 per share, underlying the Class A Units <sup>(2)(3)</sup>	\$	\$
Series A Warrants to purchase common stock, underlying the Class A Units <sup>(3)</sup>	\$	\$
Common stock underlying Series A Warrants <sup>(2)</sup>	\$805,350	\$ 93.58
Series D Warrants to purchase additional Class B Units <sup>(3)</sup>	\$	\$
Class B Units underlying Series D Warrants, each consisting of one pre-funded Series B Warrant to purchase one share of common stock and half of a Series A Warrant to purchase one share of common stock	\$2,814,300	\$ 327.02
Pre-funded Series B Warrants to purchase common stock underlying the Class B Units <sup>(3)</sup>	\$	\$
Series A Warrants to purchase common stock underlying the Class B Units <sup>(3)</sup>	\$	\$
Common stock underlying the pre-funded Series B Warrants <sup>(2)(3)</sup>	\$	\$
Common stock underlying the Series A Warrants <sup>(2)</sup>	\$1,407,150	\$ 163.51
<b>TOTAL</b>	<b>\$15,487,500</b>	<b>\$ 1,799.65</b>

(1)

This amount represents the proposed maximum offering price of the securities registered hereunder that may be sold by the registrant. Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the Securities Act ).

(2) Pursuant to Rule 416 under the Securities Act, the shares of common stock registered hereby also include an indeterminate number of additional shares of common stock as may from time to time become issuable by reason of stock splits, stock dividends, recapitalizations or other similar transactions.

(3) No registration fee is required pursuant to Rule 457(g).

(4) Previously paid.

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

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

**PRELIMINARY PROSPECTUS**

**SUBJECT TO COMPLETION**

**DATED AUGUST 4, 2015**

**1,180,000 Class A Units, Each Consisting of One Share  
of Common Stock and  
0.5 of a Series A Warrant to Purchase One Share of  
Common Stock  
and  
2,061,758 Class B Units, Each Consisting of One  
Pre-funded Series B Warrant to  
Purchase One Share of Common Stock and 0.5 of a  
Series A  
Warrant to Purchase One Share of Common Stock  
and  
885,000 Series C Warrants, Each to Purchase One  
Class A Unit  
and  
1,546,319 Series D Warrants, Each to Purchase One  
Class B Unit**

We are offering up to 1,180,000 Class A Units (the "Class A Units"), each Class A Unit consisting of one share of our common stock and 0.5 of a Series A Warrant (the "Series A Warrants") to purchase one share of our common stock. The Class A Units are being offered at an assumed offering price of \$1.82 per Class A Unit, the closing trading price of our common stock on July 30, 2015.

We are also offering to those purchasers whose purchase of Class A Units in this offering would result in their beneficial ownership, together with their affiliates and certain related parties, of more than 9.99% of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of Class A Units that would result in such ownership of more than 9.99%, up to 2,061,758 Class B Units (the "Class B Units"), with each Class B Unit consisting of one pre-funded Series B Warrant to purchase one share of our common stock (the

1,180,000 Class A Units, Each Consisting of One Share of Common Stock and 0.5 of a Series A Warrant to Purchase

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Pre-funded Series B Warrants ) and 0.5 of a Series A Warrant. The purchase price for each Class B Unit would equal the per unit public offering price for the Class A Units in this offering less the \$0.01 per share exercise price of the Pre-funded Series B Warrant included in the Class B Unit.

We are also offering up to 885,000 Series C Warrants (the Series C Warrants ), each to purchase one additional Class A Unit, and up to 1,546,319 Series D Warrants (the Series D Warrants , and together with the Series A Warrants, Pre-funded Series B Warrants and Series C Warrants, the Offering Warrants ), each to purchase one additional Class B Unit. The Series C Warrants are being offered at a price of \$0.01 per Series C Warrant. The Series D Warrants are being offered at a price of \$0.01 per Series D Warrant.

The Class A Units and Class B Units will not be issued or certificated. Purchasers will receive only shares of common stock, Series A Warrants, Pre-funded Series B Warrants, Series C Warrants and Series D Warrants. The common stock, the Series A Warrants, the Pre-funded Series B Warrants, the Series C Warrants and the Series D Warrants may be transferred separately immediately upon issuance.

Each Series A Warrant will be immediately exercisable at an initial exercise price of \$1.82 per share (100% of the public offering price of the Class A Units). The Series A Warrants will expire on the fifth anniversary of the initial date of issuance.

Each Pre-funded Series B Warrant will be immediately exercisable at an initial exercise price of \$0.01 per share. The Pre-funded Series B Warrants will expire on the fifth anniversary of the initial date of issuance.

Each Series C Warrant is exercisable for one additional Class A Unit, each of which consists of one share of our common stock and 0.5 of a Series A Warrant to purchase one share of our common stock. The Series C Warrants are exercisable immediately at an initial exercise price of \$1.82 per Class A Unit (100% of the public offering price of the Class A Units), subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, the Series C Warrants will be exercisable at a per Class A Unit exercise price equal to the lower of (i) the then-effective exercise price per Class A Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day. The Series C Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance.

Each Series D Warrant is exercisable for one additional Class B Unit, each of which consists of one Pre-funded Series B Warrant to purchase one share of our common stock and 0.5 of a Series A Warrant to purchase one share of our common stock. The Series D Warrants are exercisable immediately at an initial exercise price of \$1.81 per Class B Unit (100% of the public offering price of the Class B Units), subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, the Series D Warrants will be exercisable at a per Class B Unit exercise price equal to the lower of (i) the then-effective exercise price per Class B Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day. The Series D Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance.

Our common stock is currently traded on the NASDAQ Capital Market ( NASDAQ ) under the symbol XGTI . The closing price of our shares of common stock on NASDAQ on July 30, 2015 was \$1.82 per share. On July 17, 2015, we effected a 1-for-10 reverse stock split of our outstanding common stock.

There is no established trading market for the Offering Warrants, and we do not expect an active trading market to develop. We do not intend to list the Offering Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of the Offering Warrants will be limited.

1,180,000 Class A Units, Each Consisting of One Share of Common Stock and 0.5 of a Series A Warrant to Purchase

We are an emerging growth company as the term is used in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act ) and, as such, have elected to comply with certain reduced public company reporting requirements for this and future filings.

**Investing in our securities involves a high degree of risk. See Risk Factors beginning on page 13 of this prospectus for a discussion that should be considered in connection with an investment in our securities.**

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

	Per Class A Unit	Per Class B Unit	Per Series C Warrant	Per Series D Warrant	Total
Public offering price	\$	\$	\$	\$	\$
Underwriting discounts and commissions <sup>(1)</sup>	\$	\$			\$
Proceeds to us, before expenses	\$	\$	\$	\$	\$

The underwriter will receive compensation in addition to the underwriting discounts and commissions. We also have agreed to pay the underwriter a cash solicitation fee equal to 7% of the gross proceeds, if any, received by us upon the exercise of the Series C Warrants and Series D Warrants offered hereby under certain circumstances. See Underwriting.

The underwriter expects to deliver our securities to purchasers in the offering on or about , 2015.

## Roth Capital Partners

The date of this prospectus is , 2015.



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You should rely only on the information contained in this prospectus. Neither we nor the underwriter have authorized anyone to provide you with information that is additional or different. Neither we nor the underwriter are making an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only. Our business, prospects, financial condition and results of operations may have changed since that date.

Information contained in, and that can be accessed through, our web site, [www.xgtechnology.com](http://www.xgtechnology.com), does not constitute part of this prospectus.

The xG logo is a trademark of xG Technology, Inc. All other trademarks and service marks appearing in this prospectus are the property of their respective holders.

This prospectus includes market and industry data that has been obtained from third party sources, including industry publications, as well as industry data prepared by our management on the basis of its knowledge of and experience in the industries in which we operate (including our management's estimates and assumptions relating to such industries based on that knowledge). Management's knowledge of such industries has been developed through its experience and participation in these industries. While our management believes the third-party sources referred to in this prospectus are reliable, neither we nor our management have independently verified any of the data from such sources referred to in this prospectus or ascertained the underlying economic assumptions relied upon by such sources. Internally prepared and third party market forecasts, in particular, are estimates only and may be inaccurate, especially over long periods of time. In addition, the underwriter has not independently verified any of the industry data prepared by

management or ascertained the underlying estimates and assumptions relied upon by management. Furthermore, references in this prospectus to any publications, reports, surveys or articles prepared by third parties should not be construed as depicting the complete findings of the entire publication, report, survey or article. The information in any such publication, report, survey or article is not incorporated by reference in this prospectus.

Until \_\_\_\_\_, 2015 (25 days after the commencement of the offering) all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

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## PROSPECTUS SUMMARY

*This summary highlights selected information contained in greater detail elsewhere in this prospectus. This summary does not contain all the information you should consider before investing in our common stock. You should read the entire prospectus carefully before making an investment decision, especially Risk Factors and the financial statements and the related notes. Unless the context provides otherwise, all references herein to xG, xG Technology, the Company, we, our and us refer to xG Technology, Inc. For definitions of certain industry terms used throughout this prospectus, please see Glossary.*

*All share and per share amounts in this prospectus give retroactive effect to the 1-for-10 reverse stock split (the Reverse Stock Split) that became effective on July 17, 2015.*

### Our Company

We have developed a broad portfolio of innovative intellectual property to enhance wireless communications. Our intellectual property is embedded in proprietary software algorithms that offer cognitive interference mitigation and spectrum access solutions for countless applications using commercial off the shelf devices. We recently released the commercially available version of our software and hardware products using our proprietary xMax® cognitive radio technology.

Our current cognitive radio technology is based on years of product development. In 2008 and 2009, we generated material revenues from sales of our prior BSN250 voice-only products. After the introduction of various smartphones in 2007 and later that could handle both voice and data, we decided to enhance our voice-only products to include data services. In 2011, we delivered our enhanced BSN250 base station and TX70 handset for both voice and SMS services to the U.S. Army. Given the proliferation of smartphones, the U.S. Army subsequently requested that our BSN250 base station should integrate with commercial off the shelf devices. In 2013, we introduced an improved product line that could handle both voice and data services. These new products, the Access Point (CN1100), formerly known as the xAP base station, the Mobile Hotspot (CN5100), formerly known as the xMod modem, and the Vehicle Modem (CN3100), formerly known as the xVM modem, are able to communicate with any wi-fi enabled commercial off the shelf device. In 2014, we began developing a new product, the CN3200 Dual Band Routing Modem (CN3200), formerly known as the xRM modem. On September 30, 2014, we received certification from the U.S. Federal Communications Commission in connection with the CN3200. The CN3200 is a module that complements the xMax mobile system and is designed to provide high speed fixed broadband access using frequencies at 2.4 GHz. It offers an end-user solution that seamlessly integrates xMax and wi-fi in a single device, and allows the delivery of both high data rates and reliable high-speed mobility in the same system. We believe that the CN3200 will provide higher performance with dedicated channels for voice (xMax) and data (wi-fi), will maximize user experience via interprotocol smart-routing, and provide greater reliability.

We believe that the wireless communications industry is facing a spectrum crisis because the demand for flexible, affordable voice and data access continues to increase rapidly while the amount of available spectrum remains relatively constant. We have developed frequency-agnostic cognitive radio solutions to address this increasing demand by eliminating the need to acquire scarce and expensive licensed radio spectrum, and thus ideally lowering the total cost of ownership for wireless broadband access. With fast-growing demand straining network capacity, our intellectual property is also designed to help wireless broadband network operators make more efficient use of their existing spectrum allocations. We are targeting sales in numerous industries worldwide, such as telecommunications services, public safety and defense, and in markets ranging from rural to urban areas as well as expeditionary

deployments.

The initial implementation of our cognitive radio intellectual property is xMax. We believe the xMax system is the only commercially available cognitive radio network system that includes our interference mitigation and spatial processing technologies. xMax implements our proprietary interference mitigation software that can increase capacity on already crowded airwaves by improving interference tolerance, enabling the delivery of higher QoS than other technologies that would not be able to cope with the interference. We believe that the xMax system will also, when operating on more than one radio channel, deliver dynamic spectrum access by using our patented self-organizing network techniques. Furthermore, the xMax system can be used to provide additional capacity to licensed spectrum by identifying and utilizing unused bandwidth within the licensed spectrum.

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Our system is frequency agnostic, although currently designed to operate within the 902 – 928 MHz unlicensed band of spectrum. xMax serves as a mobile VoIP and broadband data system that utilizes an end-to-end IP system architecture. The xMax product and service suite includes access points, mobile switching centers, network management systems, deployment tools and proactive customer support. The xMax system will allow mobile operators to utilize free, unlicensed 902 – 928 MHz ISM band spectrum (which spectrum is available in all of the Americas except French Guiana) instead of purchasing scarce and expensive licensed spectrum. Our xMax system will also enable enterprises to set up a mobile communications network in an expeditious and cost-effective manner.

We have generated significant net losses for the past several years and we expect to continue to realize net losses for the immediate future.

We are executing on our sales and marketing strategy and have entered into direct sales agreements with end-customers and indirect sales agreements with channel network partners. These customer engagements are primarily in two of our target markets: public safety and rural telecommunications.

## **Our Strengths**

We believe the following strengths position us for sustainable growth:

***Our proprietary xMax® cognitive radio technology.*** We have developed our xMax cognitive radio technology to create a turnkey network solution. This solution encompasses the key elements of our cognitive technology, including spectrum sensing, spectrum management, spectrum mobility, spectrum sharing and spatial processing. Our software and hardware products and our end-to-end IP architecture implement this solution to provide quality VoIP and data services for countless applications and commercial off the shelf devices.

***Our technology addresses an expanding market need.*** Our market opportunity has accelerated and expanded due to the spectrum crisis and the stated goals of governmental organizations to increase spectrum access. Our cognitive technology allows mobile wireless networks to provide quality voice and data services using unlicensed spectrum, and our interference mitigation and spatial processing techniques enable these services even in crowded or shared spectrum bands. Rural telecommunication providers, public safety agencies, industrial and enterprise users, and those who use unlicensed spectrum can use our products and services to create wireless networks without the significant capital outlays and delays required to license spectrum.

***Our solutions meet the specific needs of targeted markets.*** Our cognitive radio technology has been specifically developed to make our entire network infrastructure mobile, so that it can be rapidly deployed in response to public safety or security threats. We believe this feature differentiates our technology from that of our competitors and will address a major capability gap for public safety, defense, homeland security and news agencies. In addition, the expanded range of our network can provide improved voice and data services for underserved rural markets.

***We have a broad patent portfolio and unencumbered use of our intellectual property.*** We maintain a broad patent portfolio consisting of patents and patent applications in the United States and many international jurisdictions, which include 54 issued U.S. patents and 59 issued international patents. We have solely funded the development of our intellectual property, which is, accordingly, unencumbered by any federal government unlimited use licenses.

***We have an accomplished leadership team.*** Our management team and board of directors bring a wealth of experience in the telecommunications and military sectors as well as hardware and software development. Our engineering team has a strong track record developing ad-hoc networking domains at Motorola and Mesh Networks. In addition, most of our leadership team has strong ties to our target markets, including public safety organizations, rural telecommunications companies and the military.



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### **Our Strategy**

We are developing a broad portfolio of innovative intellectual property that we believe will enhance wireless communications. Leveraging elements of this intellectual property portfolio, we plan to introduce a range of spectrum agnostic, cognitive radio solutions for numerous industries and applications. We believe that sales of these products and services, together with our ability to leverage our patent portfolio, present us with an attractive revenue model.

Our current strategy is to commercialize our intellectual property portfolio by developing and selling network products using our proprietary software algorithms to offer cognitive interference mitigation and spectrum access solutions. Our future strategies are for our intellectual property to be embedded by partners in a semiconductor chip that could be sold to third-party equipment manufacturers and inserted in their devices, and to license our intellectual property to other customers in industry verticals world-wide.

### **Recent Developments**

#### **Bridge Loans**

On June 11, 2015, the Company entered into a securities purchase agreement with a group of accredited investors pursuant to which the Company sold an aggregate of \$1,166,666 in principal amount of 8% Original Issue Discount Convertible Notes due December 11, 2015 (the 8% Convertible Notes ) for an aggregate purchase price of \$1,050,000. The Company received net proceeds of \$907,500 from the sale of the 8% Convertible Notes after deducting placement agent fees and other expenses.

On July 14, 2015, the Company issued an additional tranche of \$466,667 in principal amount of 8% Convertible Notes for an aggregate purchase price of \$420,000. The Company received net proceeds of \$400,000 from the sale of the additional tranche of 8% Convertible Notes after deducting placement agent fees and other expenses.

#### **Short-Term Loan**

From April 1, 2015 to July 30, 2015, the Company received a total of \$1,010,000 from George Schmitt, Chairman of the Board and Chief Executive Officer. The amount was recorded due to related parties.

### **Company Announcements**

On July 17, 2015, we effected a 1-for-10 reverse stock split of our outstanding common stock.

On July 16, 2015, we filed an S-8 Registration Statement to register 100,000 shares of common stock under the 2015 Employee Stock Purchase Plan, at an offering price of \$2.66 per share.

In July 2015, we announced we received an order for approximately \$309,000 for xMax mobile broadband wireless equipment and services which will be integrated into a dedicated Telemedicine/Telehealth Systems Network Infrastructure. The initial network Phase 1 will be built out in St. George s, the capital of Grenada, with a Network Operations Center (NOC) capable of supporting regional expansion and growth throughout CARICOM, the community of 15 nations and dependencies located in the Caribbean. The xMax equipment order was received from Telemedicine MM Systems-New York ( Telemedisys ), an integrator of healthcare and other network systems. Telmedisys plans to integrate the xMax mobile broadband communications platform into its network infrastructure to deliver telemedicine/telehealth, emergency response services, disaster recovery and other applications at an affordable

cost. The integration of xMax broadband wireless networking equipment into the network infrastructure will facilitate the desired turnkey-design effect.

In June 2015, we announced we successfully demonstrated our interference mitigation capabilities against sustained electronic attacks (jamming) at the U.S. Special Operations Command's (USSOCOM) Technical Experimentation Event 15-3 conducted June 14 to June 18 at the Muscatatuck Urban Training Center (MUTC) in Indiana. During a three day exercise, a tactical xMax network was deployed to provide real-time video, position location and integrated tactical radio communications from vehicles operating in diverse terrain throughout the MUTC. Sustained electronic attacks from military-grade jammers were introduced but were unable to disrupt the performance of the xMax network. xG was selected to participate as a technology developer at the event because of the unique capabilities that the xMax cognitive software-defined radio platform brings to tactical and expeditionary operations. xMax was the only communication system on display

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at the event that met the USSOCOM requirement for innovative and advanced software-defined radio technologies that will enable secure and interference-resistant communications for Special Operations Forces ( SOF ).

In May 2015, we announced we received an order for approximately \$100,000 in xMax mobile broadband wireless equipment and services which will be deployed in a network to be initially installed in Escazu, Costa Rica, with plans to expand in other Latin American locations. The xMax equipment order was received from Itellum, LLC ( Itellum ), a related party, one of four companies who have entered into a formal agreement to participate in the initial xMax deployment as well as expansion into other Latin American markets thereafter. The other partners include Level 3 Communications ( Level 3 ), Osmin Vargas Corporacion ( OV ), and MB Technology Holdings, LLC ( MBTH ), a related party. The xMax broadband wireless networking equipment will include compact, high-performance access points, fixed and mobile personal WiFi hotspot devices and mobile control switching centers. In June 2015, we announced the successful installation and initial deployment of an xMax broadband network in Escazu, Costa Rica by Itellum. This represents the first stage of xMax network deployments that are expected to cover additional areas of Costa Rica, with plans for expansion into other Latin American locations. In June 2015, we announced that we received an additional order for approximately \$58,000 in xMax mobile broadband wireless equipment and services from Itellum.

In May 2015, we announced that we were awarded a new patent covering enhanced techniques for mitigating interference in wireless transmissions. The new patent, Hybrid ARQ System with Snapshot Feedback Mechanism for Interference Prone Wireless Networks, outlines a method for faster and more detailed analysis of data being received, which will help deliver smoother and more reliable communications in crowded and challenged RF (radio frequency) environments. Impairments in wireless channels can cause data corruption and loss, and adversely impact system throughput. The presence of interference, both intentionally and non-intentionally generated, exacerbates this problem and further degrades performance. This is a growing occurrence in public cellular systems that can be weighed down (and even become unavailable) when there is a large concentration of users during a crisis or other event.

In May 2015, we also announced a Strategic Technology Alliance Agreement with Drakontas, LLC ( Drakontas ) to cooperate in the marketing of each other's respective solutions. Under the terms of the agreement, the Company and Drakontas will make available integrated products that include xMax private mobile broadband network technology and Drakontas DragonForce mobile team collaboration software application. Built for tactical teams and for everyday law enforcement operations, DragonForce empowers public safety teams to effectively share information in real-time in the field through instant messaging, location, personnel tracking, photo and document sharing and collaborative whiteboards.

In May 2015, we announced that we were awarded a new patent for a method of adding enhanced intelligence to a comprehensive cognitive radio-based solution for mitigating interference in wireless systems. This represents the second patent awarded to the Company this year for improved interference mitigation techniques. The new patent, Interference Rejection Method Based on Multiple Sub-Band Projections, adds a novel approach to dealing with interference that allows wireless systems to maintain high levels of performance, even in difficult transmission environments. This innovation has a direct benefit in markets that require reliable, high-quality communications in unpredictable situations, such as public safety, emergency management and the military sector.

In May 2015, we announced a Strategic Technology Alliance Agreement with Radio IP Software, Inc. ( Radio IP ) to co-market each other's respective solutions. Under the terms of the agreement, xG and Radio IP will make available integrated products that include xMax private mobile broadband network technology and Radio IP's mobile virtual private network (MVPN) solution. The Radio IP solution improves wireless data communications on mission-critical mobile networks by providing application session persistence, FIPS140-2 compliance for all applications running over MVPNs, and roaming to almost all public and private networks available (including LANs, hotspots, carrier and private radio).

In May 2015, we announced that our xMax private wireless broadband system will be FirstNet-ready, having demonstrated interoperability with the commercial LTE cellular network. FirstNet is the planned U.S. nationwide broadband high-speed network that will be reserved for use by the first responder community,

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and having a solution which is LTE-capable is a key requirement for using this network. With LTE capability included in the xMax system, these authorities can update their infrastructure by deploying the xMax wireless broadband system in their area to meet mission-essential needs today, with confidence that it will meet their FirstNet needs in the future.

In April 2015, we announced that we successfully completed the installation and deployment of a three-site pilot xMax broadband wireless network for the Bay Area Regional Interoperable Communications Systems Authority ( BayRICS ). The deployment covers parts of the San Francisco Bay Area municipalities of Livermore, Dublin and Pleasanton. The xMax solution is currently being evaluated by San Francisco Bay Area emergency management organizations. Since the original announcement of the BayRICS deployment on December 18, 2014, dozens of extensive demonstrations have been granted to California public safety stakeholders interested in experiencing the features of the xMax network in a live setting. As a result of these demonstrations, xMax is under consideration for purchase and deployment as a public safety broadband wireless solution by area municipal and emergency operations officials. The pilot network covers approximately 60 square miles and is comprised of xMax networking equipment that includes compact access points and subscriber devices installed in both stationary locations as well as in specially-equipped vehicles to showcase on-the-move support.

In April 2015, we also announced that we achieved increased performance in the patented and market-leading interference mitigation capabilities of the xMax private mobile broadband wireless system. The heightened performance is the result of successfully incorporating more complex and robust signal processing algorithms and other advances spearheaded by xG's research and development team. These technological advancements translate to up to a ten-fold improvement in the ability of xMax to withstand interference.

In addition, in April 2015, we announced an agreement with DirectView Holdings, Inc. to integrate our xMax private mobile broadband technology with DirectView's recently announced body-worn camera scheduled for commercial launch early in the third quarter of 2015. The planned integration will consolidate the private, secure, high-performance communications capabilities of xMax with the advanced features and functionality of DirectView's body-worn camera. In June 2015, we announced that we have begun beta testing of DirectView's innovative body-worn camera solution for law enforcement agencies.

### **Conversions and Balances of Outstanding Series B Preferred Stock**

As of July 30, 2015, 1,195,000 shares of the Series B Preferred Stock and 83,650 shares of the Series B Preferred Stock issued as dividends have been converted into 405,499 shares of our common stock. As of July 30, 2015, all outstanding shares of the Series B Preferred Stock have been fully converted.

### **Conversions and Balance of Outstanding Series C Preferred Stock**

As of July 30, 2015, 1,800,000 shares of the Series C Preferred Stock and 126,000 shares of the Series C Preferred Stock issued as dividends have been converted into 946,518 shares of our common stock. As of July 30, 2015, all outstanding shares of the Series C Preferred Stock have been fully converted.

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## **Risks That We Face**

An investment in our common stock involves a high degree of risk. You should carefully consider the risks summarized below. The risks are discussed more fully in the Risk Factors section of this prospectus immediately following this prospectus summary.

These risks include, but are not limited to:

we have a history of operating losses and we may continue to realize net losses for at least the next 12 months;  
we may not be able to continue as a going concern and may not be able to operate in the future;  
our business depends upon our ability to generate sustained sales of our products and technology;  
our business depends on our ability to continually develop and commercialize new products and technologies and penetrate new markets;  
we need to obtain or maintain patents or other appropriate protection for the intellectual property utilized in our technologies;  
our industry is highly competitive and we may not be able to compete with companies with larger resources than we have;  
we may require additional capital to develop new products; and  
new regulations or standards or changes in existing regulations or standards related to our products may result in unanticipated costs or liabilities.

## **Company Information**

The Company was organized as a limited liability company under the laws of the State of Delaware on August 26, 2002 under the name JTS Acquisitions, LLC. On March 21, 2003, we changed our name to xG Technology, LLC. Pursuant to a certificate of conversion and a certificate of incorporation filed with the State of Delaware on November 8, 2006, xG Technology, LLC converted to a Delaware corporation under the name xG Technology, Inc.

We are an emerging growth company as defined in the JOBS Act. We could remain an emerging growth company for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceeds \$1 billion, (ii) the date that we become a large accelerated filer as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period. Pursuant to Section 102 of the JOBS Act, we have provided reduced executive compensation disclosure and have omitted a compensation discussion and analysis from this prospectus. Pursuant to Section 107 of the JOBS Act, we have elected to utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

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## THE OFFERING

Securities offered by us:

Up to 1,180,000 Class A Units. Each Class A Unit will consist of one share of our common stock and 0.5 of a Series A Warrant to purchase one share of our common stock. The Series A Warrants (including the Series A Warrants issuable upon the exercise of the Series C Warrants) will be exercisable immediately at an initial exercise price of \$1.82 per share (100% of the public offering price of the Class A Units) and will expire on the fifth (5<sup>th</sup>) anniversary of the initial date of issuance. See Description of Securities-Series A Warrants for a discussion of the terms of the Series A Warrants.

We are also offering to those purchasers whose purchase of Class A Units in this offering would result in their beneficial ownership, together with their affiliates and certain related parties, of more than 9.99% of our outstanding common stock following the consummation of this offering, up to 2,061,758 Class B Units, with each Class B Unit consisting of one Pre-funded Series B Warrant to purchase one share of our common stock and 0.5 of a Series A Warrant to purchase one share of our common stock. Each Pre-funded Series B Warrant will have an exercise price of \$0.01 per share, will be exercisable upon issuance and will expire five years from the date of issuance. See

Description of Securities Pre-funded Series B Warrants for a discussion of the terms of the Pre-funded Series B Warrants.

In addition, we are offering up to 885,000 Series C Warrants, each to purchase one additional Class A Unit. The Series C Warrants are exercisable immediately at an initial exercise price of \$1.82 per Class A Unit (100% of the public offering price of the Class A Units), subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, the Series C Warrants will be exercisable at a per Class A Unit exercise price equal to the lower of (i) the then-effective exercise price per Class A Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day. The Series C Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance. See Description of Securities-Series C Warrants for a discussion of the term of the Series C Warrants.

We are also offering up to 1,546,319 Series D Warrants, each to purchase one additional Class B Unit. The Series D Warrants are exercisable immediately at an initial exercise price of \$1.81 per Class B Unit (100% of the public offering price of the Class B Units), subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, the Series D Warrants will be exercisable at a per Class B Unit exercise price equal to the lower of (i) the then-effective exercise price per Class B Unit and (ii) 80% of the closing price of our

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common stock on such 60<sup>th</sup> trading day. The Series D Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance. See Description of Securities Series D Warrants for a discussion of the term of the Series D Warrants.

Common stock outstanding after this offering:

8,322,734 shares of common stock, assuming the full exercise of the Pre-funded Series B Warrants underlying the Class B Units or 10,754,053 shares of common stock, assuming the full exercise of the Series C Warrants and Series D Warrants and the Pre-funded Series B Warrants underlying the Class B Units in the Series D Warrants.

Use of proceeds:

We estimate that the net proceeds in this offering will be approximately \$5,118,200, based on the public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units), or approximately \$9,219,069 if the Series C Warrants and Series D Warrants are exercised in full based on exercise prices of \$1.82 and \$1.81, respectively, after deducting estimated underwriting discounts and commissions, solicitation fees on the exercise of the Series C Warrants and Series D Warrants, and estimated offering expenses payable by us, and after deduction.

We currently intend to use the net proceeds of this offering for general corporate purposes, including working capital, product development, marketing activities, expanding our internal sales organization and further developing sales channels, funding the set-up of contract manufacturing production lines and other capital expenditures. In addition, if we raise gross proceeds of at least \$7,000,000 in this offering we will be required to redeem the 8% Convertible Notes pursuant to their terms. See Use of Proceeds for a complete discussion.

Risk Factors:

See the section entitled Risk Factors beginning on page 13 for a discussion of factors to consider carefully before deciding whether to purchase our securities.

NASDAQ Symbol:

Common Stock XGTI. On July 17, 2015, we effected a 1-for-10 reverse stock split of our outstanding common stock.

The number of shares of our common stock to be issued and outstanding after this offering is based on 5,080,976 shares of common stock issued and outstanding as of July 30, 2015, which number excludes:

28,572 shares of common stock issuable upon the exercise of the option granted to MB Technology Holdings, LLC ( MBTH ) on February 7, 2011 (as amended by agreement between us and MBTH as of January 16, 2013) at an exercise price of \$133.00 per share (the Modified Exercise Price ), which was subsequently lowered to \$55.00 on September 30, 2013.

28,572 shares of common stock issuable upon the exercise of the option granted to MBTH on February 7, 2011 (as amended by agreement between us and MBTH as of January 16, 2013) at the Modified Exercise Price per share, which was subsequently lowered to \$55.00 on September 30, 2013.

5,715 shares of common stock issuable upon the exercise of the conversion rights granted to Treco International, S.A. ( Treco ) on October 6, 2011 at a conversion price of \$350.00.

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Up to 4,286 shares of common stock issuable upon exercise of the rights to be granted to MBTH to subscribe to new shares at a subscription price of \$3.50 per new share if the holders of warrants to subscribe for MBTH shares or exchange for existing shares in our common stock held by MBTH (the MBTH Warrants ) are exercised by the holders thereof (the Additional Warrants ). MBTH Warrants were granted by MBTH, on the basis of one-tenth of a warrant for every \$350 invested in MBTH, to investors in MBTH of funds for MBTH to lend to us under the May 2011 Shareholder Loan. The actual number of Additional Warrants to be granted by us depends on the cost to MBTH resulting from the exercise of the MBTH Warrants.

136,364 shares of common stock issuable upon the exercise of the warrant issued to MBTH pursuant to the onetime agreement approved on September 30, 2013, exercisable at \$68.70 per share.

109,378 warrants issued to MBTH and other investors pursuant to the conversion of the Bridge Loan, exercisable at \$68.70 per share.

2,787 shares of common stock issuable upon exercise of the rights to be granted to investors as part of the Bridge Loan, which are exercisable at \$3.50 per share.

14,286 shares of common stock issuable upon exercise of the options agreed to be granted to MBTH on January 16, 2013 at an exercise price of \$87.50 per share in consideration for ongoing strategic and commercial advisory services provided by MBTH to us.

311,993 shares of common stock issuable upon exercise of stock options outstanding under the 2004, 2005, 2006, 2007, 2009 and 2013 Stock Incentive Plans and the 2015 Incentive Compensation Plan.

858 warrants issued to Secure Strategy Group exercisable at \$350.00 per share.

1,429 shares of common stock issuable upon the exercise of warrants granted to Mats Wennberg which are exercisable at \$78.70 per share.

76,923 shares of common stock issuable upon the exercise of warrants sold to investors as part of our initial public offering completed on July 24, 2013, including those issued as part of the over-allotment, which are exercisable at \$68.70 per share.

4,014 shares of common stock issuable upon the exercise of warrants granted to underwriters as part of our initial public offering completed on July 24, 2013, which are exercisable at \$68.70 per share.

17,145 shares of common stock issuable upon the exercise of warrants granted to underwriters as part of our public offering completed on November 18, 2013, which are exercisable at \$21.875 per share.

37,500 shares of our common stock issuable upon the exercise of warrants sold to investors as part of the Series A Preferred Stock financing completed on December 30, 2014, which are exercisable at \$11.50 per share.

17,500 shares of our common stock issuable upon the exercise of warrants sold to investors as part of the Series B Preferred Stock financing completed on February 11, 2015, which are exercisable at \$11.50 per share.

42,250 shares of our common stock issuable upon the exercise of warrants sold to investors as part of the Series B Preferred Stock financing completed on February 23, 2015, which are exercisable at \$20.00 per share.

90,000 shares of our common stock issuable upon the exercise of warrants sold to investors as part of the Series C Preferred Stock financing completed on February 24, 2015, which are exercisable at \$11.50 per share.

326,667 shares of our common stock that may be issued upon conversion of \$1,633,333 principal amount of the 8% Convertible Notes based on a conversion price of \$5.00.

Unless otherwise indicated, all information in this prospectus assumes a public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units).

TABLE OF CONTENTS**SUMMARY FINANCIAL DATA**

The following table presents a summary of certain historical financial information. Historical results are not necessarily indicative of future results and you should read the following summary financial data in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes included elsewhere in this prospectus. The summary financial data for the years ended December 31, 2014 and 2013 were derived from our audited financial statements, which are included elsewhere in this prospectus.

The summary financial data for the three months ended March 31, 2015 and 2014 were derived from unaudited financial statements included elsewhere in this prospectus. The summary financial data in this section are not intended to replace the financial statements and are qualified in their entirety by the financial statements and related notes included elsewhere in this prospectus.

**xG TECHNOLOGY, INC.**

**BALANCE SHEETS**  
**AS OF MARCH 31, 2015 AND DECEMBER 31, 2014**  
**(IN THOUSANDS EXCEPT SHARE DATA)**  
**Unaudited**

	March 31, 2015	December 31, 2014
<b>ASSETS</b>		
Current assets		
Cash	\$ 221	\$ 758
Cash, restricted	600	
Inventory, net	3,758	4,070
Accounts receivable, net of allowance of \$30 and \$30 (\$335 and \$480 from related party)	557	702
Prepaid expenses and other current assets	336	411
Total current assets	5,472	5,941
Property and equipment, net	882	816
Intangible assets, net	16,111	16,382
Total assets	\$ 22,465	\$ 23,139
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable	\$ 1,393	\$ 868
Accrued expenses	731	511
Accrued interest	87	42
Deferred revenue	50	
Due to related parties	264	2,110



Deferred revenue related party		480
Obligation under capital lease	135	123
Derivative liabilities	520	270
Total current liabilities	3,180	4,404
Long-term obligation under capital lease	83	
Convertible note payable	2,000	2,000
Total liabilities	5,263	6,404

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	March 31, 2015	December 31, 2014
Commitments and contingencies		
Series A convertible preferred stock \$0.00001 par value per share: 3,000,000 shares authorized at March 31, 2015 and December 31, 2014; 0 and 750,000 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$0 at March 31, 2015 and \$750,100 at December 31, 2014)	\$	\$378
Series B convertible preferred stock \$0.00001 par value per share: 3,000,000 and 0 shares authorized at March 31, 2015 and December 31, 2014; 250,000 and 0 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$252,300 at March 31, 2015)	104	
Series C convertible preferred stock \$0.00001 par value per share: 3,000,000 and 0 shares authorized at March 31, 2015 and December 31, 2014; 1,589,720 and 0 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$1,600,391 at March 31, 2015)	895	
Total convertible preferred stock	999	378
Stockholders' equity (deficit)		
Preferred stock \$0.00001 par value per share: 1,000,000 and 7,000,000 shares authorized as of March 31, 2015 and December 31, 2014; none issued or outstanding as of March 31, 2015 and December 31, 2014		
Common stock, \$0.00001 par value, 100,000,000 shares authorized, 3,641,914 and 2,617,622 shares issued as of March 31, 2015 and December 31, 2014, respectively	*	*
Additional paid in capital	190,302	186,919
Accumulated deficit	(174,077)	(170,540)
Treasury stock, at cost 229 shares at March 31, 2015 and December 31, 2014, respectively	(22 )	(22 )
Total stockholders' equity	16,203	16,357
Total liabilities and stockholders' equity	\$22,465	\$23,139

\*

Less than \$1

**xG TECHNOLOGY, INC.**

**UNAUDITED CONDENSED STATEMENTS OF  
OPERATIONS  
(IN THOUSANDS EXCEPT NET LOSS PER SHARE  
DATA)  
Unaudited**

	For the Three Months Ended March 31,	
	2015	2014
Revenue	\$ 584	\$ 250
Cost of revenue and operating expenses		
Cost of components and personnel	330	63
General and administrative expenses	1,586	1,679
Development	1,550	2,453
Stock based compensation	133	214
Amortization and depreciation	960	948
Total cost of revenue and operating expenses	4,559	5,357
Loss from operations	(3,975 )	(5,107)

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	For the Three Months Ended March 31,	
	2015	2014
Other income (expense)		
Changes in fair value of derivative liabilities	\$ 485	\$
Interest expense, net	(47 )	(46 )
Total other income (expense)	438	(46 )
Loss before income tax provision	(3,537 )	(5,153 )
Income tax provision		
Net loss	\$ (3,537 )	\$ (5,153 )
Dividends and deemed dividends	1,070	
Net loss attributable to common shareholders	(4,607 )	(5,153 )
Basic and diluted net loss per share	\$ (1.54 )	\$ (2.75 )
Weighted average number of shares outstanding basic and diluted	2,998	1,876

**xG TECHNOLOGY, INC.**

## STATEMENTS OF OPERATIONS

### (IN THOUSANDS, EXCEPT PER SHARE DATA)

	For the Year Ended December 31,	
	2014	2013
Revenue	\$ 628	\$ 406
Cost of revenue and operating expenses		
Cost of components and personnel	156	102
General and administrative expenses	7,618	5,501
Development	7,597	5,468
Stock based compensation	625	796
Amortization and depreciation	3,871	2,370
Total cost of revenue and operating expenses	19,867	14,237
Loss from operations	(19,239 )	(13,831 )
Other income (expense)		
Other income	440	
Other expense		(10,068 )
Inducement expense		(391 )
Interest expense, net	(179 )	(2,227 )
Impairment		(933 )
Total other income (expense)	261	(13,619 )
Loss before income tax provision	(18,978 )	(27,450 )
Income tax provision		
Net loss	\$ (18,978 )	\$ (27,450 )

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Dividends	*	
Net loss attributable to common shareholders	(18,978 )	(27,450 )
Basic and diluted net loss per share	(8.31 )	(28.59 )
Weighted average number of shares outstanding basic and diluted	2,285	960

\*

Less than \$1

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## **RISK FACTORS**

*Our business faces many risks and an investment in our common stock involves significant risks. Prospective investors are strongly encouraged to consider carefully the risks described below, as well as other information contained herein, before investing. Investors are further advised that the risks described below may not be the only risks we face. Additional risks that we do not yet know of, or that we currently think are immaterial, may also negatively impact our business operations or financial results. If any of the events or circumstances described in this section occurs, our business, financial condition or results of operations could suffer. Prospective investors in our common stock should consider the following risks before deciding whether to purchase shares.*

### **Risks Related to the Company and Our Business**

#### **We have a history of operating losses and we expect to continue to realize net losses for at least the next 12 months.**

We have recorded a net loss in each reporting period since our inception. Our net loss for the year ended December 31, 2014 and the three months ended March 31, 2015 was approximately \$18,978,000 and \$3,537,000, respectively. Our accumulated deficit at March 31, 2015, was approximately \$174,077,000. The Company began its research and development activities in 2002, and has had significant net losses and will likely continue to incur net losses until we can successfully commercialize our products and technology. Our independent registered public accounting firm has expressed substantial doubt concerning our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to raise additional capital, obtain other financing and/or close on our potential revenue producing opportunities. The Company expects to continue to have development costs as it develops the next generation of products. In addition, at this stage of our development we are subject to the following risks:

our results of operations may fluctuate significantly, which may adversely affect the value of an investment in our common stock;

we may be unable to develop and commercialize our products; and

it may be difficult to forecast accurately our key operating and performance metrics because of our limited operating history.

#### **We are uncertain of our ability to continue as a going concern, indicating the possibility that we may not be able to operate in the future.**

The audit opinion and notes that accompany our consolidated financial statements for the year ended December 31, 2014, disclose a going concern qualification to our ability to continue in business. The accompanying consolidated financial statements have been prepared under the assumption that we will continue as a going concern. We do not have sufficient cash to fund normal operations and meet debt obligations for the next 12 months without raising additional funds. We currently have no historical recurring source of revenue and our ability to continue as a going concern is dependent on our ability to raise capital to fund our working capital requirements or our ability to profitably execute our business plan. It is not possible for us to predict at this time the potential success of our business. The revenue and income potential of our proposed business and operations are currently unknown. These factors raise substantial doubt about our ability to continue as a going concern.

**We may require additional capital in the future to develop new products. If we do not obtain any such additional financing, if required, our business prospects, financial condition and results of operations will be adversely affected.**

We may require additional capital in the future to develop new products. We may not be able to secure adequate additional financing when needed on acceptable terms, or at all. To execute our business strategy, we may issue additional equity securities in public or private offerings, potentially at a price lower than the public offering price in this offering or the market price of our common stock at the time of such issuance. If we cannot secure sufficient additional funding we may be forced to forego strategic opportunities or delay, scale back and eliminate future product development.

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**Defects or errors in our products and services or in products made by our suppliers could harm our brand and relations with our customers and expose us to liability. If we experience product recalls, we may incur significant expenses and experience decreased demand for our products.**

Our products are inherently complex and may contain defects and errors that are only detectable when the products are in use. Because our products are used for both personal and business purposes, such defects or errors could have a serious impact on our end customers, which could damage our reputation, harm our customer relationships and expose us to liability. Defects or impurities in our components, materials or software, equipment failures or other difficulties could adversely affect our ability, and that of our customers, to ship products on a timely basis as well as customer or licensee demand for our products. Any such shipment delays or declines in demand could reduce our revenues and harm our ability to achieve or sustain desired levels of profitability. We and our customers may also experience component or software failures or defects that could require significant product recalls, rework and/or repairs that are not covered by warranty reserves.

**Our recognition of deferred revenue is subject to future performance obligations and may not be representative of revenues for future periods.**

As of March 31, 2015, we had \$50,000 of deferred revenue recorded as a liability on our balance sheet. This deferred revenue was recorded based on engineering design and installation services that have yet to be performed on hardware products shipped to companies that are owned or controlled by our former director, Larry Townes. On March 31, 2015, we received a partial payment for the equipment that had been delivered in prior transactions, as the purchasers indicated that the equipment met certain technical specifications associated with their networks. Previously, the purchasers did not intend to deliver payment until such technical specifications were satisfied. As of March 31, 2015, these specifications have now been satisfied and the deferred revenue has been recorded as revenue.

In accordance with the Financial Accounting Standards Board ( FASB ), United States generally accepted accounting principles ( U.S. GAAP ), and SEC Staff accounting guidance on revenue recognition, the Company considers revenue earned and realizable when: (a) persuasive evidence of the sales arrangement exists, (b) the arrangement fee is fixed or determinable, (c) service delivery or performance has occurred, (d) customer acceptance has been received, if contractually required, and (e) collectability of the arrangement fee is probable.

Due to potential future changes in customer preferences, or delays in customer development or implementation schedules or budgets, and the need for us to satisfactorily perform product support and other services, deferred revenue and backlog amounts at any particular date may not be representative of actual revenue for any current or future period.

**Although certain technical problems experienced by users may not be caused by our products, our business and reputation may be harmed if users perceive our solutions as the cause of a slow or unreliable network connection, or a high profile network failure.**

We expect that our products will be in many different locations and user environments and will be capable of providing mobile broadband connectivity and interference mitigation, among other applications. The ability of our products to operate effectively can be negatively impacted by many different elements unrelated to our products.



Although certain technical problems experienced by users may not be caused by our products, users often may perceive the underlying cause to be a result of poor performance of our technology. This perception, even if incorrect, could harm our business and reputation. Similarly, a high profile network failure may be caused by improper operation of the network or failure of a network component that we did not supply, but other service providers may perceive that our products were implicated, which, even if incorrect, could harm our business, operating results and financial condition.

**Our ability to sell our products will be highly dependent on the quality of our support and services offerings, and our failure to offer high-quality support and services would have a material adverse effect on our sales and results of operations.**

Once our products are deployed, our channel partners and end-customers will depend on our support organization to resolve any issues relating to our products. A high level of support will be important for the

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successful marketing and sale of our products. In many cases, our channel partners will likely provide support directly to our end-customers. We will not have complete control over the level or quality of support provided by our channel partners. These channel partners may also provide support for other third-party products, which may potentially distract resources from support for our products. If we and our channel partners do not effectively assist our end-customers in deploying our products, succeed in helping our end-customers quickly resolve post-deployment issues or provide effective ongoing support, our ability to sell our products to existing end-customers could be adversely affected and our reputation with potential end-customers could be harmed. In some cases, we guarantee a certain level of performance to our channel partners and end-customers, which could prove to be resource-intensive and expensive for us to fulfill if unforeseen technical problems were to arise.

### **We may fail to recruit and retain qualified personnel.**

We expect to rapidly expand our operations and grow our sales, development and administrative operations. This expansion is expected to place a significant strain on our management and will require hiring a significant number of qualified personnel. Accordingly, recruiting and retaining such personnel in the future will be critical to our success. There is intense competition from other companies for qualified personnel in the areas of our activities. If we fail to identify, attract, retain and motivate these highly skilled personnel, we may be unable to continue our marketing and development activities, and this could have a material adverse effect on the Company's business, financial condition, results of operations and future prospects.

### **We rely on key executive officers, and their knowledge of our business and technical expertise would be difficult to replace.**

We are highly dependent on our executive officers because of their expertise and experience in the telecommunications industry. We have agreements with our executive officers containing customary non-disclosure, non-compete, confidentiality and assignment of inventions provisions. We do not have key person life insurance policies for any of our officers. The loss of the technical knowledge and management and industry expertise of any of our key personnel could result in delays in product development, loss of customers and sales and diversion of management resources, which could adversely affect our operating results.

### **We and our contract manufacturers purchase some components, subassemblies and products from a limited number of suppliers. The loss of any of these suppliers may substantially disrupt our ability to obtain orders and fulfill sales as we design in and qualify new components.**

We rely on third party components and technology to build and operate our products, and we rely on our contract manufacturers to obtain the components, subassemblies and products necessary for the manufacture of our products. Shortages in components that we use in our products are possible, and our ability to predict the availability of such components is limited. While components and supplies are generally available from a variety of sources, we and our contract manufacturers currently depend on a single or limited number of suppliers for several components for our products. If our suppliers of these components or technology were to enter into exclusive relationships with other providers of wireless networking equipment or were to discontinue providing such components and technology to us and we were unable to replace them cost effectively, or at all, our ability to provide our products would be impaired.

We and our contract manufacturers generally rely on purchase orders rather than long-term contracts with these suppliers. As a result, even if available, we and our contract manufacturers may not be able to secure sufficient components at reasonable prices or of acceptable quality to build our products in a timely manner. Therefore, we may

Our ability to sell our products will be highly dependent on the quality of our support and services offerings<sup>34</sup> and our

be unable to meet customer demand for our products, which would have a material adverse effect on our business, operating results and financial condition.

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**We do not have long-term contracts with our existing contract manufacturers. The loss of any of our existing contract manufacturers could have a material adverse effect on our business, operating results and financial condition.**

We do not have long-term contracts with our existing contract manufacturers. If any of our existing contract manufacturers are unable or unwilling to manufacture our products in the future, the loss of such contract manufacturers could have a material adverse effect on our business, operating results and financial condition.

**Our intellectual property protections may be insufficient to properly safeguard our technology.**

Our success and ability to compete effectively are, in large part, dependent upon proprietary technology that we have developed internally. Given the rapid pace of innovation and technological change within the wireless and broadband industries, the technological and creative skill of our personnel, consultants and contractors and their ability to develop, enhance and market new products and upgrades to existing products are critical to our continued success. We rely primarily on patent laws to protect our proprietary rights. As of July 30, 2015, in the United States, we have 54 patents granted, 4 patent applications pending and 1 provisional application pending. Internationally, we have 59 patents granted and 47 patent applications pending. There can be no assurance that patents pending or future patent applications will be issued, or that if issued, we would have the resources to protect any such issued patent from infringement. Further, we cannot patent much of the technology that is important to our business. To date, we have relied on copyright, trademark and trade secret laws, as well as confidentiality procedures, non-compete and/or work for hire invention assignment agreements and licensing arrangements with our employees, consultants, contractors, customers and vendors, to establish and protect our rights to this technology and, to the best extent possible, control the access to and distribution of our technology, software, documentation and other proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use this technology without authorization. Policing unauthorized use of this technology is difficult. There can be no assurance that the steps we take or will take will prevent misappropriation of, or prevent an unauthorized third party from obtaining or using, the technology we rely on. In addition, effective protection may be unavailable or limited in some jurisdictions. Litigation may be necessary in the future to enforce or protect our rights.

**We may be subject to claims of intellectual property infringement or invalidity. Expenses incurred with respect to monitoring, protecting, and defending our intellectual property rights could adversely affect our business.**

Competitors and others may infringe on our intellectual property rights, or may allege that we have infringed on theirs. Monitoring infringement and misappropriation of intellectual property can be difficult and expensive, and we may not be able to detect infringement or misappropriation of our proprietary rights. We may also incur significant litigation expenses in protecting our intellectual property or defending our use of intellectual property, reducing our ability to fund product initiatives. These expenses could have an adverse effect on our future cash flows and results of operations. If we are found to infringe on the rights of others we could be required to discontinue offering certain products or systems, to pay damages, or purchase a license to use the intellectual property in question from its owner.

Litigation can also distract management from the day-to-day operations of the business.

**Enforcement of our intellectual property rights abroad, particularly in China, is limited and it is often difficult to protect and enforce such rights.**

Patent protection outside the United States is generally not as comprehensive as in the United States and may not protect our intellectual property in some countries where our products are sold or may be sold in the future. Even if patents are granted outside the United States, effective enforcement in those countries may not be available. Many companies have encountered substantial intellectual property infringement in countries where we sell, or intend to sell, products or have our products manufactured.

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In particular, the legal regime relating to intellectual property rights in China is limited and it is often difficult to protect and enforce such rights. The regulatory scheme for enforcing China's intellectual property laws may not be as developed as regulatory schemes in other countries. Any advancement of an intellectual property enforcement claim through China's regulatory scheme may require an extensive amount of time, allowing intellectual property infringers to continue largely unimpeded, to our commercial detriment in the Chinese and other export markets. In addition, rules of evidence may be unclear, inconsistent or difficult to comply with, making it difficult to prove infringement of our intellectual property rights. As a result, enforcement cases involving technology, such as copyright infringement of software code, or unauthorized manufacture or sale of products containing patented inventions, may be difficult or not possible to sustain.

These factors may make it increasingly complicated for us to enforce our intellectual property rights against parties misappropriating or copying our technology or products without our authorization, allowing competing enterprises to harm our business in the Chinese or other export markets by affecting the pricing for our products, reducing our own sales and diluting our brand or product quality reputation.

### **The intellectual property rights of others may prevent us from developing new products or entering new markets.**

The telecommunications industry is characterized by the rapid development of new technologies, which requires us to continuously introduce new products and expand into new markets that may be created. Therefore, our success depends in part on our ability to continually adapt our products and systems to incorporate new technologies and to expand into markets that may be created by new technologies. If technologies are protected by the intellectual property rights of others, including our competitors, we may be prevented from introducing new products or expanding into new markets created by these technologies. If the intellectual property rights of others prevent us from taking advantage of innovative technologies, our financial condition, operating results or prospects may be harmed.

### **We rely on the availability of third-party licenses. If these licenses are available to us only on less favorable terms or not at all in the future, our business and operating results would be harmed.**

We have incorporated third-party licensed technology into our products. It may be necessary in the future to renew licenses relating to various aspects of these products or to seek additional licenses for existing or new products. There can be no assurance that the necessary licenses will be available on acceptable terms or at all. The inability to obtain certain licenses or other rights, or to obtain those licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in delays in product releases until such time, if ever, as equivalent technology could be identified, licensed or developed and integrated into our products and might have a material adverse effect on our business, operating results and financial condition. Moreover, the inclusion in our products of intellectual property licensed from third parties on a nonexclusive basis could limit our ability to protect our proprietary rights in our products.

### **Our customers could also become the target of litigation relating to the patent and other intellectual property rights of others.**

Any litigation relating to the intellectual property rights of others could trigger technical support and indemnification obligations in licenses or customer agreements that we may enter into. These obligations could result in substantial expenses, including the payment by us of costs and damages relating to claims of intellectual property infringement.

The intellectual property rights of others may prevent us from developing new products or entering new markets.

In addition to the time and expense required for us to provide support or indemnification to our customers, any such litigation could disrupt the businesses of our customers, which in turn could hurt our relationships with such customers and cause the sale of our products to decrease. No assurance can be given that claims for indemnification will not be made, or that if made, such claims would not have a material adverse effect on our business, operating results or financial conditions.

**We expect to base our inventory purchasing decisions on our forecasts of customers demand, and if our forecasts are inaccurate, our operating results could be materially harmed.**

As our customer base increases, we expect to place orders with our contract manufacturers based on our forecasts of our customers demand. Our forecasts will be based on multiple assumptions, each of which may cause our estimates to be inaccurate, affecting our ability to provide products to our customers. When demand

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for our products increases significantly, we may not be able to meet demand on a timely basis, and we may need to expend a significant amount of time working with our customers to allocate limited supply and maintain positive customer relations, or we may incur additional costs in order to rush the manufacture and delivery of additional products. If we underestimate customers demand, we may forego revenue opportunities, lose market share and damage our customer relationships. Conversely, if we overestimate customer demand, we may purchase more inventory than we are able to sell at any given time or at all. In addition, we grant our distributors stock rotation rights, which require us to accept stock back from a distributor's inventory, including obsolete inventory. As a result of our failure to properly estimate demand for our products, we could have excess or obsolete inventory, resulting in a decline in the value of our inventory, which would increase our costs of revenues and reduce our liquidity. Our failure to accurately manage inventory relative to demand would adversely affect our operating results.

### **If our technology does not work as well as planned or if we are unsuccessful in developing and selling new products or in penetrating new markets, our business and operating results would suffer.**

Our success and ability to compete are dependent on technology which we have developed or may develop in the future. There is a risk that the technology that we have developed or may develop may not work as intended, or that the marketing of the technology may not be as successful as anticipated. Further, the markets in which we and our customers compete or plan to compete are characterized by constantly and rapidly changing technologies and technological obsolescence. Our ability to compete successfully depends on our ability to design, develop, manufacture, assemble, test, market and support new products and enhancements on a timely and cost effective basis to keep pace with market needs and satisfy the demands of customers. A fundamental shift in technologies in any of our target markets could harm our competitive position within these markets. Our failure to anticipate these shifts, to develop new technologies or to react to changes in existing technologies could materially delay our development of new products, which could result in product obsolescence, decreased revenue and a loss of customer wins to our competitors. The development of new technologies and products generally require substantial investment and can require long development and testing periods before they are commercially viable. We intend to continue to make substantial investments in developing new technologies and products and it is possible that that we may not successfully be able to develop or acquire new products or product enhancements that compete effectively within our target markets or differentiate our products based on functionality, performance or cost and that our new technologies and products will not result in meaningful revenue. Any delays in developing and releasing new or enhanced products could cause us to lose revenue opportunities and customers. Any technical flaws in product releases could diminish the innovative impact of our products and have a negative effect on customer adoption and our reputation. If we fail to introduce new products that meet the demands of our customers or target markets or do not achieve market acceptance, or if we fail to penetrate new markets, our revenue will not increase over time and our operating results and competitive position would suffer.

### **Computer malware, viruses, hacking and phishing attacks could harm our business and results of operations.**

Computer malware, viruses, and computer hacking and phishing attacks have become more prevalent in our industry, and may occur on our systems in the future. Though it is difficult to determine what, if any, harm may directly result from any specific interruption or attack, any failure to maintain performance, reliability, security, and availability of our products and technical infrastructure to the satisfaction of our users may harm our reputation and our ability to attract and retain customers.

We expect to base our inventory purchasing decisions on our forecasts of customers demand, and if our 40recasts



**Our operating expenses will increase as we make further expenditures to enhance and expand our operations in order to support additional growth in our business.**

Historically, we limited our investment in infrastructure; however, in the future we expect our infrastructure investments to increase substantially to support our anticipated growth. We intend to make additional investments in systems and personnel in order to expand our business and continue to expand our operations to support anticipated growth in our business. In addition, we may determine the need in the future to make changes to our sales model, which changes may result in higher selling, general and administrative expenses as a percentage of our revenues. As a result of these factors, we expect our operating expenses to increase.

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**If we do not effectively manage changes in our business, these changes could place a significant strain on our management and operations.**

Our ability to grow successfully requires an effective planning and management process. The expansion and growth of our business could place a significant strain on our management systems, infrastructure and other resources. To manage our growth successfully, we must continue to improve and expand our systems and infrastructure in a timely and efficient manner. Our controls, systems, procedures and resources may not be adequate to support a changing and growing company. If our management fails to respond effectively to changes and growth in our business, including acquisitions, this could have a material adverse effect on the Company's business, financial condition, results of operations and future prospects.

**Our sales cycle is unpredictable, and a failure to generate consistent sales of our products could materially affect our financial position and operating results.**

To date, we have not yet established a consistent sales cycle for our products. In addition, in our industry it is customary for potential customers to request a trial of products prior to making a purchase. There can be no assurance that such trials of our products will produce sales. If we cannot generate consistent sales of our products, our financial position and operating results could be materially affected.

**If we are unable to expand our sales and marketing capabilities or enter into more agreements with third parties to sell and market any products we may develop, we may be unable to generate product revenue.**

We are currently building our internal sales organization for the sales, marketing and distribution of our products. Part of the proceeds of the Offering is intended to be used to expand our internal sales organization and develop further our channels to market. In order to commercialize xMax® or any of our other products, we must build our sales, marketing, distribution, managerial and other non-technical capabilities or make arrangements with other parties to perform these services. The expansion of our own sales force to market any products we may develop will increase our operating costs and be time consuming. We cannot be certain that we would be able to successfully develop this capacity. If we are unable to expand our sales and marketing capability or any other non-technical capabilities necessary to commercialize any product we may develop, we will need to contract with other parties to market and sell any products we may develop. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with other parties, we may not be able to generate product revenue and may not become profitable.

**If our estimates relating to our critical accounting policies are based on assumptions or judgments that change or prove to be incorrect, our operating results could fall below expectations of securities analysts and investors, resulting in a decline in our stock price.**

The preparation of financial statements in conformity with U.S. GAAP requires our management to make estimates, assumptions and judgments that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under

If we do not effectively manage changes in our business, these changes could place a significant strain on our management and operations.

the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. Our operating results may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of financial analysts and investors, resulting in a decline in our stock price. Significant assumptions and estimates used in preparing our financial statements include those related to revenue recognition, inventory, product warranties, allowance for doubtful accounts, stock-based compensation expense, capitalization of intangible assets, impairment of long-lived assets and income taxes.

**Our exposure to the credit risks of our customers may make it difficult to collect accounts receivable and could adversely affect our operating results and financial condition.**

In the course of our sales to customers, we may encounter difficulty collecting accounts receivable and could be exposed to risks associated with uncollectible accounts receivable. Economic conditions may impact some of our customers' ability to pay their accounts payable. While we will attempt to monitor these situations carefully and attempt to take appropriate measures to collect accounts receivable balances, we have

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written down accounts receivable and written off doubtful accounts in prior periods and may be unable to avoid accounts receivable write-downs or write-offs of doubtful accounts in the future. Such write-downs or write-offs could negatively affect our operating results for the period in which they occur.

**Demand for our defense-related products and products for emergency response services and rural telecommunications depends on government spending.**

The U.S. military market is largely dependent upon government budgets, particularly the defense budget. The funding of government programs is subject to Congressional appropriation. Although multi-year contracts may be authorized in connection with major procurements, Congress generally appropriates funds on a fiscal year basis even though a program may be expected to continue for several years. Consequently, programs are often only partially funded and additional funds are committed only as Congress makes further appropriations. No assurance can be given that an increase in defense spending will be allocated to programs that would benefit our business. A decrease in levels of defense spending or the government's termination of, or failure to fully fund, one or more of the contracts for which our products may be utilized could have a material adverse effect on our financial position and results of operations.

In addition, the sale of our products to local municipalities for emergency response services and to rural telecommunication companies depends on government spending allocated to such areas. There can be no assurance that government spending will be allocated to emergency response services or to rural telecommunications companies at a level that would benefit our business. A decrease in levels of government spending for emergency response services or rural telecommunications, or the government's termination of, or failure to fully fund, one or more of the contracts for which our products may be utilized with respect to emergency response services or rural telecommunications, could have a material adverse effect on our financial position and results of operations.

**Our failure to obtain and maintain required certifications could impair our ability to bid on defense contracts.**

In order for us to participate in certain government programs we could be required to obtain and maintain quality certification and certain standards for Department of Defense wireless security such as certification by the Joint Interoperability and Test Command, (or JITC) and to meet production standards in order to be eligible to bid on government contracts. If we fail to maintain these certifications or any additional certification which may be required, we will be ineligible to bid for contracts which may impair our financial operations and consequently, our ability to continue in business.

**Regulation of the telecommunications industry could harm our operating results and future prospects.**

The traditional telecommunications industry is highly regulated, and our business and financial condition could be adversely affected by changes in regulations relating to the Internet telecommunications industry.

Currently, there are few laws or regulations that apply directly to access to or commerce on IP networks, but future regulations could include sales taxes and tariffs in previously unregulated areas and provider access charges. We could be adversely affected by regulation of IP networks and commerce in any country where we market equipment and services to service or content providers. Regulations governing the range of services and business models that can be offered by service providers or content providers could adversely affect those customers' needs for products designed

Our exposure to the credit risks of our customers may make it difficult to collect accounts receivable and could adversely

to enable a wide range of such services or business models. For instance, the U.S. Federal Communications Commission has issued regulations governing aspects of fixed broadband networks and wireless networks. These regulations might impact service provider and content provider business models and as such, providers' needs for Internet telecommunications equipment and services. In addition, many jurisdictions are evaluating or implementing regulations relating to cyber security, privacy and data protection, which could affect the market and requirements for networking and security equipment.

In addition, environmental regulations relevant to electronic equipment manufacturing or operations may impact our business and financial condition adversely. For instance, the European Union has adopted regulations on Electronic waste, e-waste, e-scrap, or waste electrical and electronic equipment ( WEEE ), Restriction of the Use of certain Hazardous Substances ( ROHS ) and Registration, Evaluation, Authorisation

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and Restriction of Chemical substances ( REACH ). In addition, some governments have regulations prohibiting government entities from purchasing security products that do not meet specified indigenous certification criteria even though those criteria may be in conflict with accepted international standards. Similar regulations are in effect or under consideration in several jurisdictions where we do business.

The adoption and implementation of such regulations could decrease demand for our products, increase the cost of building and selling our products and impact our ability to ship products into affected areas and recognize revenue in a timely manner. Any of these impacts could have a material adverse effect on our business, financial condition, and results of operations.

**To the extent that we subcontract work under our contracts, any failures by our subcontractors could impair our relations with the contracting agencies.**

We may use subcontractors to perform work or provide materials for contracts that we may secure and we may become dependent upon the subcontractors to meet the quality and delivery requirements of the contracting agency. To the extent that the products or services provided by the subcontractors do not meet the required specifications or are delivered late, the contract may be terminated by the U.S. government for default. Such a default could result in our disqualification from bidding on contracts, which could adversely affect our financial operations.

**As an emerging growth company as defined in the JOBS Act, we will utilize certain modified disclosure requirements, and we cannot be certain if these reduced requirements will make our common stock less attractive to investors.**

We are an emerging growth company as defined in the JOBS Act. We have in this prospectus utilized, and we plan in future filings with the SEC to continue to utilize, the modified disclosure requirements available to emerging growth companies, including reduced disclosure about our executive compensation and omission of compensation discussion and analysis, and an exemption from the requirement of holding a nonbinding advisory vote on executive compensation. In addition, we will not be subject to certain requirements of Section 404 of the Sarbanes-Oxley Act, including the additional testing of our internal control over financial reporting as may occur when outside auditors attest as to our internal control over financial reporting. As a result, our stockholders may not have access to certain information they may deem important.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to utilize this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards as they become applicable to public companies. We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We could remain an emerging growth company for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceeds \$1 billion, (ii) the date that we become a large accelerated filer as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is

To the extent that we subcontract work under our contracts, any failures by our subcontractors could impair our relations with the contracting agencies.

held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period.

We have not engaged our independent registered public accounting firm to perform an audit of our internal control over financial reporting as of any balance sheet date or for any period reported in our financial statements. Had our independent registered public accounting firm performed an audit of our internal control over financial reporting, additional material weaknesses may have been identified. For so long as we qualify as an emerging growth company under the JOBS Act, which may be up to five years following this offering, we will not have to provide an auditor's attestation report on our internal controls in future annual reports on Form 10-K as otherwise required by Section 404(b) of the Sarbanes-Oxley Act. During the course of the evaluation, documentation or attestation, we or our independent registered public accounting firm may identify

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weaknesses and deficiencies that we may not otherwise identify in a timely manner or at all as a result of the deferred implementation of this additional level of review.

## **Risks Relating to Our Industry**

### **Our industry is subject to rapid technological change, and we must make substantial investments in new products, services and technologies to compete successfully.**

New technological innovations generally require a substantial investment before they are commercially viable. We intend to continue to make substantial investments in developing new products and technologies, and it is possible that our development efforts will not be successful and that our new technologies will not result in meaningful revenues.

Our future success will depend on our ability to continue to develop and introduce new products, technologies and enhancements on a timely basis. Our future success will also depend on our ability to keep pace with technological developments, protect our intellectual property, satisfy customer requirements, meet customer expectations, price our products and services competitively and achieve market acceptance. The introduction of products embodying new technologies and the emergence of new industry standards could render our existing products and technologies, and products and technologies currently under development, obsolete and unmarketable. If we fail to anticipate or respond adequately to technological developments or customer requirements, or experience any significant delays in development, introduction or shipment of our products and technologies in commercial quantities, demand for our products and our customers' and licensees' products that use our technologies could decrease, and our competitive position could be damaged.

### **We may be subject to infringement claims in the future.**

We may be unaware of filed patent applications and issued patents that could include claims covering our products. Parties making claims of infringement may be able to obtain injunctive or other equitable relief that could effectively block our ability to sell or supply our products or license our technology and could cause us to pay substantial royalties, licensing fees or damages. The defense of any lawsuit could divert management's efforts and attention from ordinary business operations and result in time-consuming and expensive litigation, regardless of the merits of such claims. These outcomes may (i) require us to stop selling products or using technology that contains the allegedly infringing intellectual property; (ii) require us to redesign those products that contain the allegedly infringing intellectual property; (iii) require us to pay substantial damages to the party whose intellectual property rights we may be found to be infringing; (iv) result in the loss of existing customers or prohibit the acquisition of new customers; (v) cause us to attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all; (vi) materially and adversely affect our brand in the market place and cause a substantial loss of goodwill; (vii) cause our stock price to decline significantly; (viii) materially and adversely affect our liquidity, including our ability to pay debts and other obligations as they become due; or (ix) lead to our bankruptcy or liquidation.

### **Our industry is highly competitive and we may not be able to compete effectively.**

The communications industry is highly competitive, rapidly evolving, and subject to constant technological change. We expect that new competitors are likely to join existing competitors. Many of our competitors may be larger and have greater financial, technical, operational, marketing and other resources and experience than we do. In the event



that a competitor expends significant resources we may not be able to successfully compete. In addition, the pace of technological change makes it impossible for us to predict whether we will face new competitors using different technologies to provide products. If our competitors were to provide better and more cost effective products than our products we may not be able to capture any significant market share.

**Regulation of Voice over Internet Protocol ( VoIP ) services is developing and therefore uncertain and future legislative, regulatory or judicial actions could adversely affect our business.**

VoIP services have developed in an environment largely free from government regulation. However, the United States and other countries have begun to assert regulatory authority over VoIP and are continuing to evaluate how VoIP will be regulated in the future. Both the application of existing rules to us and our

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prospective customers and the effects of future regulatory developments are uncertain. Future legislative, judicial or other regulatory actions could have a negative effect on our business. In addition, future regulatory developments could increase our cost of doing business and limit its growth.

**Changes in current laws or regulations or the imposition of new laws or regulations could impede the sale of our products or otherwise harm our business.**

Although our technology is designed to be frequency agnostic (i.e., capable of operating at any frequency) our current range of products is being designed to be optimized for operation in the 902 – 928 MHz band, which is presently a spectrum that is not licensed in the United States. Changes in current laws or regulations or the imposition of new laws and regulations in the United States or elsewhere regarding the usage of unlicensed spectrum may materially and adversely impact our future prospects, the viability of our current business model, our expectations for future sales of our products and our business, financial condition and results of operations.

**New regulations or standards or changes in existing regulations or standards in the United States or internationally related to our products may result in unanticipated costs or liabilities, which could have a material adverse effect on our business, results of operations and future sales, and could place additional burdens on the operations of our business.**

Our products may be subject to governmental regulations in a variety of jurisdictions. In order to achieve and maintain market acceptance, our technology and products will have to comply with these regulations as well as a significant number of industry standards. In the United States, our technology and products will have to comply with various regulations defined by the Federal Communications Commission, or FCC, and others. We may also have to comply with similar international regulations. For example, our wireless communication products operate through the transmission of radio signals, and radio emissions are subject to regulation in the United States and in other countries in which we intend to do business. In the United States, various federal agencies including the Center for Devices and Radiological Health of the Food and Drug Administration, the FCC, the Occupational Safety and Health Administration and various state agencies have promulgated regulations that concern the use of radio/electromagnetic emissions standards. Member countries of the European Union have enacted similar standards concerning electrical safety and electromagnetic compatibility and emissions, and chemical substances and use standards.

As these regulations and standards evolve, and if new regulations or standards are implemented, we may be required to modify our technology or products or develop and support new versions of our technology or products, and our compliance with these regulations and standards may become more burdensome. The failure of technology or our products to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay introduction of our technology or products, which could harm our business. End-customer uncertainty regarding future policies may also affect demand for communications products, including our products. Moreover, channel partners or end-customers may require us, or we may otherwise deem it necessary or advisable, to alter our technology or products to address actual or anticipated changes in the regulatory environment. Our inability to alter our technology or products to address these requirements and any regulatory changes may have a material adverse effect on our business, operating results and financial condition.

**Compliance with environmental, health and safety laws and regulations, including new regulations requiring higher standards, may increase our costs, limit our ability to utilize supply chains, and force design changes to our products.**

Our operations are subject to a variety of environmental, health and safety laws and regulations and equivalent local, state, and regulatory agencies in each of the jurisdictions in which we currently operate or may operate in the future. The manufacturing of our products uses substances regulated under various federal, state, local laws and regulations governing the environment and worker health and safety. If we and our contract manufacturers do not comply with these laws including any new regulations, such non-compliance could reduce the net realizable value of our products, which would result in an immediate charge to our income statements. Our non-compliance with such laws could also negatively impact our operations and financial position as a result of fines, penalties that may be imposed on us, and the cost of mandated

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remediation or delays to our contract manufacturers, thus we may suffer a loss of revenues, be unable to sell our products in certain markets and/or countries, be subject to penalties and enforced fees and/or suffer a competitive disadvantage. Costs to comply with current laws and regulations and/or similar future laws and regulations, if applicable, could include costs associated with modifying our products, recycling and other waste processing costs, legal and regulatory costs and insurance costs. We cannot assure you that the costs to comply with these new laws or with current and future environmental and worker health and safety laws will not have a material adverse effect on our business, operating results and financial condition.

### **Governmental regulations affecting the import or export of products or affecting products containing encryption capabilities could negatively affect our revenues.**

The United States and various foreign governments have imposed controls, export license requirements, and restrictions on the import or export of some technologies, especially encryption technology. In addition, from time to time, governmental agencies have proposed additional regulation of encryption technology, such as requiring certification, notifications, review of source code, or the escrow and governmental recovery of private encryption keys. For example, Russia and China recently have implemented new requirements relating to products containing encryption and India has imposed special warranty and other obligations associated with technology deemed critical. Governmental regulation of encryption or IP networking technology and regulation of imports or exports, or our failure to obtain required import or export approval for our products, could harm our international and domestic sales prospects and adversely affect our revenue expectation. In addition, failure to comply with such regulations could result in penalties, costs, and restrictions on import or export privileges or adversely affect sales to government agencies or government funded projects.

### **If wireless devices pose safety risks, we may be subject to new regulations, and demand for our products and those of our licensees and customers may decrease.**

Concerns over the effects of radio frequency emissions, even if unfounded, may have the effect of discouraging the use of wireless devices, which may decrease demand for our products and those of our licensees and customers. In recent years, the FCC and foreign regulatory agencies have updated the guidelines and methods they use for evaluating radio frequency emissions from radio equipment, including wireless phones and other wireless devices. In addition, interest groups have requested that the FCC investigate claims that wireless communication technologies pose health concerns and cause interference with airbags, hearing aids and medical devices. Concerns have also been expressed over the possibility of safety risks due to a lack of attention associated with the use of wireless devices while driving. Any legislation that may be adopted in response to these expressions of concern could reduce demand for our products and those of our licensees and customers in the United States as well as foreign countries.

## **Risks Related to Market Conditions**

### **Recent global economic trends could adversely affect our business, liquidity and financial results.**

Recent global economic conditions, including a disruption of financial markets, could adversely affect us, primarily through limiting our access to capital. In addition, the continuation or worsening of general market conditions in

economies important to our businesses may adversely affect our clients' level of spending and ability to obtain financing, leading to us being unable to generate the levels of sales that we require. Current and continued disruption of financial markets could have a material adverse effect on the Company's business, financial condition, results of operations and future prospects.

## **Risks Relating to our Common Stock and the Offering**

### **Our insiders and affiliated parties beneficially own a significant portion of our common stock.**

As of July 30, 2015, our executive officers, directors and affiliated parties beneficially own approximately 32.16% of our outstanding common stock. As a result, our executive officers, directors and affiliated parties will have significant influence to:

- elect or defeat the election of our directors;
- amend or prevent amendment of our articles of incorporation or bylaws; and
- effect or prevent a merger, sale of assets or other corporate transaction.

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In addition, sales of significant amounts of shares of common stock held by our directors and executive officers, or the prospect of such sales, could adversely affect the valuation of our Company.

**Exercise of options or warrants or conversion of convertible securities may have a dilutive effect on your percentage ownership and may result in a dilution of your voting power and an increase in the number of shares of common stock eligible for future resale in the public market, which may negatively impact the trading price of our shares of common stock.**

The exercise or conversion of some or all of our outstanding options, warrants, or convertible securities could result in significant dilution in the percentage ownership interest of investors in this offering and in the percentage ownership interest of our existing common stockholders and in a significant dilution of voting rights and earnings per share.

As of July 30, 2015, we have outstanding options to purchase an aggregate of up to 71,430 shares of our common stock outside of the incentive plans, including (i) the options to purchase 57,144 shares of common stock at an exercise price of \$55.00 per share granted to MB Technology Holdings, LLC ( MBTH ) and (ii) the options to purchase 14,286 shares of common stock at an exercise price of \$87.50 per share granted to MBTH; and outstanding warrants to purchase up to 546,151 shares of common stock, including (i) the warrants to subscribe up to 4,286 shares of our common stock at a subscription price of \$3.50 per share granted to MBTH, (ii) the warrant to purchase 858 shares of our common stock issued to Secure Strategy Group exercisable at \$350.00 per share, (iii) the warrant to purchase 1,429 shares of our common stock exercisable at \$78.70 per share granted to Mats Wennberg, (iv) 76,923 shares of common stock issuable upon the exercise of warrants sold to investors as part of our initial public offering completed on July 24, 2013, including those issued as part of the over-allotment, which are exercisable at \$68.70 per share, (v) the warrants to purchase 4,014 shares of common stock at an exercise price of \$68.70 per share granted to the underwriters pursuant to our initial public offering, (vi) the warrants to purchase 136,364 shares of common stock at an exercise price of \$68.70 per share issued pursuant to a onetime agreement approved on September 30, 2013, (vii) the warrants to purchase 109,378 shares of common stock at an exercise price of \$68.70 per share granted pursuant to the conversion of the bridge loan and outstanding securities convertible into 5,715 shares of our common stock issuable to Treco at a conversion price of \$350.00 per share, (viii) 2,787 shares of common stock issuable upon exercise of the rights granted to investors as part of the bridge loan, which are exercisable at \$3.50 share, (ix) the warrants to purchase 17,145 shares of common stock at an exercise price of \$21.875 per share granted to the underwriters pursuant to our public offering completed on November 18, 2013, (x) the warrants to purchase 37,500 shares of common stock at an exercise price of \$11.50 per share granted to the investors in the December 30, 2014 private placement, (xi) the warrants to purchase 17,500 shares of common stock at an exercise price of \$11.50 per share granted to the investors in the February 11, 2015 private placement, (xii) the warrants to purchase 42,250 shares of common stock at an exercise price of \$20.00 per share granted to the investors in the February 23, 2015 private placement, and (xiii) the warrants to purchase 90,000 shares of common stock at an exercise price of \$11.50 per share granted to the investors in the February 24, 2015 private placement.

Additionally, the issuance of up to 311,993 shares of common stock upon exercise of stock options outstanding under our stock incentive plans will further dilute our stockholders' voting interests. To the extent options and/or warrants and/or conversion rights are exercised, additional shares of common stock will be issued, and such issuance will dilute stockholders.

As of July 30, 2015, 326,667 shares of our common stock may be issued upon conversion of \$1,633,333 in principal amount of 8% Convertible Notes based on a conversion price of \$5.00.

In addition to the dilutive effects described above, the exercise of those securities would lead to an increase in the number of shares of common stock eligible for resale in the public market. Sales of substantial numbers of such shares of common stock in the public market could adversely affect the market price of our shares of common stock. Substantial dilution and/or a substantial increase in the number of shares of common stock available for future resale may negatively impact the trading price of our shares of common stock. Holders who receive common stock upon conversion of the 8% Convertible Notes will be subject to the risk of volatility in the trading price of the common stock.

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**Investors will incur immediate and substantial dilution as a result of this offering.**

Investors purchasing securities in this offering will incur immediate and substantial dilution in net tangible book value per share. Assuming a public offering price of \$1.82 per Class A Unit and \$1.82 (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units) per Class B Unit, purchasers of Class A Units and Class B Units will effectively incur dilution of \$1.45 per share in the net tangible book value of their purchased shares. To the extent that any of the Offering Warrants are ultimately exercised, you will sustain further dilution. Furthermore, you may experience further dilution to the extent that shares of our common stock are issued upon the exercise of outstanding stock options and warrants. See Dilution for a discussion of the dilution to the purchasers in this offering.

**We may seek to raise additional funds, finance acquisitions or develop strategic relationships by issuing securities that would dilute your ownership. Depending on the terms available to us, if these activities result in significant dilution, it may negatively impact the trading price of our shares of common stock.**

We have financed our operations, and we expect to continue to finance our operations, acquisitions, if any, and the development of strategic relationships by issuing equity and/or convertible securities, which could significantly reduce the percentage ownership of our existing stockholders. Further, any additional financing that we secure may require the granting of rights, preferences or privileges senior to, or *pari passu* with, those of our common stock. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. We may also raise additional funds through the incurrence of debt or the issuance or sale of other securities or instruments senior to our shares of common stock. The holders of any securities or instruments we may issue may have rights superior to the rights of our common stockholders. If we experience dilution from issuance of additional securities and we grant superior rights to new securities over common stockholders, it may negatively impact the trading price of our shares of common stock and you may lose all or part of your investment.

**The market price of our shares of common stock is particularly volatile given our status as a relatively unknown company with a small and thinly traded public float and lack of profits, which could lead to wide fluctuations in our share price. You may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you.**

The market for our shares of common stock is characterized by significant price volatility when compared to the shares of larger, more established companies that trade on a national securities exchange and have large public floats, and we expect that our share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in our share price is attributable to a number of factors. First, as noted above, our shares of common stock are, compared to the shares of such larger, more established companies, sporadically and thinly traded. The price for our shares of common stock could, for example, decline precipitously in the event that a large number of our shares of common stock are sold on the market without commensurate demand.

Secondly, we are a speculative or risky investment due to our lack of profits to date. As a consequence of this



enhanced risk, more risk-adverse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares of common stock on the market more quickly and at greater discounts than would be the case with the stock of a larger, more established company that trades on a national securities exchange and has a large public float. Many of these factors are beyond our control and may decrease the market price of our shares of common stock, regardless of our operating performance.

**If and when a larger trading market for our common stock develops, the market price of our common stock is still likely to be highly volatile and subject to wide fluctuations, and you may be unable to resell your shares of common stock at or above the price at which you acquired them.**

The market price of our common stock is likely to be highly volatile and could be subject to wide fluctuations in response to a number of factors that are beyond our control, including, but not limited to:

variations in our revenues and operating expenses;

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actual or anticipated changes in the estimates of our operating results or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;  
market conditions in our industry, the industries of our customers and the economy as a whole;  
actual or expected changes in our growth rates or our competitors' growth rates;  
developments in the financial markets and worldwide or regional economies;  
announcements of innovations or new products or services by us or our competitors;  
announcements by the government relating to regulations that govern our industry;  
sales of our common stock or other securities by us or in the open market; and  
changes in the market valuations of other comparable companies.

In addition, if the market for technology stocks or the stock market in general experiences loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition or operating results. The trading price of our shares of common stock might also decline in reaction to events that affect other companies in our industry, even if these events do not directly affect us. Each of these factors, among others, could harm the value of your investment in our common stock. In the past, following periods of volatility in the market, securities class-action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management's attention and resources, which could materially and adversely affect our business, operating results and financial condition.

**There is presently no public market for the Offering Warrants being sold in this offering.**

There is presently no established public trading market for the Offering Warrants being offered in this offering and we do not expect a market to develop. Without an active market, the liquidity of the warrants will be limited. Further, the existence of the Offering Warrants may act to reduce both the trading volume and the trading price of our common stock.

**Purchasers of our Offering Warrants will not have rights of common stock shareholders until such Offering Warrants are exercised.**

The Offering Warrants being offered do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price for a limited period of time. Specifically, commencing on the date of issuance, holders of the Series A Warrants may exercise their right to acquire the common stock and pay an exercise price of \$1.82 per share (100% of the public offering price of the Class A Units) prior to five (5) years from the date of issuance, after which date any unexercised Series A Warrants will expire and have no further value; commencing on the date of issuance, holders of Pre-funded Series B Warrants may exercise their right to acquire common stock and pay an exercise price of \$0.01 per share prior to five years from the date of issuance, after which date any unexercised Pre-funded Series B Warrants will expire and have no further value; commencing on the date of issuance, holders of the Series C Warrants may exercise their right to acquire additional Class A Units and pay an initial exercise price of \$1.82 per Class A Unit (100% of the public offering price of the Class A Units) (subject to adjustment at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, to an exercise price per Class A Unit equal to the lower of (i) the then-effective exercise price per Class A Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day) prior to sixty-five (65) days from the date of issuance, after which date any unexercised Series C Warrants will expire and have no further value; and commencing on the date of issuance, holders of the Series D Warrants may exercise their right to acquire additional Class B Units and pay an exercise price of \$1.81 per Class B Unit (100% of the public offering price of the Class B Units) (subject to adjustment at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and

If and when a larger trading market for our common stock develops, the market price of our common stock will still likely

effective beginning on the third (3<sup>rd</sup>) trading day immediately preceding such 60<sup>th</sup> trading day, to an exercise price per Class B Unit equal to the lower of (i) the then-effective exercise price per Class B Unit and (ii) 80% of the closing price of our

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common stock on such 60<sup>th</sup> trading day) prior to sixty-five (65) days from the date of issuance, after which date any unexercised Series D Warrants will expire and have no further value.

**Our charter documents and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our common stock.**

Our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could delay or prevent a change in control of our Company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

authorizing the board to issue, without stockholder approval, preferred stock with rights senior to those of our common stock;

limiting the persons who may call special meetings of stockholders; and  
requiring advance notification of stockholder nominations and proposals.

In addition, the provisions of Section 203 of the Delaware General Corporation Law govern us. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time without the consent of our board of directors.

These and other provisions in our amended and restated certificate of incorporation and our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay in the future for shares of our common stock and result in the market price of our common stock being lower than it would be without these provisions.

**If we are not able to comply with the applicable continued listing requirements or standards of the NASDAQ Capital Market, NASDAQ could delist our common stock.**

Our common stock is currently listed on the NASDAQ Capital Market. In order to maintain that listing, we must satisfy minimum financial and other continued listing requirements and standards, including those regarding director independence and independent committee requirements, minimum stockholders equity, minimum share price, and certain corporate governance requirements. There can be no assurances that we will be able to comply with the applicable listing standards.

On February 9, 2015, we received a deficiency notice from NASDAQ stating that for the last thirty (30) consecutive business days, the Company had not met the \$1 per share minimum bid price continued listing standard as required by the NASDAQ rules. As provided in the NASDAQ rules, the Company has 180 calendar days from the date of the notice to regain compliance. To regain compliance, the minimum bid price of the Company's securities must be at least \$1 for a minimum of ten (10) consecutive business days at any time prior to the 180 calendar days. On July 17, 2015, we effected a 1-for-10 reverse stock split of our outstanding common stock.

In the event that our common stock is delisted from the NASDAQ Capital Market and is not eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock, and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause

the price of our common stock to decline further. Also, it may be difficult for us to raise additional capital if we are not listed on a major exchange.

**In the event that our common stock is delisted from NASDAQ, U.S. broker-dealers may be discouraged from effecting transactions in shares of our common stock because they may be considered penny stocks and thus be subject to the penny stock rules.**

The SEC has adopted a number of rules to regulate penny stock that restrict transactions involving stock which is deemed to be penny stock. Such rules include Rules 3a51-1, 15g-1, 15g-2, 15g-3, 15g-4, 15g-5, 15g-6, 15g-7, and 15g-9 under the Securities and Exchange Act of 1934, as amended (the Exchange Act). These rules may have the effect of reducing the liquidity of penny stocks. Penny stocks generally

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are equity securities with a price of less than \$5.00 per share (other than securities registered on certain national securities exchanges or quoted on the NASDAQ Stock Market if current price and volume information with respect to transactions in such securities is provided by the exchange or system). Our shares of common stock have in the past constituted, and may again in the future constitute, penny stock within the meaning of the rules. The additional sales practice and disclosure requirements imposed upon U.S. broker-dealers may discourage such broker-dealers from effecting transactions in shares of our common stock, which could severely limit the market liquidity of such shares of common stock and impede their sale in the secondary market.

A U.S. broker-dealer selling penny stock to anyone other than an established customer or accredited investor (generally, an individual with net worth in excess of \$1,000,000 or an annual income exceeding \$200,000, or \$300,000 together with his or her spouse) must make a special suitability determination for the purchaser and must receive the purchaser's written consent to the transaction prior to sale, unless the broker-dealer or the transaction is otherwise exempt. In addition, the penny stock regulations require the U.S. broker-dealer to deliver, prior to any transaction involving a penny stock, a disclosure schedule prepared in accordance with SEC standards relating to the penny stock market, unless the broker-dealer or the transaction is otherwise exempt. A U.S. broker-dealer is also required to disclose commissions payable to the U.S. broker-dealer and the registered representative and current quotations for the securities. Finally, a U.S. broker-dealer is required to submit monthly statements disclosing recent price information with respect to the penny stock held in a customer's account and information with respect to the limited market in penny stocks.

Stockholders should be aware that, according to the SEC, the market for penny stocks has suffered in recent years from patterns of fraud and abuse. Such patterns include (i) control of the market for the security by one or a few broker-dealers that are often related to the promoter or issuer; (ii) manipulation of prices through prearranged matching of purchases and sales and false and misleading press releases; (iii) boiler room practices involving high-pressure sales tactics and unrealistic price projections by inexperienced sales persons; (iv) excessive and undisclosed bid-ask differentials and markups by selling broker-dealers; and (v) the wholesale dumping of the same securities by promoters and broker-dealers after prices have been manipulated to a desired level, resulting in investor losses. Our management is aware of the abuses that have occurred historically in the penny stock market. Although we do not expect to be in a position to dictate the behavior of the market or of broker-dealers who participate in the market, management will strive within the confines of practical limitations to prevent the described patterns from being established with respect to our securities.

### **We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.**

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section of this prospectus entitled Use of Proceeds. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

### **We have not paid dividends in the past and do not expect to pay dividends for the foreseeable future, and any return on investment may be limited to potential future appreciation on the value of our common stock.**

We currently intend to retain any future earnings to support the development and expansion of our business and do not

In the event that our common stock is delisted from NASDAQ, U.S. broker-dealers may be discouraged from effecting

anticipate paying cash dividends on our shares of common stock in the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including without limitation, our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. To the extent we do not pay dividends, our shares of common stock may be less valuable because a return on investment will only occur if and to the extent our stock price appreciates, which may never occur. In addition, investors must rely on sales of their common stock after price appreciation as the only way to realize their investment, and if the price of our common stock does not appreciate, then there will be no return on investment. Investors seeking cash dividends should not purchase our common stock.

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**Non-U.S. investors may have difficulty effecting service of process against us or enforcing judgments against us in courts of non-U.S. jurisdictions.**

We are incorporated under the laws of the state of Delaware. All of our directors and officers reside in the United States. It may not be possible for non-U.S. investors to effect service of process within their own jurisdictions upon our company and our directors and officers. In addition, it may not be possible for non-U.S. investors to collect from our company and our directors and officers judgments obtained in courts in such non-U.S. jurisdictions predicated on non-U.S. legislation.

**If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our common stock adversely, our share price and trading volume could decline.**

The trading market for our shares of common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our common stock adversely, or provide more favorable relative recommendations about our competitors, our share price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our share price or trading volume to decline.

**The requirements of being a U.S. public company may strain our resources and divert management's attention.**

As a U.S. public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of NASDAQ, and other applicable securities rules and regulations.

Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming, or costly, and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual and current reports with respect to our business and operating results.

As a result of disclosure of information in this prospectus and in filings required of a public company, our business and financial condition is more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business and operating results could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert resources of our management and harm our business and operating results.

**We acknowledge material weaknesses in the controls and procedures of our financial reporting and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations, including timeliness, or result in material misstatements of our financial statements. If we continue to fail to remediate our material weaknesses or if we fail to implement effective controls and procedures for our financial reporting, our ability to accurately and timely report our financial results could be adversely**



**affected, which likely would adversely affect the value of our common stock.**

Our management has previously identified a material weakness regarding inadequate accounting resources due to the need to hire accounting personnel with the requisite knowledge of U.S. generally accepted accounting principles. The

Company made progress to remedy this deficiency through the hiring of a financial controller to support the accounting personnel. The financial controller began employment in September 2013 and has now been fully integrated into the Company's control process. However, due to the recent loss of accounting personnel through cost cutting measures and the need to deal with complex accounting transactions, we believe that our disclosure controls and internal controls over financial reporting are not yet effective.

A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute

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assurance that all control issues and instances of fraud, if any, have been detected. Failure of our internal control systems to prevent error or fraud could materially adversely impact us, could lead to restatements of our financial statements and investors not being able to rely on the completeness and accuracy of the financial information contained in our filings with the SEC, and could potentially subject us to sanctions or investigations by the SEC or other regulatory authorities or stockholder litigation. Any such failure could also cause investors to lose confidence in our reported financial information or our ongoing ability to meet SEC filing deadlines, which likely would adversely affect the value of our common stock and severely limit or even eliminate the prospects for our success in obtaining new capital.

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## **CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

*This prospectus, including the sections entitled Risk Factors , Management s Discussion and Analysis of Financial Condition and Results of Operations and Business , contains forward-looking statements that include information relating to future events, future financial performance, strategies, expectations, our competitive environment, regulation and availability of resources. These forward-looking statements include, without limitation, statements regarding: proposed new products or services; our statements concerning litigation or other matters; statements concerning projections, predictions, expectations, estimates or forecasts for our business, financial and operating results and future economic performance; statements of management s goals and objectives; trends affecting our financial condition, results of operations or future prospects; our financing plans or growth strategies; and other similar expressions concerning matters that are not historical facts. Words such as may , will , should , could , would , predicts , potential , continue , expects , anticipates , future , intends , plans , believes and estimates, and similar expressions, as well as similar statements in the future tense, identify forward-looking statements.*

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, that performance or those results will be achieved. Forward-looking statements are based on information available at the time they are made and/or management s good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from what is expressed in or suggested by the forward-looking statements.

Forward-looking statements speak only as of the date they are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information, except to the extent required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

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## **USE OF PROCEEDS**

We estimate that the net proceeds in this offering will be approximately \$5,118,200, based on the public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units), or approximately \$9,219,069 if the Series C Warrants and Series D Warrants are exercised in full based on exercise prices of \$1.82 and \$1.81, respectively, after deducting estimated underwriting discounts and commissions, solicitation fees on the exercise of the Series C Warrants and Series D Warrants, and estimated offering expenses payable by us, and after deduction.

The principal purposes of this offering are to increase our capitalization and financial flexibility and to increase our visibility in the marketplace. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds of this offering. However, we currently intend to use the net proceeds to us from this offering primarily for general corporate purposes, including working capital, product development, marketing activities, expanding our internal sales organization and further developing sales channels, funding the set-up of contract manufacturing production lines, and other capital expenditures.

If we raise gross proceeds of at least \$7,000,000 from this offering, we will be required to redeem the 8% Convertible Notes, which have an interest rate of 8% per annum and maturity dates of December 11, 2015 and January 14, 2016, for a total amount of \$2,041,667 plus accrued interest. The terms of the 8% Convertible Notes are more fully described in Management Discussion and Analysis of Financial Condition and Results of Operations Subsequent Events.

We will have broad discretion over the uses of the net proceeds in this offering. Pending these uses, we intend to invest the net proceeds from this offering in short-term, investment-grade interest-bearing securities such as money market funds, certificates of deposit, commercial paper and guaranteed obligations of the U.S. government.

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Our shares of common stock are currently listed on NASDAQ under the symbol XGTI . Our shares of common stock began trading on NASDAQ on July 19, 2013 and on the London Stock Exchange s AIM market on November 20, 2006. The cancellation of trading of the Company s common stock on the London Stock Exchange s AIM Market became effective January 3, 2014.

On July 30, 2015, the closing price of our shares of common stock listed on NASDAQ was \$1.82 per share.

The following table shows the high and low market prices for our common stock for each fiscal quarter for the two most recent fiscal years. Market prices for our common stock have fluctuated significantly. As a result, the market prices shown in the following table may not be indicative of the market prices at which our common stock will trade after this offering.

<u>Quarter</u>	NASDAQ Share Price		XGTU Share Price (US Dollars)		XGT Share Price (US Dollars)	
	High	Low	High	Low	High	Low
Third Quarter 2015 (Through July 30, 2015)	\$ 3.20	\$ 1.39	N/A	N/A	N/A	N/A
Second Quarter 2015	\$ 5.60	\$ 2.00	N/A	N/A	N/A	N/A
First Quarter 2015	\$ 6.40	\$ 2.60	N/A	N/A	N/A	N/A
Fourth Quarter 2014	\$ 20.50	\$ 4.90	N/A	N/A	N/A	N/A
Third Quarter 2014	\$ 27.40	\$ 18.60	N/A	N/A	N/A	N/A
Second Quarter 2014	\$ 30.10	\$ 12.80	N/A	N/A	N/A	N/A
First Quarter 2014(**)	\$ 50.01	\$ 11.20	N/A	N/A	N/A	N/A
Fourth Quarter 2013	\$ 51.00	\$ 14.00	\$ 5.50	\$ 1.00	\$ 10.00	\$ 10.00
Third Quarter 2013(*)	\$ 71.50	\$ 46.00	\$ 9.00	\$ 5.50	\$ 13.00	\$ 10.00
Second Quarter 2013	N/A	N/A	\$ 10.01	\$ 6.75	\$ 13.00	\$ 13.00
First Quarter 2013	N/A	N/A	\$ 13.13	\$ 7.88	\$ 15.75	\$ 14.00

\*

\*\*

NASDAQ trading began on July 19, 2013  
XGTU and XGT ceased trading on January 3, 2014

 **Holders**

As of July 30, 2015, there were 5,080,976 shares of our common stock outstanding and approximately 171 holders of record of our shares of our common stock. Because shares of our common stock are held by depositories, brokers and other nominees, the number of beneficial holders of shares of our common stock is substantially larger than the number of stockholders of record. Our transfer agent and registrar is Continental Stock Transfer & Trust Company, 17 Battery Place, 8<sup>th</sup> Floor, New York, New York 10004.

 **Dividend Policy**

We have never declared or paid any cash dividends on our common stock. We intend to retain any future earnings and do not expect to pay any cash dividends in the foreseeable future.



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The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2015, as adjusted for the reverse stock split, which we effected on July 17, 2015:

on an actual basis; and

on an as adjusted basis to give effect to the sale of 1,180,000 Class A Units and 2,061,758 Class B Units we are offering based upon an assumed public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units), the closing price of our common stock as listed on NASDAQ on July 30, 2015, and after deducting underwriting discounts and commissions and approximately \$369,000 in other estimated offering expenses payable by us.

The information below is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual sales price of the Class A Units and Class B Units. You should read this table together with the sections entitled Use of Proceeds and Management's Discussion and Analysis of Financial Condition and Results of Operations as well as our financial statements and the related notes, which appear elsewhere in this prospectus.

(\$ in thousands)	As of March 31, 2015 (Unaudited)	
	Actual	As Adjusted
Cash and cash equivalents	\$221	\$5,339
Short-term debt		
Accrued interest	87	87
Due to related parties	264	264
Deferred revenue	50	50
Obligation under capital lease	135	135
Long-term debt		
Long-term obligation under capital lease	83	83
Convertible notes payable	2,000	2,000
Total debt and accrued interest	2,619	2,619
Derivative Liability	520	3,194
Series A convertible preferred stock \$0.00001 par value per share: 3,000,000 shares authorized at March 31, 2015 and As Adjusted; 0 issued or outstanding as of March 31, 2015 and As Adjusted (liquidation preference of \$0 at March 31, 2015)		
Series B convertible preferred stock \$0.00001 par value per share: 3,000,000 shares authorized at March 31, 2015 and As Adjusted; 250,000 issued or outstanding as of March 31, 2015 and As Adjusted (liquidation preference of \$252,300 at March 31, 2015)	104	104
Series C convertible preferred stock \$0.00001 par value per share: 3,000,000 shares authorized at March 31, 2015 and As Adjusted; 1,589,720 issued or outstanding as of March 31, 2015 and As Adjusted (liquidation preference of \$1,600,391 at March 31, 2015)	895	895
Equity		
Preferred stock \$0.00001 par value per share: 1,000,000 and 7,000,000 shares authorized as of March 31, 2015 and As		

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Adjusted; none issued or outstanding as of March 31, 2015 and As Adjusted		
Common stock, \$0.00001 par value, 100,000,000 authorized, 3,641,914	*	*
shares issued as of March 31, 2015 and 6,883,672 As Adjusted, respectively		
Additional paid in capital	190,302	192,746
Accumulated deficit	(174,077)	(174,077)
Treasury stock, 229 shares	(22 )	(22 )
Total stockholders equity	16,203	18,647
Total capitalization	\$22,465	\$21,266

\*

Less than \$1

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The net tangible book value of our common stock as of March 31, 2015, was approximately \$92,000, or \$0.025 per share of common stock based upon 3,641,914 shares of common stock outstanding on such date. As adjusted net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of common stock outstanding after giving effect to the sale of up to 1,180,000 Class A Units and up to 2,061,758 Class B Units we are offering based upon an assumed public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units), and after deducting underwriting discounts and commissions and approximately \$369,000 in estimated offering expenses payable by us.

If you invest in our Class A Units and Class B Units in this offering, your interest will be diluted to the extent of the difference between the offering price per Class A Unit and per Class B Unit and the as adjusted net tangible book value per share of our common stock immediately after completion of this offering. This represents an immediate increase in as adjusted net tangible book value of \$0.34 per share to our existing stockholders and an immediate dilution of \$1.45 per share to investors purchasing Class A Units and Class B Units in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed public offering price per Class A Unit	\$ 1.82
Assumed public offering price per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units)	\$ 1.82
As adjusted net tangible book value per share as of March 31, 2015 before giving effect to this offering	\$ 0.03
Increase in as adjusted net tangible book value per share attributed to new investors purchasing shares from us in this offering	\$ 0.34
As adjusted net tangible book value per share after giving effect to this offering	\$ 0.37
Dilution in as adjusted net tangible book value per share to new investors in this offering	\$ 1.45

Each \$1.00 increase (decrease) in the assumed public offering price of \$1.82 per Class A Unit or \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units) would increase (decrease) the net tangible book value, as adjusted to give effect to this offering, by \$0.44 per share and the dilution to new investors by \$0.56 per share, assuming that the number of Class A Units and Class B Units offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions. If the Series C Warrants and Series D Warrants are exercised in full, the net tangible book value per share of our common stock, as adjusted to give effect to this offering, would be \$0.50 per share, and the dilution in as adjusted net tangible book value per share to investors in this offering would be \$1.32 per share of our common stock.

The table below summarizes as of March 31, 2015, on an as adjusted basis as described above, the number of shares of our common stock, the total consideration and the average price per share (i) paid to us by our existing stockholders and (ii) to be paid by new investors purchasing our Class A Units and Class B Units in this offering at an assumed public offering price of \$1.82 per Class A Unit and \$1.82 per Class B Unit (including and assuming the exercise of the Pre-funded Series B Warrants underlying the Class B Units), the closing price of our common stock as listed on NASDAQ on July 30, 2015, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Class A Units and Class B Units Purchased		Total Consideration		Average Price Per Class A and Class B Unit
	Number	Percent	Amount	Percent	
Existing stockholders	3,641,914	53 %	\$ 179,914,598	97 %	\$ 49.40
New investors	3,241,758	47 %	\$ 5,900,000	3 %	\$ 1.82
Total	6,883,672	100 %	\$ 185,814,598	100 %	\$ 26.99

\*

(Dollars in thousands, except per share data)

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The total number of shares of our common stock reflected in the discussion and tables above is based on 3,641,914 shares of our common stock outstanding as of March 31, 2015, and excludes:

229 treasury shares;

exercise of any options, warrants or conversion rights on convertible debt outstanding as of March 31, 2015; and conversion of 250,000 shares of Series B Preferred Stock and 1,589,720 shares of Series C Preferred Stock.

To the extent that any convertible debt is converted, outstanding warrants are exercised, outstanding options are exercised, new options are issued under our 2013 Long Term Incentive Plan or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. If all outstanding options under our 2004, 2005, 2006, 2007, 2009 and 2013 Stock Incentive Plans and options/warrants issued outside of the stock incentive plans as of July 30, 2015, 2015 were exercised, then our existing stockholders, including the holders of these options, would own 58% and the purchasers of our Class A Units and Class B Units pursuant to this prospectus would own 42% of the total number of shares of our common stock outstanding upon the closing of this offering. In such event, the total consideration paid by our existing stockholders, including the holders of these options, would be approximately \$234,420,697, or 98%, the total consideration paid by the purchasers of our Class A Units and Class B Units under this prospectus would be \$5,900,000, or 2%, the average price per share paid by our existing stockholders would be \$51.34 and the average price per share paid by the purchasers of our Class A Units and Class B Units under this prospectus would be \$1.82.

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

*You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the financial statements and the related notes included elsewhere in this prospectus. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in Risk Factors.*

## Overview

We have developed a broad portfolio of innovative intellectual property to enhance wireless communications. Our intellectual property is embedded in proprietary software algorithms that offer cognitive interference mitigation and spectrum access solutions for countless applications using commercial off the shelf devices. We recently released the commercially available version of our software and hardware products using our proprietary xMax® cognitive radio technology.

Our current cognitive radio technology is based on years of product development. In 2008 and 2009, we generated material revenues from sales of our prior BSN250 voice-only products. After the introduction of various smartphones in 2007 and later that could handle both voice and data, we decided to enhance our voice-only products to include data services. In 2011, we delivered our enhanced BSN250 base station and TX70 handset for both voice and SMS services to the U.S. Army. Given the proliferation of smartphones, the U.S. Army subsequently requested that our BSN250 base station should integrate with commercial off the shelf devices. In 2013, we introduced an improved product line that could handle both voice and data services. These new products, the Access Point ( CN1100 ), formerly known as the xAP base station, the Mobile Hotspot ( CN5100 ), formerly known as the xMod modem, and the Vehicle Modem ( CN3100 ), formerly known as the xVM modem, are able to communicate with any wi-fi enabled commercial off the shelf device. In 2014, we began developing a new product, the CN3200 Dual Band Routing Modem ( CN3200 ), formerly known as the xRM modem. On September 30, 2014, we received certification from the U.S. Federal Communications Commission in connection with the CN3200. The CN3200 is a module that complements the xMax mobile system and is designed to provide high speed fixed broadband access using frequencies at 2.4 GHz. It offers an end-user solution that seamlessly integrates xMax and wi-fi in a single device, and allows the delivery of both high data rates and reliable high-speed mobility in the same system. We believe that the CN3200 will provide higher performance with dedicated channels for voice (xMax) and data (wi-fi), will maximize user experience via interprotocol smart-routing, and provide greater reliability.

We believe that the wireless communications industry is facing a spectrum crisis because the demand for flexible, affordable voice and data access continues to increase rapidly while the amount of available spectrum remains relatively constant. We have developed frequency-agnostic cognitive radio solutions to address this increasing demand by eliminating the need to acquire scarce and expensive licensed radio spectrum, and thus ideally lowering the total cost of ownership for wireless broadband access. With fast-growing demand straining network capacity, our intellectual property is also designed to help wireless broadband network operators make more efficient use of their existing spectrum allocations. We are targeting sales in numerous industries worldwide, such as telecommunications services, public safety and defense, and in markets ranging from rural to urban areas as well as expeditionary deployments.

The initial implementation of our cognitive radio intellectual property is xMax. We believe the xMax system is the only commercially available cognitive radio network system that includes our interference mitigation and spatial processing technologies. xMax implements our proprietary interference mitigation software that can increase capacity on already crowded airwaves by improving interference tolerance, enabling the delivery of higher QoS than other technologies that would not be able to cope with the interference. We believe that the xMax system will also, when operating on more than one radio channel, deliver dynamic spectrum access by using our patented self-organizing network techniques. Furthermore, the xMax system can be used to provide additional capacity to licensed spectrum by identifying and utilizing unused bandwidth within the licensed spectrum.

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Our system is frequency agnostic, although currently designed to operate within the 902 – 928 MHz unlicensed band of spectrum. xMax serves as a mobile VoIP and broadband data system that utilizes an end-to-end IP system architecture. The xMax product and service suite includes access points, mobile switching centers, network management systems, deployment tools and proactive customer support. The xMax system will allow mobile operators to utilize free, unlicensed 902 – 928 MHz ISM band spectrum (which spectrum is available in all of the Americas except French Guiana) instead of purchasing scarce and expensive licensed spectrum. Our xMax system will also enable enterprises to set up a mobile communications network in an expeditious and cost-effective manner.

We have generated significant net losses for the past several years and we expect to continue to realize net losses for the immediate future.

We are executing on our sales and marketing strategy and have entered into direct sales agreements with end-customers and indirect sales agreements with channel network partners. These customer engagements are primarily in two of our target markets: public safety and rural telecommunications.

## **Results of Operations**

### **Comparison for the three months ended March 31, 2015 and 2014**

#### **Revenues**

Revenues for the three months ended March 31, 2015 were \$584,000 compared to \$250,000 in the corresponding period in 2014. The revenue of \$584,000 resulted from \$510,000 from sales of equipment and \$74,000 from engineering services and a consulting services agreement during the three months ended March 31, 2015. Of the \$584,000 in revenue, \$480,000 was previously recorded as deferred revenue.

#### **Cost of Revenue and Operating Expenses**

##### Cost of Components and Personnel

Cost of components and personnel for the three months ended March 31, 2015 were \$330,000 compared to \$63,000 in the corresponding period in 2014. Of the \$330,000, \$313,000 was based on the cost of components and the time allocated to building the products sold, and \$17,000 was based on the cost of the time allocated towards the engineering and consulting service agreement. Of the \$63,000, \$60,000 was based on the cost of components and the time allocated to building the products sold, and \$3,000 was based on the cost of the time allocated towards the engineering and consulting service agreement.

##### General and Administrative Expenses

General and administrative expenses are the expenses of operating the business on a daily basis. This includes salary and benefit expenses and payroll taxes, as well as the costs of trade shows, marketing programs, promotional materials, professional services, facilities, general liability insurance, and travel. For the three months ended March 31, 2015, the Company incurred aggregate expense of \$1.6 million, compared to \$1.7 million for the three months ended March 31, 2014, representing a decrease of \$0.1 million or 6%. The decrease is due to decreases in consulting fees associated with sales and marketing of \$0.1 million; \$0.1 in taxes and licenses; \$0.1 million in travel expenses; and \$0.1 in advertising. The decreases were partially offset by increases in consulting fees associated with the Company's listing on the NASDAQ Capital Market of \$0.3 million.

Development Expenses

Development expenses consist primarily of salaries, benefit expenses and payroll taxes, as well as costs for prototypes, facilities and travel. For the three months ended March 31, 2015, the Company incurred aggregate expense of \$1.6 million, compared to \$2.5 million for the three months ended March 31, 2014, representing a decrease of \$0.9 million or 37%. The decrease is due to decreases of \$0.3 million in materials used for research and development purposes; \$0.3 million in consulting services; \$0.1 million in costs related to maintaining existing patents; and \$0.4 million in additional payroll capitalization. The decreases were partially offset by an increase of \$0.2 million in travel expenses. We expect our development costs to decrease going forward as we implement cost saving measures in 2015 which include a reduction in our current full-time, part-time and contracted workforce.

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### Stock Based Compensation

Stock based compensation decreased \$0.08 million from \$0.21 million in the three months ended March 31, 2014 to \$0.13 million in the three months ended March 31, 2015. The decrease arose from the decrease in the number of outstanding options being expensed in the three months ended March 31, 2015 compared to the same period in the three months ended March 31, 2014.

### Amortization and Depreciation

Amortization and depreciation expenses increased \$0.01 million, or 1%, from \$0.95 million in the three months ended March 31, 2014 to \$0.96 million in the three months ended March 31, 2015.

### Other

Interest expense for the three months ended March 31, 2015 was \$0.05 million compared to \$0.05 million for the three months ended March 31, 2014.

## **Net Loss**

For the three months ended March 31, 2015, the Company had a net loss of \$3.5 million, as compared to a net loss of \$5.2 million for the three months ended March 31, 2014, or a decrease of \$1.7 million. The decrease in net loss is due mainly to an increase in revenue and a decrease in development expenses discussed above.

## **Comparison for the year ended December 31, 2014 and 2013**

### **Revenue**

Our revenues for the fiscal year ended December 31, 2014 increased 55% from \$0.4 million in the year ended December 31, 2013 to \$0.6 million as a result of recognizing additional revenue during the fiscal year. Revenue of \$423,000 resulted from sales of equipment and \$205,000 resulted from an engineering and consulting services agreement.

### **Cost of Revenue and Operating Expenses**

#### Cost of Components and Personnel

Cost of components and personnel was \$0.2 million in the year ended December 31, 2014 as compared to \$0.1 million in fiscal 2013. \$130,000 of such costs is based on the cost of components and the time allocated to building the products sold and \$26,000 is based on the cost of the time allocated towards the engineering and consulting services agreements.

#### General and Administrative Expenses

General and administrative expenses are the expenses of operating the business on a daily basis and include salary and benefit expenses and payroll taxes, as well as the costs of trade shows, marketing programs, promotional materials, professional services, facilities, general liability insurance, and travel.



General and administrative expenses increased by \$2.1 million, or 38%, from \$5.5 million in the year ended December 31, 2013 to \$7.6 million in the year ended December 31, 2014. The change is primarily due to increases of \$1.1 million in salary and benefit expenses due to an increase in the number of employees; \$0.8 million for the MBTH 3% cash success fee as a result of MBTH arranging financing for the Company and \$0.2 million in travel related expenses.

Development

Development expenses consist primarily of salary and benefit expenses and payroll taxes, as well as costs for prototypes, facilities and travel. Development expenses increased by \$2.1 million, or 39%, from \$5.5 million in the year ended December 31, 2013 to \$7.6 million in the year ended December 31, 2014.

The change is due to increases of \$2.5 million in salary and benefit expenses due to the increase in the number of employees, \$0.3 million in travel related expenses and \$0.1 million in costs related to maintaining existing patents. These increases were partially offset by a decrease of \$0.9 million in research and

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development expenses. We expect our development costs to decrease going forward as we implement cost saving measures in 2015 which include a reduction in our current full-time, part-time and contracted workforce.

Stock Based Compensation

Stock based compensation decreased by \$0.2 million, or 21%, from \$0.8 million in the year ended December 31, 2013 to \$0.6 million in the year ended December 31, 2014. The change arose from a decrease in the number of outstanding options being expensed in fiscal 2014 when compared to fiscal 2013.

Amortization and Depreciation

Amortization and depreciation expenses increased by \$1.5 million, or 63%, from \$2.4 million in the year ended December 31, 2013 to \$3.9 million in the year ended December 31, 2014. The increase is attributed to the xMax products becoming available for sale as of September 30, 2013. As of this date, the Company began to amortize all capitalized costs associated with these products for the remainder of the year.

Other

Other income was \$0.4 million and \$0 for the year ended December 31, 2014 and 2013, respectively. The increase was the result of a reversal of a deferred liability in 2014 from a prior fiscal year.

Other expense was \$0 and \$10.1 million for the year ended December 31, 2014 and 2013, respectively. The expense for 2013 was a result of the independent directors of the Company authorizing a onetime agreement on September 30, 2013, whereby we issued to MB Technology Holdings, LLC ( MBTH ) 159,946 shares of our common stock and a warrant to purchase 136,364 shares of our common stock at an exercise price of \$68.70 per share for the difference in price between the shares issued to them in March 2013 at a price of \$133.30 per share in exchange for the conversion of its 2011 Convertible Note and the \$55.00 purchase price for shares sold in our initial public offering in July 2013. Additionally, the modified strike price, agreed upon between the Company and MBTH in January 2013, of \$133.00 per share for the two options representing 57,143 underlying shares granted to MBTH in February 2011 has been lowered to \$55.00.

Inducement expense was \$0 and \$0.4 million for the year ended December 31, 2014 and 2013, respectively. The inducement expense represents the estimated fair value of warrants given to non-related parties in relation with the conversion of the \$7.8 million promissory note issued by us to MBTH pursuant to a subscription agreement dated January 16, 2013 (the Bridge Loan ).

Interest expense for the year ended December 31, 2014 was \$0.2 million compared to \$2.2 million for the year ended December 31, 2013, representing a decrease of \$2.0 million or 92%. The decrease was partially due to the interest and fees incurred on the Bridge Loan for 2013; \$0.7 million from the six month minimum interest recorded in connection with the increase interest rate; \$0.4 million from the accretion of the debt discount recorded as interest expense; and \$0.6 million in interest expense resulted from the Bridge Loan being convertible into new shares at a price of \$52.25, 95% of our 2013 initial public offering (the IPO ) price of \$55.00, in 2013.

Impairment charges for the year ended December 31, 2014 was \$0 compared to \$0.9 million for the year ended December 31, 2013. For the year ended December 31, 2013, \$896,000 of our impairment charge was related to property and equipment and \$37,000 was related to intangible assets.

**Net Loss**

For the year ended December 31, 2014, the Company had a net loss of \$19.0 million, as compared to a net loss of \$27.5 million for the year ended December 31, 2013, a decrease of \$8.5 million or 31%. The decrease in net loss is due mainly to the one-time agreement with MBTH, increases of inducement expense and interest expenses for 2013 discussed above.

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TABLE OF CONTENTS**Liquidity and Capital Resources**

As of March 31, 2015, the Company had positive working capital of approximately \$2.3 million including \$0.6 million of restricted cash, \$0.2 million of cash and cash equivalents. We have incurred net losses of \$3.5 million in the three months ended March 31, 2015 and \$19.0 million in the year ended December 31, 2014. Additionally, we have incurred negative operating cash flows including cash used in operations of \$1.8 million in the three months ended March 31, 2015 and cash used in operations of \$14.6 million for the year ended December 31, 2014.

Our operations primarily have been funded through cash generated by debt and equity financing. Cash comprises cash in hand and demand deposits. Our cash balances were as follows:

	March 31, 2015 \$ 000	December 31, 2014 \$ 000
Cash	221	758

During 2014, the Company relied upon additional investment through proceeds from a registered public offering in April 2014 and through the financings off of our Shelf Registration Statement in the third and fourth fiscal quarters as further described below. During 2013, the Company relied upon additional investment through proceeds from the IPO, our 2013 public offering, Bridge Loan and convertible notes payable. The Company will be dependent on new debt or equity financing to fund future operations.

The Company does not currently have sufficient capital in order to fund operations for the next twelve months from the balance sheet date or to achieve cash flow breakeven. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including our rate of revenue growth, the timing and extent of spending to support development efforts, the timing of new product introductions, market acceptance of our products and overall economic conditions. The ability of the Company to continue as a going concern is dependent upon its ability to raise additional capital, obtain other means of financing, and to fulfill purchase orders. The ability to recognize revenue and ultimately cash receipts, on purchase orders is contingent upon, but not limited to, acceptable performance of the delivered equipment and services.

**Cash Flows****Comparison for the three months ended March 31, 2015 and 2014**

The following table sets forth the major components of our statements of cash flows data for the periods presented.

**For the Three Month Period Ended  
(In Thousands)**

	March 31, 2015	March 31, 2014
Cash flows used in Operations	\$ (1,824 )	\$ (4,523 )
Investing Activities	\$ (755 )	\$ (277 )

Financing Activities	\$ 2,042	\$ 31
Cash at end of period	\$ 221	\$ 686

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TABLE OF CONTENTS**Comparison for the year ended December 31, 2014 and 2013**

The following table sets forth the major components of our statements of cash flows data for the periods presented.

	Year Ended December 31, 2014 \$ 000	Year Ended December 31, 2013 \$ 000
Net cash used in operating activities	(14,619 )	(14,395 )
Net cash used in investment activities	(1,905 )	(2,896 )
Net cash inflow from financing activities	11,765	22,537
Net (decrease) increase in cash	(4,759 )	5,246

**Operating Activities****Comparison for the three months ended March 31, 2015 and 2014**

Net cash used in operating activities for the three months ended March 31, 2015 totaled \$1.8 million as compared to \$4.5 million for the three months ended March 31, 2014. Of the \$1.8 million, approximately \$0.5 million was related to the increase of our payables and the remaining balance consisted principally of the net loss from operations.

**Comparison for the year ended December 31, 2014 and 2013**

Net cash used in operating activities for the year ended December 31, 2014 totaled \$14.6 million as compared to \$14.4 million for the year ended December 31, 2013. Of the \$14.6 million, approximately \$1.7 million was related to the increase of our inventory, \$1.9 million was the increase in due to related parties, \$1.0 million to the reduction of our payables and \$0.3 million from the increase in accrued expense and the remaining consisted principally of the net loss from operations.

**Investing Activities****Comparison for the three months ended March 31, 2015 and 2014**

Net cash used in investing activities for the three months ended March 31, 2015 was \$0.8 million as compared to \$0.3 million for the three months ended March 31, 2014. This represents capital expenditures primarily associated with the investment in product and technology development and our patent portfolio.

**Comparison for the year ended December 31, 2014 and 2013**

Net cash used in investing activities for the year ended December 31, 2014 was \$1.9 million as compared to \$2.9 million for the year ended December 31, 2013. This represents capital expenditures primarily associated with the investment in product and technology development and our patent portfolio.

We have invested in product and technology development and our patent portfolio, with \$1.8 million accounted for as investment in intangible assets in the year ended December 31, 2014, and \$2.6 million in the year ended December 31, 2013. In addition, the Company's investment in property and equipment, comprising the purchase of testing and manufacturing equipment, of \$0.1 million in the year ended December 31, 2014 decreased by \$0.2 million, or 54%,

from \$0.3 million in the year ended December 31, 2013.

## **Financing Activities**

### **Comparison for the three months ended March 31, 2015 and 2014**

Our net cash provided by financing activities for the three months ended March 31, 2015 was \$2.0 million as compared to cash provided by financing activities of \$0.03 million for the three months ended March 31, 2014. During the three months ended March 31, 2015, there were cash inflows of \$2.7 million which were partially offset by the increase in restricted cash of \$0.6 million. In the three months ended March 31, 2015 there were net proceeds from the Series B Preferred Stock and Series C Preferred Stock totaling \$2.7 million.

### **Comparison for the year ended December 31, 2014 and 2013**

Our net cash provided by financing activities for the year ended December 31, 2014 was \$11.8 million as compared to \$22.5 million for 2013. The proceeds of \$11.8 million in 2014 primarily consisted of proceeds

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from the issuance of common and preferred stock. During 2014, the Company raised \$8.8 million through the third offering; \$1.0 million from the \$1 million purchase agreement; \$1.3 million from various investors through financing under our S-3 registration statement; and \$0.7 million through the sale of convertible preferred stock.

During the year ended December 31, 2013, the proceeds of \$22.5 million in 2013 primarily consisted of further advances under convertible promissory notes issued by the Company and proceeds from issuance of common stock.

During 2013, the Company raised \$7.8 million through the IPO and IPO over-allotment, \$9.6 million through the November 2013 offering and related partial over-allotment, drew down \$5.0 million under the Bridge Loan and \$0.5 million under the convertible notes payable to related party. Also note holders converted the May 2011 shareholders note of \$15 million and the Bridge Loan of \$11.4 million during 2013.

## **2014 and 2015 Financings**

### **April 2014 Offering**

On April 22, 2014, the Company closed an underwritten public offering of 526,500 shares of common stock, at a purchase price to the public of \$19.00 per share, for net proceeds to the Company, after deducting underwriter discounts and offering expenses, of \$8,816,000. Roth Capital Partners, LLC and Feltl and Company acted as underwriters for the offering.

### **Purchase Agreements and Registration Rights Agreement with Lincoln Park**

#### \$1,000,000 Purchase Agreement

On September 22, 2014, the Company entered into a Purchase Agreement with Lincoln Park Capital Fund ( Lincoln Park ), pursuant to which we offered 50,000 shares of our common stock to Lincoln Park at a price of \$20.00 per share, for an aggregate purchase price of \$961,000 net of expenses. The closing of the transaction occurred on September 24, 2014. The Company issued the 50,000 shares of common stock pursuant to the Company's registration statement on Form S-3 that was declared effective on August 31, 2014 (the Shelf Registration Statement ).

#### \$15,000,000 Purchase Agreement

On September 19, 2014, we entered into a Purchase Agreement (the \$15M Purchase Agreement ) and a registration rights agreement with Lincoln Park. In consideration for entering into the transaction, we issued 17,500 shares of our common stock to Lincoln Park as a commitment fee upon execution of the \$15M Purchase Agreement. We recorded \$346,000 as a prepaid expense based upon a stock price of \$19.80 on the date of issuance. Lincoln Park also agreed to purchase up to \$15,000,000 of our shares of common stock over the 24-month term of the \$15M Purchase Agreement.

The \$15M Purchase Agreement provides that, from time to time over the term of the \$15M Purchase Agreement, on any business day, as often as every other business day, and at our sole discretion, we may require Lincoln Park to purchase up to 10,000 shares of our common stock (a Regular Purchase ); provided, however, that (i) a Regular Purchase may be increased to up to 15,000 shares of our common stock provided that the closing sale price of our common stock is not below \$20.00 on the purchase date, (ii) a Regular Purchase may be increased to up to 20,000 shares of our common stock provided that the closing sale price of our common stock is not below \$25.00 on the purchase date and (iii) a Regular Purchase may be increased to up to 25,000 shares of our common stock provided that the closing sale price of our common stock is not below \$30.00 on the purchase date; and provided, further, that the aggregate price of any Regular Purchase shall not exceed \$1,000,000. We may not sell any shares of our common



stock as a Regular Purchase on a date in which the closing sale price of our common stock is below \$15.00. The purchase price for Regular Purchases shall be equal to the lesser of (i) the lowest sale price of our common stock on the purchase date and (ii) the average of the three (3) lowest closing sale prices of our common stock during the ten (10) business days prior to the purchase date, as reported on the NASDAQ Capital Market.

We also have the right, at our sole discretion, to require Lincoln Park to make an accelerated purchase on the business day following the purchase date of a Regular Purchase in an amount up to the lesser of (i) 200% of the number of shares of common stock purchased as a Regular Purchase and (ii) 30% of the trading volume of our common stock on such accelerated purchase date, provided that the closing price of our

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common stock equals or exceeds \$15.00 on such accelerated purchase date, as reported on the NASDAQ Capital Market. The purchase price per share of common stock for any accelerated purchase will be equal to the lesser of (i) the closing sale price of our common stock on the accelerated purchase date and (ii) 95% of the volume weighted average price of our common stock on the accelerated purchase date.

On October 3, 2014, the Company filed a registration statement on Form S-1 with the SEC to register for resale by Lincoln Park 478,291 shares of the Company's common stock issuable to Lincoln Park under the \$15M Purchase Agreement and the 17,500 shares of common stock issued to Lincoln Park as a commitment fee. On October 20, 2014, the SEC declared this registration statement effective.

As of March 31, 2015, the Company has drawn down \$145,000 and issued 10,000 shares of common stock under the \$15M Purchase Agreement. The prepaid expense for this financing was \$249,000 as of March 31, 2015, representing a decrease of \$97,000 from the initial recording of \$346,000. The Company is amortizing the prepaid balance to additional paid in capital on a straight line basis over the term of the agreement.

On May 14, 2015, we provided written notice to Lincoln Park of our election to terminate the \$15M Purchase Agreement effective May 15, 2015. On May 18, 2015, we filed a Post-Effective Amendment (the Post-Effective Amendment) to the Registration Statement on Form S-1 that was filed in connection with the \$15M Purchase Agreement. The Post-Effective Amendment, which was declared effective by the SEC on May 19, 2015, was filed to deregister 485,791 unsold shares of common stock in the offering.

### \$1,331,500 Purchase Agreement

On November 25, 2014, the Company entered into a purchase agreement, pursuant to which the Company sold to Lincoln Park, certain officers and directors of the Company (the Affiliate Purchasers) and certain other investors (the Other Investors) an aggregate of \$1,331,500 of the Company's common stock. The Company received net proceeds of \$1,311,500 after deducting \$20,000 in expenses associated with the purchase agreement. Pursuant to the purchase agreement, Lincoln Park purchased 50,000 shares of Common Stock at a purchase price of \$12.50 per share, the Affiliate Purchasers purchased 24,599 shares of Common Stock at a purchase price of \$13.70 per share and the Other Investors purchased 29,560 shares of Common Stock at a purchase price of \$12.50 per share pursuant to the Company's Shelf Registration Statement.

### **Equity Distribution Agreement with Roth Capital Partners, LLC**

On November 18, 2014, we entered into an Equity Distribution Agreement (the Equity Distribution Agreement) with Roth Capital Partners, LLC (Roth), pursuant to which we may sell from time to time up to \$10,000,000 of shares of our common stock (the Shares), through Roth (the Offering). The Equity Distribution Agreement was amended on December 29, 2014 to change the amount of the Offering to up to \$1,000,000. Effective February 23, 2015, we terminated the Equity Distribution Agreement with Roth.

### **\$750,000 Purchase Agreement Series A Preferred Stock**

On December 30, 2014, we entered into a Securities Purchase Agreement (the Purchase Agreement) with 31 Group, LLC (31 Group) pursuant to which we sold to 31 Group, for a purchase price of \$750,000, 750,000 shares of our Series A Convertible Preferred Stock, par value \$0.00001 per share (the Series A Preferred Stock) and warrants (the Warrants) to purchase 37,500 shares of our common stock. We also issued to 31 Group 3,315 shares of our common stock in consideration of 31 Group's execution and delivery of the Purchase Agreement (the Commitment Shares). The offer and sale of the Series A Preferred Stock, the common stock issuable upon conversion of the Series A Preferred

Stock and the Commitment Shares were made pursuant to the Shelf Registration Statement.

As of March 31, 2015, 750,000 shares of the Series A Preferred Stock and 52,500 shares of the Series A Preferred Stock issued as dividends have been converted into 239,247 shares of common stock. As of March 31, 2015, all outstanding shares of the Series A Preferred Stock have been fully converted.

The Warrants are exercisable immediately for a period of five years from their issue date. The initial exercise price of the Warrants was \$20.00 per share. Effective as of June 11, 2015, the warrants were amended to lower the exercise price from \$20.00 per share to \$11.50 per share. The exercise price for the Warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends,

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distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

### **Short Term Related Party Loans**

On December 30, 2014, the Company received a \$245,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded as a due to related parties on the financial statements.

On January 8, 2015, the Company repaid \$100,000 of the \$245,000 due to related party balance owed to George Schmitt.

On January 29, 2015 and February 13, 2015, the Company received an aggregate of \$700,000 from certain family members of George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded as a short term loan in due to related parties. On February 23, 2015, George Schmitt transferred the balance of his \$145,000 loan to certain family members bringing the total the Company owed to certain family members to \$845,000. The \$845,000 loan was settled through the issuance of 845,000 shares of Series B Preferred Stock, 5,310 shares of common stock and warrants with respect to 42,250 underlying shares of common stock exercisable for five years at a price of \$20.00 per share. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

### **\$350,000 Purchase Agreement with 31 Group Series B Preferred Stock**

On February 11, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to 31 Group, 350,000 shares of the Company's Series B Convertible Preferred Stock, par value \$0.00001 per share (the Series B Preferred Stock) and warrants to purchase 17,500 shares of the Company's common stock for a purchase price of \$350,000. The Company also issued 2,462 shares of its common stock in consideration of 31 Group's execution and delivery of the purchase agreement (the Series B Commitment Shares). The Series B Preferred Stock and the Series B Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

As of July 30, 2015, 1,195,000 shares of the Series B Preferred Stock and 83,650 of the Series B Preferred Stock issued as dividends have been converted into 405,499 shares of our common stock. As of July 30, 2015, all outstanding shares of the Series B Preferred Stock have been fully converted.

## Warrants

The warrants are exercisable immediately for a period of five years from their issue date. The initial exercise price with respect to the warrants was \$20.00 per share. Effective as of June 11, 2015, the warrants were amended to lower the exercise price from \$20.00 per share to \$11.50 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

### **\$1,800,000 Purchase Agreement Series C Preferred Stock**

On February 24, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to institutional investors, 1,800,000 shares of the Company's Series C Preferred Stock, par value \$0.00001 per share (the

Series C Preferred Stock ) and warrants to purchase 90,000 shares of the Company's common stock for a purchase price of \$1,800,000. The Company also issued 11,864 shares of its common stock in consideration of the investors' execution and delivery of the purchase agreement (the Series C Commitment Shares ). The Series C Preferred Stock and the Series C Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

As of July 30, 2015, 1,800,000 shares of the Series C Preferred Stock and 126,000 of the Series C Preferred Stock issued as dividends have been converted into 946,518 shares of our common stock. As of July 30, 2015, all outstanding shares of the Series C Preferred Stock have been fully converted.

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### Warrants

The warrants are exercisable immediately for a period of five years from their issue date. The initial exercise price with respect to the warrants was \$20.00 per share. Effective as of June 11, 2015, the warrants were amended to lower the exercise price from \$20.00 per share to \$11.50 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

## **Subsequent Events**

### **Reverse Stock Split**

On July 17, 2015, we effected a 1-for-10 reverse stock split of our outstanding common stock.

### **Shares Issued Under S-8 Registration Statements**

From April 15, 2015 to July 30, 2015, the Company issued 362,753 shares of common stock to employees and consultants in lieu of paying \$985,754 in payroll and consulting services.

### **Short-Term Loan**

From April 1, 2015 to July 30, 2015, the Company received a total of \$1,010,000 from George Schmitt, Chairman of the Board and Chief Executive Officer. The amount was recorded due to related parties.

### **8% Convertible Notes**

*Overview.* On June 11, 2015, the Company entered into a securities purchase agreement ( June 2015 Purchase Agreement ) with a group of accredited investors pursuant to which the Company sold an aggregate of \$1,166,666 in principal amount of the 8% Convertible Notes for an aggregate purchase price of \$1,050,000 (the First Tranche ). The Company received net proceeds of \$907,500 from the sale of the 8% Convertible Notes after deducting placement agent fees and other expenses. On July 14, 2015, the Company and the investors entered into an amendment to the June 2015 Purchase Agreement (the Amendment ) pursuant to which the Company agreed to issue an additional \$466,667 in principal amount of 8% Convertible Notes for a purchase price of \$420,000 (the Second Tranche ) for total net proceeds to the Company of \$400,000.

*Maturity and Interest.* The First Tranche of 8% Convertible Notes will mature on December 11, 2015, and the Second Tranche of 8% Convertible Notes will mature on January 14, 2016 (each, a Maturity Date ), less any amounts converted or redeemed prior to the Maturity Date. If the 8% Convertible Notes are not repaid by the Company by the Maturity Date, the Maturity Date shall be automatically extended for an additional three-month period until March 11, 2016 and April 14, 2016 for the First Tranche and Second Tranche, respectively (such period, the Extension Period ), which extension shall not be considered an event of default. The 8% Convertible Notes bear interest at a rate of 8% per annum, subject to increase to the lesser of 24% per annum or the maximum rate permitted under applicable law upon the occurrence of certain events of default.

*Conversion.* The 8% Convertible Notes are convertible at any time, in whole or in part, at the option of the holders into shares of common stock at a conversion price of \$5.00 per share, which is subject to adjustment for stock dividends, stock splits, combinations or similar events. However, during the Extension Period, the conversion price shall be the lesser of (i) \$5.00, subject to adjustment for stock dividends, stock splits, combinations or similar events, and (ii) 85% of the lowest closing price of the common stock in the twenty (20) trading days prior to the date of conversion.

*Prepayments and Redemptions.* The Company may prepay in cash any portion of the principal amount of the 8% Convertible Notes and any accrued and unpaid interest. If such prepayment is made within sixty (60) days after the issuance date of the 8% Convertible Notes, the Company shall pay an amount in cash equal to 125% of the sum of the then outstanding principal amount of the note and interest; thereafter, if such prepayment is made, the Company shall pay an amount in cash equal to 135% of the sum of the then outstanding principal amount of the note and interest.

Within one (1) business day after the closing of any

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underwritten public offering of at least \$7,000,000 of securities of the Company pursuant to a registration statement on Form S-1 or Form S-3 (the "Public Offering"), the Company shall prepay in cash an amount equal to (i) 125% of the sum of the then outstanding principal amount of the note and interest if the closing of the Public Offering occurs within sixty (60) days after the issuance date of the 8% Convertible Notes or (ii) 135% of the sum of the then outstanding principal amount of the note and interest if the closing of the Public Offering occurs after sixty (60) days following the issuance date of the 8% Convertible Notes.

*Right to Participate in Future Financings.* For so long as the 8% Convertible Notes are outstanding, the holder has a right to participate in any issuance of the Company's common stock, common stock equivalents or a combination of units thereof in an underwritten public offering (a "Subsequent Financing"), in an aggregate amount of the Subsequent Financing equal to at least \$500,000, on the same terms, conditions and price provided for in the Subsequent Financing.

## **Off-Balance Sheet Arrangements**

We do not currently have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to our stockholders.

## **Recent Accounting Pronouncements**

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. We will remain an emerging growth company for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceed \$1 billion, (ii) the date that we become a large accelerated filer as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period. Pursuant to Section 107 of the JOBS Act, we have elected to utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

The Company does not believe that recently issued accounting pronouncements will have a material impact on its financial statements.

## **Critical Accounting Policies and Estimates**

Critical accounting estimates are those that management deems to be most important to the portrayal of our financial condition and results of operations, and that require management's most difficult, subjective or complex judgments, due to the need to make estimates about the effects of matters that are inherently uncertain. We have identified our critical accounting estimates which are discussed below.



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## **BUSINESS**

### **Overview**

We have developed a broad portfolio of innovative intellectual property to enhance wireless communications. Our intellectual property is embedded in proprietary software algorithms that offer cognitive interference mitigation and spectrum access solutions for countless applications using commercial off the shelf devices. We recently released the commercially available version of our software and hardware products using our proprietary xMax cognitive radio technology.

Our current cognitive radio technology is based on years of product development. In 2008 and 2009, we generated material revenues from sales of our prior BSN250 voice-only products. After the introduction of various smartphones in 2007 and later that could handle both voice and data, we decided to enhance our voice-only products to include data services. In 2011, we delivered our enhanced BSN250 base station and TX70 handset for both voice and SMS services to the U.S. Army. Given the proliferation of smartphones, the U.S. Army subsequently requested that our BSN250 base station should integrate with commercial off the shelf devices. In 2013, we introduced an improved product line that could handle both voice and data services. These new products, the Access Point ( CN1100 ), formerly known as the xAP base station, the Mobile Hotspot ( CN5100 ), formerly known as the xMod modem, and the Vehicle Modem ( CN3100 ), formerly known as the xVM modem, are able to communicate with any wi-fi enabled commercial off the shelf device. We have generated significant net losses for the past several years and we expect to continue to realize net losses for the immediate future. We estimate that we will begin generating revenues sufficient to cover the cost of our operations in late 2015.

We believe that the wireless communications industry is facing a spectrum crisis because the demand for flexible, affordable voice and data access continues to increase rapidly while the amount of available spectrum remains relatively constant. We have developed frequency-agnostic cognitive radio solutions to address this increasing demand by eliminating the need to acquire scarce and expensive licensed radio spectrum, and thus ideally lowering the total cost of ownership for wireless broadband access. With fast-growing demand straining network capacity, our intellectual property is also designed to help wireless broadband network operators make more efficient use of their existing spectrum allocations. We are targeting sales in numerous industries worldwide, such as telecommunications services, public safety and defense, and in markets ranging from rural to urban areas as well as expeditionary deployments.

The initial implementation of our cognitive radio intellectual property is xMax. We believe the xMax system is the only commercially available cognitive radio network system that includes our interference mitigation and spatial processing technologies. xMax implements our proprietary interference mitigation software that can increase capacity on already crowded airwaves by improving interference tolerance, enabling the delivery of higher Quality of Service ( QoS ) than other technologies that would not be able to cope with the interference. We believe that the xMax system will also, when operating on more than one radio channel, deliver dynamic spectrum access by using our patented self-organizing network techniques. Furthermore, the xMax system can be used to provide additional capacity to licensed spectrum by identifying and utilizing unused bandwidth within the licensed spectrum. Our system is frequency agnostic, although currently designed to operate within the 902 - 928 MHz unlicensed band of spectrum. xMax serves as a mobile voice over internet protocol ( VoIP ) and broadband data system that utilizes an end-to-end Internet Protocol ( IP ) system architecture. The xMax product and service suite includes access points, mobile switching centers, network management systems, deployment tools and proactive customer support. The xMax system will allow mobile operators to utilize free, unlicensed 902 - 928 MHz ISM band spectrum (which spectrum is available

in all of the Americas except French Guiana) instead of purchasing scarce and expensive licensed spectrum. Our xMax system will also enable enterprises to set up a mobile communications network in an expeditious and cost-effective manner.

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Below is a diagram that provides a high-level overview of the xMax® network architecture:

We are executing on our sales and marketing strategy and have entered into direct sales agreements with end-customers and indirect sales agreements with channel network partners. These customer engagements are primarily in two of our target markets: public safety and rural telecommunications.

As of the date of this prospectus, 23.57% of the shares of our common stock are beneficially owned by MBTH. MBTH was co-founded in 2010 by Rick Mooers, Roger Branton and George Schmitt in order to invest in, and provide expertise, guidance and other support to, us. Roger Branton, our Chief Financial Officer, and George Schmitt, our Executive Chairman, are directors of MBTH, and Richard Mooers, a director of our Company, is the CEO and a director of MBTH. MB Merchant Group, LLC ( MBMG ), a merchant bank owned by family entities or trusts related to Richard Mooers and Roger Branton, has a 45.85% ownership interest in MBTH as of July 30, 2015. George Schmitt has a direct 36.84% ownership interest in MBTH as of July 30, 2015, and has been granted an option to purchase MBTH shares sufficient to give him an additional 5% ownership interest in MBTH. Since its founding, MBTH has provided xG Technology with significant financial and other support, including \$7.8 million of indebtedness under the promissory note issued by us to MBTH pursuant to a subscription agreement dated January 16, 2013 (together, the Bridge Loan ). On July 18, 2013, MBTH, along with other investors, exchanged the outstanding Bridge Loan for 218,753 shares of our common stock and warrants to purchase an additional 109,378 shares, in full satisfaction of the Bridge Loan. We agreed to award MBTH a 3% cash success fee if MBTH arranges financing for the Company or arranges a merger, consolidation or sale by the Company of substantially all of the assets. On February 24, 2015, MBTH invoiced the Company for \$700,000 in fees associated with equity financings through April 16, 2014 at a rate of 3% per financing less certain discounts. The Company also accrued for an additional fee of approximately \$109,000 for equity financings between April 17, 2014 and December 31, 2014. The balance of \$809,000 was recorded as an expense in general and administrative expenses and included in due to related parties. On February 24, 2015, we issued 399,114 shares of common stock to MBTH in consideration of converting \$1,756,098 owed of the balance due to related parties. For further details on the financial support given by MBTH to us and other transactions and arrangements between us and MBTH, please see the section entitled Related Party Transactions Other Transactions .

## **Our Strengths**

We believe the following strengths position us for sustainable growth:

***Our proprietary xMax® cognitive radio technology.*** We have developed our xMax cognitive radio technology to create a turnkey network solution. This solution encompasses the key elements of our cognitive technology, including spectrum sensing, spectrum management, spectrum mobility, spectrum sharing and spatial processing. Our software and hardware products and our end-to-end IP architecture implement this solution to provide quality VoIP and data services for countless applications and commercial off the shelf devices.

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***Our technology addresses an expanding market need.*** Our market opportunity has accelerated and expanded due to the spectrum crisis and the stated goals of governmental organizations to increase spectrum access. Our cognitive technology allows mobile wireless networks to provide quality voice and data services using unlicensed spectrum, and our interference mitigation and spatial processing techniques enable these services even in crowded or shared spectrum bands. Rural telecommunication providers, public safety agencies, industrial and enterprise users, and those who use unlicensed spectrum can use our products and services to create wireless networks without the significant capital outlays and delays required to license spectrum.

***Our solutions meet the specific needs of targeted markets.*** Our cognitive radio technology has been specifically developed to make our entire network infrastructure mobile, so that it can be rapidly deployed in response to public safety or security threats. We believe this feature differentiates our technology from that of our competitors and will address a major capability gap for public safety, defense, homeland security and news agencies. In addition, the expanded range of our network can provide improved voice and data services for underserved rural markets.

***We have a broad patent portfolio and unencumbered use of our intellectual property.*** We maintain a broad patent portfolio consisting of patents and patent applications in the United States and many international jurisdictions, which include 54 issued U.S. patents and 59 issued international patents. We have solely funded the development of our intellectual property, which is, accordingly, unencumbered by any federal government unlimited use licenses.

***We have an accomplished leadership team.*** Our management team and board of directors bring a wealth of experience in the telecommunications and military sectors as well as hardware and software development. Our engineering team has a strong track record developing ad-hoc networking domains at Motorola and Mesh Networks. In addition, most of our leadership team has strong ties to our target markets, including public safety organizations, rural telecommunications companies and the military.

## **Our Strategy**

We are developing a broad portfolio of innovative intellectual property that we believe will enhance wireless communications. Leveraging elements of this intellectual property portfolio, we plan to introduce a range of spectrum agnostic, cognitive radio solutions for numerous industries and applications. We believe that sales of these products and services, together with our ability to leverage our patent portfolio, present us with an attractive revenue model.

Our current strategy is to commercialize our intellectual property portfolio by developing and selling network products using our proprietary software algorithms to offer cognitive interference mitigation and spectrum access solutions. Our future strategies are for our intellectual property to be embedded by partners in a semiconductor chip that could be sold to third-party equipment manufacturers and inserted in their devices, and to license our intellectual property to other customers in industry verticals world-wide.

## **Market Overview**

### **Our Market**

We are witnessing rapidly increasing demand in the marketplace for mobile bandwidth. The surge in demand is attributable to the proliferation of smartphones, tablet PCs and other broadband-centric devices, as well as the shift to data and video-intensive services. A Cisco report (the Cisco Visual Networking Index, February 2012) indicates that in 2011 more than 50% of the data traffic on mobile networks was video, and the report forecasts video traffic to account for over 70% of total mobile data traffic by 2016.

There has also been an increase in mobile voice demand as more people unplug their wired phones and rely on wireless devices for all of their calling needs. According to Cisco's report, as well as several studies undertaken by the Federal Communications Commission ( FCC ), the demand for wireless services will continue to grow in the coming years, as shown in the chart below. Cisco predicts mobile data traffic will increase 11-fold between 2013 and 2018, a

61% CAGR, reaching 15.9 Exabytes per month.

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**Source: Mobile Broadband: The Benefits of Additional Spectrum (FCC Report 10/2010)**

In early 2009, Congress directed the Federal Communications Commission (FCC) to develop a National Broadband Plan to ensure every American has access to broadband capability. After conducting thirty-six public workshops and engaging in significant collaboration and conversations with other government agencies and Congress, the FCC released the National Broadband Plan in early 2010. Within the Plan the FCC acknowledges that the current spectrum policy framework sometimes impedes the free flow of spectrum to its most highly valued uses. The Plan states that Wireless broadband is poised to become a key platform for innovation in the U.S. over the next decade. As a result, U.S. spectrum policy requires reform to accommodate the new ways that industry is delivering wireless services. These reforms include making more spectrum available on a flexible basis, including for unlicensed and opportunistic uses.

Specific recommendations within the report that indicate a favorable regulatory environment for cognitive radio technology include: Recommendation 5.13: The FCC should spur further development and deployment of opportunistic uses across more radio spectrum. The Plan further states that, the FCC and NTIA should take steps to expand the environment in which new, opportunistic technologies can be developed and improved. And The FCC should allow opportunistic radios to operate on spectrum currently held by the FCC (such as in certain license areas where spectrum was not successfully auctioned).

On March 27, 2012 the U.S. Department of Commerce, through the NTIA, released a report in which they announced, In the past, the federal government has freed up spectrum for exclusive commercial use by clearing a spectrum band of federal users, who typically relocated to other bands. However, given the growing demand for spectrum by both industry and the federal agencies, it is increasingly difficult to find desirable spectrum that can be vacated by federal users as well as spectrum in which to relocate these federal users. Due to the scarcity of spectrum, the complexity of federal operations, and the time and cost of relocating federal users, the old approach alone is no longer feasible.

The report further states NTIA proposes a new path forward for spectrum repurposing that relies on a combination of relocating federal users and sharing spectrum between federal agencies and commercial users. Spectrum sharing will be a vital component to satisfying the growing demand for spectrum, and federal and non-federal users will need to adopt innovative spectrum-sharing techniques to accommodate this demand.

In July 2012, The President's Council of Advisors on Science and Technology (PCAST) issued a report to the US President titled Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth in which It concludes that the traditional practice of clearing government-held spectrum of Federal users and auctioning it for commercial use is not sustainable. In light of changes made possible by modern technology, we recommend that you issue a new Memorandum that states it is the policy of the U.S. government to share underutilized spectrum to the maximum extent consistent with the Federal mission, and requires the Secretary of Commerce to identify 1,000 MHz of Federal spectrum in which to implement shared-use spectrum pilot projects. The report noted that simply clearing and reallocating spectrum would

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not be sustainable and pointed to a recent study by the National Telecommunications and Information Administration (NTIA) which found that clearing of just one 95 MHz band will take 10 years, cost \$18 billion, and cause significant disruption. Among its key recommendations are to adopt new technologies, including cognitive radios, that could help use existing spectrum more efficiently, stating that the use of new radio technologies, including cognitive radios, will be an important tool in helping increase spectrum capacity and utilization. The PCAST authors stated that agile (cognitive) radio technologies that make it possible for computerized radio systems to share spectrum on a vastly more efficient basis would make it possible to move from an era of scarcity to one of abundance.

Moreover, on July 6, 2012 a Presidential Executive Order was issued regarding the Assignment of National Security and Emergency Preparedness Communications Functions. The order establishes that the federal government must be able to communicate with the public, other agencies, other levels of government and businesses at all times and circumstances and in all locations, both domestically and internationally. To ensure this, the order mandates the establishment of emergency communications capabilities that are survivable, resilient, enduring and effective. These capabilities are not available in traditional public system networks, but the xMax® cognitive radio system has been designed from the ground up to meet the very survivability, redundancy, mobility, interoperability, and resiliency requirements specified by this Order.

Recognizing the spectrum constraints on fast growing needs for wireless connectivity, in September 2012 the European Commission published a communication promoting the shared use of radio spectrum resources. A study conducted for the European Commission showed that finding additional shared spectrum resources for wireless broadband could create significant net economic benefits for the European Union. With an increase of between 200 to 400 MHz in shared access spectrum for wireless broadband, the scenarios evaluated in the study showed a net increase in the value to the European economy of the order of several hundred billion Euros by 2020. The Commission, therefore, proposed steps to foster the development of wireless innovations in the EU to ensure that the currently allocated spectrum is exploited to the fullest extent possible. This has been followed by Ofcom, the telecommunications regulator in the UK, moving to complete the process to release TV Whites Spaces for shared use.

While it appears to management that spectrum regulation is developing in a favorable manner, we have, nonetheless, chosen to release the initial xMax® product line on the unlicensed 900 MHz ISM band (902 – 928 MHz) in order to minimize our exposure to regulatory risk (see further under the section entitled Government Regulations, Regulators Role in spectrum). The unlicensed bands are well established and although these bands are allocated for Industrial Scientific and Medical (ISM) use (e.g., microwave ovens and industrial equipment), a major use has been unlicensed (Part 15) systems such as Wi-Fi, Bluetooth, and ZigBee. In the period 1995 – 2005, most of the cordless phones marketed in the US were in the 902 – 928 MHz band, but conflicts with the other uses and availability of DECT equipment has greatly decreased sales of 902 – 928 MHz cordless phones.

The rules for these bands sprung from FCC Docket 81-413 which sought to end an implicit prohibition of spread spectrum/CDMA technology that resulted from a focus on FDMA spectrum uses. This resulted in rules adopted in 1985 that allow unlicensed spread spectrum systems to use these bands for almost any possible application subject to a 1W power limit. When wireless LAN use became of interest several years later, these time-tested rules allowed U.S. market access without FCC deliberations. The 2.4 and 5.8 GHz bands are used for Wi-Fi today. In a similar fashion, we are launching our initial software-defined product offering programmed to operate on unlicensed spectrum in order to speed commercialization of our intellectual property without requiring FCC or NTIA deliberations on opportunistic access. Because we have designed our core technology to be usable beyond the unlicensed band that its initial product offering operates on, we believe that we are well positioned to benefit from possible future regulatory reforms that support wider spread use of spectrum sharing and opportunistic access techniques.

The growth of wireless data over the past few years has made the subject of available spectrum a pressing priority. In fact, the current situation has been referred to as a looming spectrum crisis . (FCC Chairman Julius Genachowski, speech to CTIA, October 2009). Responses to this crisis have included lobbying efforts to persuade the FCC to find new sources of licensed spectrum and proposals to reallocate existing licensed spectrum. Demand for more spectrum and capacity has also been a key factor in industry



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consolidation. The rationale given for the AT&T/Cingular merger was based on the fact that AT&T had more spectrum than Cingular, and by combining the companies they could more efficiently serve their customers. Likewise, Verizon's \$3.6 billion bidding to buy unused wireless spectrum and AT&T's \$39 billion attempt to acquire T-Mobile was primarily driven by AT&T's desire to secure additional spectrum and cell sites in order to provide more capacity across its network.

Our company and our technology and products are based on our belief that there is insufficient spectrum available to satisfy the current and future growth of wireless data. However, we also believe that this crisis is not solely a result of insufficient amounts of available spectrum, but also the result of inefficient use of the currently available spectrum. Rather than merely demanding more spectrum we believe that the more appropriate response to the call for increased bandwidth would be to shift the focus to getting more use out of spectrum that has already been allocated. More effective utilization of the available spectrum can be accomplished in a number of different ways. Advancements in radio technology, such as the movement to the LTE standard from the previous 3G networks, for example, have allowed for better spectrum utilization. This has been attributed to the incorporation of new advanced technologies such as multiple in, multiple out ( MIMO ) and Orthogonal Frequency-Division Multiple to reduce multiuser interference.

Other methods being employed by network operators to meet bandwidth requirements have included off-loading some of the demand to unlicensed Wi-Fi hotspots and selling in-building femtocells that make use of a customer's own wired Internet connection. Another approach is to build more cell sites closer together. Each cell site would cover a smaller area, and thus offer the ability to reuse frequencies more times in a larger geographic coverage area. However, such would entail more costs, and is time consuming due to local permitting and other considerations. Many of these approaches have been driven by the need to receive more capacity out of limited spectrum.

While the spectrum currently available cannot satisfy the future growth of wireless data, the idea of getting better use out of spectrum (both licensed and unlicensed) by sharing it is receiving increased attention as a more effective and efficient solution for the industry than simply identifying new spectrum. This has led to industry and policy makers to consider technology-based approaches, such as cognitive radio and opportunistic (i.e. shared) spectrum use.

Users of commercial cellular networks are not the only users that are running out of capacity due to spectrum limitations. Wireless users around the globe such as industrial and enterprise users, public safety agencies and those who use unlicensed spectrum (such as Wi-Fi and White Spaces) are also lacking necessary spectrum, but are not being allocated the necessary spectrum due to the fact that regulators have historically prioritized commercial mobile carriers in the allocation of spectrum assets as the demand for both voice and broadband access continues to increase.

We believe that deployment of cognitive radio networks offers the best solution to addressing the pressing need for more efficient use of spectrum.

## **Radio Spectrum A Primer**

Radio spectrum is a finite resource. In order to utilize this limited radio spectrum better, we have essentially been limited to reallocating swaths held by existing users, who either have to lose some of their spectrum or have to move to other portions of the band.

The best spectrum for two-way radio or cellular types of communications is in lower frequencies. These frequencies are scarce due to technical, historical, and regulatory reasons. A large part of the spectrum (30MHz to 900MHz) that is well suited for cellular and land mobile radio ( LMR ) is occupied by existing business, industrial, public safety, and

other license holders. Additionally, only a fraction of this spectrum is practical for mobile commercial consumption as the usage of lower frequencies requires antennas, filters and other components that do not fit into a portable handheld device. There are also many services that have long used valuable spectrum in frequencies that could be reassigned for mobile data and voice since those services could use some other spectrum efficiently.

The availability of widespread high-speed wireless broadband has led to customer uptake that was far greater than the network operators, device manufacturers, and application developers had predicted. The introduction of the iPhone by Apple was a starting point for soaring broadband wireless service demand, and

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since that time, new applications, including streaming video for TV and movie services, have proliferated. Network operators are struggling with how to keep up with this demand. AT&T reported that 4% of its iPhone customers were accounting for more than 50% of the data traffic on its 3G network, and a Cisco report indicates that today more than 50% of the data traffic on mobile networks is video. This trend is expected to accelerate as network operators begin deploying 4G (fourth-generation cellular services). However, 4G does not fully address the current spectrum issues, and in fact may make it worse as new bandwidth and spectrum-intensive services are brought to market.

### **Cognitive Radio Networks A Primer**

The industry definition of a cognitive radio is a device that, unlike a traditional radio, can dynamically find and use available frequency to improve throughput and connectivity. This can be done via real-time sensing that allows the radio to scan for unused frequencies and then instantly tune to such frequencies. Cognitive radios can also rely on a database that can tell it what channels are available (usually based on the radio's location and known spectrum restrictions in that area).

Either or both of these techniques can be used to help the cognitive radio avoid interference and optimize its throughput and connection reliability on a dynamic basis. With detailed information about its local radio frequency (RF) environment, cognitive radios are able to change power output, frequency and receive or transmit parameters, in order to extract latent (unused) bandwidth and capacity from crowded unlicensed, as well as underutilized licensed, wireless spectrum.

The key elements of cognitive radio technology include spectrum sensing, spectrum management, spectrum mobility, spectrum sharing, and spatial processing:

*Spectrum sensing* may be defined as interference-based detection of transmitters with the ability to look at a portion of the spectrum to see if it contains any transmitters that could cause interference to the cognitive radio system. Making the end user devices and network infrastructure cognitive enables both to dynamically react to a wide range of conditions. In the xMax® system, the end user radio is used to inform the network of changes in the RF environment, core infrastructure and other relevant conditions. This allows the network itself, and not just the radios, to adapt dynamically. When only the radio itself is cognitive, each radio will individually optimize its parameters and throughput based on local conditions, without regard to overall system performance. What may be optimal for the radios on an individual basis may not lead to overall network optimization in terms of coverage, throughput or other measures.

*Spectrum management* is the ability of the system to capture the best available spectrum for use at any given point in time. It is based on the premise that both terminals and base stations can be directed to change their operating frequencies dynamically as needed to keep the communications from interfering with others in that portion of the spectrum, or of being interfered with by others in the same spectrum. By propagating and collecting data from individual radios across the network, a cognitive system approach can make the entire network smarter, and optimize total network throughput. This enables new and useful features such as self-RF planning that can simplify, and reduce the cost of, the deployment and operation of the network. After the RF data is collected, better utilization and performance can be achieved automatically and continuously. This makes the network vastly more adaptable, self-sustaining and self-optimizing in many ways. The ability for the network to provide a level of self-RF planning is only one example of what a cognitive network can offer. Because a cognitive radio network can self-optimize and self-configure, little-to-no frequency coordination between cognitive radio nodes or other radio networks operating in the same frequencies is needed. This leads to an often overlooked benefit of having a self-planning, self-optimizing network: it reduces or eliminates the need for skilled radio technicians. These cognitive radio networks use software,

powerful on-board computing power and real-time RF sensing to supplant expensive and overburdened radio technicians. The smart network goes beyond self-frequency planning to also encompass dynamic capacity shifting. That is to say that when a cell is lightly loaded, it can automatically abandon one or more channels in any given sector, thus making those channels available for adjacent cells to use if loading at that cell justifies the need for more spectrum. In addition to the ability to shift spectrum resources around to other cells, it also makes the network as a whole a good neighbor to other systems that might be trying to use the same spectrum in a shared band (like TV White Spaces) by using the minimum amount of spectrum at any given time. Moreover, these capabilities

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will allow xMax® networks themselves to become mobile, adapting to new spectrum conditions and terrain on-the-go , which will make xMax® an excellent solution for expeditionary deployments by defense, public safety and emergency agencies.

*Spectrum mobility* refers to the ability to make use of spectrum dynamically, commonly called DSA. The system can decide to change bands or channels within the spectrum in which they are operating.

*Spectrum sharing* is the ability for a cognitive radio system to operate in shared spectrum (unlicensed spectrum, for example), detect stations that interfere with the transmissions, mitigate that interference if possible, or avoid it by changing operating frequencies or other system parameters. By enabling xMax® to tolerate high levels of interference before requiring the radios to switch channels, more gray spectrum (containing interference or jamming) can be used in place of white spectrum (clean and interference-free). This makes these white spectrum channels available for other radios that cannot mitigate the interference on their current channel. The overall capability increases the network's total throughput and capacity greatly without consuming additional scarce spectrum resources.

*Spatial processing* is the use of multiple integrated receiver chains known as MIMO systems that can provide another layer of resistance to interferers. MIMO processing allows better use of the radio channel to improve link budget and data rates. By employing advanced signal processing techniques, we believe that our system can also be used to track and mitigate interference from multiple mobile transmitters using sophisticated signal processing algorithms. The ability to mitigate, rather than simply run away from interference will be critical going forward. We believe that there will be no more white spaces and that all spectrum will be made up of gray spaces (interference laden frequencies) caused by a system's own self-interference or that which is caused by other nearby systems.

We believe that a true cognitive or intelligent radio network will make use of most, if not all, of these capabilities in order to be able dynamically to keep the system operating by mitigating or avoiding interference that may show up in the frequencies the cognitive network is currently using. If the interference becomes too severe, an intelligent system will be able to locate other spectrum and shift the radio links to new frequencies nearly instantaneously. Using cognitive radio techniques, the cognitive network can intelligently share spectrum and extract more bandwidth via opportunistic use of shared spectrum resources.

Today's cognitive radio systems are taking advantage of new antenna technology (such as MIMO) and digital signal processors (DSPs) with advanced, innovative software algorithms. This evolution has also yielded a class of DSPs that are incredibly powerful, yet still energy-efficient. These and other technologies are enabling a new generation of smart (i.e., cognitive) radios. In general, the limiting factor in high capacity wireless systems is interference. As stated above, there are a number of ways to deal with interference to keep the communications link up and running. Unlike traditional systems (such as 3G and 4G), cognitive systems can recognize and then deal with interference locally and in real-time, thus greatly increasing the capacity of new and existing spectrum.

## **Products**

### **xMax®:**

The first implementation of xG's innovative cognitive radio intellectual property is xMax®. Operating initially within the 902-928 MHz license-free band, xMax® is a mobile voice over internet protocol (VoIP) and broadband data system that utilizes an end-to-end Internet Protocol (IP) system architecture. The xMax® technology we are developing is spectrum agnostic. In any spectrum band that xMax® will operate in, we will break the band into channels and sub channels. We will then use spatial processing and adaptive modulation to mitigate interference in

that band. If the band becomes unusable because of overwhelming interference, we will then use dynamic spectrum access to change to another channel or band. The xMax® product suite we are currently developing is band specific due to the current limitations in RF technology that can be produced for a given size, cost and complexity. Multiband, small, portable devices today require custom developed integrated circuits, which are on our technology roadmap, but not currently available. The mid-term objective is to transition implementation of xMax® to a licensing and semiconductor chip business model, which is anticipated to begin in 2016.

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The xMax® system design represents a turnkey network solution that will include rapid-deploy self-organizing access points (base stations), fixed and mobile personal Wi-Fi hotspots, mobile switching centers, as well as network management and deployment tools. A key feature of the xMax® system is the ability to leverage off-the-shelf commercial mobile devices (such as smartphones, laptops and tablets), resulting in reduced network infrastructure, maintenance and operational costs. The xMax® system will allow mobile operators to utilize free, unlicensed 902 – 928 MHz ISM band spectrum (available in most of the Americas) instead of having to purchase scarce licensed spectrum which can be prohibitively expensive. In addition, mobile network operators will be able to use xMax® cognitive radio technology to add additional capacity to licensed spectrum by identifying and utilizing unused bandwidth in those frequencies.

Our xMax® system is designed to utilize an advanced cognitive radio technology that incorporates OFDM and MIMO to increase interference tolerance, allow mobility, and improve resistance to fading. All xMax® products leverage an array of high-performance, low-cost digital signal processors (DSPs) that enable multidimensional signal processing that mitigates interference and dynamically optimizes available spectrum. xMax®'s software defined radios (SDR) are designed to be inherently frequency-agile, which will allow network access points and user devices to automatically retune and operate on clearer channels within the band. This innovative signal processing will enable xMax® to deliver a licensed spectrum experience using unlicensed spectrum.

The product portfolio that we are creating by combining advanced computer processing power and novel wireless design means that a technology solution is becoming a viable alternative to past public and private spectrum acquisition policies. We employ a multifaceted cognitive radio approach that combines sophisticated interference mitigation capabilities with innovative dynamic spectrum access attributes. The former features MIMO smart antenna technologies. Employed in concert, these capabilities will help squeeze additional usable spectrum out of airwaves once considered unusable for advanced mobile communications.

### **CN5100 Mobile Hotspot (formerly known as xMod):**

The xMax® CN5100 Mobile Hotspot is a device that allows users of Wi-Fi-enabled smartphones, tablets, notebooks and other devices to access the Internet through the xMax® cognitive radio network. The CN5100 Mobile Hotspot acts as a transparent protocol bridge that connects end user devices to the wide-area xMax® network using secure Wi-Fi links, USB or Ethernet cables. It supports not only fixed users but will also supports mobile users and has been designed to provide exceptional QoS (Quality of Service) and MoS (Mean Opinion Score) while supporting calls, texting (SMS) and broadband data streams over the xMax® network.

The CN5100 Mobile Hotspot includes a Wi-Fi router chip that allows it to simultaneously support multiple external devices wirelessly. It will enable operators to deploy long-range xMax® networks that can integrate with the large installed base of Wi-Fi and Ethernet-capable devices. Subscribers will easily be able to install and set up a CN5100 Mobile Hotspot to support any device having a Wi-Fi, USB or Ethernet

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connection. By incorporating xMax® radios and 2x4 MIMO technology, CN5100 Mobile Hotspots can provide range and reliability that management believes is superior to Wi-Fi-based wide-area systems.

The CN5100 Mobile Hotspot and xMax® system is designed to support nomadic and mobile connectivity (including high-speed handoffs) which will allow xMax® operators to offer on-the-go services that differ from those of fixed services, such as cable and DSL. It will be possible to deploy xMax® in fixed, mobile or nomadic configurations.

When a planned later version of xMax® delivering higher data rates is deployed in a fixed manner rural telecommunications operators could recover the cost of the network via the Universal Service Fund ( USF ) subsidy mechanism. Recent regulatory reform has begun to transition USF support to broadband capable networks. Because xMax® can carry both voice and data, we believe that xMax® is well suited for rural carriers to handle such a transition. As with all the components in the xMax® family of products, the CN5100 is designed to offer increased range, flexibility, throughput and reliability, while reducing network deployment and management costs. Management believes this will make xMax® an attractive solution for WISPs, mobile telecommunications operators and other service providers.

### **CN3100 Vehicle Modem (formerly known as xVM):**

The xMax® CN3100 Vehicle Modem is an IP67-rated ruggedized subscriber device that is designed to be installed inside or outside vehicles. The CN3100 acts as a transparent protocol bridge, allowing users of WiFi-enabled smartphones, tablets, notebooks and other devices to seamlessly access the Internet through the xMax cognitive radio network.

The CN3100 Vehicle Modem is waterproof and made to withstand wide temperature ranges and challenging environmental conditions. It has been designed to meet the extreme demands characteristic of expeditionary environments, making it ideally suited for employment in the public safety, homeland security, and military market places.

While primarily developed for vehicle usage, the CN3100 Vehicle Modem may also be externally mounted in fixed locations like parks or other outdoor areas to provide WiFi access for use in monitoring, surveillance, machine-to-machine and other applications using the xMax backhaul link.



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## **CN3200 Dual-Band Routing Modem:**

Introduced in 2014, the xMax® CN3200 Dual-Band Routing Modem is a single compact unit that operates in both the 900 MHz and 2.4 GHz frequency bands. The CN3200 Dual-Band Routing Modem utilizes interprotocol smart-routing algorithms to automatically determine which frequency to use based on the user's application. Voice calls are prioritized to the 900 MHz band while video and data are prioritized to the 2.4 GHz band. The experience to the user is seamless, providing simultaneous high speed data communications and calling without latency or echo.

CN3200 Dual-Band Routing Modem is designed for use in both fixed and mobile applications. In logistics, military, or public service applications, the 2.4 GHz link can assist in loading and unloading high volumes of data from the application server to a stationary vehicle and then transparently switch over to 900 MHz once it goes mobile. The CN3200 Dual-Band Routing Modem automatically switches all data and voice traffic to the 900 MHz radio to keep the connection alive. When the vehicle becomes stationary again, the CN3200 Dual-Band Routing Modem resumes dual band operation.

The CN3200 Dual-Band Routing Modem has been designed with built-in redundancy with automatic failover. If the 2.4 GHz band becomes congested, slow, or filled with interference, the CN3200 Dual-Band Routing Modem automatically routes all voice and data communications over the 900 MHz band to preserve communications.

The CN3200 Dual-Band Routing Modem has been engineered to support the delivery of both fixed location high data rates and reliable high-speed mobility in the same system. It is management's belief that it will provide a cost-effective way for rural telecommunications operators to deliver high quality voice, high speed data, and streaming video to their rural and remote customers. We believe the CN3200 Dual-Band Routing Modem will help these operators recover the cost of the network via the Universal Service Fund ( USF ) subsidy mechanism. Recent regulatory reform has begun to transition USF support from telephone to broadband services. Because xMax® can carry both voice and data, we believe that xMax® is well suited for rural carriers to handle such a migration.

In addition, it is expected that the CN3200 Dual-Band Routing Modem will allow these providers to create entirely new sources of unregulated revenue, for example, providing voice and data services to local emergency response teams.

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**CN1100 Access Point (formerly known as xAP):**

The xMax® CN1100 Access Point is an all-IP wireless access point that will deliver wide area coverage and reliability even when there is significant interference. The CN1100 Access Point brings together innovative technologies including Software Defined Radio (SDR), cognitive networking and a 2x4 MIMO in a compact and affordable broadband access point. These capabilities will enable the CN1100 Access Point to deliver wide area coverage and broadband throughput for fixed, nomadic and mobile applications.

xMax® radios and 2x4 MIMO technologies give the CN1100 Access Point range and reliability surpassing Wi-Fi-based systems. The CN1100 Access Point (as well as all xMax® components) will support nomadic and fully mobile connectivity, including high-speed handoff that will allow xMax® operators to offer on-the-go services that differ from those of fixed services, such as cable and DSL. As part of the xMax® family of products, the CN1100 Access Point is designed to offer increased coverage, throughput and robustness while reducing network deployment and management costs, making it, we believe, an attractive solution for WISPs, mobile telecommunications operators and other service providers. When implemented, Self-Organizing Networking (SON) technology will simplify and speed deployment for commercial, private and tactical networks.

The CN1100 Access Point is a small, single channel device that will provide a data rate of up to 3 Mbps per channel and supports a range of 1 to 5 miles (non-line-of-sight) and up to 8 miles (line-of-sight), depending on conditions. The xMax® system is designed so that it will be possible to collocate multiple CN1100 Access Points in order to increase system capacity. CN1100 Access Points are GPS time-synchronized to avoid self-interference, which increases overall system capacity and load leveling. These features, along with deterministic Media Access Control (MAC) for high-quality voice calls, give the xMax® system improved scalability in real-world conditions.

Having numerous accessible channels will allow neighboring network nodes (made up of one or more CN1100 Access Points) to utilize non-interfering channels automatically when employing the network self-planning features that are in our technology roadmap. This will allow the network to grow and scale more easily without the operator having to redesign the network RF plan each time a device moves, or when CN1100 Access Points or users are added or removed from the network.

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**CN7000 Mobile Control Center (formerly known as xMSC):**

The xMax® CN7000 Mobile Control Center is the backbone network element in the xMax® regional network. The CN7000 controls the delivery of the voice and data services, and manages all elements in the regional network, including access points and end-user devices.

The CN7000 Mobile Control Center acts as an aggregation point for the connected CN1100 Access Points. It performs routing and security functions. The CN7000 Mobile Control Center is typically connected to the Global Information Grid (GIG) and one or more VoIP soft switches.

**xMonitor/xDrive:**

These software tools provide integrated and comprehensive network and element management for the xMax® network, as well as mobile network throughput and coverage optimization.

xMonitor is a component of the CN7000 Mobile Control Center that monitors the status and health of all CN1100 Access Points, CN7000 Mobile Control Center elements, and VoIP core elements. It provides

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end-to-end IP network management and monitoring services. xMonitor is a web-based application that will be installed at an operator's Network Operation Center, enabling remote management of network status. The program runs as a live application that continuously collects data from the network, updating the aggregated information without user intervention. It can be programmed to display specific views around the clock providing an at-a-glance heads-up display from which to survey the network.

xDrive is a drive mapping utility designed to gather, display and log performance statistics from the CN5100 Mobile Hotspot, CN3200 Dual-Band Routing Modem and CN3100 Vehicle Modem. It will allow field technicians to map the coverage of a deployment of CN1100 Access Points, as well as providing CN5100 Mobile Hotspot/CN3200 Dual-Band Routing Modem/CN3100 Vehicle Modem to CN1100 Access Points to link statistics.

## **Competition**

The wireless technology sector is intensely competitive and is rapidly evolving. Several vendors have researched and experimented with cognitive radios. This research predominately falls under the traditional industry defined use of a cognitive radio where cognitive capabilities are restricted to dynamic spectrum access ( DSA ) within the radio device. However, we believe that only a few vendors are undertaking development across all the key elements of cognitive technology: spectrum sensing, spectrum management, spectrum mobility, spectrum sharing, and spatial processing.

As an example, both Spectrum Bridge and Microsoft have developed a database approach to frequency reuse. This method was developed specifically to enable unlicensed broadband systems to coexist with existing TV transmitters in the TV White Spaces band.

We not only face competition from other companies developing cognitive radio solutions but we are also competing for sales to end-user customers with companies offering solutions utilizing other technologies for access to licensed and unlicensed spectrum, such as LTE and Wi-Fi.

In the cognitive radio market, our competitors include, Neul Ltd., Shared Spectrum Corporation and Adaptrum.

End-customers in the rural broadband market are being offered a choice of solutions based on alternative technologies, such as LTE and Wi-Fi. Global communications networking equipment vendors such as Ericsson, Huawei, Alcatel-Lucent and others are actively selling and deploying LTE and, to a lesser extent, WiMax equipment with rural telecommunications operators that own, or can lease, appropriate licensed spectrum frequencies. We also face competition for equipment sales with Ruckus Wireless, Ubiquiti Networks and Cambium Networks, which have also targeted markets for communications systems around the world similar to our target markets. Although these companies are vastly larger than we are, with significantly greater resources, we believe that we or our channel partners will need to convince end users to consider our offerings as a viable alternative to these larger companies if we are to succeed.

It is not uncommon for a single rural operator to deploy a mix of technologies (such as LTE and Wi-Fi) to address differing applications, spectrum holdings and economics across their market areas. As new technologies are introduced and spectrum availability and costs increase, we anticipate that rural telecommunications operators will continue to deploy a growing range of innovative solutions that deliver voice and data communications to their customers.

The main vendor in the public safety market is Motorola Solutions, which is a global player that holds a highly dominant market share in the U.S. of over 80% in public safety and government wireless networks.

In the defense market, there are several large and significant companies that provide wireless communications systems to U.S. and international military agencies, including Harris Corporation, ITT Industries, Raytheon, Boeing, Thales Communications and Lockheed Martin. It is common for one competitor to be a subcontractor to another competitor who is the prime contractor and vice versa as programs of record ramp up and ramp down over time.

A number of our current or potential competitors have long operating histories, significant brand recognition, large customer bases and significantly greater financial, technical, sales, marketing and other resources than we do. As an emerging technology company, our brand is not as well known as incumbents in

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those markets. Potential customers may prefer to purchase from their existing suppliers rather than a new supplier, regardless of product performance or features.

### **Competitive Positioning**

*Regulatory risk* we believe that our choice initially to develop our cognitive radio technology utilizing the unlicensed 902 – 928 band exposes us to less regulatory risk than companies building products upon newly available TV White Space frequencies. Whereas the 902 – 928 MHz band has withstood multiple attempts to redefine the rules regarding its use, newer frequency bands such as TV White Spaces have yet to demonstrate their permanence. Specific initiatives to license off TV White Space frequencies for cellular carrier use are being promoted by licensed spectrum stakeholders.

While our core technology can be adapted for operation upon such newly available frequencies once their staying power has been demonstrated, we believe that we are not subject to the same make-or-break dependency upon the availability of TV White Spaces as are most other cognitive radio product companies.

*Mobility* we are specifically developing our product line to support mobility. We believe that mobility is an important differentiator with regard to our offering in the marketplace. Designed to do its own RF planning automatically by utilizing an extended range of non-interfering channels without manual intervention, xMax® will offer the ability to make the entire network infrastructure mobile, with CN1100 base stations able to move in relation to each other as well as to CN5100s, CN3100 s and users. We believe this feature will be unique to xMax® and will address a major capability gap for defense, homeland security, and public safety agencies which all require on the move communications networks. These agencies currently have no equipment or capacity for this identified and urgently needed capability.

*Support for both real-time VoIP and data sessions utilizing a single set of infrastructure* Most IP systems do not carry large numbers of simultaneous voice conversations. We have focused on designing a core technology that is capable of carrying both mass-scale voice and data sessions on the same network.

*Interference mitigation* Whereas most efforts to date focus on interference avoidance, we have extended our core competency into the realm of interference mitigation. In a world where wireless demand is certain to result in more, not less, congested airwaves, we believe that our intellectual property that can help to ameliorate interference is a unique competitive advantage in the marketplace.

We believe we compete favorably on these factors. However, our industry is evolving rapidly and is becoming increasingly competitive. Other developers could develop alternative wireless cognitive networks and other technologies that may adversely affect our ability to attract and retain customers. These competitors may include companies of which we may not be currently aware.

### **Sales and Marketing**

Our strategy is to sell intellectual property and the equipment in which our intellectual property is initially implemented, globally direct and through an indirect channel network that we will leverage in order to upscale our selling efforts without the significant cost of a large direct sales force. Our channel partners will utilize their own internal and external sales representatives to provide lead generation among their established customer base and beyond, pre-sales support, product fulfillment and, in certain circumstances, post-sales customer service and support.

In certain cases, service providers may also act as a channel partner for sales of our solutions to their existing customers or new enterprise accounts.

Our sales team currently is comprised of business development, relationship and account executives and a channel manager. This sales team is focused on supporting our current customers, as well as nurturing relationships with prospective customers in key domestic and international markets. Our relationship managers support the development of sales presentation materials and training of our channel partner sales personnel to assist them in marketing our services, either directly or indirectly to their customers. We also directly train and support selected key customers and technology providers in order to grow an active client base and solidify relationships. We are currently using the SalesLogix Customer Relationship Management (CRM) tool to manage our sales activity and manage these relationships.

As of July 30, 2015, our business development, sales and marketing team consisted of 8 full-time employees or contractors, supported by outside marketing professionals.

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### **Customers**

We have begun to implement our sales and marketing strategy, both through direct sales to end-customers and indirect sales to channel network partners and we have entered into a number of equipment purchase, reseller and teaming agreements as a result. These customer engagements span our target markets in rural telecommunications and defense.

The Company was delayed listing on the NASDAQ from April 2013 until July 2013. The Company received proceeds of \$7.4M from the public offering. FCC certification on its products was delayed until September 2013. Outsourcing a full production line, general release of the software and establishing a sales division was further delayed until additional proceeds of \$10M was completed in November 2013. A limited production line was completed in December 2013 along with establishing a sales and customer service organization. During this timeframe, rural broadband requirements mandated by the FCC were changing with minimum speeds going from 4Mbps down and 1 up (initial products met these requirements) to proposed speeds of 10Mbps down and 1 up. This pending legislation was enacted into law in December 2014 which delayed the rural customers on the backlog to submit purchase orders until new product met these requirements. The Company developed a new product and received FCC certification in January 2015. The xRM performance now exceeds the FCC requirements for rural broadband.

Certain contracts on the backlog expired during this timeframe and were not renewed. These were mostly reseller agreements in which their customers could not wait any longer for the Company to commercialize its products and/or receive the necessary certifications.

Revenues are recognized over the respective lives of the agreements according to the delivery and transfer of ownership and risk of xMax equipment and the provision of services as well as specification of features required by our customers. These potential customers do not satisfy certain technical expectations or requirements of those customers, we will not receive any revenue from these purchase orders.

We have begun to fulfill orders now that our equipment has been certificated by the FCC. Revenues are recognized over the respective lives of the agreements according to the delivery and transfer of ownership and risk of xMax® equipment and the provision of services as well as specification of features required by our customers.

### **Manufacturing and Suppliers**

We retain contract manufacturers to manufacture, test, assure the quality of, and ship our products. We primarily utilize contract manufacturers located in the United States to ensure proximity between the manufacturer and our design and development engineers and with the initial customers we anticipate winning.

Our internal manufacturing organization consists of a small number of supply chain managers, employees and contractors who supervise the manufacture of our products at contract manufacturer sites. We rely on our contract manufacturers, test engineers and our internal quality assurance resources to implement quality assurance programs designed to assure high product quality and reliability.

In the future, we will focus on our core strengths, which are innovation and technology design and the development, creation and exploitation of our intellectual property. Accordingly, we ultimately plan to become a designer, developer and fabless supplier of xMax® integrated circuits and system software solutions for xMax® products where we would supply integrated circuits produced by third party manufacturing partners under license, software, reference designs, features, tools and technical support.



We rely on third party components and technology to build our products, and we procure components, subassemblies and products necessary for the manufacture of our products based upon our design, development and production needs. Once we have retained a contract manufacturer, they will be responsible for obtaining these components, subassemblies and products. While components and supplies are generally available from a variety of sources, we currently depend on a single or limited number of suppliers for several components for our products. We are using a single source digital signal processor that may be difficult to replace with an equivalent performance device. In the longer term, we are planning to adapt the xMax® system to run on multiple low cost platforms. We rely on purchase orders rather than long-term contracts with

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our suppliers. We do not currently stockpile enough components to mitigate any potential supply disruption if we are required to re-engineer our products to use alternative components.

## Intellectual Property

Our business is significantly based on the creation, acquisition, use and protection of intellectual property. Some of this intellectual property is in the form of software code, patented technology and trade secrets that we use to develop our technologies, solutions and products. We have developed a broad portfolio of intellectual property that covers wired and wireless communications systems. As of July 30, 2015, in the United States, we have 54 patents granted, 4 patent applications pending, and 1 provisional application pending. Internationally, we have 59 patents granted and 47 patent applications pending.

Areas of our development activities for xMax® and beyond that have culminated in filings and/or awarded patents include:

Spatial Processing (MIMO);  
Self-Organizing Networks;  
RF Modulation;  
Compression (protocols, payload, signaling, etc.);  
Modulators/Demodulators;  
Antennas/Shielding;  
Wired and Wireless Networks;  
Media Access Control Protocols;  
Cognition enabling over the air protocols (MAC layer);  
Wireless data compression;  
Dynamic Spectrum Access (DSA); and  
Quality of Service.

We protect our intellectual property rights by relying on federal, state and common law rights, as well as contractual restrictions. We control access to our proprietary technology by entering into confidentiality and invention assignment agreements with our employees and contractors, and confidentiality agreements with third parties. We also actively engage in monitoring activities with respect to infringing uses of our intellectual property by third parties.

In addition to these contractual arrangements, we also rely on a combination of trade secret, copyright, trademark, trade dress, domain name and patents to protect our products and other intellectual property. We typically own the copyright to our software code, as well as the brand or title name trademark under which our products are marketed. We pursue the registration of our domain names, trademarks, and service marks in the United States and in locations outside the United States. Our registered trademarks in the United States include xG , and xMax® , the names of our suite of products, among others.

Circumstances outside our control could pose a threat to our intellectual property rights. For example, effective intellectual property protection may not be available in the United States or other countries in which our products are sold or distributed. Also, the efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. In addition, protecting our intellectual property rights is costly and time-consuming. Any unauthorized disclosure or use of our intellectual property could make it more expensive to do business, thereby harming our operating results.

Companies in the mobile wireless communications technology and other industries may own large numbers of patents, copyrights and trademarks and may frequently request license agreements, threaten litigation or file suit against us based on allegations of infringement or other violations of intellectual property rights. We may face allegations by third parties, including our competitors and non-practicing entities, that we

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have infringed their trademarks, copyrights, patents and other intellectual property rights. As our business grows, we will likely face more claims of infringement.

## **Government Regulations**

*Regulators Role in Spectrum.* In the past, all radios were designed with the assumption that they were operating in a spectrum band that was free of interference. There was no requirement to design radios with the ability to dynamically change channels or change spectrum bands in response to interference. These radios required pristine, dedicated licensed spectrum to operate. This led to the FCC and other regulators worldwide licensing spectrum to a particular network operator, for example, cellular paging or wireless service provider so that interference would be carefully controlled. Because of this past legacy, significant blocks of spectrum were underutilized. Even in spectrum bands that might be considered to be highly utilized, valuable spectrum can sit idle in sparsely populated areas or at certain hours of the day when network use dramatically drops.

There are also applications such as paging that have fallen out of favor and contribute to this underutilization. Despite the dramatic drop in the use of pagers, a large amount of spectrum is still dedicated to this application. This regulatory policy has led to inefficient use of spectrum and consequently the declaration of a spectrum crisis. While regulators are continuing to allocate spectrum based upon this assumption that radios do not have the ability to share spectrum, they are now starting to embrace the concept of shared spectrum and the opportunistic use of spectrum enabled by cognitive radio networks.

Regulators are starting to ease the rules relating to the allocation and access of spectrum. A good example of this is the shared use of TV broadcast spectrum via the creation of TV White Spaces for wireless broadband. The FCC and other spectrum regulatory agencies like the UK's Ofcom have begun the process to allow cognitive radios to use freed-up spectrum resulting from the transition from analog to digital TV broadcasts. For example, TV white space continues to gain momentum in the US and Europe with multiple deployments and trials being supported by some of the world's largest technology companies. Furthermore, a new group has been formed called AIR.U that is being funded by Microsoft, Google and others to utilize TV White Spaces to bring high-speed Internet services to rural campuses, schools and other institutions in the US. Similar initiatives are being undertaken in the UK with extensive trials being done in both urban and rural settings using TV White Spaces. In addition to two of the largest technology companies mentioned above, Nokia is also taking a leading role in the UK's TV White Space trials. While there have been rumors circulating that the FCC was somehow taking back TV White Spaces, there appears to be no actual indication of this taking place. In fact, the FCC appears to be approving more TV White Space database administrators as well as certifying additional radio platforms for operation in TV White Spaces. It is possible, nonetheless, that over time, TV White Spaces could be reclaimed by Congress or the FCC and re-auctioned for licensed use. However, that is a risk any unlicensed spectrum faces and has never actually occurred in the US. Other countries globally are also seriously considering creating their own TV white space allocations. These countries include Canada, Brazil and the EU.

Operators and consumers are able to use available unlicensed spectrum bands for the delivery of new applications and inexpensive broadband capacity. An example of this is the data offload efforts of some carriers that use 802.11 Wi-Fi (in the 2.4 and 5.8 GHz unlicensed bands) in densely populated areas where their 3G network is congested. This allows carriers to continue supporting mobile voice and data services over their licensed spectrum, while data that can be consumed at a fixed location (airport, coffee shop, office, etc.) is forced over an unlicensed Wi-Fi link. However, the popularity of Wi-Fi and other devices that use these frequencies has resulted in crowded and noisy spectrum that not only has to support the carriers' smartphone data, but all other applications from other devices in that band as well. The interference in these bands affects the capacity and efficiency of this spectrum for conventional radios. However, where conventional radios see walls of interference, cognitive radios can uncover windows of opportunity and recover

up to 85% of the total unused bandwidth in these frequencies.

The FCC's Part 15 rules that govern use of the 902 – 928 MHz ISM band and other unlicensed spectrum bands are well established and are considered responsible for creating an environment where technology and innovation has flourished. They are recognized as having helped create an industry that has generated tens of thousands of high technology jobs, added billions of dollars to the United States economy, and brought the benefits of a wide variety of convenient, economical communications devices to business, industry, education,

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health care providers and consumers alike. While there have been some attempts to challenge them, they have always been reaffirmed and we have every reason to believe they will remain so.

Even during the recent debates over spectrum policy, there have been no suggestions put forth by the FCC, the Congress or industry to repurpose the ISM unlicensed band to a licensed one that could be auctioned off. The reallocation of a band that is in active use by so many devices would be prohibitively disruptive. Given the long history and widespread use of the ISM band for such a wide array of communications, we feel very confident that it will remain open to use by technologies such as xMax® for the foreseeable future.

While devices operating upon unlicensed bands do not require FCC licensing, they are not unregulated and must meet the Federal Code of Regulation (CFR) FCC Part 15, which is a common testing standard for most electronic equipment. FCC Part 15 covers the regulations under which an intentional, unintentional, or incidental radiator that can be operated without an individual license. FCC Part 15 covers as well the technical specifications, administrative requirements and other conditions relating to the marketing of FCC Part 15 devices.

In order to reduce regulatory risk and gain familiarity with the requirements we elected to obtain FCC equipment authorization on some of our pre-commercial prototype xMax® devices. FCC authorized testing laboratories were used to make measurements to ensure that the prototype equipment complied with the appropriate technical standards.

Although not required unless specifically requested, we submitted a sample unit and representative data to the Commissions demonstrating compliance. Multiple briefings were also scheduled with the FCC Chief of the Office of Engineering Technology (OET) and staff, which is responsible for Equipment Certifications in an effort to inform them of our design approaches and objectives.

*Limitation of existing solutions.* Existing wireless networking technologies such as standard 802.11 based Wi-Fi, WiMAX and LTE have been designed to satisfy the increasing demand for broadband access and support mobility.

According to a Gartner forecast in May 2011, aggregate end-user spending on wireless networking equipment for Enterprise WLAN, wireless broadband access, and LTE solutions, are expected to grow from \$5.2 billion in 2010 to \$22.5 billion in 2015, representing a CAGR of 34%. However, these existing alternative networking solutions often fail to meet the price-performance requirements of wireless networking in emerging markets, which in turn has led to low penetration and large populations of unaddressed users in these areas. As a result, there is a strong need for cost-effective solutions to deliver wireless networking solutions to consumers and enterprises in underserved and underpenetrated markets. These solutions must be robust and provide service equivalent to that of alternative wired and wireless solutions while simultaneously meeting the economic objectives of network operators and service providers in these markets.

*Increasing use of the unlicensed spectrum.* Private industry in underserved and underpenetrated markets worldwide has responded to the lack of wired infrastructure by deploying wireless networks utilizing unlicensed RF spectrum.

These network operators and service providers often cannot afford the capital outlay to acquire licenses for the licensed RF spectrum and have consequently designed their wireless networks for the unlicensed RF spectrum. In the absence of affordable broadband access in the licensed spectrum, the number of users of the unlicensed RF spectrum has increased for communications equipment, as well as consumer devices such as cordless phones, baby monitors and microwave ovens. As a result of high demand for the unlicensed RF spectrum, use of this spectrum to provide high quality wireless networking has become more challenging and congestion is limiting the growth of wireless networks.

*Government incentives for broadband access.* Governments around the world are increasingly taking both regulatory and financial steps to expand access to broadband networks and increase availability of advanced broadband services to consumers and businesses. For example, in many countries, including the United States, the responsible regulatory

agencies have released the spectrum previously used for broadcast TV, known as the TV White Space, to relieve some of the congestion. The United States and other countries have adopted stimulus plans to increase the delivery of robust broadband access in unserved and underserved areas. The World Bank has reported that 12 countries and the EU have committed an aggregate of \$122.4 billion in broadband stimulus funds to date.

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## **Employees**

As of July 30, 2015, we employed 61 full-time equivalent employees, contractors or consultants, which included 39 in development, 3 officers, 5 in general and administrative, 2 in business development, 6 in operations and 6 in sales and marketing. We also engage a number of temporary employees and consultants. None of our employees are represented by a labor union or is a party to a collective bargaining agreement. We believe that we have good relations with our employees.

## **Properties**

Our corporate headquarters and marketing and business development office are located in Sarasota, Florida, in an office consisting of a total of 3,403 square feet pursuant to a lease that expires October 31, 2019. For our research and development, engineering, sales and support personnel we also have an office in Sunrise, Fort Lauderdale, Florida consisting of 12,832 square feet pursuant to a lease that expires on May 11, 2016. We believe our current facilities are sufficient for our current needs and will be adequate, or that suitable additional or substitute space will be available on commercially reasonable terms, for the foreseeable future.

## **Legal Proceedings**

From time to time, we are a party to litigation and subject to claims incident to the ordinary course of business. Future litigation may be necessary to defend ourselves and our customers by determining the scope, enforceability and validity of third party proprietary rights or to establish our proprietary rights.



TABLE OF CONTENTS**MANAGEMENT****Executive Officers and Directors**

The following table sets forth the names, ages and positions of all of the directors and executive officers of the Company and the positions they hold as of the date hereof.

Name	Age	Position
George F. Schmitt	71	Executive Chairman of the Board, Chief Executive Officer and Director
Roger G. Branton	48	Chief Financial Officer
James Woodyatt	47	President
Belinda Marino	55	Secretary
John C. Coleman	61	Director
Gary Cuccio	69	Director
Kenneth Hoffman	59	Director
Richard L. Mooers	51	Director
Raymond M. Sidney	45	Director
General James T. Conway	67	Director

**Background of Directors and Executive Officers****George F. Schmitt, Executive Chairman of the Board, Chief Executive Officer and Director**

Mr. Schmitt has over 40 years of broad telecom experience in wireless and wireline companies and has built wireless networks in a dozen countries. He is a major investor in xG Technology through his personal holdings and through his holdings in MBTH and became Executive Chairman of the Board on July 19, 2013 while previously serving as a Director since February 4, 2011, and having been the Chief Executive Officer since February 7, 2015. He also previously served as the Chief Executive Officer of MBTH, from December 2010 through December 2013. Mr. Schmitt currently sits on the board of directors of SecureAlert, Culient, and the California Thoroughbred Breeders Association. Mr. Schmitt previously served as a director of TeleAtlas, Objective Systems Integrators, Omnipoint and LHS Group. Mr. Schmitt is a principal of Sierra Sunset II, LLC and served as a former Trustee of St. Mary's College.

In addition, Mr. Schmitt has served as a director of many privately held companies including Voice Objects, Knowledge Adventure, Jungo and Cybergate, among others. Mr. Schmitt has also served as Financial Vice President of Pacific Telesis and chaired the Audit Committees of Objective Systems Integrations and TeleATLAS. Mr. Schmitt received an M.S. in Management from Stanford University, where he was a Sloan Fellow, and a B.A. in Political Science from Saint Mary's College.

Mr. Schmitt was selected to serve on our board based on his extensive experience with technology and networking companies and broad experience in the telecommunications industry and his status as a significant investor in our company.

## **Roger G. Branton, Chief Financial Officer**

For the past 12 years Mr. Branton has served in a variety of positions with our company since its founding in August 2002. Mr. Branton currently serves as our Chief Financial Officer since inception. He also serves in similar capacities at MBTH, a company he co-founded with Richard Mooers and George Schmitt in 2010. He graduated from West Chester University in Pennsylvania with a Bachelor of Science degree in accounting. He trained as a certified public accountant in 1989.

## **James Woodyatt, President**

Mr. Woodyatt has served as our President since April 20, 2012. He also served as our Deputy Chief Executive Officer from June 2007 to April 20, 2012, at which time James assumed the President title, and as a Director from January 2007 through July 2013. From February 2006 until October 2011, James served as President of Veegoo Holding SA, a company he co-founded in 2006 and as a Managing Director of Veegoo Capital Services SA, a group which is active in business advisory and private equity.

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## **Belinda Marino, Secretary**

Mrs. Marino has served secretary since August 2013. Mrs. Marino is also an employee of the Company serving as the Director of Human Resources since 2006. In addition to the above, Mrs. Marino has ongoing responsibilities for functions that include corporate banking activities and corporate governance. Mrs. Marino earned a PHR (Professional in Human Resources) Certificate from the HR Certification Institute in 2009.

## **John C. Coleman, Director**

Mr. Coleman brings to us 35 years of combined experience in expeditionary operations from both government service and the private sector. From June 2010 to February 2015, he has served as the Chief Executive Officer and Chief Operating Officer of the Company. From January 2009 to June 2012, he was the Chief Executive Officer of Joint Command and Control Consulting (JC3), a consulting services firm he founded that is focused on the development, integration, and delivery of mature and emerging technologies in support of expeditionary operations, particularly as related to command, control, and communications. In conjunction with its strategic partners, JC3 provides C4ISR-related systems, service, training, and support to expeditionary responders, both civil and military. He also served as a Vice-President of Hunter Defense Technology, a position he held from July 2006 to December 2008. In the thirty years preceding private sector employment, Mr. Coleman served the United States as a U.S. Marine Officer. Defining the character of his service upon retirement, Mr. Coleman was awarded the nation's Distinguished Service Medal, an honor very rarely and only under exceptional circumstance bestowed to Marines below the rank of General Officer. He retired from the U.S. Marine Corp as a Colonel. He possesses top secret clearance which gives him access to several of our major markets. Currently, Mr. Coleman serves as a member of the board of xG.

Mr. Coleman was selected to serve on our board based on his significant experience with the military and military operations.

## **Gary Cuccio, Director**

Gary Cuccio has over 35 years of broad operating experience in wireless, software, engineering, operations, sales and marketing. Mr. Cuccio currently serves as Chairman of Openet Telecom Ltd. Based in Dublin, Ireland, Openet Telecom is a venture-backed software company providing IP mediation to leading Telcos on a global basis. Mr. Cuccio also serves on the board of mBlox as the chairman of its audit committee. mBlox is a venture-backed startup providing a service bureau for SMS messages in the wireless space. Headquartered in London and Sunnyvale, CA, mBlox operates in Europe, the U.S. and Asia. Previously, Mr. Cuccio was CEO of ATG, a CLEC based in California, Oregon, and Washington. Prior to ATG, Mr. Cuccio was CEO of LHS group (Nasdaq: LHSG), a Telco billing software supplier. LHS was acquired by Sema, a French software company, in Q3, 2000 for \$6.8BB. Mr. Cuccio was also COO of Omnipoint, a PCS mobile wireless carrier. Mr. Cuccio's experience also includes several positions held at Airtouch, most notably Vice President of Operations for Europe, Vice President, Asia and President of Airtouch Paging. The company was merged with Vodafone in 1999. He has also served as chairman of the board and audit committee chairman of privately held companies and has helped sell and merge several public and privately held companies. Mr. Cuccio started his career with 27+ years at Pacific Tel in Operations, Engineering, Customer Service and Sales & Marketing, ending his tenure there as VP/General Manager.

Mr. Cuccio received his AMP from Harvard University, his MBA from St. Mary's College and his BA in Political Science from California State University Los Angeles.

Mr. Cuccio was selected to serve on our board based on his 45 years of experience with technology and communications companies as well as his financial and audit committee background. Mr. Cuccio qualifies as an audit committee financial expert within the meaning of the SEC regulations.

## **Kenneth Hoffman, Director**

Mr. Hoffman joined the Company in August 2010 as an advisor. Ken Hoffman is Vice President of Regulatory Affairs for Florida Power & Light Company, the rate-regulated subsidiary of NextEra Energy, Inc. (NYSE: NEE), one of the nation's leading electricity-related services companies. He is responsible for providing assistance in the management and oversight of FPL's regulatory activities before state regulators and the State Legislature on energy matters. Mr. Hoffman joined FPL in 2008 after a successful career in private

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law practice specializing in the representation of public utilities and telecommunications companies before the Florida Public Service Commission, the Florida Legislature and the Florida courts. He has over 25 years experience representing various types of telecommunications carriers including wireless before regulatory and legislative bodies. His expertise in regulatory proceedings in Florida will be helpful as we grow and face potential regulatory actions. Prior to joining FPL, he was a shareholder at Rutledge Ecenia Purnell & Hoffman, PA, in Tallahassee, Florida for 14 years.

Mr. Hoffman was selected to serve on our board based on his extensive experience in the utility industry, a key industry segment to utilize our products and services.

### **Richard L. Mooers, Director**

Richard Mooers has been involved in telecommunications activities for over 20 years and has significant expertise in accounting, risk management, and controls. For the past 12 years he has served in a variety of positions with our company since its founding in August, 2002. Mr. Mooers served as our Executive Chairman of the Board from inception until July 19, 2013 and will continue to serve as a Director, a position he has held from inception. He also serves as Chairman, CEO and Director of MBTH a company he co-founded with Roger Branton and George Schmitt in 2010. Richard graduated summa cum laude from the University of Maine, with a Bachelor of Science degree in business administration in 1985. He remains one of the major investors in the Company.

Mr. Mooers was selected to serve on our board based on his extensive experience with technology and telecommunications companies, including as a founder, executive and investor.

### **Raymond M. Sidney, Director**

Dr. Sidney has established several real estate investment ventures and been involved with a number of companies, including Covia Labs, Planetary Resources, Edison2, and AnthroTronix as an investor, board member, or advisor. He also serves on the Vision Circle of the X PRIZE Foundation. Prior to this, Dr. Sidney was the second software engineer hired at Google, Inc.; previously, Dr. Sidney had worked as a security expert and software engineer at RSA Labs and D.E. Shaw & Co., among other companies. He provided the implementation expertise for RC6, RSA's candidate cipher for NIST's quest for AES, a successor to the Data Encryption Standard. Dr. Sidney attended Caltech and Harvard, and he received a bachelor's degree in mathematics from Harvard in 1991. He then entered the graduate program in mathematics at MIT, where he specialized in cryptography and received a PhD in 1995. His higher mathematics knowledge will be helpful to our development team. Dr. Sidney also has an MBA from UC Berkeley's Haas School of Business. In addition, he is active in educational and environmental undertakings in the Lake Tahoe area.

Mr. Sidney was selected to serve on our board based on his extensive experience with technology companies and broad experience in the venture capital industry.

### **General James T. Conway, Director**

General Conway retired from active military duty in 2010. Since retiring, General Conway has consulted for several corporate and non-profit boards, including Textron Inc., Colt Defense and General Dynamics. General Conway also co-chairs the Energy Security Leadership Council, a non-partisan energy policy think tank. Prior to his retirement, General Conway served as the 34<sup>th</sup> Commandant of the U.S. Marine Corps for four years. Prior to becoming

Commandant, General Conway served for four years on the Joint Chiefs of Staff as Senior Operations Officer in the U.S. military, where he oversaw the war efforts in Iraq and Afghanistan. As a member of the Joint Chiefs of Staff, General Conway functioned as a military advisor to the Secretary of Defense, the National Security Council, and the President.

General Conway was selected to serve on our board based on his significant experience assessing and implementing military technology operations.

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## **Board Composition and Committees and Director Independence**

### **Director Independence**

Our board of directors currently consists of seven members: Richard L. Mooers, John C. Coleman, Gary Cuccio, Kenneth Hoffman, George F. Schmitt, Raymond M. Sidney and General James T. Conway. All of our directors will serve until our next annual meeting and until their successors are duly elected and qualified.

As we are listed on NASDAQ, our determination of independence of directors is made using the definition of independent director contained in Rule 5605(a)(2) of the Marketplace Rules of the NASDAQ Stock Market. Our board affirmatively determined that Gary Cuccio, Kenneth Hoffman, James T. Conway and Ray Sidney, are independent directors, as that term is defined in the Nasdaq Stock Market Rules.

### **Board Committees**

Our board of directors has an audit committee, a compensation committee and a governance and nominations committee. Each committee has a charter, which is available on our website at [www.xgtechnology.com](http://www.xgtechnology.com). Information contained on our website is not incorporated herein by reference. Each of the board committees has the composition and responsibilities described below.

#### **Audit Committee**

We have an Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of our Audit Committee are Gary Cuccio, Ken Hoffman and General James T. Conway. Each of these Committee members is independent within the meaning of Rule 10A-3 under the Exchange Act and the NASDAQ Stock Market Rules. Our board has determined that Gary Cuccio shall serve as the audit committee financial expert, as such term is defined in Item 407(d)(5) of Regulation S-K. Gary Cuccio currently serves as Chairman of the Audit Committee of mBlox, Inc. and Openet Telecom Ltd. In the past he also served on the Audit Committee of Objective Systems Integration, Inc. and Affinity Internet, Inc. Gary Cuccio will serve as Chairman of our Audit Committee.

The Audit Committee oversees our accounting and financial reporting processes and oversees the audit of our financial statements and the effectiveness of our internal control over financial reporting. The specific functions of this Committee include:

- selecting and recommending to our board of directors the appointment of an independent registered public accounting firm and overseeing the engagement of such firm;
- approving the fees to be paid to the independent registered public accounting firm;
- helping to ensure the independence of our independent registered public accounting firm;
- overseeing the integrity of our financial statements;
- preparing an audit committee report as required by the SEC to be included in our annual proxy statement;
- reviewing major changes to our auditing and accounting principles and practices as suggested by our company's independent registered public accounting firm, internal auditors (if any) or management;
- reviewing and approving all related party transactions; and
- overseeing our compliance with legal and regulatory requirements.

### **Compensation Committee**

The members of our Compensation Committee are Gary Cuccio, Ken Hoffman, Ray Sidney and General James T. Conway. Each such member is independent within the meaning of the NASDAQ Stock Market Rules. In addition, each member of our Compensation Committee qualifies as a non-employee director under Rule 16b-3 of the Exchange Act. Our Compensation Committee assists the board of directors in the discharge of its responsibilities relating to the compensation of the board of directors and our executive officers. General James T. Conway serves as Chairman of our Compensation Committee.

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The Committee's compensation-related responsibilities include:

assisting our board of directors in developing and evaluating potential candidates for executive positions and overseeing the development of executive succession plans;  
reviewing and approving on an annual basis the corporate goals and objectives with respect to compensation for our chief executive officer;  
reviewing, approving and recommending to our board of directors on an annual basis the evaluation process and compensation structure for our other executive officers;  
providing oversight of management's decisions concerning the performance and compensation of other company officers, employees, consultants and advisors;  
reviewing our incentive compensation and other stock-based plans and recommending changes in such plans to our board of directors as needed, and exercising all the authority of our board of directors with respect to the administration of such plans;  
reviewing and recommending to our board of directors the compensation of independent directors, including incentive and equity-based compensation; and  
selecting, retaining and terminating such compensation consultants, outside counsel and other advisors as it deems necessary or appropriate.

**Governance and Nominations Committee**

The members of our Governance and Nominations Committee are Gary Cuccio, Ken Hoffman, Ray Sidney and General James T. Conway. Each such member is independent within the meaning of the NASDAQ Stock Market Rules. The purpose of the Governance and Nominations Committee is to recommend to the board nominees for election as directors and persons to be elected to fill any vacancies on the board, develop and recommend a set of corporate governance principles and oversee the performance of the board. Ken Hoffman will serve as chairman of our Governance and Nominations Committee.

The Committee's responsibilities include:

Selecting director nominees. The governance and nominations committee recommends to the board of directors nominees for election as directors at any meeting of stockholders and nominees to fill vacancies on the board. The governance and nominations committee would consider candidates proposed by stockholders and will apply the same criteria and follow substantially the same process in considering such candidates as it does when considering other candidates. The governance and nominations committee may adopt, in its discretion, separate procedures regarding director candidates proposed by our stockholders. Director recommendations by stockholders must be in writing, include a resume of the candidate's business and personal background and include a signed consent that the candidate would be willing to be considered as a nominee to the board and, if elected, would serve. Such recommendation must be sent to the Company's Secretary at the Company's executive offices. When it seeks nominees for directors, our governance and nominations committee takes into account a variety of factors including (a) ensuring that the board, as a whole, is diverse and consists of individuals with various and relevant career experience, relevant technical skills, industry knowledge and experience, financial expertise (including expertise that could qualify a director as a financial expert, as that term is defined by the rules of the SEC), local or community ties and (b) minimum individual qualifications, including strength of character, mature judgment, familiarity with the Company's business and industry, independence of thought and an ability to work collegially. The Company is of the view that the continuing service of qualified incumbents promotes stability and continuity in the board room, contributing to the ability of the board of directors to work as a collective body, while giving the Company the benefit of the familiarity and insight into the Company's affairs that its directors have accumulated during their tenure. Accordingly, the process of the governance and nominations committee for identifying nominees reflects the Company's practice of re-nominating incumbent directors who continue to satisfy the committee's criteria for membership on the board of directors, whom the

committee believes continue to make important contributions to the board of directors and who consent to  
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continue their service on the board of directors. The board has not adopted a formal policy with respect to its consideration of diversity and does not follow any ratio or formula to determine the appropriate mix; rather, it uses its judgment to identify nominees whose backgrounds, attributes and experiences, taken as a whole, will contribute to the high standards of board service. The governance and nominations committee may adopt, and periodically review and revise as it deems appropriate, procedures regarding director candidates proposed by stockholders;

Reviewing requisite skills and criteria for new board members and board composition. The governance and nominations committee reviews with the entire board of directors, on an annual basis, the requisite skills and criteria for board candidates and the composition of the board as a whole;

Hiring of search firms to identify director nominees. The governance and nominations committee has the authority to retain search firms to assist in identifying board candidates, approve the terms of the search firm's engagement, and cause the Company to pay the engaged search firm's engagement fee;

Selection of committee members. The governance and nominations committee recommends to the board of directors on an annual basis the directors to be appointed to each committee of the board of directors;

Evaluation of the board of directors. The governance and nominations committee will oversee an annual self-evaluation of the board of directors and its committees to determine whether it and its committees are functioning effectively; and

Development of Corporate Governance Guidelines. The governance and nominations committee will develop and recommend to the board a set of corporate governance guidelines applicable to the Company.

The governance and nominations committee may delegate any of its responsibilities to subcommittees as it deems appropriate. The governance and nominations committee is authorized to retain independent legal and other advisors, and conduct or authorize investigations into any matter within the scope of its duties.

## **Involvement in Certain Legal Proceedings**

To the best of our knowledge, none of our directors or executive officers has, during the past ten years:

been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);

had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;

been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;

been found by a court of competent jurisdiction in a civil action or by the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;

been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of

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disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or

been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in Certain Relationships and Related Transactions, none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the Commission.

## **Family Relationships**

There are no family relationships between any of the officers or directors of the Company.

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The following table summarizes information regarding the compensation awarded to, earned by or paid to, our Executive Chairman, Chief Executive Officer, Chief Financial Officer and our two other most highly compensated executive officers during 2014 and 2013. We refer to these individuals in this report as our named executive officers.

Name and Principal Position	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) <sup>(2)</sup>	Non-Equity Incentive Plan Compensation (\$)	Non-qualified Deferred Compensation (\$) <sup>(3)</sup>	All Other Compensation (\$)	Total (\$)
George F. Schmitt, <i>Executive Chairman</i> <sup>(4)</sup>	2013	150,000	0	0	0			0	150,000
	2014	150,000	0	7,581					157,581
Richard L. Mooers, <i>Executive Chairman</i> <sup>(5)</sup>	2013	357,500	0	0	12,894			19,414	389,808
	2014	0	0	0	0			0	0
John C. Coleman, <sup>(6)</sup> <i>Director</i>	2013	250,000	0	0	51,578			45,082	346,660
	2014	250,000	0	12,193	0			42,578	304,771
Roger G. Branton, <i>Chief Financial Officer</i>	2013	275,000	0	6,468	0			12,442	293,910
	2014	240,000	0	0	38,683			10,776	289,459
James Woodyatt, <i>President</i>	2013	165,000	0	0	38,683			4,676	208,359
	2014	202,522	67,500	8,340	0			3,672	282,034

(1) Amounts represent corporate performance-related bonuses to be paid in stock from the 2011 and 2012 bonus plan.

(2) Amounts relate to grants of stock options made under the 2013 Stock Incentive Plan. With respect to each stock option grant, the amounts disclosed generally reflect the grant date fair value computed in accordance with FASB ASC Topic 718 Stock Compensation .

(3) Includes employer-paid insurance and, for Mr. Coleman, a housing allowance.

(4) Mr. Schmitt became Executive Chairman of the Board on July 19, 2013. On February 17, 2015, the Company's Board of Directors appointed Mr. Schmitt to the role of Chief Executive Officer.

(5) Mr. Mooers served in the position of Executive Chairman of the Board from inception until July 19, 2013. Mr. Mooers will continue to serve as a Director of the Company.

(6) As of February 17, 2015, Mr. Coleman is no longer an executive officer of the Company. Mr. Coleman will continue to serve as a Director of the Company.

**Executive Compensation Program Components****Base Salary**

We provide base salary as a fixed source of compensation for our executive officers, allowing them a degree of certainty when having a meaningful portion of their compensation at risk in the form of equity awards covering the shares of a company for whose shares there has been limited liquidity to date. The board of directors recognizes the

importance of base salaries as an element of compensation that helps to attract highly qualified executive talent.

Base salaries for our executive officers were established primarily based on individual negotiations with the executive officers when they joined us and reflect the scope of their anticipated responsibilities, the individual experience they bring, the board members' experiences and knowledge in compensating similarly situated individuals at other companies, our then-current cash constraints, and a general sense of internal pay equity among our executive officers.

The Board does not apply specific formulas in determining base salary increases. In determining base salaries for 2013 and 2014 for our continuing named executive officers, no adjustments were made to the base

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salaries of any of our named executive officers, except for James Woodyatt, as the board or compensation committee determined, in their independent judgment and without reliance on any survey data, that existing base salaries, taken together with other elements of compensation, provided sufficient fixed compensation for retention purposes.

### **Cash Bonuses or Bonuses Paid in Shares**

Prior to the initial public offering, our employees, including our executive officers, have been eligible to earn discretionary performance bonuses based on individual performance. The amount of individual bonus earned was determined in a subjective manner, without specific weightings or a formula.

In 2012, we set targets for the award of corporate performance-related bonuses, expressed as a percentage of base salary, for our employees, including our executive officers. The overall corporate performance of the Company, as evaluated by our board, was with reference to specific pre-established corporate goals, and was the critical factor for determining corporate performance-related bonuses. Each participant could earn an annual bonus of up to 100% of his earned base salary, which our board felt was an appropriate percentage given such payment can be paid in stock or cash at the board's discretion.

For our 2012 bonus program, our Chief Executive Officer established, in consultation with the board, objectives and key results, for officers and senior management which also applied to all employees of the Company.

Bonus accruals for the 2011 and 2012 calendar years were paid on February 5, 2014 and February 18, 2014 through the issuance of 8,234 and 1,687 common shares. The bonus awarded was allocated to general & administrative and development expenses in 2011 and 2012. During 2013, \$2,335,000 of salary expense was reversed to account for the decrease in the fair market value of the accrued bonus from \$2,633,000 at December 31, 2012 to \$298,000 at December 31, 2013. The reason for the decrease is related to the decrease in the stock price of common shares used for settlement.

In 2013, we again set targets for the award of corporate performance-related bonuses; however, those targets were not met and no performance-related bonuses were paid out. We have not yet set any targets for the award of corporate performance-related bonuses for 2014.

### **Equity Compensation**

As a majority-held company, we have historically used options as the principal component of our executive compensation program. Consistent with our compensation objectives, we believe this approach has allowed us to attract and retain key talent and aligned our executive team's contributions with the long-term interests of the company and our stockholders. We grant stock options with an exercise price not less than the fair market value of our common stock on the date of grant, so these options will have value to our executive officers only if the fair market value of our common stock increases after the date of grant and the date of vesting. Typically, stock options granted to our executive officers vest over three years.

In addition, our board has approved certain executive grants of options containing accelerated vesting provisions upon an involuntary termination (both termination without cause and resignation for good reason) as well as upon certain material change in control transactions. Our board believes these accelerated vesting provisions reflect current market practices, based on the collective knowledge and experiences of our board members (and without reference to specific peer group data), and allow us to attract and retain highly qualified executive officers. In addition, we believe these accelerated vesting provisions will allow our executive officers to focus on closing a transaction that may be in the best interest of our stockholders even though the transaction may otherwise result in a termination of their

employment and, absent such accelerated vesting, a forfeiture of their unvested equity awards. Additional information regarding accelerated vesting prior to, upon or following a change in control is discussed below under Potential Payments Upon Termination or Change in Control.

In determining the form, size and material terms of executive equity awards, our board customarily considered, among other things, individual negotiations with the executive officers at their time of hire, the executive officer's total compensation opportunity, the need to create a meaningful opportunity for reward predicated on the creation of long-term stockholder value, internal pay equity as among our executive officers, notable performance accomplishments, adjustments to duties and the retention implications of existing grants.



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Our board of directors made the grants to our executive officers set forth below. In determining the size of the equity grants, our board generally considered the CEO's recommendations, the executive officer's existing equity award holdings (including the unvested portion of such awards), internal pay equity, our retention and incentive goals, and, as applicable, negotiations with the executive at the time of his hiring. Our board of directors did not make any grants to our executive officers in 2014.

## Employment Agreements

The Company has an employment agreement with its former CEO, John Coleman, for a term of three years with automatic renewals unless terminated. Mr. Coleman's agreement was effective on August 1, 2011. It provides that he will receive a salary of no less than \$250,000 per year, subject to annual increases as determined by the Board. In addition, he is entitled to incentive compensation not to exceed two (2) times his base salary. The incentive compensation is payable in shares of common stock at the Company's discretion. He is also entitled to participate in all other benefits that the Company may provide to other senior executives. The agreement contains a non-compete and non-solicitation provision.

## Outstanding Equity Awards at Fiscal Year-End 2014

The following table presents information regarding outstanding options held by our named executive officers as of December 31, 2014:

	Option Awards Number of Securities Underlying Unexercised Options (#) Exercisable		Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration date
George Schmitt	143			84.00	2/23/2020
Total	143				
John Coleman	143			87.50	3/8/2020
	1,429			70.00	6/16/2020
	2,858			87.50	4/14/2021
	1,334	2,667	(2)	16.30	11/19/2023
Total	5,764	2,667			
Roger Branton <sup>(1)</sup>	3,072			192.50	1/2/2015
	7,858			700.00	1/19/2016
	1,000	2,000	(3)	16.30	11/19/2023
Total	11,930	2,000			
James Woodyatt	2,143			1,925.00	1/10/2017
	1,000	0		78.80	4/14/2021
	1,000	2,000	(3)	16.30	11/19/2023
Total	4,143	2,000			

- (1) Held by trusts and entities for the benefit of Roger Branton, his wife and minor children.
- (2) 1,334 of these options vest on November 19, 2014, 1,334 vest on November 19, 2015 and 1,334 vest on November 19, 2016.
- (3) 1,000 of these options vest on November 19, 2014, 1,000 vest on November 19, 2015 and 1,000 vest on November 19, 2016.

## Director Compensation

The Company compensates our non-employee directors on a negotiated basis including expenses for their service. Each of these directors received compensation in the amount of \$15,000 annually payable quarterly or the same value in shares of the Company, based on the director's determination. In addition, they received awards of 1,429 options in September of 2012 with a strike price of \$157.50 and 1,000 in November of 2013 with a strike price of \$16.30. Each award has a vesting schedule of one-third vesting each year on the anniversary date over three (3) years. No options were awarded in 2014.

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The table below summarizes the compensation earned by our non-employee directors for the fiscal year ended December 31, 2014.

Name	Fees earned or paid in cash (\$)	Stock Awards (\$)	Option Awards (\$)	Non-equity incentive plan compensation (\$)	Change in pension value and nonqualified deferred compensation earnings (\$)	All Other Compensation (\$)	Total (\$)
Gary Cuccio	15,000	0	0	0	0	0	15,000
Kenneth Hoffman	0	15,000	0	0	0	0	15,000
Raymond Sidney	0	15,000	0	0	0	0	15,000
Larry Townes	0	15,000	0	0	0	0	15,000

**Pension Benefits**

We do not have any defined pension plans.

**Potential Payments upon Termination or Change in Control**

Our executive employment agreements do not call for any potential payments upon termination or change in control.

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# SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the beneficial ownership of our common stock as of July 30, 2015 by (a) each stockholder who is known to us to own beneficially 5% or more of our outstanding common stock; (b) all directors; (c) our executive officers, and (d) all executive officers and directors as a group. Except as otherwise indicated, all persons listed below have (i) sole voting power and investment power with respect to their shares of common stock, except to the extent that authority is shared by spouses under applicable law, and (ii) record and beneficial ownership with respect to their shares of common stock.

For purposes of this table, a person or group of persons is deemed to have beneficial ownership of any shares of common stock that such person has the right to acquire within 60 days of July 30, 2015. For purposes of computing the percentage of outstanding shares of our common stock held by each person or group of persons named above, any shares of common stock that such person or persons has the right to acquire within 60 days of July 30, 2015 is deemed to be outstanding, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. The inclusion herein of any shares of common stock listed as beneficially owned does not constitute an admission of beneficial ownership. Unless otherwise identified, the address of our directors and officers is c/o xG Technology, Inc., 240 S. Pineapple Avenue, Suite 701, Sarasota, Florida 34236.

Name and address of beneficial owner:	Amount and Nature of Beneficial Ownership	Percent of class of Common Stock <sup>(1)</sup>
5% Stockholders:		
MB Technology Holdings, LLC ( MBTH <sup>2)</sup> )	1,247,410	23.57 %
Named Executive Officers and Directors:		
George F. Schmitt <sup>(3)</sup>	1,575,589	29.42 %
John C. Coleman <sup>(4)</sup>	15,343	*
Roger G. Branton <sup>(5)</sup>	1,294,452	24.38 %
James Woodyatt <sup>(6)</sup>	6,650	*
Belinda Marino <sup>(7)</sup>	1,312	*
Gary Cuccio <sup>(8)</sup>	3,969	*
Richard L. Mooers <sup>(9)</sup>	1,327,946	24.95 %
Ken Hoffman <sup>(10)</sup>	5,518	*
Raymond M. Sidney <sup>(11)</sup>	5,518	*
General James T. Conway <sup>(12)</sup>		
All executive officers and directors as a group (10 persons):	<b>1,741,477</b>	<b>32.16 %</b>

\*

Less than 1%

(1) Based on 5,080,976 shares of common stock issued and outstanding as of July 30, 2015. Shares of common stock subject to options or warrants currently exercisable or exercisable within 60 days, are deemed outstanding for purposes of computing the percentage of the person holding such options or warrants, but are not deemed outstanding for purposes of computing the percentage of any other person.

(2) Includes 212,078 shares of common stock underlying options and warrants that are presently exercisable.

(3)

Includes 265,619 shares of common stock and 62,560 shares of common stock underlying options and warrants that are presently exercisable, held directly by Mr. Schmitt, and 1,035,332 shares of common stock and 212,078 shares of common stock underlying options and warrants that are presently exercisable, beneficially owned through MBTH. Mr. Schmitt has a direct 36.84% ownership interest in MBTH. In addition, Mr. Schmitt, through his employment agreement as CEO of MBTH, has been granted an option to purchase MBTH shares sufficient to give him five percent (5%) of the equity ownership of MBTH shares, based on MBTH's total capitalization as of the date of execution of his employment agreement with MBTH and fully diluted to incorporate all shares issued and amounts paid in the exercise of such options.

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- (4) Includes 7,915 shares of common stock and 6,327 shares of common stock underlying options and warrants that are presently exercisable. Includes 1,101 shares of common stock owned by Mr. Coleman's wife.  
Includes 29,957 shares of common stock and 15,656 shares of common stock underlying options and warrants that are presently exercisable, beneficially owned through Branton Partners, LLC, of which various family entities, including Mr. Branton's spouse, children and trusts for the benefit of Mr. Branton's children, beneficially own
- (5) 100%, 1,429 shares beneficially owned through Mooers Branton and Company (MBC), of which Mr. Branton is a 20% owner, and 1,035,332 shares of common stock and 212,078 shares of common stock underlying options and warrants that are presently exercisable, beneficially owned through MBTH. Mr. Branton beneficially holds 20% of the issued share capital of MB Merchant Group, LLC, which has a 45.85% ownership interest in MBTH.
- (6) Includes 2,507 shares of common stock and 4,143 shares of common stock underlying options that are presently exercisable.
- (7) Includes 783 shares of common stock and 529 shares of common stock underlying options that are presently exercisable.
- (8) Includes 2,683 shares of common stock and 1,286 shares of common stock underlying options that are presently exercisable.  
Includes 15,454 shares of common stock and 334 shares of common stock underlying options that are presently exercisable. Richard Mooers' family entities and trusts for the benefit of his and his wife's children hold 80% of the share capital of MBMG and MBC. MBTH owns 1,035,332 shares of common stock and 212,078 shares of common stock underlying options that are presently exercisable in xG. MBMG owns 45.85% of MBTH. Mooers Partners, LLC (MP) owns 29,059 shares of common stock and 25,836 shares of common stock underlying options
- (9) and warrants that are presently exercisable in xG. MP is owned by various trusts for the benefit of Mr. Mooers' children. Additionally, a trust for the benefit of Mr. Mooers' children also owns 5,503 shares of common stock and 2,751 shares of common stock underlying warrants that are presently exercisable in xG. MBC directly owns 1,429 shares of xG. 172 shares of xG are held by Mr. Mooers' children directly. As the children reside in Mr. Mooers' household, he is required to claim beneficial ownership and does.
- (10) Includes 4,232 shares of common stock and 1,286 shares of common stock underlying options that are presently exercisable.
- (11) Includes 4,232 shares of common stock and 1,286 shares of common stock underlying options that are presently exercisable.

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## **CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS**

Other than compensation arrangements, the following is a description of transactions to which we were a participant or will be a participant to, in which:

the amounts involved exceeded or will exceed the lesser of 1% of our total assets or \$120,000; and any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest. Our Audit Committee considers and approves or disapproves any related person transaction as required by NASDAQ regulations.

### **Assumption of liabilities by MBTH**

Roger Branton, the Company's Chief Financial Officer, and George Schmitt, the Company's Chief Executive Officer and Executive Chairman, are directors of MBTH, and Richard Mooers, a director of the Company, is the CEO and a director of MBTH. During the year ended December 31, 2014, MBTH did not fund any additional liabilities on behalf of the Company under the 2011 assumption of liability agreement with MBTH. During the year ended December 31, 2014, the Company repaid MBTH \$280,000 for liabilities previously paid by MBTH and the balance due to MBTH under the 2011 assumption of liability agreement was \$931,000 as of December 31, 2014 which is included in due to related parties.

On April 29, 2014, the Company entered into a management agreement (the "Management Agreement") with MBTH, pursuant to which MBTH agreed to provide certain management and financial services to the Company for a monthly fee of \$25,000. The Management Agreement was effective January 1, 2014. The Company incurred fees related to the Management Agreement of \$300,000 and \$0, respectively, for the year ended December 31, 2014 and 2013. During the year ended December 31, 2014, the Company paid \$225,000 of the fees under the Management Agreement and the remaining \$75,000 was included in due to related parties at December 31, 2014.

In December 2014, MBTH loaned the Company \$50,000 for payroll related expenses. This balance was included in due to related parties.

The Company agreed to award MBTH a 3% cash success fee if MBTH arranges financing for the Company or arranges a merger, consolidation or sale by the Company of substantially all of the assets. On February 24, 2015, MBTH invoiced the Company for \$700,000 in fees associated with equity financings through April 16, 2014 at a rate of 3% per financing less certain discounts. The Company also accrued for an additional fee of approximately \$109,000 for equity financings between April 17, 2014 and December 31, 2014. The balance of \$809,000 was recorded as an expense in general and administrative expenses and included in due to related parties. As of July 30, 2015, the balance due to MBTH is \$213,504.

### **Issuance of common stock to MBTH**

On February 24, 2015, the company issued 399,114 shares of common stock to MBTH in consideration of converting \$1,756,098 owed of the balance due to related parties at a conversion price of \$4.40 per share.

**George Schmitt Due to Related Party**

On December 30, 2014, the Company received a \$245,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded in due to related parties.

On January 8, 2015, the Company repaid \$100,000 of the \$245,000 due to related party balance owed to George Schmitt.

On January 29, 2015 and February 13, 2015, the Company received an aggregate of \$700,000 from certain family members of George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer.

This amount was recorded as a short term loan in due to related parties. On February 23, 2015, George Schmitt transferred the balance of his \$145,000 loan to certain family members bringing the total the Company owed to certain family members to \$845,000. The \$845,000 loan was settled



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through the issuance of 845,000 shares of Series B Preferred Stock, 5,310 shares of common stock and warrants with respect to 42,250 underlying shares of common stock exercisable for five years at a price of \$20.00 per share.

On February 24, 2015, the 845,000 shares of the Series B Preferred Stock issued to certain family members of George Schmitt and 59,150 shares of the Series B Preferred Stock issued as dividends were converted into 222,792 shares of our common stock (See Note 10 Preferred Stock). As of March 31, 2015 none of the Series B Preferred Stock issued to certain family members of George Schmitt remained outstanding.

From April 1, 2015 to July 30, 2015, the Company received a total of \$1,050,000 in loans from George Schmitt, Chairman of the Board and Chief Executive Officer. This amount was recorded in due to related parties.

### **Mooers Branton & Co., Incorporated**

On March 2, 2006, the Company entered into a management agreement (the MBC Management Agreement ) with Mooers Branton & Co. Incorporated ( MBC ), a Florida corporation, pursuant to which MBC agreed to provide certain management and financial services to the Company for a monthly fee of \$80,000. The MBC Management Agreement was terminated on January 1, 2014. The Company incurred fees related to the MBC Management Agreement of \$0 and \$720,000, respectively, for the year ended December 31, 2014 and 2013. MBC is beneficially controlled and operated by Richard Mooers, a director and Roger Branton, the Chief Financial Officer, of the Company.

### **MB Technology Holdings, LLC**

On April 29, 2014, the Company entered into a management agreement (the Management Agreement ) with MB Technology Holdings, LLC ( MBTH ), pursuant to which MBTH agreed to provide certain management and financial services to the Company for a monthly fee of \$25,000. The Management Agreement was effective January 1, 2014.

The Company incurred fees related to the Management Agreement of \$300,000 and \$0, respectively, for the fiscal year ended December 31, 2014 and 2013. As of July 30, 2015, MBTH owned approximately 23.57% of the Company s outstanding shares. Roger Branton, the Company s Chief Financial Officer, and George Schmitt, the Company s Chief Executive Officer and Executive Chairman, are directors of MBTH, and Richard Mooers, a director of the Company, is the CEO and a director of MBTH.

### **Subsidiaries of Townes Tele-Communications, Inc. ( Townes Tele-Communications )**

On October 16, 2013, the Company completed the first delivery of xMax comprehensive cognitive radio system, shipping equipment and providing engineering services required to fulfill the \$179,000 purchase order that was received from rural broadband provider Walnut Hill Telephone Company on November 26, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Walnut Hill Telephone Company. Given that Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Walnut Hill Telephone Company was, at the time it was entered into, considered to be a related party transaction. Due to Walnut Hill Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction is considered deferred revenue as of December 31, 2014.

On December 16, 2013, the Company sold xMax comprehensive cognitive radio system to Haxtun Telephone Company for \$301,000 to fulfill a purchase order that was received on November 24, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Haxtun Telephone Company. Given that

Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Haxtun Telephone Company was, at the time it was entered into, considered to be a related party transaction. Due to Haxtun Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction is considered deferred revenue as of December 31, 2014.

On March 31, 2015, we shipped additional equipment purchased by Larry Townes and we received a partial payment for the equipment that had been previously delivered in those transactions as the purchasers indicated that the equipment met certain technical specifications associated with their networks. Previously,

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Walnut Hill Telephone Company and Haxtun Telephone Company did not intend to deliver payment until such technical specifications were satisfied. These specifications have now been satisfied and the deferred revenue has been recorded as revenue.

Any transactions subsequent to Larry Townes resigning will not be considered related party transactions.

## **Itellum, LLC**

In May 2015, we announced we received an order for approximately \$100,000 in xMax mobile broadband wireless equipment and services which will be deployed in a network to be initially installed in Escazu, Costa Rica, with plans to expand in other Latin American locations. The xMax equipment order was received from Itellum, LLC ( Itellum ), a related party, one of four companies who have entered into a formal agreement to participate in the initial xMax deployment as well as expansion into other Latin American markets thereafter. The other partners include Level 3 Communications ( Level 3 ), Osmin Vargas Corporacion ( OV ), and MB Technology Holdings, LLC ( MBTH ), a related party. The xMax broadband wireless networking equipment will include compact, high-performance access points, fixed and mobile personal WiFi hotspot devices and mobile control switching centers. In June 2015, we announced the successful installation and initial deployment of an xMax broadband network in Escazu, Costa Rica by Itellum. This represents the first stage of xMax network deployments that are expected to cover additional areas of Costa Rica, with plans for expansion into other Latin American locations. In June 2015, we announced that we received an additional order for approximately \$58,000 in xMax mobile broadband wireless equipment and services from Itellum.

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## **DESCRIPTION OF SECURITIES**

### **General**

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws. Copies of these documents will be filed with the Securities and Exchange Commission as exhibits to the registration statement of which this prospectus forms a part.

Our authorized capital stock consists of 100,000,000 shares of common stock, with a par value of \$0.00001 per share, and 10,000,000 shares of blank check preferred stock, of which 3,000,000 shares of preferred stock were designated as the Series A Preferred Stock, 3,000,000 shares of preferred stock were designated as the Series B Preferred Stock, and 3,000,000 shares of preferred stock were designated as the Series C Preferred Stock. As of July 30, 2015, we had 5,080,976 shares of common stock outstanding.

On July 17, 2015 the Company effected a 1-for-10 reverse stock split and every ten (10) shares of outstanding common stock decreased to one (1) share of common stock. Similarly, the number of shares of common stock into which each outstanding option, convertible note and warrant to purchase common stock is to be exercisable or convert into decreased on a 1-for-10 basis and the exercise price or conversion price of each outstanding option, convertible note and warrant to purchase common stock increased proportionately.

### **Common Stock**

#### **Voting Rights**

Each stockholder has one vote for each share of common stock held on all matters submitted to a vote of stockholders. A stockholder may vote in person or by proxy. Elections of directors are determined by a plurality of the votes cast and all other matters are decided by a majority of the votes cast by those stockholders entitled to vote and present in person or by proxy.

Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the voting power of our shares of common stock will be able to elect all of our directors. Our amended and restated certificate of incorporation and amended and restated bylaws provides that stockholder actions may be effected at a duly called meeting of stockholders or pursuant to written consent of the majority of stockholders. A special meeting of stockholders may be called by the majority of our board of directors or by a committee determined by the board of directors with power to call such meetings.

#### **Dividend Rights**

The holders of outstanding shares of common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that our board may determine, provided that required dividends, if any, on preferred stock have been paid or provided for. However, to date we have not paid or declared cash distributions or dividends on our common stock and do not currently intend to pay cash dividends on our common stock in the foreseeable future. We intend to retain all earnings, if and when generated, to finance our operations. The declaration of cash

dividends in the future will be determined by the board based upon our earnings, financial condition, capital requirements and other relevant factors.

### **No Preemptive or Similar Rights**

Holders of our common stock do not have preemptive rights, and our common stock is not convertible or redeemable.

### **Right to Receive Liquidation Distributions**

Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders and remaining after payment to holders of preferred stock of the amounts, if any, to which they are entitled, are distributable ratably among the holders of our common stock subject to any senior class of securities.

### **Preferred Stock**

As of July 30, 2015, 0 shares of the Company's Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock are outstanding.

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## Series A Warrants

*The following summary of certain terms and provisions of Series A Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of, the Series A Warrant, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions of the form of Series A Warrant for a complete description of the terms and conditions of the Series A Warrants.*

**Duration and Exercise Price.** The Series A Warrants offered hereby will entitle the holders thereof to purchase up to an aggregate of    shares of our common stock at an initial exercise price of \$    per share, commencing immediately on the date of issuance and will expire on the fifth anniversary of the initial date of issuance. The Series A Warrants will be issued separately from the common stock included in the Class A Units and the Pre-funded Series B Warrants included in the Class B Units, and may be transferred separately immediately thereafter. If the Series C Warrants and Series D Warrants described below are exercised in full, we will issue additional Series A Warrants to purchase up to an aggregate of    shares of our common stock. All Series A Warrants will have the same expiration date.

**Anti-Dilution Adjustments:** The Series A Warrants exercise price is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. The Series A Warrants exercise price is subject to anti-dilution adjustments for any issuance of common stock or rights to acquire common stock for consideration per share less than the exercise price of the Series A Warrants. For purposes of these adjustments, dilutive issuances do not include securities issued under existing instruments, under board-approved equity incentive plans or in certain strategic transactions. Additionally, the exercise of the Series B Warrants, Series C Warrants and Series D Warrants (each as described below) will not trigger any anti-dilution protection.

**Cashless Exercise.** If, at the time a holder exercises its Series A Warrant, there is no effective registration statement registering, or the prospectus contained therein is not available for an issuance of the shares underlying the Series A Warrant to the holder then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Series A Warrant.

**Fundamental Transactions.** In the event of any fundamental transaction, as described in the Series A Warrants and generally including any merger with another entity, the sale, transfer or other disposition of all or substantially all of our assets to another entity, or the acquisition by a person of more than 50% of our common stock, then the holders of the Series A Warrants will thereafter have the right to receive upon exercise of the Series A Warrants such shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock equal to the number of shares of our common stock issuable upon exercise of the Series A Warrants immediately prior to the fundamental transaction, had the fundamental transaction not taken place, and appropriate provision will be made so that the provisions of the Series A Warrants (including, for example, provisions relating to the adjustment of the exercise price) will thereafter be applicable, as nearly equivalent as may be practicable in relation to any share of stock, securities or assets deliverable upon the exercise of the Series A Warrants after the fundamental transaction. In lieu of the right to receive upon exercise the shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock, the holders of the Series A Warrants may require us under certain circumstances to redeem the Series A Warrant for a purchase price payable in cash of the Black-Scholes value of the Series A Warrant, as calculated pursuant to the terms of the Series A Warrant.

*Transferability.* The Series A Warrants may be transferred at the option of the Series A Warrant holder upon surrender of the Series A Warrants with the appropriate instruments of transfer.

*Exchange Listing.* We do not plan on making an application to list the Series A Warrants on any national securities exchange or other nationally recognized trading system.

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*Right as a Stockholder.* Except by virtue of a holder's ownership of shares of our common stock, the holders of the Series A Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Series A Warrants.

*Exercisability.* The Series A Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the warrant to the extent that the holder would own more than 4.99% of the outstanding common stock after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A Warrants.

*Waivers and Amendments.* Subject to certain exceptions, any term of the Series A Warrants may be amended or waived with our written consent and the written consent of the holders of at least 66 2/3% of the then-outstanding Series A Warrants.

## **Pre-funded Series B Warrants**

*The following summary of certain terms and provisions of the Pre-funded Series B Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of, the Pre-funded Series B Warrant, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions of the form of Pre-funded Series B Warrant for a complete description of the terms and conditions of the Pre-funded Series B Warrants.*

*Form.* The Pre-funded Series B Warrants will be issued as individual warrant agreements to the investors.

*Exercisability.* The Pre-funded Series B Warrants are exercisable at any time after their original issuance and at any time up to the date that is years after their original issuance. The Pre-funded Series B Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. As an alternative to payment in immediately available funds, if a registration statement covering the shares of common stock issuable upon exercise of the Pre-funded Series B Warrants, or an exemption from registration under the securities laws, is not available for the resale of such shares of common stock, the holder may, in its sole discretion, elect to exercise the Pre-funded Series B Warrants through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the Pre-funded Series B Warrants. No fractional shares of common stock will be issued in connection with the exercise of the Pre-funded Series B Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price.

*Exercise Limitations.* A holder will not have the right to exercise any portion of the Pre-funded Series B Warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Pre-funded Series B Warrants. However, any holder may increase or decrease such percentage to any other percentage upon at least 61 days' prior notice from the holder to us. In addition, notwithstanding any election made by a holder, under the Pre-funded Series B Warrants we may not effect the



exercise of, and a holder is not entitled to exercise, any portion of the Pre-funded Series B Warrants, to the extent that such exercise would result in the holder thereof (and its affiliates) beneficially owning more than 9.99% of the number of shares of our common stock outstanding or the combined voting power of our securities outstanding immediately after giving effect to the issuance of shares of common stock issuable upon exercise of the Pre-funded Series B Warrants.

*Exercise Price.* The exercise price per whole share of our common stock purchasable upon the exercise of the Pre-funded Series B Warrants is \$0.01 per share of common stock. The exercise price of the Pre-funded

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Series B Warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

*Transferability.* Subject to applicable laws, the Pre-funded Series B Warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* There is no established public trading market for the Pre-funded Series B Warrants, and we do not expect an active trading market to develop. We do not intend to list the Pre-funded Series B Warrants on any securities exchange or other trading market. Without an active trading market, the liquidity of the Pre-funded Series B Warrants will be limited.

*Fundamental Transactions.* In the event of a fundamental transaction, as described in the Pre-funded Series B Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the Pre-funded Series B Warrants will be entitled to receive upon exercise of the Pre-funded Series B Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Pre-funded Series B Warrants immediately prior to such fundamental transaction.

*Rights as a Stockholder.* Except by virtue of such holder's ownership of shares of our common stock, the holder of a Pre-funded Series B Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Pre-funded Series B Warrant.

## **Series C Warrants**

*The following summary of certain terms and provisions of the Series C Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of the Series C Warrant, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions of the Series C Warrant for a complete description of the terms and conditions of the Series C Warrants.*

*Duration and Exercise Price.* The Series C Warrants offered hereby entitle the holders thereof to purchase up to an aggregate of additional Class A Units. The Series C Warrants are exercisable immediately at an initial exercise price of \$ per Class A Unit, subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third trading day immediately preceding such 60<sup>th</sup> trading day, the Series C Warrants will be exercisable at an exercise price per Class A Unit equal to the lower of (i) the then-effective exercise price per Class A Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day. If a holder of Series C Warrants exercises such warrants between the third Trading Day immediately preceding such 60<sup>th</sup> Trading Day and the 60<sup>th</sup> Trading Day in accordance with (i) above and subsequently the Exercise Price is adjusted as determined in accordance with (ii) above, the Company will reimburse the Holder for the difference, within five (5) Trading Days following the 60<sup>th</sup> Trading Day. The Series C Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance.

The Series C Warrants will be issued separately from the common stock and the Series A Warrants included in the Class A Units, the Pre-funded Series B Warrants and Series A Warrants included in the Class B Units, and the Series

D Warrants, and may be transferred separately immediately thereafter. Series C Warrants will be issued in certificated form only. No additional consideration will be payable by investors for the Series C Warrants.

*Exercisability.* The Series C Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice that is accompanied by payment in full for the number of Class A Units purchased upon such exercise (except in the case of a cashless exercise as discussed below). With certain limited exceptions involving the exercise of Series C Warrants in connection with a fundamental transaction in which our company is acquired by a third party, a holder (together with its affiliates) may not exercise any portion of the Series C Warrants to the extent that, after giving effect to the

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shares of common stock issuable upon exercise of the Series C Warrants and the shares of common stock issuable upon exercise of the Series A Warrants underlying such Series C Warrants, the holder would own more than 9.99% of the outstanding common stock after exercise, as such percentage ownership is determined in accordance with the terms of the warrants.

*Transferability.* The Series C Warrants may be transferred at the option of the Series C Warrant holder upon surrender of the Series C Warrants with the appropriate instruments of transfer.

*Exchange Listing.* We do not plan on making an application to list the Series C Warrants on any national securities exchange or other nationally recognized trading system.

*Fundamental Transactions.* In the event of any fundamental transaction, as described in the Series C Warrants and generally including any merger with another entity, the sale, transfer or other disposition of all or substantially all of our assets to another entity, or the acquisition by a person of more than 50% of our common stock, then the holders of the Series C Warrants will thereafter have the right to receive upon exercise of the Series C Warrants such shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock equal to the number of shares of our common stock issuable upon exercise of the Series C Warrants immediately prior to the fundamental transaction, had the fundamental transaction not taken place, and appropriate provision will be made so that the provisions of the Series C Warrants (including, for example, provisions relating to the adjustment of the exercise price) will thereafter be applicable, as nearly equivalent as may be practicable in relation to any share of stock, securities or assets deliverable upon the exercise of the Series C Warrants after the fundamental transaction.

*Rights as a Stockholder.* Except by virtue of a holder's ownership of shares of our common stock, the holders of the Series C Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Series C Warrants.

*Waivers and Amendments.* Subject to certain exceptions, any term of the Series C Warrants may be amended or waived with our written consent and the written consent of the holders of at least 66 2/3% of the then-outstanding Series C Warrants.

## **Series D Warrants**

*The following summary of certain terms and provisions of the Series D Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by the provisions of, the Series D Warrant, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions of the Series D Warrant for a complete description of the terms and conditions of the Series D Warrants.*

*Duration and Exercise Price.* The Series D Warrants offered hereby entitle the holders thereof to purchase up to an aggregate of additional Class B Units. The Series D Warrants are exercisable immediately at an initial exercise price of \$ per Class B Unit, subject to adjustment. Beginning at the close of trading on the 60<sup>th</sup> trading day following the date of issuance, and effective beginning on the third trading day immediately preceding such 60<sup>th</sup> trading day, the Series D Warrants will be exercisable at an exercise price per Class B Unit equal to the lower of (i) the then-effective exercise price per Class B Unit and (ii) 80% of the closing price of our common stock on such 60<sup>th</sup> trading day. If a holder of Series D Warrants exercises such warrants between the third Trading Day immediately preceding such 60<sup>th</sup> Trading Day and the 60<sup>th</sup> Trading Day in accordance with (i) above and subsequently the

Exercise Price is adjusted as determined in accordance with (ii) above, the Company will reimburse the Holder for the difference, within five (5) Trading Days following the 60th Trading Day. The Series D Warrants will expire at the close of business at 5:00 p.m. (New York time) on the 65<sup>th</sup> trading day following the date of issuance.

The Series D Warrants will be issued separately from the common stock and the Series A Warrants included in the Class A Units, the Pre-funded Series B Warrants and the Series A Warrants included in the Class B Units, and the Series C Warrants, and may be transferred separately immediately thereafter. Series D Warrants will be issued in certificated form only. No additional consideration will be payable by investors for the Series D Warrants.

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*Exercisability.* The Series D Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice that is accompanied by payment in full for the number of Class B Units purchased upon such exercise (except in the case of a cashless exercise as discussed below).

*Transferability.* The Series D Warrants may be transferred at the option of the Series D Warrant holder upon surrender of the Series D Warrants with the appropriate instruments of transfer.

*Exchange Listing.* We do not plan on making an application to list the Series D Warrants on any national securities exchange or other nationally recognized trading system.

*Fundamental Transactions.* In the event of any fundamental transaction, as described in the Series D Warrants and generally including any merger with another entity, the sale, transfer or other disposition of all or substantially all of our assets to another entity, or the acquisition by a person of more than 50% of our common stock, then the holders of the Series D Warrants will thereafter have the right to receive upon exercise of the Series D Warrants such shares of stock, securities or assets as would have been issuable or payable with respect to or in exchange for a number of shares of our common stock equal to the number of shares of our common stock issuable upon exercise of the Series D Warrants immediately prior to the fundamental transaction, had the fundamental transaction not taken place, and appropriate provision will be made so that the provisions of the Series D Warrants (including, for example, provisions relating to the adjustment of the exercise price) will thereafter be applicable, as nearly equivalent as may be practicable in relation to any share of stock, securities or assets deliverable upon the exercise of the Series D Warrants after the fundamental transaction.

*Rights as a Stockholder.* Except by virtue of a holder's ownership of shares of our common stock, the holders of the Series D Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their Series D Warrants and the Pre-funded Series B Warrants or Series A Warrants underlying such Series D Warrants.

*Waivers and Amendments.* Subject to certain exceptions, any term of the Series D Warrants may be amended or waived with our written consent and the written consent of the holders of at least 66 2/3% of the then-outstanding Series D Warrants.

## Options and Warrants

As of July 30, 2015 and December 31, 2014, we had outstanding options and warrants to purchase shares of common stock as set forth in the table below:

	July 30, 2015 Number of options and warrants	December 31, 2014 Number of options and warrants
At January 1	557,997	522,915
Granted	383,250	48,260
Forfeited or Expired	(17,388 )	(13,178 )
Exercised		
Unexercised as at July 30, 2015 and December 31, 2014	<b>923,859</b>	<b>557,997</b>

The weighted average exercise prices as of July 30, 2015 and December 31, 2014 were \$59.00 and \$96.78, respectively.

## **Anti-Takeover Provisions**

Since our board of directors has the power to retain and discharge our officers, these provisions could make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of us.

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These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in our control or management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

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

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

before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

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

any merger or consolidation involving the corporation and the interested stockholder;

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

subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

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

## **Transfer Agent and Registrar**

Our transfer agent and registrar for our common stock in the United States is Continental Stock Transfer & Trust Company.



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## SHARES ELIGIBLE FOR FUTURE SALE

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

Our common stock has traded on NASDAQ since July 19, 2013.

Based on the number of shares outstanding as of \_\_\_\_\_, 2015, upon the closing of this offering \_\_\_\_\_ shares of common stock will be issued and outstanding, and assuming no exercise of outstanding options or warrants. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

Shares of our common stock outstanding after this offering are restricted securities as such term is defined in Rule 144 under the Securities Act and/or are subject to lock-up agreements as described below. Following the expiration of the lock-up period in such agreements, restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under the Securities Act, as described in greater detail below.

### Rule 144

In general, under Rule 144, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we have been subject to the Exchange Act, periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to volume restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

1% of the number of shares of our common stock then outstanding, which will equal approximately \_\_\_\_\_ shares of common stock immediately after this offering, based on the number of shares of common stock outstanding as \_\_\_\_\_, 2015; or  
the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Provided, in each case, that we have been subject to and are current with the Exchange Act periodic reporting requirements for at least 90 days before the sale. Sales by affiliates must also comply with the manner of sale and notice provisions of Rule 144.

### Rule 701

Rule 701 under the Securities Act permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers,

directors or consultants who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under Underwriting and will become eligible for sale at the expiration of those agreements.

Employees can only sell vested shares. Employees who do not hold vested shares, including shares subject to options, upon expiration of these selling restrictions will not be able to sell shares until they vest.

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## **Lock-Up Arrangements**

We have agreed with the Representative that for a period of 90 days following the date of this prospectus, we will not offer, sell, assign, transfer, pledge, contract to sell or otherwise dispose of, or hedge, any shares of our common stock or any securities convertible into or exchangeable for shares of our common stock, subject to specified exceptions.

The Representative may, in its sole discretion, waive this prohibition. The restriction is not applicable to shares issuable upon conversion or exercise of any existing securities.

In addition, all officers and directors and their affiliates have agreed not to sell any shares beneficially owned by them for a period of 90 days from the effective date of this Registration Statement.

## **Registration Rights**

There are no shareholders who have any right to request registration of their shares.

## **Stock Incentive Plans**

We have filed two (2) Form S-8 registration statements under the Securities Act to register shares of our common stock issued or reserved for issuance under some of our stock incentive plans and agreements. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to vesting restrictions, and Rule 144 limitations applicable to affiliates.

TABLE OF CONTENTS**UNDERWRITING**

Roth Capital Partners, LLC is acting as book-running manager of the offering and as representative of the underwriter (the Representative). We have entered into an underwriting agreement, dated \_\_\_\_\_, 2015, with the Representative. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriter, at the public offering price per Class A Unit, Class B Unit, Series C Warrant and Series D Warrant less the underwriting discounts and commissions (where applicable) set forth on the cover page of this prospectus, the number of Class A Units, Class B Units, Series C Warrants and Series D Warrants listed next to its name in the following table:

Underwriter	Number of Class A Units	Number of Class B Units	Number of Series C Warrants	Number of Series D Warrants
Roth Capital Partners, LLC				
Total				

The underwriter is committed to purchase all the Class A Units and Class B Units offered by us if any of the Class A Units and Class B Units are purchased. The obligations of the underwriter may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the underwriter's obligations are subject to customary conditions, representations and warranties contained in the underwriting agreement, such as receipt by the underwriter of officers' certificates and legal opinions and no material adverse change to our business.

We have agreed to indemnify the underwriter against specified liabilities, including liabilities under the Securities Act of 1933, as amended, and to contribute to payments the underwriter may be required to make in respect thereof.

The underwriter is offering the Class A Units and Class B Units, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by its counsel and other conditions specified in the underwriting agreement. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

*Discounts and Commissions.* The following table shows the public offering prices of the Class A Units and the Class B Units, the underwriting discounts and commissions and the proceeds to us, before expenses.

	Per Class A Unit	Per Class B Unit	Per Series C Warrant	Per Series D Warrant	Total
Public offering price	\$	\$	\$ 0.01	\$ 0.01	\$
Underwriting discounts and commissions	\$	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$	\$

We have agreed to reimburse the Representative for certain of its out-of-pocket expenses in an aggregate amount not to exceed \$150,000. The underwriting agreement, however, provides that in the event this offering is terminated, the Representative will only be entitled to the reimbursement of out-of-pocket expenses actually incurred in accordance with FINRA Rule 5110(f)(2)(D).

The underwriter proposes to offer the Class A Units and Class B Units offered by us to the public at the public offering price per Class A Unit and per Class B Unit set forth on the cover of this prospectus. In addition, the underwriter may offer some of the Class A Units and Class B Units to other securities dealers at such prices less a concession of \$     per Class A Unit and \$     per Class B Unit. If all of the Class A Units and Class B Units offered by us are not sold at the public offering price per Class A Unit and per Class B Unit, respectively, the underwriter may change the offering price per Class A Unit and per Class B Unit and other selling terms by means of a supplement to this prospectus.

We estimate that the total expenses of the offering payable by us, excluding underwriting discounts and commissions, will be approximately \$     .

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We also have engaged the Representative to act as our exclusive agent for the solicitation of exercises of the Series C Warrants and Series D Warrants. In such capacity, the Representative will contact record and beneficial owners of the Series C Warrants and Series D Warrants, solicit such holders to exercise their Series C Warrants and Series D Warrants, assist such holders in effecting the exercise of their Series C Warrants and Series D Warrants and respond to appropriate questions and requests for assistance from such holders. We have agreed to pay the Representative a cash solicitation fee of 7% of the exercise price of the Series C Warrants and Series D Warrants exercised as a result of their solicitation services. As required by FINRA Rule 5110(f)(2)(K), no solicitation fee will be payable to the Representative with respect to the exercise of a Series C Warrant or Series D Warrant if:

the market price of the underlying Class A Unit or Class B Unit, as applicable, is lower than the exercise price of the Series C Warrant or Series D Warrant at the time of exercise;

the Series C Warrant or Series D Warrant is held in a discretionary account of the Representative at the time of exercise, unless prior specific written approval for the exercise is received from the holder;

the arrangement to pay the solicitation fee is not disclosed in any prospectus provided to the holder of the Series C Warrant or Series D Warrant at the time of exercise;

the Series C Warrant or Series D Warrant is exercised in an unsolicited transaction; or

the holder of the Series C Warrant or Series D Warrant has not confirmed in writing that exercise was solicited by the Representative.

The maximum total cash underwriter's fee and cash solicitation fee payable to the Representative will not exceed a maximum of \$ , assuming the offering of Class A Units at a public offering price of \$ per Class A Unit, Class B Units at a public offering price of \$ per Class B Unit and assuming the full exercise of the Series C Warrants and the Series D Warrants. In the event that not all of the Series C Warrants or Series D Warrants are exercised, the exercise price of the Series C Warrants is less than the public offering price per Class A Unit set forth on the cover page of this prospectus or the exercise price of the Series D Warrants is less than the public offering price per Class B Unit set forth on the cover page of this prospectus, the total cash underwriter's fee and solicitation fee payable to the Representative would be reduced.

*Electronic Offer, Sale and Distribution of Class A Units and Class B Units.* A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriter or selling group members, if any, participating in this offering and the underwriter participating in this offering may distribute prospectuses electronically. The Representative may agree to allocate a number of shares to the underwriter and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriter and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of, nor incorporated by reference into, this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or the underwriter in its capacity as underwriter, and should not be relied upon by investors.

*Stabilization.* In connection with this offering, the underwriter may engage in stabilizing transactions, syndicate-covering transactions, penalty bids and purchases to cover positions created by short sales in accordance with Regulation M under the Exchange Act.

Stabilizing transactions permit bids to purchase shares so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the shares while the offering is in progress.

Syndicate covering transactions involve purchases of shares in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market.



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Penalty bids permit the Representative to reclaim a selling concession from a syndicate member when the shares originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our shares of common stock or preventing or retarding a decline in the market price of our shares of common stock. As a result, the price of our common stock or warrants in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriter make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on The NASDAQ Capital Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

*Passive market making.* In connection with this offering, the underwriter and selling group members may engage in passive market making transactions in our common stock on The NASDAQ Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of the shares and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, then that bid must then be lowered when specified purchase limits are exceeded.

## **Offer restrictions outside the United States**

Other than in the United States, no action has been taken by us or the underwriter that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

### **Australia**

This prospectus is not a disclosure document under Chapter 6D of the Australian Corporations Act, has not been lodged with the Australian Securities and Investments Commission and does not purport to include the information required of a disclosure document under Chapter 6D of the Australian Corporations Act. Accordingly, (i) the offer of the securities under this prospectus is only made to persons to whom it is lawful to offer the securities without disclosure under Chapter 6D of the Australian Corporations Act under one or more exemptions set out in section 708 of the Australian Corporations Act, (ii) this prospectus is made available in Australia only to those persons as set forth in clause (i) above, and (iii) the offeree must be sent a notice stating in substance that by accepting this offer, the offeree represents that the offeree is such a person as set forth in clause (i) above, and, unless permitted under the Australian Corporations Act, agrees not to sell or offer for sale within Australia any of the securities sold to the offeree within 12 months after its transfer for the offeree under this prospectus.

### **China**

The information in this document does not constitute a public offer of the securities, whether by way of sale or subscription, in the People's Republic of China (excluding, for purposes of this paragraph, Hong Kong Special



Administrative Region, Macau Special Administrative Region and Taiwan). The securities may not be offered or sold directly or indirectly in the PRC to legal or natural persons other than directly to qualified domestic institutional investors.

## **European Economic Area Belgium, Germany, Luxembourg and Netherlands**

The information in this document has been prepared on the basis that all offers of securities will be made pursuant to an exemption under the Directive 2003/71/EC ( Prospectus Directive ), as implemented in

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Member States of the European Economic Area (each, a Relevant Member State ), from the requirement to produce a prospectus for offers of securities.

An offer to the public of securities has not been made, and may not be made, in a Relevant Member State except pursuant to one of the following exemptions under the Prospectus Directive as implemented in that Relevant Member State:

- (a) to legal entities that are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
  - to any legal entity that has two or more of (i) an average of at least 250 employees during its last fiscal year; (ii) a total balance sheet of more than €43,000,000 (as shown on its last annual unconsolidated or consolidated financial statements) and (iii) an annual net turnover of more than €50,000,000 (as shown on its last annual unconsolidated or consolidated financial statements);
- (b) to fewer than 100 natural or legal persons (other than qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive) subject to obtaining the prior consent of the Company or any underwriter for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of securities shall result in a requirement for the publication by the Company of a prospectus pursuant.

### **France**

This document is not being distributed in the context of a public offering of financial securities (offre au public de titres financiers) in France within the meaning of Article L.411-1 of the French Monetary and Financial Code (Code monétaire et financier) and Articles 211-1 et seq. of the General Regulation of the French Autorité des marchés financiers ( AMF ). The securities have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in France.

This document and any other offering material relating to the securities have not been, and will not be, submitted to the AMF for approval in France and, accordingly, may not be distributed or caused to be distributed, directly or indirectly, to the public in France.

Such offers, sales and distributions have been and shall only be made in France to (i) qualified investors (investisseurs qualifiés) acting for their own account, as defined in and in accordance with Articles L.411-2-II-2° and D.411-1 to D.411-3, D.744-1, D.754-1 and D.764-1 of the French Monetary and Financial Code and any implementing regulation and/or (ii) a restricted number of non-qualified investors (cercle restreint d'investisseurs) acting for their own account, as defined in and in accordance with Articles L.411-2-II-2° and D.411-4, D.744-1, D.754-1 and D.764-1 of the French Monetary and Financial Code and any implementing regulation.

Pursuant to Article 211-3 of the General Regulation of the AMF, investors in France are informed that the securities cannot be distributed (directly or indirectly) to the public by the investors otherwise than in accordance with Articles L.411-1, L.411-2, L.412-1 and L.621-8 to L.621-8-3 of the French Monetary and Financial Code.

### **Ireland**

The information in this document does not constitute a prospectus under any Irish laws or regulations and this document has not been filed with or approved by any Irish regulatory authority as the information has not been prepared in the context of a public offering of securities in Ireland within the meaning of the Irish

Prospectus (Directive 2003/71/EC) Regulations 2005 (the Prospectus Regulations ). The securities have not been offered or sold, and will not be offered, sold or delivered directly or indirectly in Ireland by way of a public offering, except to (i) qualified investors as defined in Regulation 2(1) of the Prospectus Regulations and (ii) fewer than 100 natural or legal persons who are not qualified investors.

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**Israel**

The securities offered by this prospectus have not been approved or disapproved by the Israeli Securities Authority, or the ISA, nor have such securities been registered for sale in Israel. The shares may not be offered or sold, directly or indirectly, to the public in Israel, absent the publication of a prospectus. The ISA has not issued permits, approvals or licenses in connection with the offering or publishing the prospectus; nor has it authenticated the details included herein, confirmed their reliability or completeness, or rendered an opinion as to the quality of the securities being offered. Any resale in Israel, directly or indirectly, to the public of the securities offered by this prospectus is subject to restrictions on transferability and must be effected only in compliance with the Israeli securities laws and regulations.

**Italy**

The offering of the securities in the Republic of Italy has not been authorized by the Italian Securities and Exchange Commission (Commissione Nazionale per le Società e la Borsa, CONSOB), pursuant to the Italian securities legislation and, accordingly, no offering material relating to the securities may be distributed in Italy and such securities may not be offered or sold in Italy in a public offer within the meaning of Article 1.1(t) of Legislative Decree No. 58 of 24 February 1998 (Decree No. 58), other than:

to Italian qualified investors, as defined in Article 100 of Decree no. 58 by reference to Article 34-ter of CONSOB Regulation no. 11971 of 14 May 1999 (Regulation no. 11971) as amended (Qualified Investors); and in other circumstances that are exempt from the rules on public offer pursuant to Article 100 of Decree No. 58 and Article 34-ter of Regulation No. 11971 as amended.

Any offer, sale or delivery of the securities or distribution of any offer document relating to the securities in Italy (excluding placements where a Qualified Investor solicits an offer from the issuer) under the paragraphs above must be:

made by investment firms, banks or financial intermediaries permitted to conduct such activities in Italy in accordance with Legislative Decree No. 385 of 1 September 1993 (as amended), Decree No. 58, CONSOB Regulation No. 16190 of 29 October 2007 and any other applicable laws; and

in compliance with all relevant Italian securities, tax and exchange controls and any other applicable laws. Any subsequent distribution of the securities in Italy must be made in compliance with the public offer and prospectus requirement rules provided under Decree No. 58 and the Regulation No. 11971 as amended, unless an exception from those rules applies. Failure to comply with such rules may result in the sale of such securities being declared null and void and in the liability of the entity transferring the securities for any damages suffered by the investors.

**Japan**

The securities have not been and will not be registered under Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948), as amended (the FIEL) pursuant to an exemption from the registration requirements applicable to a private placement of securities to Qualified Institutional Investors (as defined in and in accordance with Article 2, paragraph 3 of the FIEL and the regulations promulgated thereunder). Accordingly, the securities may not be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan other than Qualified Institutional Investors. Any Qualified Institutional Investor who acquires securities may not resell them to any person in Japan that is not a Qualified Institutional Investor, and acquisition by any such person of securities is conditional upon the execution of an agreement to that effect.

## Portugal

This document is not being distributed in the context of a public offer of financial securities (oferta pública de valores mobiliários) in Portugal, within the meaning of Article 109 of the Portuguese Securities Code (Código dos Valores Mobiliários). The securities have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in Portugal. This document and any other offering material relating to

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the securities have not been, and will not be, submitted to the Portuguese Securities Market Commission (Comissão do Mercado de Valores Mobiliários) for approval in Portugal and, accordingly, may not be distributed or caused to be distributed, directly or indirectly, to the public in Portugal, other than under circumstances that are deemed not to qualify as a public offer under the Portuguese Securities Code. Such offers, sales and distributions of securities in Portugal are limited to persons who are qualified investors (as defined in the Portuguese Securities Code). Only such investors may receive this document and they may not distribute it or the information contained in it to any other person.

### **Sweden**

This document has not been, and will not be, registered with or approved by Finansinspektionen (the Swedish Financial Supervisory Authority). Accordingly, this document may not be made available, nor may the securities be offered for sale in Sweden, other than under circumstances that are deemed not to require a prospectus under the Swedish Financial Instruments Trading Act (1991:980) (Sw. lag (1991:980) om handel med finansiella instrument). Any offering of securities in Sweden is limited to persons who are qualified investors (as defined in the Financial Instruments Trading Act). Only such investors may receive this document and they may not distribute it or the information contained in it to any other person.

### **Switzerland**

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ( SIX ) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering material relating to the securities may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering material relating to the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority.

This document is personal to the recipient only and not for general circulation in Switzerland.

### **United Arab Emirates**

Neither this document nor the securities have been approved, disapproved or passed on in any way by the Central Bank of the United Arab Emirates or any other governmental authority in the United Arab Emirates, nor has the Company received authorization or licensing from the Central Bank of the United Arab Emirates or any other governmental authority in the United Arab Emirates to market or sell the securities within the United Arab Emirates. This document does not constitute and may not be used for the purpose of an offer or invitation. No services relating to the securities, including the receipt of applications and/or the allotment or redemption of such shares, may be rendered within the United Arab Emirates by the Company.

No offer or invitation to subscribe for securities is valid or permitted in the Dubai International Financial Centre.

## United Kingdom

Neither the information in this document nor any other document relating to the offer has been delivered for approval to the Financial Services Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended ( FSMA )) has been published or is intended to be published in respect of the securities. This document is issued on a confidential basis to qualified investors (within the meaning of section 86(7) of FSMA) in the United Kingdom, and the securities may not be offered or sold in the United Kingdom by means of this document, any accompanying letter or any other document, except in circumstances which do not require the publication of a prospectus pursuant to section 86(1) FSMA.

This document should not be distributed, published or reproduced, in whole or in part, nor may its contents be disclosed by recipients to any other person in the United Kingdom.

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Any invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) received in connection with the issue or sale of the securities has only been communicated or caused to be communicated and will only be communicated or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of FSMA does not apply.

In the United Kingdom, this document is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 ( FPO ), (ii) who fall within the categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together relevant persons ). The investments to which this document relates are available only to, and any invitation, offer or agreement to purchase will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

## **LEGAL MATTERS**

Robinson Brog Leinwand Greene Genovese & Gluck P.C. will render a legal opinion as to the validity of the securities to be registered hereby. Certain legal matters in connection with this offering will be passed upon for the underwriter by Shearman & Sterling LLP, Menlo Park, California.

## **EXPERTS**

Our financial statements as of and for the years ended December 31, 2013 and 2014 included in this prospectus have been audited by Friedman, LLP, independent certified public accountants, to the extent and for the periods set forth in their report appearing elsewhere herein, and are included in reliance on such report given upon the authority of said firm as experts in auditing and accounting.



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## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. We have also filed with the SEC under the Securities Act a registration statement on Form S-1 with respect to the common stock offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all the information set forth in the registration statement or the exhibits and schedules which are part of the registration statement, portions of which are omitted as permitted by the rules and regulations of the SEC. Statements made in this prospectus regarding the contents of any contract or other document are summaries of the material terms of the contract or document. With respect to each contract or document filed as an exhibit to the registration statement, reference is made to the corresponding exhibit. For further information pertaining to us and the common stock offered by this prospectus, reference is made to the registration statement, including the exhibits and schedules thereto, copies of which may be inspected without charge at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549 on official business days during the hours of 10 a.m. to 3 p.m. Copies of all or any portion of the registration statement may be obtained from the SEC at prescribed rates. Information on the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The web site can be accessed at <http://www.sec.gov>. The internet address of xG is [www.xgtechnology.com](http://www.xgtechnology.com). Information contained on our website is not a part of, and is not incorporated into, this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****UNAUDITED CONDENSED BALANCE SHEETS  
(IN THOUSANDS EXCEPT PER SHARE DATA)**

	March 31, 2015	December 31, 2014
<b>ASSETS</b>		
Current assets		
Cash	\$ 221	\$ 758
Cash, restricted	600	
Inventory, net	3,758	4,070
Accounts receivable, net of allowance of \$30 and \$30 (\$335 and \$480 from related party)	557	702
Prepaid expenses and other current assets	336	411
Total current assets	5,472	5,941
Property and equipment, net	882	816
Intangible assets, net	16,111	16,382
Total assets	\$ 22,465	\$ 23,139
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable	\$ 1,393	\$ 868
Accrued expenses	731	511
Accrued interest	87	42
Deferred revenue	50	
Due to related parties	264	2,110
Deferred revenue related party		480
Obligation under capital lease	135	123
Derivative liabilities	520	270
Total current liabilities	3,180	4,404
Long-term obligation under capital lease	83	
Convertible note payable	2,000	2,000
Total liabilities	5,263	6,404
Commitments and contingencies		
Series A convertible preferred stock \$0.00001 par value per share: 3,000,000 shares authorized at March 31, 2015 and December 31, 2014; 0 and 750,000 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$0 at March 31, 2015 and \$750,100 at December 31, 2014)		378
Series B convertible preferred stock \$0.00001 par value per share: 3,000,000 and 0 shares authorized at March 31, 2015 and December 31, 2014; 250,000 and 0 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$252,300 at March 31, 2015)	104	

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Series C convertible preferred stock \$0.00001 par value per share: 3,000,000 and 0 shares authorized at March 31, 2015 and December 31, 2014; 1,589,720 and 0 issued or outstanding as of March 31, 2015 and December 31, 2014 (liquidation preference of \$1,600,391 at March 31, 2015)	895	
Total convertible preferred stock	999	378

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

TABLE OF CONTENTS**xG TECHNOLOGY, INC.**

**UNAUDITED CONDENSED BALANCE  
SHEETS (continued)  
(IN THOUSANDS EXCEPT PER SHARE DATA)**

	March 31, 2015	December 31, 2014
Stockholders' equity (deficit)		
Preferred stock \$0.00001 par value per share: 1,000,000 and 7,000,000 shares authorized as of March 31, 2015 and December 31, 2014; none issued or outstanding as of March 31, 2015 and December 31, 2014		
Common stock, \$0.00001 par value, 100,000,000 shares authorized, 3,641,914 and 2,617,622 shares issued as of March 31, 2015 and December 31, 2014, respectively	*	*
Additional paid in capital	190,302	186,919
Accumulated deficit	(174,077)	(170,540)
Treasury stock, at cost 229 shares at March 31, 2015 and December 31, 2014, respectively	(22 )	(22 )
Total stockholders' equity	16,203	16,357
Total liabilities and stockholders' equity	\$22,465	\$23,139

\*

Less than \$1

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

TABLE OF CONTENTS**xG TECHNOLOGY, INC.**

**UNAUDITED CONDENSED STATEMENTS OF  
OPERATIONS  
(IN THOUSANDS EXCEPT NET LOSS PER SHARE  
DATA)**

	For the Three Months Ended March 31,	
	2015	2014
Revenue	\$ 584	\$ 250
Cost of revenue and operating expenses		
Cost of components and personnel	330	63
General and administrative expenses	1,586	1,679
Development	1,550	2,453
Stock based compensation	133	214
Amortization and depreciation	960	948
Total cost of revenue and operating expenses	4,559	5,357
Loss from operations	(3,975 )	(5,107 )
Other income (expense)		
Changes in fair value of derivative liabilities	485	
Interest expense, net	(47 )	(46 )
Total other income (expense)	438	(46 )
Loss before income tax provision	(3,537 )	(5,153 )
Income tax provision		
Net loss	\$ (3,537 )	\$ (5,153 )
Dividends and deemed dividends	1,070	
Net loss attributable to common shareholders	(4,607 )	(5,153 )
Basic and diluted net loss per share	\$ (1.54 )	\$ (2.75 )
Weighted average number of shares outstanding basic and diluted	2,998	1,876

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



TABLE OF CONTENTS**xG TECHNOLOGY, INC.****UNAUDITED CONDENSED STATEMENTS OF CASH FLOWS  
(IN THOUSANDS)**

	Three Months Ended March 31,	
	2015	2014
Cash flows from operating activities		
Net loss	\$(3,537)	\$(5,153)
Adjustments to reconcile net loss to net cash used in operating activities		
Stock based compensation	133	214
Share-based consulting and other services	73	38
Non-cash interest expense		45
Allowance for doubtful accounts	12	2
Depreciation and amortization	960	948
Change in fair value of derivative liabilities	(485 )	
Non-monetary transaction	43	
Changes in assets and liabilities		
Accounts receivable	133	(100 )
Inventory	312	(962 )
Prepaid expenses and other current assets	31	(26 )
Accounts payable	509	(651 )
Accrued expenses	330	17
Deferred revenue related party	(480 )	
Due to related parties	55	1,105
Long term capital lease obligation	87	
Net cash used in operating activities	(1,824)	(4,523)
Cash flows from investing activities		
Capital expenditures for property and equipment	(130 )	(84 )
Capitalization of intangible assets	(625 )	(193 )
Net cash used in investing activities	(755 )	(277 )
Cash flows from financing activities		
Payment of capital lease	(35 )	(31 )
Proceeds from issuance of convertible preferred stock, net of issuance costs	2,677	
Restricted cash	(600 )	
Net cash provided by (used in) financing activities	2,042	(31 )
Net (decrease) in cash	(537 )	(4,831)
Cash, beginning of period	758	5,517
Cash, end of period	\$221	\$686
Supplemental cash flow disclosures of investing and financing activities		
Stock issued in connection with conversion of due to related party	1,756	



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Stock issued in connection with conversion of preferred stock and deemed dividend	1,379	
Derivative liability in connection with conversion option and warrants	460	
Stock issued as payment of fees on convertible preferred stock	88	
Amortization of prepaid fees related to the \$15M purchase agreement	45	
Stock issued as payment of bonus		168

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

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**xG TECHNOLOGY, INC.**

**NOTES TO THE CONDENSED FINANCIAL  
STATEMENTS  
AS OF MARCH 31, 2015 AND DECEMBER 31, 2014  
AND FOR THE  
THREE MONTHS ENDED MARCH 31, 2015  
(Unaudited)**

**NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT  
ACCOUNTING POLICIES**

**Description of Business**

xG Technology, Inc. (the Company) is a Delaware corporation that has developed a broad portfolio of innovative intellectual property that we believe will enhance wireless communications. The Company's intellectual property is embedded in proprietary software algorithms designed to offer cognitive interference mitigation and spectrum access solutions to organizations in a wide variety of industries, including national defense and rural broadband, which represent the primary vertical markets that the Company is initially targeting.

**Basis of Presentation**

The accompanying unaudited financial statements were prepared using generally accepted accounting principles for interim financial information and the instructions to Form 10-Q and Regulation S-X. Accordingly, these financial statements do not include all information or notes required by generally accepted accounting principles for annual financial statements and should be read in conjunction with the 2014 Financial Statements as filed on the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

The preparation of financial statements in conformity with these accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts of expenses during the reported period. Ultimate results could differ from the estimates of management.

In the opinion of management, the unaudited financial statements included herein contain all adjustments necessary to present fairly the Company's financial position as of March 31, 2015 and the results of its operations and cash flows for the three months ended March 31, 2015 and 2014. Such adjustments are of a normal recurring nature. The results of operations for the three months ended March 31, 2015 may not be indicative of results for the full year.

### **Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **Cash and Cash Equivalents**

The Company considers all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents. The Company's cash balances exceeded the current insured amounts under the Federal Deposit Insurance Corporation of \$250,000.

### **Concentrations of Credit Risk**

The Company does not have any off-balance-sheet concentrations of credit risk. Credit risk is the risk that counterparty will default on its contractual obligations resulting in financial loss to the company. The company's credit risk is primarily attributable to its cash and accounts receivable. The Company's policy is to maintain its cash with high credit quality financial institutions to limit its risk of loss exposure. During the year, the Company had cash balances in excess of the federally insured limits of \$250,000. The funds are on deposit with Wells Fargo Bank, N.A.

Consequently, the Company does not believe that there is a significant risk having these balances in one financial institution. The Company has not experienced any losses in its bank accounts through March 31, 2015. For customers, management assesses the credit quality of the

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**xG TECHNOLOGY, INC.**

**NOTES TO THE CONDENSED FINANCIAL  
STATEMENTS  
AS OF MARCH 31, 2015 AND DECEMBER 31, 2014  
AND FOR THE  
THREE MONTHS ENDED MARCH 31, 2015  
(Unaudited)**

**NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT  
ACCOUNTING POLICIES (continued)**

customer, taking into account its financial position, past experience and other factors. The majority of trade receivables are those of related parties and management does not expect any losses from non-performance of these parties.

**Inventory**

Inventories, consisting principally of raw materials and finished goods, are carried at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. Raw materials consist of purchased parts, components and supplies. The Company evaluates inventory balances and adjusts inventory to the lower of cost or market based upon anticipated usage of the inventory and the potential for obsolescence.

**Intangible Assets**

Capitalized software costs incurred in the research, design and development of software for sale to others as a separate product or embedded in a product and sold as part of the product as a whole are charged to expense until technological feasibility is established and amortized on a straight-line basis over five years, beginning when the products are offered for sale or the enhancements are integrated into the products. Management is required to use its judgment in determining whether capitalized software costs meet the criteria for immediate expense or capitalization, in accordance with Generally Accepted Accounting Principles ( GAAP ). The unamortized capitalized costs of a computer software product are compared to the net realizable value of that product and any excess is written off.

The Company's proprietary software solutions operate in a fast changing industry that may generate unknown methods of detecting and monitoring disturbances that could render our technology inferior, resulting in the Company's results of operations being materially adversely affected. The Company does, however, closely monitor trends and changes in technologies and customer demand that could adversely impact its competitiveness and overall success. It is reasonably possible that those estimates of anticipated future gross revenues, the remaining estimated economic life of the product, or both will be reduced significantly in the near term due to competitive pressures. As a result, the carrying amount of the capitalized software costs for the Company's products may be reduced materially in the near

term.

Costs incurred for product enhancements are charged to expense as research and development until the technological feasibility of the enhancement has been established. These enhancements are amortized on a straight line basis over the useful life of the product enhancement which is currently estimated to be five years beginning when the enhancements are integrated into the products that are offered for sale.

The Company's software is inherently complex and may contain defects and errors that are only detectable when the products are in use. Such defects or errors could have a serious impact on our end customers, which could damage our reputation, harm our customer relationships and expose the Company to liability. Defects in the Company's software could adversely affect our ability and that of our customers to ship products on a timely basis as well as customer or licensee demand for our products. Any such delays or declines in demand could reduce the Company's revenues and harm our ability to achieve or sustain desired levels of profitability. We and our customers may also experience component or software failures or defects that could require significant product recalls, rework and/or repairs that are not covered by warranty reserves. In 2014, we began developing a new product, the CN3200 Dual Band Routing Modem ( CN3200 ), formerly known as the xRM modem. On September 30, 2014, we received certification from the U.S. Federal Communications Commission in connection with the CN3200. Intellectual property is embedded in proprietary software algorithms that offer cognitive spectrum access and interference mitigation solutions.

Patents and licenses are measured initially at purchase cost and are amortized on a straight line basis over their useful lives which range between 18.5 to 20 years.

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**NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT  
ACCOUNTING POLICIES (continued)**

**Property, Plant and Equipment**

Property, plant and equipment are presented at cost at the date of acquisition. Depreciation is computed using the straight-line method over estimated useful asset lives, which range from 3 to 7 years commencing the month following the purchase.

**Impairment of Long-Lived Assets**

Long-lived assets including certain intangible assets with finite lives are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by that asset. If the carrying amount of an asset exceeds its estimated future undiscounted cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset.

**Allowance for Doubtful Accounts**

In the event that management determines that a receivable becomes uncollectible, or events or circumstances change, which result in a temporary cessation of payments from the customer, we will make our best estimate of probable or potential losses in our accounts receivable balance using the allowance method for each quarterly period. Management will periodically review the receivables at the end of each quarterly reporting period and the appropriate accrual will be made based on current available evidence and historical experience. Allowance for doubtful accounts was \$30,000 and \$30,000 as of March 31, 2015 and December 31, 2014, respectively.

**Revenue Recognition**

The Company recognizes revenues when persuasive evidence of an arrangement exists, services have been rendered, the price is fixed and determinable, and collectability is reasonably assured. Revenues from management and

consulting, time-and-materials service contracts, maintenance agreements and other services are recognized as the services are provided or at the time the goods are shipped and title has passed.

### **Development Expenses**

Development expenses consist primarily of salaries and related costs for technical and programming personnel, they are expensed as incurred and were \$1,550,000 and \$2,453,000 for the three months ended March 31, 2015 and 2014, respectively.

### **Income Taxes**

The Company accounts for income taxes using the assets and liability method. Accordingly, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in the tax rate is recognized in income or expense in the period that the change is effective. Tax benefits are recognized when it is probable that the deduction will be sustained. A valuation allowance is established when it is more likely than not that all or a portion of a deferred tax asset will not be realized.

The Company files a U.S. federal and state income tax return. The Company recognizes liabilities for uncertain tax positions based on the two-step process prescribed by GAAP. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than

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**NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT  
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not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires the Company to estimate and measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. The Company reevaluates these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision in the period. The Company recognizes interest and penalties as incurred in finance income (expense), net in the Statements of Operations. There were no liabilities recorded for uncertain tax positions at March 31, 2015 and December 31, 2014.

**Stock Based Compensation**

The Company accounts for stock-based awards to employees in accordance with applicable accounting principles, which requires compensation expense related to share-based transactions, including employee stock options, to be measured and recognized in the financial statements based on a determination of the fair value of the stock options.

The grant date fair value is determined using the Black-Scholes-Merton ( Black-Scholes ) pricing model. For all employee stock options, the Company recognizes expense over the employee's requisite service period (generally the vesting period of the equity grant). The Company's option pricing model requires the input of highly subjective assumptions, including the expected stock price volatility, expected term, and forfeiture rate. Any changes in these highly subjective assumptions significantly impact stock-based compensation expense.

Options awarded to purchase shares of common stock issued to non-employees in exchange for services are accounted for as variable awards in accordance with applicable accounting principles. Such options are valued using the Black-Scholes option pricing model.



### **Treasury Stock**

Shares of common stock repurchased are recorded at cost as treasury stock. When shares are reissued, the cost method is used for determining cost. In accordance with GAAP, the excess of the acquisition cost over the reissuance price of the treasury stock, if any, is recorded to additional paid-in capital, limited to the amount previously credited to additional paid-in capital, if any. Any excess is charged to accumulated deficit.

### **Earnings Per Share**

Basic earnings per common share amounts are based on weighted average number of common shares outstanding. Diluted earnings per share amounts are based on the weighted average number of common shares outstanding, plus the incremental shares that would have been outstanding upon the assumed exercise of all potentially dilutive stock options, warrants and convertible debt, subject to anti-dilution limitations. All such potentially dilutive instruments were anti-dilutive as of March 31, 2015 and December 31, 2014. At March 31, 2015 and December 31, 2014 approximately 1.57 million and 0.7 million shares, respectively, underlying the options, warrants, convertible debt and convertible preferred stock were anti-dilutive.

### **Warranty Reserve**

The Company established a warranty reserve policy effective for the fiscal year ending December 31, 2013. Although the Company tests its product in accordance with its quality programs and processes, its warranty obligation is affected by product failure rates and service delivery costs incurred in correcting a product failure. Should actual product failure rates or service costs differ from the Company's estimates,

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**NOTE 1 ORGANIZATION AND SUMMARY OF SIGNIFICANT  
ACCOUNTING POLICIES (continued)**

which are based on limited historical data, where applicable, revisions to the estimated warranty liability would be required. The warranty reserve at March 31, 2015 and December 31, 2014 was \$10,000 and \$9,000, respectively.

**Fair Value of Financial Instruments**

Generally accepted accounting principles require disclosing the fair value of financial instruments to the extent practicable for financial instruments which are recognized or unrecognized in the balance sheet. The fair value of the financial instruments disclosed herein is not necessarily representative of the amount that could be realized or settled, nor does the fair value amount consider the tax consequences of realization or settlement.

In assessing the fair value of financial instruments, the Company uses a variety of methods and assumptions, which are based on estimates of market conditions and risks existing at the time. For certain instruments, including cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses, it was estimated that the carrying amount approximated fair value because of the short maturities of these instruments. All debt is based on current rates at which the Company could borrow funds with similar remaining maturities and approximates fair value.

GAAP establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use on unobservable inputs by requiring that the most observable inputs be used when available.

Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The hierarchy is described below:

- Level 1 Quoted prices in active markets for identical assets or liabilities.
- Level 2 Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.
- Level 3 Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

### **Recently Issued Accounting Principles**

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. We will remain an emerging growth company for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceed \$1 billion, (ii) the date that we become a large accelerated filer as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period. Pursuant to Section 107 of the JOBS Act, we have elected to utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

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**NOTE 2 GOING CONCERN**

The financial statements have been prepared in conformity with generally accepted accounting principles which contemplate continuation of the Company as a going concern. As of March 31, 2015, the Company had an accumulated deficit of \$174.1 million and a net loss of \$3.5 million for the three months ended March 31, 2015. On March 1, 2015, the Company announced that it implemented cost reduction initiatives that included a decrease in the Company's workforce and other expense reductions, which should decrease the monthly cash burn. As of the date of this filing, the Company believes it has sufficient liquidity to fund operations through May 2015. To date, the Company is experiencing long sales cycles in the areas that have potential for near term revenue, most notably, in the first responder, public safety, military and rural telco markets. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The ability to recognize revenue and ultimately cash receipts is contingent upon, but not limited to, acceptable performance of the delivered equipment and services. If the Company is unable to raise additional capital and or close on some of its revenue producing opportunities in the near term, the carrying value of its assets may be impacted and it may be material. The financial statements do not include any adjustments related to the recovery and classification of asset carrying amounts or the amount and classification of liabilities that might result should the Company be unable to continue as a going concern.

**NOTE 3 INVENTORY**

Inventories included in the accompanying condensed balance sheet are stated at the lower of cost or market as summarized below:

	March 31, 2015	December 31, 2014
Raw materials consisting of purchased parts, components and supplies	\$1,815,000	\$2,084,000
Finished goods	2,143,000	2,186,000

Sub-total inventories	3,958,000	4,270,000
Less inventory reserve	(200,000 )	(200,000 )
Total Inventory net	\$3,758,000	\$4,070,000

Based upon the Company's analysis of the lower of cost or market, the Company recorded a reserve for inventory of \$200,000 and \$200,000 as of March 31, 2015 and December 31, 2014, respectively.

## NOTE 4 ACCOUNTS RECEIVABLE

Accounts receivable consist of the following:

	March 31, 2015	December 31, 2014
Accounts receivable	\$ 251,000	\$ 252,000
Accounts receivable related parties	336,000	480,000
Sub-total accounts receivable	587,000	732,000
Allowance for doubtful accounts	(30,000 )	(30,000 )
Net accounts receivable	\$ 557,000	\$ 702,000

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**NOTE 5 PROPERTY AND EQUIPMENT**

Property and equipment consist of the following:

	Useful Life	March 31, 2015	December 31, 2014
Cost:			
Furniture and equipment	3 7 years	\$ 3,059,000	\$ 2,930,000
Accumulated depreciation:		(2,177,000)	(2,114,000)
Property and equipment, net		\$ 882,000	\$ 816,000

Depreciation expense amounted to approximately \$63,000 and \$52,000 for the three months ended March 31, 2015 and 2014, respectively.

**NOTE 6 INTANGIBLE ASSETS**

Intangible assets consist of the following:

	Software Development Costs		Patents & Licenses		Total
	Costs	A.A.	Cost	A.A.	
Balance as of December 31, 2014	\$16,455,000	\$(5,494,000)	\$12,378,000	\$(6,957,000)	\$16,382,000
Additions	625,000				625,000
Amortization		(730,000)		(166,000)	(896,000)
Balance as of March 31, 2015	\$17,080,000	\$(6,224,000)	\$12,378,000	\$(7,123,000)	\$16,111,000

Amortization of intangible assets amounted to \$896,000 and \$897,000 for the three months ended March 31, 2015 and 2014, respectively. The total cost basis of intangible assets at March 31, 2015 was \$29.5 million, which consists of \$26.9 million of costs that are subject to amortization and \$2.6 million of assets that are not subject to amortization.

### **Software Development Costs**

At March 31, 2015, the Company has capitalized a total of \$17.1 million of software development costs. Included in the capitalized costs is \$2.5 million of costs associated with enhancement of the xMax cognitive radio products. These costs are not being amortized considering that the enhancement is not yet incorporated in products and available for sale. During the three months ended March 31, 2015 and 2014, the Company recognized amortization of software development costs available for sale of \$0.7 million and \$0.7 million, respectively.

### **Patents & Licenses**

At March 31, 2015, the Company has capitalized a total of \$12.4 million of patents & licenses. Included in the capitalized costs is \$12.3 million of costs associated with patents and licenses that have been filed. Also included in the capitalized costs is \$0.1 million of costs associated with provisional patents and pending applications which have not yet been filed. The Company amortizes patents and licenses that have been filed over their useful lives which range between 18.5 to 20 years. The costs of provisional patents and pending applications is not amortized until the patent is filed and is reviewed each reporting period to determine if it is likely that the patent will be successfully filed. The Company recognized \$0.2 million of amortization expense related to patents and licenses for the three months ended March 31, 2015 and 2014.

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**NOTE 6 INTANGIBLE ASSETS (continued)**

Estimated amortization expense for the twelve-month periods ended March 31 is as follows:

2016	\$ 3,613,000
2017	2,912,000
2018	2,802,000
2019	1,723,000
2020 and thereafter	2,500,000
	\$ 13,550,000

**NOTE 7 OBLIGATION UNDER CAPITAL LEASE**

During the three months ending March 31, 2015, we purchased equipment under a capital lease value totaling \$129,000.

The future minimum capital lease payments for the following twelve months periods as of March 31 are as follows:

2016	\$ 142,000
2017	50,000
2018	45,000
Total minimum lease payments	237,000
Less Amount representing interest	(19,000 )
Present value of the net minimum lease payments	218,000
Less obligations under capital lease maturing within one year	(135,000 )
Long-term portion of obligations under capital lease	\$ 83,000

The interest rate for the capital leases range between 4% and 8%.



## NOTE 8 CONVERTIBLE NOTES PAYABLE

### Treco

On October 6, 2011, the Company entered into a convertible promissory note (the "\$2 Million Convertible Note") in favor of Treco International, S.A. ("Treco"), as part of the settlement compensation to Treco for terminating the infrastructure agreement. The \$2 Million Convertible Note is payable on final maturity, October 6, 2018 and is convertible, at Treco's option, into common shares of the Company at a price of \$350.00 per share. Interest at the rate of 9% per year is payable semi-annually in cash or shares, at the Company's option. As of March 31, 2015, \$2 million of principal balance was outstanding under the \$2 Million Convertible Note. The accrued interest at March 31, 2015 was \$87,000.

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**NOTE 9 COMMITMENTS**

The Company's office rental, deployment sites and warehouse facilities expenses aggregated approximately \$107,000 and \$86,000 for the three months ended March 31, 2015 and 2014, respectively. The leases will expire on different dates from 2016 through 2019. The Company also entered into contract agreements with one of its principal vendors to provide parts for production. Total obligation of purchasing parts under contractual agreements, minimum future annual rentals, exclusive of real estate taxes and related costs, are approximately as follows:

	Twelve Months Ended March 31,
2016	\$ 2,052,000
2017	\$ 127,000
2018	\$ 84,000
2019	\$ 87,000
2020	\$ 66,000
	\$ 2,416,000

**NOTE 10 PREFERRED STOCK**

In March 2013, by approval of the majority of the shareholders, the Company was authorized to issue 10,000,000 shares of Blank Check preferred stock, par value \$0.00001 per share. On December 30, 2014, 3,000,000 shares were designated as authorized Series A Preferred Stock. On February 11, 2015, 3,000,000 shares were designated as authorized Series B Preferred Stock. On February 24, 2015, 3,000,000 shares were designated as authorized Series C Preferred Stock.

**Series A Preferred Stock**

On December 30, 2014, the Company entered into a Securities Purchase Agreement (the Purchase Agreement) with 31 Group, LLC (31 Group) pursuant to which the Company sold to 31 Group, for a purchase price of \$750,000,

750,000 shares of Series A Preferred Stock, par value \$0.00001 per share (the Series A Preferred Stock ) and warrants (the Warrants ) to purchase 37,500 shares of common stock. The Company also issued to 31 Group 3,314 shares of common stock in consideration of 31 Group's execution and delivery of the Purchase Agreement (the Commitment Shares ). The offer and sale of the Series A Preferred Stock, the common stock issuable upon conversion of the Series A Preferred Stock and the Commitment Shares were made pursuant to the Company's registration statement on Form S-3 that was declared effective on August 31, 2014 (the Shelf Registration Statement ).

The Warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

#### **Holder Optional Redemption after Maturity Date**

At any time from and after the tenth business day prior to the maturity date, December 30, 2015, any holder may require the Company to redeem all or any number of Series A Preferred Stock held by such holder at a purchase price equal to 105% of the conversion amount.

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**NOTE 10 PREFERRED STOCK (continued)**

**Ranking**

The Series A Preferred Stock will rank with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company senior to all of the Company's common stock and other classes of capital stock, unless the holders of a majority of the outstanding shares of Series A Preferred Stock consent to the creation of parity stock or senior preferred stock.

**Liquidation Preference of Series A Preferred Stock**

Upon the voluntary or involuntary liquidation, dissolution or winding up of the Company, before the payment of any amount to the holder of shares of junior stock, but pari passu with any parity stock, the holders of Series A Preferred Stock are entitled to receive an amount equal to the greater of (i) the stated value of the Series A Preferred Stock or (ii) the amount the holder of Series A Preferred Stock would receive if such holder converted the Series A Preferred Stock into common stock immediately prior to the date of the liquidation event, including accrued and unpaid dividends.

**Dividends on Series A Preferred Stock**

Holders of Series A Preferred Stock shall be entitled to receive from the first date of issuance of the Series A Preferred Stock cumulative dividends at a rate of 7.0% per annum on a compounded basis. The Company shall have the right to pay dividends in cash or shares of common stock on the Maturity Date or in cash on any applicable redemption date or, with respect to Series A Preferred Stock subject to conversion into common stock, as part of the conversion amount.

**Redemption of Series A Preferred Stock**

Upon the occurrence of certain triggering events as defined in the certificate of designation, the holder of Series A Preferred Stock shall have the right to require the Company, by written notice, to redeem all or any of the shares of Series A Preferred Stock at a price equal to the greater of (i) 125% of the conversion amount to be redeemed and (ii) the product of (a) the conversion amount divided by 85% of the average of the five (5) lowest volume weighted

average prices of the common stock during the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice multiplied by (b) 125% of the greatest closing sale price of the common stock on any trading day during the period commencing on the date immediately preceding such triggering event and ending on the date the Company makes the entire redemption payment to the holder of Series A Preferred Stock.

Upon the occurrence of a change in control of the Company, a holder of Series A Preferred Stock shall have the right to require the Company to redeem all or any portion of the Series A Preferred Stock at a price equal to 125% of the stated value of the Series A Preferred Stock. In addition, so long as certain conditions do not exist (including the Company shall have timely delivered any Common Stock upon the conversion of the Series A Preferred Stock), then the Company shall have the right to redeem all, but not less than all, of the Series A Preferred Stock outstanding in cash at a price equal to the sum of (i) 125% of the stated value of the Series A Preferred Stock and (ii) all accrued and unpaid dividends thereon.

At any time from and after the tenth (10) business day prior to the date of maturity, a holder of the Series A Preferred Stock may require the Company to redeem all or any number of Series A Preferred Stock shares held by such holder at a purchase price equal to 105% of the conversion amount of such Series A Preferred Stock shares.

### **Conversion Rights of Preferred Stock**

A holder of Series A Preferred Stock shall have the right to convert the Series A Preferred Stock, in whole or in part, upon written notice to the Company at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the average of the five (5) lowest volume weighted average prices of the Common Stock during

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**NOTE 10 PREFERRED STOCK (continued)**

the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice (as adjusted for stock splits, share combinations and similar transactions).

**Fundamental Transaction**

The Company shall use its commercially reasonable efforts to not enter into a fundamental transaction unless the successor entity assumes the obligations of the Company under the Certificate of Designations and the successor entity (including its parent entity) is a publicly traded company whose shares of common stock are quoted or listed on an eligible national securities exchange. Upon a change of control of the Company, a holder of Series A Preferred Stock shall have the right to require the Company to redeem all or any portion of the Series A Preferred Stock at the applicable premium redemption price. A fundamental transaction is a transaction in which (i) the Company, directly or indirectly, in one or more related transactions, (a) consolidates or merges with or into any other entity (except where the Company is the surviving entity), (b) sells, leases, licenses, assigns, transfers, conveys or otherwise disposes of all or substantially all of its properties or assets to any other entity, (c) allows any other entity to make a purchase, tender or exchange offer that is accepted by such holders of more than 50% of the outstanding shares of voting stock of the Company (not including any shares of voting stock of the Company held by the entity making or party to, or associated or affiliated with the entity making or party to, such purchase, tender or exchange offer), or (d) consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with any other entity whereby such other entity acquires more than 50% of the outstanding shares of voting stock of the Company (not including any shares of voting stock of the Company held by the other entity making or party to, or associated or affiliated with the other entity making or party to, such stock or share purchase agreement or other business combination), or (e) reorganizes, recapitalizes or reclassifies the Common Stock (which shall not include a reverse stock split), or (ii) any person or group (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act of 1934, as amended, (the Exchange Act ) and the rules and regulations promulgated thereunder) is or shall become the beneficial owner (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by issued and outstanding voting stock of the Company.

## **Voting Rights**

Holders of Series A Preferred Stock shall have no voting rights.

## **Conversions and Balances of Outstanding Series A Preferred Stock**

As of March 27, 2015, 750,000 shares of the Series A Preferred Stock and 52,500 shares of Series A Preferred Stock issued as dividends have been converted into 239,247 shares of common stock. As of March 27, 2015, all outstanding shares of the Series A Preferred Stock have been fully converted.

As a result of the conversion, the preferred stock value, net of discounts, and the derivative liability arising from the conversion feature were extinguished. The Company recorded the fair value of the common stock issued upon conversion which resulted in a deemed dividend of \$483,000 that was recorded as a charge to additional paid in capital.

## **Short Term Related Party Loans**

On December 30, 2014, the Company received a \$245,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded as a due to related parties on the financial statements.

On January 8, 2015, the Company repaid \$100,000 of the \$245,000 due to related party balance owed to George Schmitt.

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**NOTE 10 PREFERRED STOCK (continued)**

On January 29, 2015 and February 13, 2015, the Company received an aggregate of \$700,000 from certain family members of George Schmitt, Chairman of the Board and Chief Executive Officer (effective as of February 17, 2015).

This amount was recorded as a short term loan in due to related parties. On February 23, 2015, George Schmitt transferred the balance of his \$145,000 loan to certain family members bringing the total the Company owed to certain family members to \$845,000. The \$845,000 loan was settled through the issuance of 845,000 shares of Series B Preferred Stock, 5,310 shares of common stock and warrants with respect to 42,250 underlying shares of common stock exercisable for five years at a price of \$20.00 per share. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

**\$350,000 Purchase Agreement**

On February 11, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to 31 Group, 350,000 shares of the Company's Series B Preferred Stock, par value \$0.00001 per share (the Series B Preferred Stock) and warrants to purchase 17,500 shares of the Company's common stock for a purchase price of \$350,000. The Company also issued 2,462 shares of its common stock in consideration of 31 Group's execution and delivery of the purchase agreement (the Series B Commitment Shares). The Series B Preferred Stock and the Series B Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

The warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

**Series B Preferred Stock**

The Series B Preferred Stock rank pari passu with our Series A Preferred Stock with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company and have the same terms and preferences as the Series A Preferred Stock except for the following:



*Conversion Rights of Series B Preferred Stock.* A holder of Series B Preferred Stock shall have the right to convert the Series B Preferred Stock, in whole or in part, upon written notice to the Company at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the lowest volume weighted average price of the common stock of the Company during the five (5) consecutive trading day period ending and including the trading day immediately preceding the delivery of the applicable conversion notice (as adjusted for stock splits, share combinations and similar transactions).

## **Conversions and Balances of Outstanding Series B Preferred Stock**

As of March 31, 2015, 945,000 shares of the Series B Preferred Stock and 66,150 shares of the Series B Preferred Stock issued as dividends have been converted into 267,701 shares of our common stock. As of March 31, 2015, 250,000 shares of the Series B Preferred Stock remain outstanding.

As a result of the conversion, the preferred stock value, net of discounts, and the derivative liability arising from the conversion feature were extinguished. The Company recorded the fair value of the common stock issued upon conversion which resulted in a deemed dividend of \$390,000 that was recorded as a charge to additional paid in capital.

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**NOTE 10 PREFERRED STOCK (continued)**

**\$1,800,000 Purchase Agreement**

On February 24, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to institutional investors, 1,800,000 shares of the Company's Series C Preferred Stock, par value \$0.00001 per share (the Series C Preferred Stock) and warrants to purchase 90,000 shares of the Company's common stock for a purchase price of \$1,800,000. The Company also issued 11,864 shares of its common stock in consideration of the investors execution and delivery of the purchase agreement (the Series C Commitment Shares). The Series C Preferred Stock and the Series C Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

The warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

**Series C Preferred Stock**

The Series C Preferred Stock rank pari passu with our Series A Preferred Stock and our Series B Preferred Stock with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company and have the same terms and preferences as the Series A Preferred Stock and Series B Preferred Stock except for the following:

*Conversion Rights of Series C Preferred Stock.* Upon the occurrence of certain triggering events (including the Series C Preferred Stock or common stock underlying the Series C Preferred Stock is not freely tradeable without restriction; the failure of the common stock to be listed on the NASDAQ Capital Market or other national securities exchange; and bankruptcy, insolvency, reorganization or liquidation proceedings instituted against the Company shall not be dismissed in thirty (30) days or the voluntary commencement of such proceedings by the Company), the holder of Series C Preferred Stock shall have the right to require the Company, by written notice, to redeem all or any of the shares of Series C Preferred Stock at a price equal to the greater of (i) 125% of the conversion amount to be redeemed and (ii) the product of (a) the conversion amount divided by the lower of (x) \$20.00 or (y) 85% of the lowest volume

weighted average price of the common stock of the Company during the five (5) consecutive trading day period ending and including the trading day immediately preceding the delivery of the applicable conversion notice multiplied by (b) 125% of the greatest closing sale price of the common stock on any trading day during the period commencing on the date immediately preceding such triggering event and ending on the date the Company makes the entire redemption payment to the holder of Series C Preferred Stock.

On each of March 12, 2015, March 24, 2015, April 12, 2015 and April 24, 2015, upon the Company's failure to meet certain conditions (including the Company's common stock failing to maintain a minimum trading price and the common stock failing to maintain certain trading volumes) during the period between the initial issuance date of the Series C Preferred Stock and the relevant determination date, the holders of Series C Preferred Stock shall have the right to require the Company, by written notice, to redeem in cash up to \$300,000 of the Series C Preferred Stock, at a price equal to the sum of (i) the stated value of Series C Preferred Stock to be redeemed multiplied by 105% (for redemptions occurring within the first thirty days of the initial issuance date) or 110% (for redemptions occurring during the period between thirty and sixty days of the initial issuance date) plus (ii) all accrued and unpaid dividends thereon until the date of the redemption. On both March 12, 2015, and March 24, 2015, the Company met all conditions.

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**NOTE 10 PREFERRED STOCK (continued)**

**Conversions and Balance of Outstanding Series C Preferred Stock**

As of March 31, 2015, 210,280 shares of the Series C Preferred Stock and 14,720 shares of the Series C Preferred Stock issued as dividends have been converted into 88,251 shares of our common stock. As of March 31, 2015, 1,589,720 shares of the Series C Preferred Stock remain outstanding.

As a result of the conversion, the preferred stock value, net of discounts, and the derivative liability arising from the conversion feature were extinguished. The Company recorded the fair value of the common stock issued upon conversion which resulted in a deemed dividend of \$184,000 that was recorded as a charge to additional paid in capital.

**NOTE 11 EQUITY**

**Delisting Notice**

On February 9, 2015, the Company received a written notification (the Notice) from the Nasdaq Stock Market LLC (Nasdaq) indicating that the Company was not in compliance with Nasdaq Listing Rule 5550(a)(2) relating to the minimum bid requirements as the Company's closing bid price was below \$1.00 per share for the previous thirty (30) consecutive business days.

Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), the Company has been granted a 180 calendar day compliance period, or until August 10, 2015, to regain compliance with the minimum bid price requirements. During the compliance period, the Company's shares of common stock will continue to be listed and traded on the Nasdaq Capital Market. To regain compliance, the closing bid of the Company's shares of common stock must meet or exceed \$1.00 per share for at least ten (10) consecutive business days during the 180 calendar day grace period.

If the Company is not in compliance by August 10, 2015, the Company may be afforded a second 180 calendar day grace period. To qualify, the Company would be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the

minimum bid price requirements. In addition, the Company would be required to notify Nasdaq of its intent to cure the minimum bid price deficiency by effecting a reverse stock split, if necessary.

If the Company does not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that the Company's shares of common stock will be subject to delisting.

The Company intends to monitor its closing bid price for its common stock between now and August 10, 2015, and will consider available options to resolve the Company's noncompliance with the minimum bid price requirement, as may be necessary. There can be no assurance that the Company will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

### **Equity Distribution Agreement**

On February 23, 2015, the Company delivered notice to Roth Capital Partners, LLC ( Roth ) terminating the Equity Distribution Agreement effective as of February 23, 2015. The Company previously entered into the Equity Distribution Agreement with Roth on November 19, 2014 and amended on December 30, 2014. The Company also filed a supplement to the Prospectus Supplement terminating the offering with respect to the \$1,000,000 of the Company's common stock issuable to Roth under the Equity Distribution Agreement. No shares of the Company's common stock were sold to Roth by the Company during the term of the Equity Distribution Agreement.

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**NOTE 11 EQUITY (continued)****Warrants and Options**

The Company has issued warrants and options outside of the equity incentive plans. A summary of the warrant and option activity is as follows:

	Number of Warrants and Options (in Shares)	Weighted Average Exercise Price
Outstanding January 1, 2015	557,997	\$ 96.78
Granted	152,250	19.70
Exercised		
Forfeited or Expired	(7,429 )	192.50
Outstanding, March 31, 2015	702,818	79.00
Exercisable, March 31, 2015	670,816	\$ 81.50

**NOTE 12 DERIVATIVE LIABILITIES****Series A, B and C Preferred Stock Conversion Options**

On December 30, 2014, the Company entered into a purchase agreement pursuant to which the Company sold to 31 Group, 750,000 of the Company's Series A Preferred Stock (the "Series A Preferred Stock"). On February 12, 2015, the Company entered into a purchase agreement pursuant to which the Company sold to 31 Group, 350,000 of the Company's Series B Preferred Stock (the "Series B Preferred Stock"). On February 24, 2015, the Company entered into a purchase agreement pursuant to which the Company sold to certain members of George's Schmitt's family, 845,000 of the Company's Series B Preferred Stock (the "Series B Preferred Stock"). On February 24, 2015, the Company entered into a purchase agreement pursuant to which the Company sold to 31 Group and Dominion Capital, 1,800,000 of the Company's Series C Preferred Stock (the "Series C Preferred Stock").

The Series A Preferred Stock are convertible, in whole or in part, at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the average of the five (5) lowest volume weighted average prices of the common stock during the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice.

The Series B and C Preferred Stock are convertible, in whole or in part, at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the lowest volume weighted average price of the common stock of the Company during the five (5) consecutive trading day period ending and including the trading day immediately preceding the delivery of the applicable conversion notice.

The conversion feature was bifurcated from the Preferred Stock as it was not considered to be clearly and closely related to the host agreement and is accounted for as a derivative liability.

## **Warrants to Purchase Common Stock**

In connection with the issuance of Series A Preferred Stock to 31 Group, the Company issued warrants to purchase up to 37,500 shares of Common Stock which are exercisable at any time on or before December 31, 2019. In connection with the issuance of Series B Preferred Stock to 31 Group, the Company issued warrants to purchase up to 17,500 shares of Common Stock which are exercisable at any time on or before February 11, 2020. In connection with the issuance of Series B Preferred Stock to certain family members of George Schmitt, the Company issued warrants to purchase up to 42,250 shares of Common Stock are exercisable at any time on or before February 24, 2020. In connection with the issuance of Series C

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**NOTE 12 DERIVATIVE LIABILITIES (continued)**

Preferred Stock to 31 Group and Dominion Capital, the Company issued warrants to purchase up to 90,000 shares of Common Stock are exercisable at any time on or before February 24, 2020. The Warrants each have an exercise price of \$20.00 per share. The warrants are accounted for as derivative liability as they can be redeemed by the holder for Black Scholes value upon certain fundamental transactions.

The table below sets forth a summary of changes in the fair value of the Company's Level 3 derivative liabilities for the quarter ended March 31, 2015:

	Series A	Series B (31 Group)	Series B (Related Party)	Series C	Total
Balance at January 1, 2015	270,000				270,000
Additions to conversion option derivative liability		84,000	220,000	468,000	772,000
Additions to warrant derivative liability		42,000	118,000	252,000	412,000
Conversions of derivative liability	(150,000)	(24,000)	(220,000)	(55,000)	(449,000)
Change in fair market value of the derivative liabilities	(60,000)	(44,000)	(50,000)	(331,000)	(485,000)
Balance at March 31, 2015	60,000	58,000	68,000	334,000	520,000

These instruments were valued using the Black Scholes pricing model that incorporates the price of a share of Common Stock, volatility, risk free rate, dividend rate and estimated life. As of March 31, 2015 all outstanding shares of the Series A Preferred Stock and the Series B Preferred Stock (Related Party) have been converted.

The following are the key assumptions used in connection with the valuation of the conversion option on the date of issuance, at December 31, 2014 and March 31, 2015:

Series A	Series B (31 Group)	Series B (Related	Series C
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			Party)			
Date of issuance	12/30/2014	2/11/2015	2/24/2015	2/24/2015		
Number of preferred shares	750,000	350,000	845,000	1,800,000		
Fair market value of stock	\$5.10	\$4.20	\$4.50	\$4.50		
Conversion price	\$5.70	\$3.57	\$4.00	\$4.00		
Volatility	131	% 143.4	% 143.4	% 143.4	%	%
Risk-free interest rate	0.13	% 0.26	% 0.26	% 0.26	%	%
Expected dividend yield						
Life of convertible preferred stock (years)	1	1	1	1		

	Series A	Series B (31 Group)	Series B (Related Party)	Series C	
Number of preferred shares remaining on March 31, 2015		250,000		1,589,720	
Fair market value of stock		\$2.79		\$2.79	
Conversion price		\$2.295		\$2.295	
Volatility		105.4	%	105.4	%
Risk-free interest rate		0.99	%	0.99	%
Expected dividend yield					
Life of convertible preferred stock (years)		0.85		0.90	

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**NOTE 12 DERIVATIVE LIABILITIES (continued)**

The following are the key assumptions used in connection with the valuation of the warrants on the date of issuance, at December 31, 2014 and March 31, 2015:

	Series A	Series B (31 Group)	Series B (Related Party)	Series C
Date of warrant	12/30/2014	2/11/2015	2/24/2015	2/24/2015
Number of shares underlying the warrants	37,500	17,500	42,250	90,000
Fair market value of stock	\$5.10	\$4.20	\$4.50	\$4.50
Exercise price	\$20.00	\$20.00	\$20.00	\$20.00
Volatility	112.9 %	120.6 %	120.6 %	120.6 %
Risk-free interest rate	0.96 %	0.90 %	0.90 %	0.90 %
Expected dividend yield				
Warrant life (years)	5	5	5	5

	Series A	Series B (31 Group)	Series B (Related Party)	Series C
Number of shares underlying the warrants on March 31, 2015	37,500	17,500	42,250	90,000
Fair market value of stock	\$2.79	\$2.79	\$2.79	\$2.79
Exercise price	\$20.00	\$20.00	\$20.00	\$20.00
Volatility	116.3 %	120.6 %	120.6 %	120.6 %
Risk-free interest rate	0.99 %	0.90 %	0.90 %	0.90 %
Expected dividend yield				
Warrant life (years)	4.75	4.85	4.90	4.90

The risk-free rate is based on the rate for the U.S. Treasury note over the expected terms. The expected term is the full term of the warrant and preferred stock. Expected volatility is based on the average of the weekly share price changes

over the shorter of the expected term or the period from the placement on London Stock Exchange's AIM Market to the date of the grant.

## **NOTE 13 RELATED PARTY TRANSACTIONS**

### **MBTH**

On April 29, 2014, the Company entered into a management agreement (the "Management Agreement") with MB Technology Holdings, LLC ("MBTH"), pursuant to which MBTH agreed to provide certain management and financial services to the Company for a monthly fee of \$25,000. The Management Agreement was effective January 1, 2014. The Company incurred fees related to the Management Agreement of \$75,000 and \$75,000, respectively, for the three months ended March 31, 2015 and 2014. As of March 31, 2015, MBTH owned approximately 32.09% of the Company's outstanding shares. Roger Branton, the Company's Chief Financial Officer, and George Schmitt, the Company's Executive Chairman and, effective as of February 17, 2015, Chief Executive Officer, are directors of MBTH, and Richard Mooers, a director of the Company, is the CEO and a director of MBTH.

During the three months ended March 31, 2015, MBTH incurred no new liabilities on behalf of the Company under the 2011 assumption of liability agreement with MBTH. From January 1, 2015 to March 31, 2015, the Company repaid MBTH \$0 for liabilities previously paid by MBTH. The due to related party balance was \$264,000 as of March 31, 2015.

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**NOTE 13 RELATED PARTY TRANSACTIONS (continued)**

The Company agreed to award MBTH a 3% cash success fee if MBTH arranges financing for the Company or arranges a merger, consolidation or sale by the Company of substantially all of the assets. On February 24, 2015, MBTH invoiced the Company for \$700,000 in fees associated with equity financings through April 16, 2014 at a rate of 3% per financing less certain discounts. The Company also accrued for an additional fee of approximately \$109,000 for equity financings between April 17, 2014 and December 31, 2014. The balance of \$809,000 was recorded as an expense in general and administrative expenses and included in due to related parties as of December 31, 2014. The Company accrued approximately \$90,000 for equity financings between January 1, 2015 and March 31, 2015.

**George Schmitt Due to Related Party**

On December 30, 2014, the Company received a \$245,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded as a due to related parties on the financial statements.

On January 8, 2015, the Company repaid \$100,000 of the \$245,000 due to related party balance owed to George Schmitt.

On January 29, 2015 and February 13, 2015, the Company received an aggregate of \$700,000 from certain family members of George Schmitt, Chairman of the Board and Chief Executive Officer (effective as of February 17, 2015).

This amount was recorded as a short term loan in due to related parties. On February 23, 2015, George Schmitt transferred the balance of his \$145,000 loan to certain family members bringing the total the Company owed to certain family members to \$845,000. The \$845,000 loan was settled through the issuance of 845,000 shares of Series B Preferred Stock, 5,310 shares of common stock and warrants with respect to 42,250 underlying shares of common stock exercisable for five years at a price of \$20.00 per share. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

On February 24, 2015, the 845,000 shares of the Series B Preferred Stock issued to certain family members of George Schmitt and 59,150 shares of the Series B Preferred Stock issued as dividends were converted into 222,792 shares of our common stock (See Note 10 Preferred Stock). As of March 31, 2015 none of the Series B Preferred Stock issued

to certain family members of George Schmitt remains outstanding.

On March 24, 2015, the Company received a \$40,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded in due to related parties.

#### **Issuance of common stock to MBTH**

On February 24, 2015, the company issued 399,114 shares of common stock to MBTH in consideration of converting \$1,756,098 owed of the balance due to related parties at a conversion price of \$4.40 per share.

#### **Deferred Revenue**

On October 16, 2013, the Company completed the first delivery of xMax comprehensive cognitive radio system, shipping equipment and providing engineering services required to fulfill the \$179,000 purchase order that was received from rural broadband provider Walnut Hill Telephone Company on November 26, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Walnut Hill Telephone Company. Given that Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Walnut Hill Telephone Company was, at the time it was entered into,

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**NOTE 13 RELATED PARTY TRANSACTIONS (continued)**

considered to be a related party transaction. Due to Walnut Hill Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction was considered deferred revenue as of December 31, 2014.

On December 16, 2013, the Company sold xMax comprehensive cognitive radio system to Haxtun Telephone Company for \$301,000 to fulfill a purchase order that was received on November 24, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Haxtun Telephone Company. Given that Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Haxtun Telephone Company was, at the time it was entered into, considered to be a related party transaction. Due to Haxtun Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction was considered deferred revenue as of December 31, 2014.

On March 31, 2015, we shipped additional equipment purchased by Larry Townes and we received a partial payment for the equipment that had been previously delivered in those transactions as the purchasers indicated that the equipment met certain technical specifications associated with their networks. Previously, Walnut Hill Telephone Company and Haxtun Telephone Company did not intend to deliver payment until such technical specifications were satisfied. These specifications have now been satisfied and the deferred revenue has been recorded as revenue.

**NOTE 14 CONCENTRATIONS**

During the three months ended March 31, 2015, the Company recorded revenue from individual sales or services rendered of \$534,000 (91%) in excess of 10% of the Company's total sales to a related party.

At March 31, 2015, approximately 91% of net accounts receivable was due from two customers broken down individually as follows; \$316,000 (57%) to a related party and \$190,000 (34%) to an unrelated party.

During the three months ended March 31, 2015, approximately 100% of the Company's inventory purchases were derived from three vendors.

## **NOTE 15 CONTINGENCIES**

The Company is subject, from time to time, to claims by third parties under various legal theories. The defense of such claims, or any adverse outcome relating to any such claims, could have a material adverse effect on the Company's liquidity, financial condition and cash flows. As of March 31, 2015, the Company did not have any legal actions pending.

## **NOTE 16 SUBSEQUENT EVENTS**

### **Reverse Stock Split**

On July 9, 2015, the Board approved a resolution to amend the Company's Certificate of Incorporation and to authorize the Company to effect a reverse split of the Company's outstanding common stock at a ratio of 1-for-10. On July 17, 2015, the Company effected a one-for-ten reverse stock split. Upon effectiveness of the reverse stock split, every 10 shares of outstanding common stock decreased to one share of common stock.

### **Amendment of Warrants**

On July 20, 2015, and effective June 11, 2015, the Company amended the warrants issued to investors on December 30, 2014, February 11, 2015 and February 24, 2015 in connection with issuances of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, respectively, to lower the exercise

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**NOTE 16 SUBSEQUENT EVENTS (continued)**

price from \$20.00 per share to \$11.50 per share, except for the warrants issued to certain family members of George Schmitt, which will retain an exercise price of \$20.00 per share.

**Conversions and Balances of Outstanding Series B Preferred Stock**

As of April 29, 2015, 1,195,000 shares of the Series B Preferred Stock and 83,650 of the Series B Preferred Stock issued as dividends have been converted into 405,499 shares of our common stock. As of July 20, 2015, all outstanding shares of the Series B Preferred Stock have been fully converted.

**Conversions and Balance of Outstanding Series C Preferred Stock**

As of July 20, 2015, 1,800,000 shares of the Series C Preferred Stock and 126,000 shares of the Series C Preferred Stock issued as dividends have been converted into 946,518 shares of our common stock. As of July 20, 2015, all outstanding shares of the Series C Preferred Stock have been fully converted.

**Shares Issued Under S-8 Registration Statements**

On April 14, 2015, the Company filed an S-8 Registration Statement to register 350,000 shares of common stock under the 2013 Long Term Incentive Plan. From April 15, 2015 to June 30, 2015, the Company issued 301,402 shares of common stock to employees in lieu of paying \$815,881 of payroll due to cost cutting measures; 17,456 shares of common stock to various consultants to pay \$54,519 worth of services; and 189,904 shares of common stock to various employees of MBTH which reduced the due to related party balance by \$52,130. A total of 12,239 registered shares remain under the April 14, 2015 S-8 Registration Statement.

On July 16, 2015, we filed an S-8 Registration Statement to register 100,000 shares of common stock under the 2015 Employee Stock Purchase Plan. From July 15, 2015 to July 20, 2015, the Company issued 24,991 shares of common stock to employees in lieu of paying \$63,224 of payroll due to cost cutting measures.



## Short-Term Loan

From April 1, 2015 to July 30, 2015, the Company received a total of \$1,010,000 in loans from George Schmitt, Chairman of the Board and Chief Executive Officer. This amount was recorded in due to related parties.

## 8% Convertible Notes

*Overview.* On June 11, 2015, the Company entered into a securities purchase agreement (the *June 2015 Purchase Agreement*) with a group of accredited investors pursuant to which the Company sold an aggregate of \$1,166,666 in principal amount of 8% Original Issue Discount Convertible Notes (the *8% Convertible Notes*) for an aggregate purchase price of \$1,050,000 (the *First Tranche*). The Company received net proceeds of \$907,500 from the sale of the notes after deducting placement agent fees and other expenses. On July 14, 2015, the Company and the investors entered into an amendment to the June 2015 Purchase Agreement (the *Amendment*) pursuant to which the Company agreed to issue an additional \$466,667 in principal amount of 8% Convertible Notes for a purchase price of \$420,000 (the *Second Tranche*) for total net proceeds to the Company of \$400,000.

*Maturity and Interest.* The First Tranche of 8% Convertible Notes will mature on December 11, 2015, and the Second Tranche of 8% Convertible Notes will mature on January 14, 2016 (each, a *Maturity Date*), less any amounts converted or redeemed prior to the Maturity Date. If the 8% Convertible Notes are not repaid by the Company by the Maturity Date, the Maturity Date shall be automatically extended for an additional three-month period until March 11, 2016 and April 14, 2016 for the First Tranche and Second Tranche, respectively

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**NOTE 16 SUBSEQUENT EVENTS (continued)**

(such period, the Extension Period ), which extension shall not be considered an event of default. The 8% Convertible Notes bear interest at a rate of 8% per annum, subject to increase to the lesser of 24% per annum or the maximum rate permitted under applicable law upon the occurrence of certain events of default.

*Conversion.* The 8% Convertible Notes are convertible at any time, in whole or in part, at the option of the holders into shares of common stock at a conversion price of \$5.00 per share, which is subject to adjustment for stock dividends, stock splits, combinations or similar events. However, during the Extension Period, the conversion price shall be the lesser of (i) \$5.00, subject to adjustment for stock dividends, stock splits, combinations or similar events, and (ii) 85% of the lowest closing price of the common stock in the twenty (20) trading days prior to the date of conversion.

*Prepayments and Redemptions.* The Company may prepay in cash any portion of the principal amount of the 8% Convertible Notes and any accrued and unpaid interest. If such prepayment is made within sixty (60) days after the issuance date of the 8% Convertible Notes, the Company shall pay an amount in cash equal to 125% of the sum of the then outstanding principal amount of the note and interest; thereafter, if such prepayment is made, the Company shall pay an amount in cash equal to 135% of the sum of the then outstanding principal amount of the note and interest. Within one (1) business day after the closing of any underwritten public offering of at least \$7,000,000 of securities of the Company pursuant to a registration statement on Form S-1 or Form S-3 (the Public Offering ), the Company shall prepay in cash an amount equal to (i) 125% of the sum of the then outstanding principal amount of the note and interest if the closing of the Public Offering occurs within sixty (60) days after the issuance date of the 8% Convertible Notes or (ii) 135% of the sum of the then outstanding principal amount of the note and interest if the closing of the Public Offering occurs after sixty (60) days following the issuance date of the 8% Convertible Notes.

*Right to Participate in Future Financings.* For so long as the 8% Convertible Notes are outstanding, the holder has a right to participate in any issuance of the Company's common stock, common stock equivalents or a combination of units thereof in an underwritten public offering (a Subsequent Financing ), in an aggregate amount of the Subsequent Financing equal to at least \$500,000, on the same terms, conditions and price provided for in the Subsequent Financing.



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# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and  
Stockholders of xG Technology, Inc.

We have audited the accompanying balance sheets of xG Technology, Inc. as of December 31, 2014 and 2013, and the related statements of income, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2014. xG Technology, Inc.'s management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of xG Technology, Inc. as of December 31, 2014 and 2013, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2014 in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has recurring losses. These conditions raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include adjustments relating to the recoverability and classification of assets carrying amounts or the amount and classification of liabilities that might result should the Company be unable to continue as a going concern.

/s/ FRIEDMAN LLP  
East Hanover, New Jersey  
March 31, 2015, except for Note 20, as to which the date is July 20, 2015

TABLE OF CONTENTS**xG TECHNOLOGY, INC.****BALANCE SHEETS  
(IN THOUSANDS EXCEPT SHARE DATA)**

	December 31,	
	2014	2013
<b>ASSETS</b>		
Current assets		
Cash	\$758	\$5,517
Inventory, net	4,070	2,916
Accounts Receivable, net of allowance of \$30 and \$16 (\$480 and \$470 from related party, net of allowance of \$10 and \$10)	702	788
Prepaid expenses and other current assets	411	49
Due from related party		1,350
Total current assets	5,941	10,620
Property and equipment, net	816	806
Intangible assets, net	16,382	18,196
Total assets	\$23,139	\$29,622
<b>LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)</b>		
Current liabilities		
Accounts payable	\$868	\$1,841
Accrued expenses	511	772
Accrued bonuses		298
Accrued interest	42	42
Due to related parties	2,110	1,526
Deferred revenue (\$480 and \$480 from related party)	480	480
Obligation under capital lease	123	129
Derivative liabilities	270	
Total current liabilities	4,404	5,088
Long-term obligation under capital lease		118
Convertible note payable	2,000	2,000
Total liabilities	6,404	7,206
Commitments and contingencies		
Series A convertible preferred stock \$0.00001 par value per share: 3,000,000 and 0 shares authorized at December 31, 2014 and 2013; 750,000 and 0 issued or outstanding as of December 31, 2014 and 2013 (liquidation preference of \$750,100 at December 31, 2014)	378	
Total convertible preferred stock	378	
Stockholders' equity (deficit)		
Preferred stock \$0.00001 par value per share: 7,000,000 and 10,000,000 shares authorized at December 31, 2014 and 2013; none issued or outstanding as of December 31, 2014 and 2013		

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Common stock, \$0.00001 par value, 100,000,000 and 300,000,000 shares authorized, 2,617,622 and 1,868,235 shares issued as of December 31, 2014 and 2013, respectively	*	*
Additional paid in capital	186,919	174,000
Accumulated deficit	(170,540)	(151,562)
Treasury stock, at cost 229 shares as of December 31, 2014 and 2013, respectively	(22 )	(22 )
Total stockholder s equity	16,357	22,416
Total liabilities and stockholders equity	\$23,139	\$29,622

\*

Less than \$1

The accompanying notes are an integral part of these statements.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****STATEMENTS OF OPERATIONS  
(IN THOUSANDS, EXCEPT PER SHARE DATA)**

	For the Year Ended December 31,	
	2014	2013
Revenue	\$ 628	\$ 406
Cost of revenue and operating expenses		
Cost of components and personnel	156	102
General and administrative expenses	7,618	5,501
Development	7,597	5,468
Stock based compensation	625	796
Amortization and depreciation	3,871	2,370
Total cost of revenue and operating expenses	19,867	14,237
Loss from operations	(19,239 )	(13,831 )
Other income (expense)		
Other income	440	
Other expense		(10,068 )
Inducement expense		(391 )
Interest expense, net	(179 )	(2,227 )
Impairment		(933 )
Total other income (expense)	261	(13,619 )
Loss before income tax provision	(18,978 )	(27,450 )
Income tax provision		
Net loss	\$ (18,978 )	\$ (27,450 )
Dividends	*	
Net loss attributable to common shareholders	(18,978 )	(27,450 )
Basic and diluted net loss per share	(8.31 )	(28.59 )
Weighted average number of shares outstanding basic and diluted	2,285	960

\*

Less than \$1

The accompanying notes are an integral part of these statements.



TABLE OF CONTENTS**xG TECHNOLOGY, INC.****STATEMENTS OF STOCKHOLDERS EQUITY  
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE  
DATA)**

	Common Stock Shares	Amount	Additional Paid In Capital	Treasury Stock	Accumulated Deficit	Total
Balance, January 1, 2013	604,195	\$ *	\$ 118,247	\$ (22 )	\$ (124,112 )	\$ (5,887 )
Net loss					(27,450 )	(27,450)
Stock based compensation			796			796
Compensation granted in stock	1,525	*	94			94
Issuance of stock in exchange for payment of interest on convertible debt	4,168	*	180			180
Conversion of 2011 Convertible Note Payable Principal Balance	112,782	*	15,000			15,000
Issuance of stock for inducement of 2011 Convertible note payable	15,933	*				
Issuance of stock for conversion of Bridge Loan and extinguishment	218,753	*	11,480			11,480
Issuance of Warrants conversion of bridge loan			392			392
Issuance of warrants for the Bridge Loan and extinguishment			401			401
Issuance of shares and warrants IPO	133,780	*	6,751			6,751
Issuance of shares and warrants IPO over-allotment	20,067	*	1,027			1,027
Issuance of shares, warrants, and modification of options for one-time agreement with MBTH	159,946	*	10,067			10,067
Issuance of shares and warrants secondary offering	571,500	*	9,147			9,147
Issuance of stock secondary offering exercise of over-allotment	25,500	*	415			415
Issuance of stock from exercise of warrants	86	*	3			3
Balance, December 31, 2013	1,868,235	\$ *	\$ 174,000	\$ (22 )	\$ (151,562 )	\$ 22,416

\*

Less than \$1

The accompanying notes are an integral part of these statements.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****STATEMENTS OF STOCKHOLDERS EQUITY  
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE  
DATA)**

	Common Stock Shares	Amount	Additional Paid In Capital	Treasury Stock	Accumulated Deficit	Total
Balance, January 1, 2014	1,868,235	\$ *	\$ 174,000	\$ (22 )	\$ (151,562 )	\$ 22,416
Net loss					(18,978 )	(18,978)
Stock based compensation			625			625
Compensation granted in stock	14,560	*	307			307
Issuance of stock as payment of 2011 and 2012 bonus	14,887	*	272			272
Issuance of stock in exchange for payment of interest on convertible debt	8,466	*	180			180
Issuance of stock third offering	526,500	*	8,816			8,816
Issuance of stock 15 million purchase agreement	27,500	*	439			439
Issuance of stock 1 million purchase agreement	50,000	*	961			961
Issuance of stock S-3 financing	104,159	*	1,302			1,302
Issuance of stock to financing agent Series A financing	3,315	*	17			17
Balance, December 31, 2014	2,617,622	\$ *	\$ 186,919	\$ (22 )	\$ (170,540 )	\$ 16,357

\*

Less than \$1

The accompanying notes are an integral part of these statements.

TABLE OF CONTENTS**xG TECHNOLOGY, INC.****STATEMENTS OF CASH FLOWS  
(IN THOUSANDS)**

	Year Ended December 31,	
	2014	2013
Cash flows used in operating activities		
Net loss	\$ (18,978 )	\$ (27,450 )
Adjustments to reconcile net loss to net cash used in operating activities		
Stock based compensation	625	796
Share-based consulting and other services	307	94
Allowance for doubtful accounts	14	16
Bad debt write-off	257	
Inventory reserve	200	
Gain from non-monetary exchange	(65 )	
Depreciation and amortization	3,871	2,370
Impairment		933
Accretion of financing instruments		176
Inducement expense		391
Other expense		10,067
Other income	(440 )	
Non-cash interest expense		601
Reversal of accrued bonus expense	(25 )	(2,335 )
Inventory write-off	159	
Changes in assets and liabilities		
Accounts receivable	(185 )	(804 )
Inventory	(1,676 )	(2,621 )
Prepaid expenses and other current assets	(3 )	293
Accounts payable	(973 )	1,186
Accrued expenses	359	21
Accrued interest and fees		1,300
Deferred revenue related party		480
Due to related parties	1,934	91
Net cash used in operating activities	(14,619 )	(14,395 )
Cash flows used in investing activities		
Capital expenditures for property and equipment	(134 )	(294 )
Capitalization of intangible assets	(1,771 )	(2,602 )
Net cash used in investing activities	(1,905 )	(2,896 )
Cash flows provided by financing activities		
Repayment of capital lease	(123 )	(123 )
Proceeds from convertible notes payable		450
Proceeds from convertible bridge loan payable (\$2,727 to related party)		4,994

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Repayment of convertible bridge loan payable		(125 )
Proceeds from issuance of common stock	11,224	17,340
Proceeds from issuance of convertible preferred stock, net of issuance costs	664	
Proceeds from issuance of warrants		1
Net cash provided by financing activities	11,765	22,537
Net (decrease) increase in cash	(4,759 )	5,246
Cash, beginning of year	5,517	271
Cash, end of year	\$ 758	\$ 5,517

The accompanying notes are an integral part of these statements.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****STATEMENTS OF CASH FLOWS (continued)  
(IN THOUSANDS)**

	Year Ended December 31,	
	2014	2013
Supplemental cash flow disclosures of investing and financing activities		
Stock issued as payment of fees under the \$15M purchase agreement	\$ 294	\$
Stock issued as payment of bonus	272	
Derivative liability in connection with conversion option and warrants	270	
Stock issued as payment for interest on convertible note	180	180
Reclassification of inventory to fixed asset	163	
Reclassification of fixed asset to inventory		293
Stock issued as payment of fees on convertible preferred stock	17	
Conversion of note payable		15,000
Conversion of convertible bridge loan payable including interest and fees		9,023
Interest and fees refinanced under the bridge loan		5,408
Due to related party refinanced under the bridge loan		1,393
Related party amount refinanced under the bridge loan		1,013
Capital lease obligation for property and equipment		370

The accompanying notes are an integral part of these statements.

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# **xG TECHNOLOGY, INC.**

## **NOTES TO FINANCIAL STATEMENTS**

### **1 NATURE OF OPERATIONS**

#### **Description of Business**

xG Technology, Inc. (the Company) is a Delaware corporation that has developed a broad portfolio of innovative intellectual property that we believe will enhance wireless communications. The Company's intellectual property is embedded in proprietary software algorithms designed to offer cognitive interference mitigation and spectrum access solutions to organizations in a wide variety of industries, including national defense and rural broadband, which represent the primary vertical markets that the Company is initially targeting.

### **2 GOING CONCERN**

The financial statements have been prepared in conformity with generally accepted accounting principles which contemplate continuation of the Company as a going concern. At December 31, 2014, the Company has an accumulated deficit of \$170.5 million and a net loss of approximately \$19.0 for year then ended. On March 1, 2015, the Company announced that it implemented cost reduction initiatives that included a decrease in the Company's workforce and other expense reductions which should decrease the monthly cash burn. As of the date of this filing, the Company believes it has sufficient liquidity to fund operations through May 2015. To date, the Company is experiencing long sales cycles in the areas that have potential for near term revenue, most notably, in the first responder, public safety, military and rural telco markets. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The ability to recognize revenue and ultimately cash receipts is contingent upon, but not limited to, acceptable performance of the delivered equipment and services. If the Company is unable to raise additional capital and or close on some of its revenue producing opportunities in the near term, the carrying value its assets may be impacted and it may be material. The financial statements do not include any adjustments related to the recovery and classification of asset carrying amounts or the amount and classification of liabilities that might result should the Company be unable to continue as a going concern.

### **3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

#### **Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Cash and Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less at the time of purchase to be cash equivalents.

### Concentrations of Credit Risk for Cash

The Company does not have any off-balance-sheet concentrations of credit risk. Credit risk is the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company's credit risk is primarily attributable to its cash and account receivables. The Company's policy is to maintain its cash with high credit quality financial institutions to limit its risk of loss exposure. During the year, the Company had cash balances in excess of the federally insured limits of \$250,000. The funds are on deposit with Wells Fargo Bank, N.A. Consequently, the Company does not believe that there is a significant risk having these balances in one financial institution. The Company has not experienced any losses in its bank accounts through December 31, 2014. For customers, management assesses the credit quality of the customer, taking into account its financial position, past experience and other factors.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(continued)**

**Inventory**

Inventories, consisting principally of raw materials and finished goods, are carried at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. Raw materials consist of purchased parts, components and supplies. The Company evaluates inventory balances and adjusts inventory to the lower of cost or market based upon anticipated usage of the inventory and the potential for obsolescence.

**Intangible Assets**

Capitalized software costs incurred in the research, design and development of software for sale to others as a separate product or embedded in a product and sold as part of the product as a whole are charged to expense until technological feasibility is established and amortized on a straight-line basis over five years, beginning when the products are offered for sale or the enhancements are integrated into the products. Management is required to use its judgment in determining whether capitalized software costs meet the criteria for immediate expense or capitalization, in accordance with Generally Accepted Accounting Principles ( GAAP ). The unamortized capitalized costs of a computer software product are compared to the net realizable value of that product and any excess is written off.

The Company s proprietary software solutions operate in a fast changing industry that may generate unknown methods of detecting and monitoring disturbances that could render our technology inferior, resulting in the Company s results of operations being materially adversely affected. The Company does, however, closely monitor trends and changes in technologies and customer demand that could adversely impact its competitiveness and overall success. It is reasonably possible that those estimates of anticipated future gross revenues, the remaining estimated economic life of the product, or both will be reduced significantly in the near term due to competitive pressures. As a result, the carrying amount of the capitalized software costs for the Company s products may be reduced materially in the near term.

Costs incurred for product enhancements are charged to expense as research and development until the technological feasibility of the enhancement has been established. These enhancements are amortized on a straight line basis over the useful life of the product enhancement which is currently estimated to be five years beginning when the enhancements are integrated into the products that are offered for sale.

The Company s software is inherently complex and may contain defects and errors that are only detectable when the products are in use. Such defects or errors could have a serious impact on our end customers, which could damage our reputation, harm our customer relationships and expose the Company to liability. Defects in the Company s software could adversely affect our ability and that of our customers to ship products on a timely basis as well as customer or licensee demand for our products. Any such delays or declines in demand could reduce the Company s revenues and

harm our ability to achieve or sustain desired levels of profitability. The Company and its customers may also experience component or software failures or defects that could require significant product recalls, rework and/or repairs that are not covered by warranty reserves. In 2014, the Company began developing a new product, the CN3200 Dual Band Routing Modem ( CN3200 ), formerly known as the xRM modem. On September 30, 2014, the Company received certification from the U.S. Federal Communications Commission in connection with the CN3200.

Intellectual property is embedded in proprietary software algorithms that offer cognitive spectrum access and interference mitigation solutions.

Patents and licenses are measured initially at purchase cost and are amortized on a straight line basis over their useful lives which range between 18.5 to 20 years.

## **Property, Plant and Equipment**

Property, plant and equipment are presented at cost at the date of acquisition. Depreciation is computed using the straight-line method over estimated useful asset lives, which range from 3 to 7 years commencing the month following the purchase.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(continued)**

**Impairment of Long-Lived Assets**

Long lived assets including certain intangible assets with finite lives are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by that asset. If the carrying amount of an asset exceeds its estimated future undiscounted cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Impairment of intangible assets amounted to \$0 and \$37,000 for the years ended December 31, 2014 and 2013, respectively. Impairment of property and equipment amounted to \$0 and \$896,000 for the years ended December 31, 2014 and 2013, respectively.

**Allowance for Doubtful Accounts**

In the event that management determines that a receivable becomes uncollectible, or events or circumstances change, which result in a temporary cessation of payments from the customer, the Company will make a best estimate of probable or potential losses in accounts receivable balance using the allowance method for each quarterly period. Management will periodically review the receivables at the end of each quarterly reporting period and the appropriate accrual will be made based on current available evidence and historical experience. Allowance for doubtful accounts were \$30,000 and \$16,000 for the years ended December 31, 2014 and 2013, respectively. The Company wrote off \$257,000 and \$0 of accounts receivable to bad debt expense for the years ended December 31, 2014 and 2013, respectively.

**Revenue Recognition**

The Company recognizes revenues when persuasive evidence of an arrangement exists, services have been rendered, the price is fixed and determinable, and collectability is reasonably assured. Revenues from management and consulting, time-and-materials service contracts, maintenance agreements and other services are recognized as the services are provided or at the time the goods are shipped and title as passed.

**Development Expenses**

Development expenses consist primarily of salaries and related costs for technical and programming personnel, are expensed as incurred and were \$7,597,000 and \$5,468,000 for the years ended December 31, 2014 and 2013, respectively.

## **Accounting for Warrants to Purchase Common Stock**

Warrants for the purchase of common stock in connection with the Series A Convertible Preferred Stock are carried at fair value and reported as a derivative liability on the accompanying balance sheets. Upon certain fundamental events the warrants could be redeemed at the option of the holder at fair market value estimated using Black Scholes. Changes in the fair value of warrants for the purchase of Series A Convertible Preferred Stock are included in other income (expense) in the statements of operations.

## **Accounting for Derivative Instruments**

The conversion feature was bifurcated from the Series A Preferred Stock as it was not considered to be clearly and closely related to the host agreement. The conversion feature had terms that require derivative liability classification on the balance sheet which is carried at fair value. Changes in the fair value of Convertible Feature for the purchase of the Series A Convertible Preferred Stock are included in other income (expense) on the statements of operations.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(continued)**

**Income Taxes**

The Company accounts for income taxes using the assets and liability method. Accordingly, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in the tax rate is recognized in income or expense in the period that the change is effective. Tax benefits are recognized when it is probable that the deduction will be sustained. A valuation allowance is established when it is more likely than not that all or a portion of a deferred tax asset will not be realized.

The Company files a U.S. federal and state income tax return. The Company recognizes liabilities for uncertain tax positions based on the two-step process prescribed by GAAP. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires the Company to estimate and measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. The Company reevaluates these uncertain tax positions on a quarterly basis. This evaluation is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision in the period. The Company recognizes interest and penalties as incurred in finance income (expense), net in the Statements of Operations. There were no liabilities recorded for uncertain tax positions at December 31, 2014 and 2013.

**Stock Based Compensation**

The Company accounts for stock-based awards to employees in accordance with applicable accounting principles, which requires compensation expense related to share-based transactions, including employee stock options, to be measured and recognized in the financial statements based on a determination of the fair value of the stock options.

The grant date fair value is determined using the Black-Scholes-Merton ( Black-Scholes ) pricing model. For all employee stock options, the Company recognizes expense over the employee's requisite service period (generally the vesting period of the equity grant). The Company's option pricing model requires the input of highly subjective assumptions, including the expected stock price volatility, expected term, and forfeiture rate. Any changes in these highly subjective assumptions significantly impact stock-based compensation expense.

Options awarded to purchase shares of common stock issued to non-employees in exchange for services are accounted for as variable awards in accordance with applicable accounting principles. Such options are valued using the Black-Scholes option pricing model.

## **Treasury Stock**

Shares of common stock repurchased are recorded at cost as treasury stock. When shares are reissued, the cost method is used for determining cost. In accordance with GAAP, the excess of the acquisition cost over the reissuance price of the treasury stock, if any, is recorded to additional paid-in capital, limited to the amount previously credited to additional paid-in capital, if any. Any excess is charged to accumulated deficit.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(continued)**

**Earnings Per Share**

Basic earnings per common share amounts are based on weighted average number of common shares outstanding. Diluted earnings per share amounts are based on the weighted average number of common shares outstanding, plus the incremental shares that would have been outstanding upon the assumed exercise of all potentially dilutive stock options, warrants and convertible stock, subject to anti-dilution limitations. All such potentially dilutive instruments were anti-dilutive as of December 31, 2014 and 2013. At December 31, 2014 and 2013 approximately 0.7 million and 0.5 million shares underlying the convertible debentures, options and warrants were anti-dilutive.

**Warranty Reserve**

Although the Company tests its product in accordance with its quality programs and processes, its warranty obligation is affected by product failure rates and service delivery costs incurred in correcting a product failure. Should actual product failure rates or service costs differ from the Company's estimates, which are based on limited historical data, where applicable, revisions to the estimated warranty liability would be required. The warranty reserve for the fiscal year ending December 31, 2014 and 2013 was \$9,000 and \$8,000, respectively.

**Fair Value of Financial Instruments**

Generally accepted accounting principles require disclosing the fair value of financial instruments to the extent practicable for financial instruments which are recognized or unrecognized in the balance sheet. The fair value of the financial instruments disclosed herein is not necessarily representative of the amount that could be realized or settled, nor does the fair value amount consider the tax consequences of realization or settlement.

In assessing the fair value of financial instruments, the Company uses a variety of methods and assumptions, which are based on estimates of market conditions and risks existing at the time. For certain instruments, including cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses, it was estimated that the carrying amount approximated fair value because of the short maturities of these instruments. All debt is based on current rates at which the Company could borrow funds with similar remaining maturities and approximates fair value.

GAAP establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use on unobservable inputs by requiring that the most observable inputs be used when available.

Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The hierarchy is described below:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****NOTES TO FINANCIAL STATEMENTS****3 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES  
(continued)**

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2014, consistent with the fair value hierarchy provisions:

	Quoted Prices in Active Markets for Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Carrying Amount
<b>Assets:</b>				
Cash	\$ 758,000	\$	\$	\$ 758,000
<b>Liabilities:</b>				
Convertible note payable	\$	\$ 29,000	\$	\$ 2,000,000
Preferred stock conversion feature	\$	\$	\$ 150,000	\$ 150,000
Preferred stock warrants	\$	\$	\$ 120,000	\$ 120,000

The following table presents the Company's assets and liabilities that are measured at fair value on a recurring basis at December 31, 2013, consistent with the fair value hierarchy provisions:

	Quoted Prices in Active Markets for Identical Assets/Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Carrying Amount
<b>Assets:</b>				
Cash	\$ 5,517,000	\$	\$	\$ 5,517,000
<b>Liabilities:</b>				
Convertible note payable	\$	\$ 90,000	\$	\$ 2,000,000

**Recently Issued Accounting Principles**

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. We will remain an emerging growth company for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceed \$1 billion, (ii) the date that we become a large accelerated filer as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding

three-year period. Pursuant to Section 107 of the JOBS Act, we have elected to utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

In May 2014, the Financial Accounting Standards Board ( FASB ) issued Accounting Standards Update ( ASU ) No. 2014-09, *Revenue from Contracts with Customers: Topic 606*. This update affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of nonfinancial assets, unless those contracts are within the scope of other standards. The guidance in this update supersedes the revenue recognition requirements in Topic 605, *Revenue Recognition* and most industry-specific guidance. The core principle of the guidance is that an entity should recognize revenue to illustrate the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The new guidance also includes a cohesive set of disclosure requirements that will provide users of financial statements with comprehensive information about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a reporting organization's contracts with customers. This ASU is effective retrospectively for

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(continued)**

fiscal years, and interim periods within those years beginning after December 15, 2016 for public companies and 2017 for non-public entities. Management is evaluating the effect, if any, on the Company's financial position and results of operations.

In June 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-12, Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period. The amendments in the ASU require that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. A reporting entity should apply existing guidance in Topic 718, Compensation—Stock Compensation, as it relates to awards with performance conditions that affect vesting to account for such awards. The performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering service and still be eligible to vest in the award if the performance target is achieved. Management is evaluating the effect, if any, on the Company's financial position and results of operations.

**4 INVENTORY**

Inventories included in the accompanying balance sheet are stated at the lower of cost or market as summarized below:

	December 31, 2014	December 31, 2013
Raw materials consisting of purchased parts, components and supplies	\$2,084,000	\$2,461,000
Finished goods	2,186,000	455,000
Sub-total inventories	4,270,000	2,916,000
Less inventory reserve	(200,000 )	
Total inventory net	\$4,070,000	\$2,916,000

Based upon the Company's analysis of the lower of cost or market, the Company recorded a reserve for inventory of \$200,000 and \$0 as of December 31, 2014 and 2013. The Company wrote-off \$159,000 and \$0 of inventory for the years ending December 31, 2014 and 2013, respectively.

## 5 ACCOUNTS RECEIVABLE

Accounts receivable consist of the following:

	December 31, 2014	December 31, 2013
Accounts receivable	\$ 252,000	\$ 324,000
Accounts receivable related party (see note 17)	480,000	480,000
	732,000	804,000
Net allowance for doubtful accounts	(30,000 )	(16,000 )
Net accounts receivable	\$ 702,000	\$ 788,000

The Company wrote off \$257,000 and \$0 of accounts receivable to bad debt expense for the years ended December 31, 2014 and 2013, respectively.

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****NOTES TO FINANCIAL STATEMENTS****6 PROPERTY AND EQUIPMENT**

Property and equipment consist of the following:

	Useful Life (years)	December 31, 2014	2013
Cost:			
Furniture and equipment	3 - 7 years	\$ 2,930,000	\$ 2,633,000
Accumulated depreciation		(2,114,000)	(1,827,000)
Property and equipment, net		\$ 816,000	\$ 806,000

Depreciation of property and equipment amounted to \$287,000 and \$393,000 for the years ended December 31, 2014 and 2013, respectively. The Company reclassified inventory totaling \$163,000 into equipment in 2014.

Impairment of property and equipment amounted to \$0 and \$896,000 for the years ended December 31, 2014 and 2013, respectively. The impairment charge of \$896,000 in 2013 was related to hardware with a cost of \$2,193,000 and an accumulated depreciation of \$1,297,000.

**7 INTANGIBLE ASSETS**

Intangible assets consist of the following:

	Software Development Costs		Patents & Licenses		Total
	Cost	A.A.	Cost	A.A.	
Balance as of December 31, 2012	\$12,226,000	\$(1,261,000)	\$12,272,000	\$(5,629,000)	\$17,608,000
Additions	2,562,000		39,000		2,601,000
Impairments			(36,000)		(36,000)
Amortization		(1,313,000)		(664,000)	(1,977,000)
Balance as of December 31, 2013	\$14,788,000	\$(2,574,000)	\$12,275,000	\$(6,293,000)	\$18,196,000
Additions	1,667,000		103,000		1,770,000
Impairments					
Amortization		(2,920,000)		(664,000)	(3,584,000)
Balance as of December 31, 2014	\$16,455,000	\$(5,494,000)	\$12,378,000	\$(6,957,000)	\$16,382,000

Amortization of intangible assets amounted to \$3,584,000 and \$1,977,000 for 2014 and 2013, respectively. The total cost basis of intangible assets at December 31, 2014 was \$28.8 million which consists of \$26.9 million of costs that are subject to amortization at December 31, 2014 and \$1.9 million of assets that are not subject to amortization at December 31, 2014.

**Software Development Costs:**

At December 31, 2014 the Company has capitalized a total of \$16.5 million of software development costs. Included in the capitalized costs is \$1.8 million of costs associated with enhancement of the xMax cognitive radio products. These costs are not being amortized considering that the enhancement is not yet incorporated in products and available for sale. The Company recognized amortization of software development costs available for sale of \$2.9 million and \$1.3 million in 2014 and 2013, respectively.

**Patents & Licenses:**

At December 31, 2014 the Company has capitalized a total of \$12.4 million of patents & licenses. Included in the capitalized costs is \$12.3 million of costs associated with patents and licenses that have been filed. Also included in the capitalized costs is \$0.1 million of costs associated with provisional patents and pending applications which have not yet been filed. The Company amortizes patents and licenses that have been filed over their useful lives which range between 18.5 to 20 years. The costs of provisional patents and pending applications is not amortized until the patent is filed and is reviewed each reporting period to

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****NOTES TO FINANCIAL STATEMENTS****7 INTANGIBLE ASSETS (continued)**

determine if it is likely that the patent will be successfully filed. The Company recognized \$0.7 million of amortization expense related to patents and licenses in each of the years ended December 31, 2014 and 2013.

Estimated amortization expense for the succeeding five years is as follows:

2015	\$ 3,589,000
2016	3,037,000
2017	2,980,000
2018	2,179,000
2019 and thereafter	2,679,000
	\$ 14,464,000

**8 OBLIGATION UNDER CAPITAL LEASE**

The future minimum payments for capital leases as at December 31, 2014 are as follows:

2015	\$ 125,500
Total minimum lease payments	125,500
Less amount representing interest	(2,500 )
Present value of the net minimum lease payments	123,000
Less obligations under capital lease maturing within one year	(123,000 )
Long-term portion of obligations under capital lease	\$

The interest rate on the capital lease agreement is 4% annually.

**9 CONVERTIBLE NOTE PAYABLE****Treco**

On October 6, 2011, the Company entered into a convertible promissory note (the "\$2 Million Convertible Note") in favor of Treco International, S.A. ("Treco"), as part of the settlement compensation to Treco for terminating the infrastructure agreement. The \$2 Million Convertible Note is payable on final maturity, October 6, 2018 and is convertible, at Treco's option, into common shares of the Company at a price of \$350.00 per share. Interest at the rate of 9% per year is payable semi-annually in cash or shares, at the Company's option. As of December 31, 2014, \$2 million of principal balance was outstanding under the \$2 million Convertible Note. The accrued interest was \$42,329 and \$42,329 at December 31, 2014 and 2013, respectively. On May 7, 2014, the Company issued 3,410 shares in repayment of \$90,000 of interest. On November 5, 2014, the Company issued 5,057 shares in repayment of \$90,000 of interest.





TABLE OF CONTENTS**xG TECHNOLOGY, INC.****NOTES TO FINANCIAL STATEMENTS****10 INCOME TAXES**

The provision (benefit) for income taxes consists of the following:

	December 31,	
	2014	2013
Current tax provision		
Federal	\$	\$
State		
Deferred tax provision		
Federal		
State		
Income tax provision	\$	\$

A reconciliation of the statutory tax rate to the effective tax rate is as follows:

	December 31,			
	2014		2013	
Statutory Federal income tax rate	35	%	35	%
State and local taxes net of Federal benefit	5.50	%	5.50	%
Permanent differences	(1.90)	)%	(1.24)	)%
Valuation allowance	(38.60)	)%	(39.26)	)%
Effective tax rate	0	%	0	%

There were no uncertain tax positions taken, or expected to be taken, in a tax return that would be determined to be an unrecognized tax benefit taken or expected to be taken in a tax return that should have been recorded on the Company's financial statements for the years ended December 31, 2014 or 2013.

Deferred income taxes reflect the tax effects of temporary differences between the carrying amounts of assets and liabilities for financial accounting purposes and the amounts used for income tax reporting. Significant components of the Company's deferred tax assets are as follows:

	December 31,	
	2014	2013
Deferred tax assets		
Net operating loss carry forwards	\$ 53,634,000	\$ 48,122,000
Research and development tax credit carry forwards	1,869,000	1,207,000
Change in fair value of options and warrants		

Accrued expenses		96,000
Total deferred tax asset	55,503,000	49,425,000
Valuation allowance	(55,503,000)	(49,425,000)
	\$	\$

Net operating losses ( NOL ) of approximately \$132.4 million will expire beginning in 2027 for federal and state purposes. The Company also has research and development credits of approximately \$1.9 million which will begin to expire in 2027.

Realization of the NOL carry forwards and other deferred tax temporary differences is contingent on future taxable earnings. The Company's deferred tax asset was reviewed for expected utilization using a more likely than not approach by assessing the available positive and negative evidence surrounding its

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TABLE OF CONTENTS**xG TECHNOLOGY, INC.****NOTES TO FINANCIAL STATEMENTS****10 INCOME TAXES (continued)**

recoverability. Accordingly, a valuation allowance has been recorded against the Company's deferred tax asset, as it was determined based upon past and present losses that it was more likely than not that the Company's deferred tax assets would not be realized. The valuation allowance was increased to the full carrying amount of the Company's deferred tax assets. In future years, if the deferred tax assets are determined by management to be more likely than not to be realized, the recognized tax benefits relating to the reversal of the valuation allowance as of December 31, 2014 will be recorded. The Company will continue to assess and evaluate strategies that will enable the deferred tax asset, or portion thereof, to be utilized, and will reduce the valuation allowance appropriately as such time when it is determined that the more likely than not criteria is satisfied. The federal and state tax returns for the years ending December 31, 2011, 2012 and 2013 are currently open.

**11 DERIVATIVE LIABILITIES****Series A Convertible Preferred Stock Conversion Option**

On December 30, 2014, the Company entered into a purchase agreement pursuant to which the Company sold to 31 Group, 750,000 of the Company's Series A Convertible Preferred Stock (the Preferred Stock). The Preferred Stock are convertible, in whole or in part, at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the average of the five (5) lowest volume weighted average prices of the common stock during the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice. The conversion feature was bifurcated from the Preferred Stock as it was not considered to be clearly and closely related to the host agreement and is accounted for as a derivative liability.

**Warrants to Purchase Common Stock**

In connection with the issuance of Series A Convertible Preferred Stock, the Company issued warrants to purchase up to 37,500 shares of Common Stock (the Warrants). The Warrants have an exercise price of \$20.00 per share (the Exercise Price). Warrants covering up to 37,500 shares of Common Stock are exercisable at any time on or before December 31, 2019. The Warrants are accounted for as derivative liability as they can be redeemed by the holder for fair market value upon certain fundamental transactions.

The table below sets forth a summary of changes in the fair value of the Company's Level 3 derivative liabilities for the year ended December 31, 2014:

Balance at beginning of year	\$
Additions to conversion option derivative liability at December 30, 2014	150,000
Additions to warrant derivative liability at December 30, 2014	120,000
Change in fair market value of the derivative liabilities	

Balance at end of year

\$ 270,000

These instruments were valued using pricing models that incorporate the price of a share of Common Stock, volatility, risk free rate, dividend rate and estimated life. The Company computed the fair value using the Black-Scholes model as of December 30, 2014. There was no change in fair value of the instruments at December 31, 2014.

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The following are the key assumptions used in connection with the valuation of the conversion option on the date of issuance and at December 31, 2014:

Number of preferred shares	750,000	
Fair market value of stock	\$ 5.10	
Conversion Price	\$ 5.70	
Volatility	131	%
Risk-free interest rate	0.13	%
Expected dividend yield	0	%
Life of Convertible Preferred Stock (year)	1	
Number of shares underlying the Warrants	37,500	
Fair market value of stock	\$ 5.10	
Exercise Price	\$ 20.00	
Volatility	112.9	%
Risk-free interest rate	0.96	%
Expected dividend yield	0	%
Warrant life (years)	5	

The risk-free rate is based on the rate for the U.S. Treasury note over the expected terms. The expected term is the full term of the warrant and preferred stock. Expected volatility is based on the average of the weekly share price changes over the shorter of the expected term or the period from the placement on London Stock Exchange's AIM Market to the date of the grant.

**12 PREFERRED STOCK**

In March 2013, by approval of the majority of the shareholders, the Company was authorized to issue 10,000,000 shares of Blank Check preferred stock, par value \$0.00001 per share. On December 30, 2014, 3,000,000 shares were designated as authorized Series A Convertible Preferred Stock.

**Series A Convertible Preferred Stock**

On December 30, 2014, the Company entered into a Securities Purchase Agreement (the Purchase Agreement) with 31 Group, LLC (31 Group) pursuant to which the Company sold to 31 Group, for a purchase price of \$750,000, 750,000 shares of Series A Convertible Preferred Stock, par value \$0.00001 per share (the Series A Preferred Stock) and warrants (the Warrants) to purchase 37,500 shares of common stock. The Company also issued to 31 Group 3,315 shares of common stock in consideration of 31 Group's execution and delivery of the Purchase Agreement (the Commitment Shares). The offer and sale of the Series A Preferred Stock, the common stock issuable upon conversion of the Series A Preferred Stock and the Commitment Shares were made pursuant to the Shelf Registration Statement.

The Warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

#### **Holder Optional Redemption after Maturity Date**

At any time from and after the tenth business day prior to the maturity date, December 30, 2015, any holder may require the Company to redeem all or any number of Series A Preferred Stock held by such holder at a purchase price equal to 105% of the conversion amount.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**12 PREFERRED STOCK (continued)**

**Ranking**

The Series A Preferred Stock will rank with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company senior to all of the Company's common stock and other classes of capital stock, unless the holders of a majority of the outstanding shares of Series A Preferred Stock consent to the creation of parity stock or senior preferred stock.

**Liquidation Preference of Series A Preferred Stock**

Upon the voluntary or involuntary liquidation, dissolution or winding up of the Company, before the payment of any amount to the holder of shares of junior stock, but pari passu with any parity stock, the holders of Series A Preferred Stock are entitled to receive an amount equal to the greater of (i) the stated value of the Series A Preferred Stock or (ii) the amount the holder of Series A Preferred Stock would receive if such holder converted the Series A Preferred Stock into common stock immediately prior to the date of the liquidation event, including accrued and unpaid dividends.

**Dividends on Series A Preferred Stock**

Holders of Series A Preferred Stock shall be entitled to receive from the first date of issuance of the Series A Preferred Stock cumulative dividends at a rate of 7.0% per annum on a compounded basis. The Company shall have the right to pay dividends in cash or shares of common stock on the Maturity Date or in cash on any applicable redemption date or, with respect to Series A Preferred Stock subject to conversion into common stock, as part of the conversion amount.

**Redemption of Series A Preferred Stock**

Upon the occurrence of certain triggering events as defined in the certificate of designation, the holder of Series A Preferred Stock shall have the right to require the Company, by written notice, to redeem all or any of the shares of Series A Preferred Stock at a price equal to the greater of (i) 125% of the conversion amount to be redeemed and (ii) the product of (a) the conversion amount divided by 85% of the average of the five (5) lowest volume weighted average prices of the common stock during the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice multiplied by (b) 125% of the greatest closing sale price of the common stock on any trading day during the period commencing on the date immediately preceding such triggering event and ending on the date the Company makes the entire redemption payment to the holder of Series A Preferred Stock.

Upon the occurrence of a change in control of the Company, a holder of Series A Preferred Stock shall have the right to require the Company to redeem all or any portion of the Series A Preferred Stock at a price equal to 125% of the stated value of the Series A Preferred Stock. In addition, so long as certain conditions do not exist (including the

Company shall have timely delivered any Common Stock upon the conversion of the Series A Preferred Stock), then the Company shall have the right to redeem all, but not less than all, of the Series A Preferred Stock outstanding in cash at a price equal to the sum of (i) 125% of the stated value of the Series A Preferred Stock and (ii) all accrued and unpaid dividends thereon.

At any time from and after the tenth (10) business day prior to the date of maturity, a holder of the Series A Preferred Stock may require the Company to redeem all or any number of Series A Preferred Stock shares held by such holder at a purchase price equal to 105% of the conversion amount of such Series A Preferred Stock shares.

### **Conversion Rights of Preferred Stock**

A holder of Series A Preferred Stock shall have the right to convert the Series A Preferred Stock, in whole or in part, upon written notice to the Company at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the average of the five (5) lowest volume weighted average prices of the Common Stock during the twenty (20) consecutive trading day period ending the trading day immediately preceding the delivery of the applicable conversion notice (as adjusted for stock splits, share combinations and similar transactions).

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**12 PREFERRED STOCK (continued)**

**Fundamental Transaction**

The Company shall use its commercially reasonable efforts to not enter into a fundamental transaction unless the successor entity assumes the obligations of the Company under the Certificate of Designations and the successor entity (including its parent entity) is a publicly traded company whose shares of common stock are quoted or listed on an eligible national securities exchange. Upon a change of control of the Company, a holder of Series A Preferred Stock shall have the right to require the Company to redeem all or any portion of the Series A Preferred Stock at the applicable premium redemption price. A fundamental transaction is a transaction in which (i) the Company, directly or indirectly, in one or more related transactions, (a) consolidates or merges with or into any other entity (except where the Company is the surviving entity), (b) sells, leases, licenses, assigns, transfers, conveys or otherwise disposes of all or substantially all of its properties or assets to any other entity, (c) allows any other entity to make a purchase, tender or exchange offer that is accepted by such holders of more than 50% of the outstanding shares of voting stock of the Company (not including any shares of voting stock of the Company held by the entity making or party to, or associated or affiliated with the entity making or party to, such purchase, tender or exchange offer), or (d) consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with any other entity whereby such other entity acquires more than 50% of the outstanding shares of voting stock of the Company (not including any shares of voting stock of the Company held by the other entity making or party to, or associated or affiliated with the other entity making or party to, such stock or share purchase agreement or other business combination), or (e) reorganizes, recapitalizes or reclassifies the Common Stock (which shall not include a reverse stock split), or (ii) any person or group (as these terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act of 1934, as amended, (the Exchange Act ) and the rules and regulations promulgated thereunder) is or shall become the beneficial owner (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of 50% of the aggregate ordinary voting power represented by issued and outstanding voting stock of the Company.

**Voting Rights**

Holders of Series A Preferred Stock shall have no voting rights.

**13 EQUITY**

**April 2014 Offering**

On April 22, 2014, the Company closed an underwritten public offering of 526,500 shares of common stock, at a purchase price to the public of \$19.00 per share, for net proceeds to the Company, after deducting underwriter discounts and offering expenses, of \$8,816,000. Roth Capital Partners and Feltl and Company acted as underwriters for the offering.

### **Reduction in Authorized Shares**

On June 11, 2014, the Board approved a resolution to amend the Corporation's Certificate of Incorporation, declaring said resolution to be advisable, and calling for the submission of the following resolution to the shareholders to authorize the Board to decrease the number of authorized shares of common stock from 300,000,000 shares to 100,000,000 shares.

### **Purchase Agreements and Registration Rights Agreement with Lincoln Park**

#### **\$1,000,000 Purchase Agreement**

On September 22, 2014, the Company entered into a Purchase Agreement with Lincoln Park Capital Fund ( Lincoln Park ), pursuant to which we offered 50,000 shares of common stock to Lincoln Park at a price of \$20.00 per share, for an aggregate purchase price of \$961,000 net of expenses. The closing of the transaction occurred on September 24, 2014. The Company issued the 50,000 shares of common stock pursuant to the Company's registration statement on Form S-3 that was declared effective on August 31, 2014 (the Shelf registration Statement ).

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**13 EQUITY (continued)**

**\$15,000,000 Purchase Agreement**

On September 19, 2014, the Company entered into a Purchase Agreement (the "\$15M Purchase Agreement") and a registration rights agreement with Lincoln Park. In consideration for entering into the transaction, the Company issued 17,500 shares of its common stock to Lincoln Park as a commitment fee upon execution of the \$15M Purchase Agreement. The Company recorded \$346,000 as a prepaid expense based upon a stock price of \$19.80 on the date of issuance. Lincoln Park also agreed to purchase up to \$15,000,000 of shares of common stock over the 24-month term of the \$15M Purchase Agreement.

The \$15M Purchase Agreement provides that, from time to time over the term of the \$15M Purchase Agreement, on any business day, as often as every other business day, and at its sole discretion, the Company may require Lincoln Park to purchase up to 10,000 shares of common stock (a "Regular Purchase"); provided, however, that (i) a Regular Purchase may be increased to up to 15,000 shares of common stock provided that the closing sale price of common stock is not below \$20.00 on the purchase date, (ii) a Regular Purchase may be increased to up to 20,000 shares of common stock provided that the closing sale price of common stock is not below \$22.50 on the purchase date and (iii) a Regular Purchase may be increased to up to 25,000 shares of common stock provided that the closing sale price of common stock is not below \$30.00 on the purchase date; and provided, further, that the aggregate price of any Regular Purchase shall not exceed \$1,000,000. The Company may not sell any shares of its common stock as a Regular Purchase on a date in which the closing sale price of its common stock is below \$15.00. The purchase price for Regular Purchases shall be equal to the lesser of (i) the lowest sale price of common stock on the purchase date and (ii) the average of the three (3) lowest closing sale prices of common stock during the ten (10) business days prior to the purchase date, as reported on the NASDAQ Capital Market.

The Company also has the right, at its sole discretion, to require Lincoln Park to make an accelerated purchase on the business day following the purchase date of a Regular Purchase in an amount up to the lesser of (i) 200% of the number of shares of common stock purchased as a Regular Purchase and (ii) 30% of the trading volume of common stock on such accelerated purchase date, provided that the closing price of common stock equals or exceeds \$15.00 on such accelerated purchase date, as reported on the NASDAQ Capital Market. The purchase price per share of common stock for any accelerated purchase will be equal to the lesser of (i) the closing sale price of common stock on the accelerated purchase date and (ii) 95% of the volume weighted average price of common stock on the accelerated purchase date.

On October 3, 2014, the Company filed a registration statement on Form S-1 with the SEC to register 478,291 shares of the Company's common stock for sale to Lincoln Park under the \$15M Purchase Agreement and 17,500 shares of common stock issued to Lincoln Park on September 19, 2014 as a commitment fee. On October 20, 2014, the SEC declared this registration statement effective.

As of December 31, 2014, the Company has drawn down \$145,000 and issued 10,000 shares of common stock under the \$15M Purchase Agreement. The Lincoln Park prepaid expense was \$294,000 as of December 31, 2014,

representing a decrease of \$52,000 from the initial recording of \$346,000. The Company is amortizing the prepaid balance to additional paid in capital on a straight line basis over the term of the agreement.

**\$1,331,500 Purchase Agreement**

On November 25, 2014, the Company entered into a purchase agreement, pursuant to which the Company sold to Lincoln Park, certain officers and directors of the Company (the Affiliate Purchasers ) and certain other investors (the Other Investors ) an aggregate of \$1,331,500 of the Company's common stock,. The Company received net proceeds of \$1,311,500 after deducting \$20,000 in expenses associated with the purchase agreement. Pursuant to the Purchase Agreement, Lincoln Park purchased 50,000 shares of Common Stock at a purchase price of \$12.50 per share, the Affiliate Purchasers purchased 24,599 shares of Common

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Stock at a purchase price of \$13.70 per share and the Other Investors purchased 29,560 shares of Common Stock at a purchase price of \$12.50 per share pursuant to the Company's Shelf Registration Statement.

**Equity Distribution Agreement with Roth Capital Partners, LLC**

On November 18, 2014, we entered into an Equity Distribution Agreement (the "Equity Distribution Agreement") with Roth Capital Partners, LLC ("Roth"), pursuant to which the Company may sell from time to time up to \$10,000,000 of shares of common stock (the "Shares"), through Roth (the "Offering"). The Equity Distribution Agreement was amended on December 29, 2014 to change the amount of the Offering to up to \$1,000,000. Effective February 23, 2015, the Company terminated the Equity Distribution Agreement with Roth.

**Issuance of common stock to 31 Group**

On December 30, 2014, the Company issued 3,315 shares of its common stock in consideration of 31 Group's execution and delivery of the Purchase Agreement (See Note 12 - Series A Convertible Preferred Stock).

**Stock Options Equity Incentive Plans:**

The Company's stock option plans provide for the grant of options to purchase shares of common stock to officers, directors, other key employees and consultants. The purchase price may be paid in cash or "net settled" in shares of the Company's common stock. In a net settlement of an option, the Company does not require a payment of the exercise price of the option from the optionee, but reduces the number of shares of common stock issued upon the exercise of the option by the smallest number of whole shares that has an aggregate fair market value equal to or in excess of the aggregate exercise price for the option shares covered by the option exercised. Options generally vest over a three year period from the date of grant and expire ten years from the date of grant.

A summary of the Company's historical stock option plan activity as of December 31, 2014 is as follows:

Plan Name	Options Authorized	Options Granted	Shares Exercised	Shares Forfeited/Expired	Options Outstanding
2004	14,286	14,286	6,746	4,683	2,858
2005	14,286	14,286	1,000	5,858	7,429
2006	31,429	31,011	631	7,224	23,156
2007	2,857	2,572		429	2,143
2009	28,572	35,844	1,005	11,312	23,529
2013	90,630	41,323		4,555	36,768
Total	182,060	139,322	9,382	34,061	95,883

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Under ASC 718, the weighted average fair value of options granted was \$12.20 and \$19.90 for options granted in 2014 and 2013, respectively. Each option is estimated on the date of grant, using the Black-Scholes model and the following assumptions (all in weighted averages):

	2014	2013
Exercise price	\$ 14.20	\$ 24.30
Volatility	118 %	109 %
Risk-free interest rate	1.63 %	1.37 %
Expected dividend yield	0 %	0 %
Expected term (years)	6	6

The risk-free rate is based on the rate for the U.S. Treasury note over the expected term of the option. The expected term for employees represents the period of time that options granted are expected to be

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outstanding using the simplified method, for non-employee options the expected term is the full term of the option. Expected volatility is based on the average of the weekly share price changes over the shorter of the expected term or the period from the placement on London Stock Exchange's AIM Market to the date of the grant. The forfeiture rate is based on historical data related to prior option grants, as we believe such historical data will be similar to future results.

A summary of the status of the Company's stock option plans for the years ended December 31, 2014 and 2013 is as follows:

	Number of Options (in Shares)	Weighted Average Exercise Price
Options Outstanding January 1, 2013	70,091	\$ 381.50
Granted	33,417	24.30
Exercised		
Forfeited or Expired	(5,209 )	131.60
Options outstanding, December 31, 2013	98,299	280.50
Exercisable, December 31, 2013	57,127	\$ 447.90
Options Outstanding, January 1, 2014	98,299	\$ 280.50
Granted	10,760	14.20
Exercised		
Forfeited or Expired	(13,178 )	158.70
Options outstanding, December 31, 2014	95,881	266.80
Exercisable, December 31, 2014	65,614	\$ 376.00

Summary information regarding the options outstanding and exercisable at December 31, 2014 is as follows:

Range of Exercise Prices	Outstanding		Weighted Average Exercise Price	Exercisable	
	Number Outstanding (in shares)	Weighted Average Remaining Contractual Life (in years)		Number Exercisable (in shares)	Weighted Average Exercise Price
\$10.50 - 80.50	47,461	8.41	\$ 29.40	20,470	\$ 47.30
84.00 - 238.00	22,307	5.06	147.40	19,031	147.40
350.00 - 700.00	23,528	1.19	688.30	23,528	688.30
1,225.00 - 2,887.50	2,585	2.02	1,819.80	2,585	1,819.80
	95,881			65,614	

Under the provisions of ASC 718, the Company recorded approximately \$625,000 and \$796,000 of stock based compensation expense for the years ended December 31, 2014 and 2013, respectively. Stock based compensation for employees was approximately \$305,000 and \$421,000 and stock based compensation expense for non-employees was approximately \$320,000 and \$375,000 for the years ended December 31, 2014 and 2013, respectively. As of December 31, 2014 and 2013, there was approximately \$0.6 million and \$1.2 million, respectively, of unrecognized compensation cost related to non-vested options under the plans.

In 2014 and 2013, no options were exercised. The intrinsic value of options exercisable at December 31, 2014 and 2013 was \$0 and \$0, respectively. The total fair value of shares vested during 2014 and 2013 was \$830,000 and \$846,000, respectively.

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We had approximately \$0.6 million of unrecognized stock-based compensation expense related to unvested stock options, net of estimated forfeitures, as of December 31, 2014, which we expect to be recognized over the next three years.

Deferred tax benefits recognized from the timing difference of recognizing stock based compensation expense per the financial statements compared to the income tax return has been fully reserved for as the Company is in a net loss position. No windfall tax benefits have been recognized for the exercise of stock options.

**Warrants:**

The Company has issued warrants, outside of the equity incentive plans, at exercise prices equal to or greater than market value of the Company's common stock at the date of issuance.

A summary of the warrant and option activity is as follows:

	Number of Options/Warrants (in Shares)	Weighted Average Exercise Price
Warrants Outstanding January 1, 2013	59,431	\$ 259.00
Granted	365,272	66.10
Exercised	(87 )	3.50
Forfeited or Expired		
Warrants Outstanding, December 31, 2013	424,616	65.30
Exercisable, December 31, 2013	424,616	\$ 65.30
Warrants Outstanding, January 1, 2014	424,616	\$ 65.30
Granted	37,500	20.00
Exercised		
Forfeited or Expired		
Warrants Outstanding, December 31, 2014	462,116	61.60
Exercisable, December 31, 2014	462,116	\$ 61.60

Summary information regarding the warrants as of December 31, 2014 is as follows:

Exercise Price	Number Outstanding (in shares)	Weighted Average Remaining Contractual Life

		(in years)
\$3.50	7,074	3.65
\$20.00	37,500	5.00
\$21.88	17,145	3.89
\$55.00	57,144	1.13
\$68.70	326,680	3.66
\$78.70	1,429	0.28
\$8.75	14,286	3.04
\$350.00	858	2.20
Exercisable, December 31, 2014	462,116	

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**14 RETIREMENT PLAN**

The Company has a 401(k) plan for all full-time employees who have attained the age of 21 and completed 90 days. The Company does not provide any match for the 401(k).

**15 COMMITMENTS**

The Company's office rental, deployment sites and warehouse facilities expenses aggregated approximately \$437,000 and \$304,000 of which \$0 and \$83,000 was capitalized during the years ended December 31, 2014 and 2013, respectively. The leases will expire on different dates from 2015 through 2019. The company also entered into contract agreements with one of its principal vendors to provide parts for production totaling \$1,634,000. Total obligation of purchasing parts under contractual agreements, minimum future annual rentals, exclusive of real estate taxes and related costs, are approximately as follows:

Year Ending December 31,	
2015	\$ 2,069,000
2016	217,000
2017	84,000
2018	87,000
2019	66,000
	\$ 2,523,000

The Company has an employment agreement with its CEO, John Coleman, for a term of three years with automatic renewals unless terminated. Mr. Coleman's agreement was effective on August 1, 2011. It provides that he will receive a salary of no less than \$250,000 per year, subject to annual increases as determined by the Board. In addition, he is entitled to incentive compensation not to exceed two times his base salary. The incentive compensation is payable in shares of common stock at the Company's discretion. He is also entitled to participate in all other benefits that the Company may provide to other senior executives. The agreement contains a non-compete and non-solicitation agreement.

On February 17, 2015, John Coleman resigned from his position of Chief Executive Officer effective immediately. Mr. Coleman's resignation was not a result of any disagreements with the Company. Mr. Coleman will stay on the xG Board and manage the governmental/expeditionary portions of the business.

In connection with this transition, on February 17, 2015, the Company's Board of Directors (the Board) appointed George Schmitt, the Company's Executive Chairman, to the role of Chief Executive Officer. Mr. Schmitt will perform the services and duties that are normally and customarily associated with the Chief Executive Officer position, as well as other duties as the Board reasonably determines.

## 16 CONCENTRATIONS

During the year ended December 31, 2014, the Company recorded sales to two customers of \$204,000 (32%) and \$100,000 (16%) in excess of 10% of the Company's total sales. The Company also recorded consulting revenue of which \$200,000 (32%) came from one customer.

At December 31, 2014, approximately 97% of net accounts receivable was due from four customers broken down individually as follows; \$289,000 (41%), \$190,000 (27%), \$172,000 (24%) and \$33,000 (5%).

During the year ended December 31, 2014, approximately 33% of the inventory purchases were derived from three vendors broken down individually as follows; \$239,000 (13%), \$188,000 (10%) and \$178,000 (10%).

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**17 RELATED PARTY TRANSACTIONS**

**MBTH Due to Related Party**

As of December 31, 2014, MBTH owned approximately 24% of the Company's outstanding shares. Roger Branton, the Company's Chief Financial Officer, and George Schmitt, the Company's Executive Chairman, are directors of MBTH, and Richard Mooers, a director of the Company, is the CEO and a director of MBTH.

On April 29, 2014, the Company entered into a management agreement (the "Management Agreement") with MB Technology Holdings, LLC ( "MBTH"), pursuant to which MBTH agreed to provide certain management and financial services to the Company for a monthly fee of \$25,000. The Management Agreement was effective January 1, 2014.

The Company incurred fees related to the Management Agreement of \$300,000 and \$0, respectively, for the year ended December 31, 2014 and 2013. During the year ended December 31, 2014, the Company paid \$225,000 of the fees under the Management Agreement and the remaining \$75,000 was included in due to related parties at December 31, 2014.

During the year ended December 31, 2014, MBTH did not fund any additional liabilities on behalf of the Company under the 2011 assumption of liability agreement with MBTH. During the year ended December 31, 2014, the Company repaid MBTH \$280,000 for liabilities previously paid by MBTH and the balance due to MBTH under the 2011 assumption of liability agreement was \$931,000 as of December 31, 2014 which is included in due to related parties.

The Company agreed to award MBTH a 3% cash success fee if MBTH arranges financing for the Company or arranges a merger, consolidation or sale by the Company of substantially all of the assets. On February 24, 2015, MBTH invoiced the Company for \$700,000 in fees associated with equity financings through April 16, 2014 at a rate of 3% per financing less certain discounts. The Company also accrued for an additional fee of approximately \$109,000 for equity financings between April 17, 2014 and December 31, 2014. The balance of \$809,000 was recorded as an expense in general and administrative expenses and included in due to related parties.

In December 2014, MBTH loaned the Company \$50,000 for payroll related expenses. This balance was included in due to related parties.

**George Schmitt Due to Related Party**

On December 30, 2014, the Company received a \$245,000 loan from George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded in due to related parties.

**Deferred Revenue**

On October 16, 2013, the Company completed the first delivery of xMax comprehensive cognitive radio system, shipping equipment and providing engineering services required to fulfill the \$179,000 purchase order that was

received from rural broadband provider Walnut Hill Telephone Company on November 26, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Walnut Hill Telephone Company. Given that Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Walnut Hill Telephone Company was, at the time it was entered into, considered to be a related party transaction. Due to Walnut Hill Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction is considered deferred revenue as of December 31, 2014.

On December 16, 2013, the Company sold xMax comprehensive cognitive radio system to Haxtun Telephone Company for \$301,000 to fulfill a purchase order that was received on November 24, 2012. Larry Townes is Chairman of Townes Tele-Communications, Inc., the parent company of Haxtun Telephone Company. Given that Larry Townes was a director of xG Technology, at the time of the purchase order, the sale of equipment to Haxtun Telephone Company was, at the time it was entered into, considered to be a

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**17 RELATED PARTY TRANSACTIONS (continued)**

related party transaction. Due to Haxtun Telephone Company waiting for the equipment to meet certain technical specifications, the revenue from this transaction is considered deferred revenue as of December 31, 2014.

Any transactions subsequent to Larry Townes resigning will not be considered related party transactions.

**Mooers Branton & Co. Incorporated**

On March 2, 2006, the Company entered into a management agreement (the MBC Management Agreement ) with Mooers Branton & Co. Incorporated ( MBC ), a Florida corporation, pursuant to which MBC agreed to provide certain management and financial services to the Company for a monthly fee of \$80,000. The MBC Management Agreement was terminated on January 1, 2014. The Company incurred fees related to the MBC Management Agreement of \$0 and \$720,000, respectively, for the year ended December 31, 2014 and 2013. MBC is beneficially controlled and operated by Richard Mooers, a director and Roger Branton, the Chief Financial Officer, of the Company.

**18 CONTINGENCIES**

The Company is subject, from time to time, to claims by third parties under various legal theories. The defense of such claims, or any adverse outcome relating to any such claims, could have a material adverse effect on the Company's liquidity, financial condition and cash flows. For the years ended December 31, 2014 and 2013, the Company did not have any legal actions pending.

**19 SUBSEQUENT EVENTS**

**Conversions and Balances of Outstanding Series A Preferred Stock**

As of March 27 2015, \$750,000 of the Series A Convertible Stock and \$52,500 in dividends have been converted into 239,247 shares of common stock. As of March 27, 2015, all outstanding shares of the Series A Convertible Preferred Stock have been fully converted.

**Short Term Loans**

On January 8, 2015, the Company repaid \$100,000 of the \$245,000 due to related party balance owed to George Schmitt.

On January 29, 2015 and February 13, 2015, the Company received an aggregate of \$700,000 from certain family members of George Schmitt, Chairman of the Board and, effective as of February 17, 2015, Chief Executive Officer. This amount was recorded as a short term loan in due to related parties. On February 23, 2015, George Schmitt

transferred the balance of his \$145,000 loan to certain family members bringing the total the Company owed to certain family members to \$845,000. The \$845,000 loan was settled through the issuance of 845,000 shares of Series B Preferred Stock, 5,310 shares of common stock and warrants with respect to 42,250 underlying shares of common stock exercisable for five years at a price of \$20.00 per share.

The Warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

### **\$350,000 Purchase Agreement**

On February 11, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to 31 Group, 350,000 of the Company's Series B Convertible Preferred Stock, par value \$0.00001 per share (the Series B Preferred Stock ) and warrants to purchase 17,500 shares of the Company's common

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**19 SUBSEQUENT EVENTS (continued)**

stock for a purchase price of \$350,000. The Company also issued 2,462 shares of its common stock in consideration of 31 Group's execution and delivery of the purchase agreement (the Commitment Shares). The Preferred Stock and the Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

The Warrants are exercisable immediately for a period of five years from their issue date. The exercise price with respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

**Series B Preferred Stock**

The Series B Preferred Stock rank pari passu with our Series A Preferred Stock with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company and have the same terms and preferences as the Series A Preferred Stock except for the following:

*Conversion Rights of Series B Preferred Stock.* A holder of Series B Preferred Stock shall have the right to convert the Series B Preferred Stock, in whole or in part, upon written notice to the Company at a conversion price equal to the lower of (i) \$20.00 or (ii) 85% of the lowest volume weighted average price of the common stock of the Company during the five (5) consecutive trading day period ending and including the trading day immediately preceding the delivery of the applicable conversion notice (as adjusted for stock splits, share combinations and similar transactions).

**Conversions and Balances of Outstanding Series B Preferred Stock**

As of March 27 2015, \$945,000 of the Series B Convertible Stock and \$66,150 in dividends have been converted into 267,701 shares of our common stock. As of March 27, 2015, \$250,000 of the Series B Preferred Stock remains outstanding.

**\$1,800,000 Purchase Agreement**

On February 24, 2015, the Company entered into a purchase agreement, pursuant to which the Company sold to institutional investors, 1,800,000 of the Company's Series C Convertible Preferred Stock, par value \$0.00001 per share (the Series C Preferred Stock) and warrants to purchase 90,000 shares of the Company's common stock for a purchase price of \$1,800,000. The Company also issued 11,864 shares of its common stock in consideration of the investors execution and delivery of the purchase agreement (the Commitment Shares). The Preferred Stock and the Commitment Shares were issued pursuant to the Company's Shelf Registration Statement.

The Warrants are exercisable immediately for a period of five years from their issue date. The exercise price with

respect to the warrants is \$20.00 per share. The exercise price for the warrants is subject to adjustment upon certain events, such as stock splits, combinations, dividends, distributions, reclassifications, mergers or other corporate change and dilutive issuances. Upon certain fundamental events, the warrants could be redeemed by the holders of the warrants at fair market value estimated using Black Scholes.

**Series C Preferred Stock**

The Series C Preferred Stock rank pari passu with our Series A Preferred Stock and our Series B Preferred Stock with respect to dividend rights and/or rights upon distributions, liquidation, dissolution or winding up of the Company and have the same terms and preferences as the Series A and Series B Preferred Stock except for the following:

*Conversion Rights of Series C Preferred Stock.* Upon the occurrence of certain triggering events (including the Preferred Stock or common stock underlying the Preferred Stock is not freely tradeable without restriction; the failure of the common stock to be listed on the NASDAQ Capital Market or other national

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**19 SUBSEQUENT EVENTS (continued)**

securities exchange; and bankruptcy, insolvency, reorganization or liquidation proceedings instituted against the Company shall not be dismissed in thirty (30) days or the voluntary commencement of such proceedings by the Company), the holder of Preferred Stock shall have the right to require the Company, by written notice, to redeem all or any of the shares of Preferred Stock at a price equal to the greater of (i) 125% of the conversion amount to be redeemed and (ii) the product of (a) the conversion amount divided by the lower of (x) \$20.00 or (y) 85% of the lowest volume weighted average price of the common stock of the Company during the five (5) consecutive trading day period ending and including the trading day immediately preceding the delivery of the applicable conversion notice multiplied by (b) 125% of the greatest closing sale price of the common stock on any trading day during the period commencing on the date immediately preceding such triggering event and ending on the date the Company makes the entire redemption payment to the holder of Preferred Stock.

On each of March 12, 2015, March 24, 2015, April 12, 2015 and April 24, 2015, upon the Company's failure to meet certain conditions (including the Company's common stock failing to maintain a minimum trading price and the common stock failing to maintain certain trading volumes) during the period between the initial issuance date of the Preferred Stock and the relevant determination date, the holders of Preferred Stock shall have the right to require the Company, by written notice, to redeem in cash up to \$300,000 of the Preferred Stock, at a price equal to the sum of (i) the stated value of Preferred Stock to be redeemed multiplied by 105% (for redemptions occurring within the first thirty days of the initial issuance date) or 110% (for redemptions occurring during the period between thirty and sixty days of the initial issuance date) plus (ii) all accrued and unpaid dividends thereon until the date of the redemption.

**Conversions and Balance of Outstanding Series C Preferred Stock**

As of March 27, 2015, \$168,224 of the Series C Convertible Stock and \$11,776 in dividends have been converted into 68,422 shares of our common stock. As of March 27, 2015, \$1,631,776 of the Series C Preferred Stock remains outstanding.

**Delisting Notice**

On February 9, 2015, the Company received a written notification (the Notice) from the Nasdaq Stock Market LLC (Nasdaq) indicating that the Company was not in compliance with Nasdaq Listing Rule 5550(a)(2) relating to the minimum bid requirements as the Company's closing bid price was below \$1.00 per share for the previous thirty (30) consecutive business days.

Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), the Company has been granted a 180 calendar day compliance period, or until August 10, 2015, to regain compliance with the minimum bid price requirements. During the compliance period, the Company's shares of common stock will continue to be listed and traded on the Nasdaq Capital Market. To regain compliance, the closing bid of the Company's shares of common stock must meet or exceed \$1.00 per share for at least ten (10) consecutive business days during the 180 calendar day grace period.

If the Company is not in compliance by August 10, 2015, the Company may be afforded a second 180 calendar day grace period. To qualify, the Company would be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the minimum bid price requirements. In addition, the Company would be required to notify Nasdaq of its intent to cure the minimum bid price deficiency by effecting a reverse stock split, if necessary.

If the Company does not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that the Company's shares of common stock will be subject to delisting.

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**xG TECHNOLOGY, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**19 SUBSEQUENT EVENTS (continued)**

The Company intends to monitor its closing bid price for its common stock between now and August 10, 2015, and will consider available options to resolve the Company's noncompliance with the minimum bid price requirement, as may be necessary. There can be no assurance that the Company will be able to regain compliance with the minimum bid price requirement or will otherwise be in compliance with other Nasdaq listing criteria.

**Management Transition**

Effective January 6, 2015, the board of directors of the Company appointed General James T. Conway as a member of the Board, filling the vacant seat on the Board.

On February 17, 2015, John Coleman resigned from his position of Chief Executive Officer effective immediately. Mr. Coleman's resignation was not a result of any disagreements with the Company. Mr. Coleman will stay on the xG Board and manage the governmental/expeditionary portions of the business.

In connection with this transition, on February 17, 2015, the Company's Board of Directors (the Board) appointed George Schmitt, the Company's Executive Chairman, to the role of Chief Executive Officer. Mr. Schmitt will perform the services and duties that are normally and customarily associated with the Chief Executive Officer position, as well as other duties as the Board reasonably determines.

**Equity Distribution Agreement**

On February 24, 2015, the Company delivered notice to Roth Capital Partners, LLC (Roth) terminating the Equity Distribution Agreement effective as of February 23, 2015. The Company previously entered into the Equity Distribution Agreement with Roth on November 19, 2014 and amended on December 30, 2014. The Company also filed a supplement to the Prospectus Supplement terminating the offering with respect to the \$1,000,000 of the Company's common stock issuable to Roth under the Equity Distribution Agreement. No shares of the Company's common stock were sold to Roth by the Company during the term of the Equity Distribution Agreement.

**Issuance of common stock to MBTH**

On February 24, 2015, the company issued 399,114 shares of common stock to MBTH in consideration of converting \$1,756,098 owed of the balance due to related parties at a conversion price of \$4.40 per share.

**Cost Reduction Initiatives**

On February 26, 2015, the Company announced that effective March 1, 2015, it will implement cost reduction initiatives that will include a decrease in the Company's current full, part-time and contracted workforce. These initiatives will result in a reduction in monthly operating expenses to approximately \$800,000—an improvement of over 30 percent.

## **20 REVERSE STOCK SPLIT**

On July 9, 2015, the Board approved a resolution to amend the Company's Certificate of Incorporation and to authorize the Company to effect a reverse split of the Company's outstanding common stock at a ratio of 1-for-10. On July 17, 2015, the Company effected a one-for-ten reverse stock split. Upon effectiveness of the reverse stock split, every 10 shares of outstanding common stock decreased to one share of common stock.

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## GLOSSARY

As used herein, the terms set forth below shall have the following meaning:

**3G (Third Generation Cellular)** A mobile wireless technology that typically offered a minimum data rate of 2 Megabits/second (Mbits/s, or millions of bits per second) for stationary or walking users, and 384 kilobits/second in a moving vehicle. This system is currently being upgraded to the new 4G LTE technology (see below).

**4G (Fourth Generation Cellular)** A successor to 3G cellular technology. Long Term Evolution (LTE) is the most widely deployed 4G technology and has a theoretical net bit rate capacity of up to 100 Mbits/s in the downlink and 50 Mbits/s in the uplink if a 20 MegaHertz (MHz) channel is used.

**Broadband** A telecommunications signaling method that includes or handles a relatively high rate of data transfer (typically measured in the range of Mbits/s). Also used as a descriptive term for evolving digital technologies that provide consumers a signal-switched facility offering integrated access to voice, high-speed data, video, and interactive delivery services.

**Carrier-Class** Refers to a wireless system that is extremely reliable, well-tested and proven in its capabilities to deliver an exceptional level of service and performance.

**Cognitive Radio** An approach to wireless engineering wherein the radio, radio network, or wireless system is endowed with awareness, reason, and agility to intelligently adapt operational aspects of the radio, radio network, or wireless system. Cognitive radios are intelligent enough to make informed decisions on when, how and where to transmit based on past usage and current conditions without manual intervention. They are designed with a high level of agility that enables them to adapt their modulation, frequency, power and other parameters to the available wireless spectrum. This ability to adjust their characteristics (in real time) depending on interference and other conditions of their environment helps ensure optimized transmissions. Cognitive radio is also referred to as agile radio or smart radio.

**Competitive Local Exchange Carrier (CLEC)** An organization offering local telephone service that competes with the already established local telephone business by providing its own network and switching infrastructure. The term distinguishes new or potential competitors from established local exchange carriers (LECs) and arises from the Telecommunications Act of 1996, which was intended to promote competition among both long-distance and local phone service providers. Many CLECs specialize in one type of service such as fixed wireless or digital subscriber lines (DSL), while others offer a range of services.

**CTIA** The CTIA is an international non-profit membership organization that has represented the wireless communications industry since 1984. Membership in the association is primarily made up of large and incumbent wireless carriers and their suppliers, as well as providers and manufacturers of wireless data services and products. The association advocates on behalf of its members at all levels of government.

**DSP (Digital Signal Processor)** Specialized microprocessors used for the mathematical manipulation of an information signal to modify or improve it in some way. DSPs are used in a wide range of applications including signal processing for communications, control of systems, digital image processing, audio and speech signal processing.

**Dynamic Spectrum Access** A radio software solution that enables a device to dynamically sense and adapt to its radio frequency (RF) environment to maintain reliable communications, even in the presence of potentially harmful interference. Dynamic spectrum access techniques can dramatically improve spectrum efficiency, communications reliability, and system deployment time.

**Fading** In wireless communications, fading is the dynamic attenuation of a signal's strength. Fading is quite common in mobile systems and can be caused by the movement of either the transmitter or receiver (or both) and/or movement in the environment, such as a tree branch swaying, rain or snow or a passing vehicle.

**Interference Mitigation** The ability to minimize or mitigate interference, a major issue limiting performance of wide area wireless networks. Interference can be caused by transmitting elements within the

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network (self-interference) or from third party devices that are part of another network (external interference). The ability to mitigate interference greatly increases the throughput, reliability and range for wireless communications links.

**Internet Protocol (IP)** The primary component and communications protocol that underpins the global system of interconnected computer networks (i.e., the World Wide Web). Internet Protocol consists of a set of digital message formats and rules for exchanging information between computers across a single network or a series of interconnected networks. The main purpose and task of Internet Protocol is the delivery of blocks of data called data packets from the source host (source computer) to the destination host (receiving computer) based on their addresses.

**Licensed Frequencies** The Federal Communications Commission in the U.S., and similar agencies in other countries, control the use of wireless spectrum (i.e., frequencies). Part of the spectrum in most countries is controlled for military use, public safety and commercial services. Only the entities so entitled may use the frequency bands they have rights to. Licenses to these bands may be allocated at no cost to the network operator as in the case of public safety and military use. However commercial users of licensed frequencies can, and have, paid billions of dollars for regional or national spectrum licenses.

**LMR (Land Mobile Radio)** Also called public land mobile radio or private land mobile radio, LMR is a term that denotes a wireless communications system intended for use by terrestrial users in vehicles (mobiles) or on foot (portables). Such systems are used by emergency first responder organizations, public works organizations, or companies with large vehicle fleets or numerous field staff. Such a system can be independent, but often can be connected to other fixed systems, such as the public switched telephone network (PSTN) or cellular networks. Land mobile radio systems are also used in the United States Department of Defense's communication systems.

**MAC (Media Access Control)** A sub layer within the link control layer (layer 2) in the OSI 7 layer model. This layer manages the interaction of devices with a shared medium. The MAC sub layer provides addressing and channel access control mechanisms that make it possible for several terminals or network nodes to communicate within a multiple access network that incorporates a shared medium (i.e., a wireless channel). The MAC is a critical part of the software within the radio system needed to make a wireless network operate.

**MANET (Mobile Ad hoc Network)** A type of network with elements that can change locations and configure themselves on the fly. Because MANETs are mobile, they use wireless connections to connect to various networks and end user devices. MANET systems are used where reliability and redundant communications paths are paramount.

**MIMO** Multiple-input and multiple-output (commonly pronounced my-moh or me-moh), is the use of multiple antennas at both the transmitter and receiver to improve communication performance. It is one of several forms of smart antenna technology.

**Mobile Virtual Network Enabler (MVNE)** A company that provides services to mobile virtual network operators, such as billing, network element provisioning, administration, operations, business support systems and operations support systems, and provision of back-end network elements, to enable provision of mobile network services like cellular phone connectivity. An MVNE does not have a relationship with end-user customers. Instead, an MVNE provides infrastructure and services to enable Mobile Virtual Network Operators (MVNOs) to offer services and have a relationship with end-user customers. MVNEs offer the ability for MVNOs to focus on their core strengths of brand, customer loyalty and marketing and leave the back-end enablement and operations to MVNEs.

**MoS (Mean Opinion Score)** MoS is used as a subjective rating of telephone communications quality in which listeners judge transmissions by qualifiers, such as excellent, good, fair, poor, or unsatisfactory.

**OFDM** Orthogonal frequency-division multiplexing is a method of encoding digital data on multiple carrier frequencies. OFDM has developed into a popular scheme for wideband digital communication.

**Part 15 rules** An oft-quoted part of Federal Communications Commission (FCC) rules and regulations regarding unlicensed transmissions. It is a part of Title 47 of the Code of Federal Regulations (CFR), and

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regulates everything from spurious emissions to unlicensed low-power broadcasting such as that used by Wi-Fi and Bluetooth devices. xMax® is subject to Part 15 rules.

**PCAST (President's Council of Advisors on Science and Technology)** An advisory group of the nation's leading scientists and engineers who directly advise the President and the Executive Office of the President. PCAST makes policy recommendations in the many areas where understanding of science, technology, and innovation apply. In 2012, PCAST recommended spectrum sharing as the primary means to address the looming spectrum crisis.

**QoS (Quality of Service)** The performance specification of a communications channel or system. QoS may be quantitatively indicated by channel or system performance parameters, such as signal-to-noise ratio (S/N), bit error ratio (BER), message throughput rate, and call blocking probability.

**RF (Radio Frequency)** Is a rate of oscillation in the range of about 3 kHz to 300 GHz, which corresponds to the frequency of radio waves, and the alternating currents which carry radio signals. The terms are also used as a synonym for radio i.e., to describe the use of wireless communication, as opposed to communication via electric wires.

**SDR** Software-defined radio is a radio communication system where components that have been typically implemented in hardware are instead implemented by means of software on an embedded computing device. While the concept of SDR is not new, the rapidly evolving capabilities of digital electronics render practical many processes which used to be only theoretically possible. A software-defined radio can be flexible enough to avoid the limited spectrum assumptions of designers of previous kinds of radios, in one or more ways.

**SON (Self Organizing Network)** A process whereby coordination arises out of the local interactions between network components, typically end user devices and core network elements. It is not directed or controlled by any external agent or pre-planning, but arises out of the RF sensing capabilities and intelligence built into the network elements. As such, it is typically very robust and able to survive and self-repair substantial damage or changes.

**Spectrum Agnostic** A cognitive radio system designed to utilize a wide range of frequency bands. This is in contrast to traditional radios that are programmed to operate in fixed, specific frequencies. Spectrum-agnostic capability is beneficial since the FCC and wireless regulatory bodies around the world are in the process of opening up new spectrum, as well as reclassifying existing spectrum, to be made available for opportunistic use (use by cognitive radios).

**TV White Spaces** TV White Spaces (TVWS) are unused TV broadcast channels, made available through the transition from analog to digital TV. In the U.S. they comprise approximately 200MHz of spectrum from the top of the VHF (Very High Frequency, 30 MHz to 300 MHz) band to the bottom of the UHF (Ultra High Frequency, 300 MHz and 3 GHz) band. In 2010, the FCC made TVWS spectrum available for unlicensed public use. TVWS have important benefits that make them highly desirable for wireless communications, including the ability to cover a greater area at a relative lower cost than typical Wi-Fi signals and non-line-of-sight performance offering the ability to penetrate obstacles such as trees, buildings, and rugged terrain. Under FCC regulation, in order to utilize this unlicensed spectrum band, devices must communicate with a database to obtain a list of currently available white space channels and ensure incumbent users are protected. The available channels may vary, depending on device type and location.

**Unlicensed Frequencies** Unlicensed or license-free spectrum as it is sometimes called simply means a spectrum band that does not require operators or users to purchase a frequency use license from a national regulator (e.g., the FCC). Typically, these frequencies have rules that limit maximum transmit power and interference to ensure the band can be shared among many users. Any person or entity that uses approved equipment (which is pre-certified by the

manufacturer) can put up a license-free network at any time for either private or public purposes, including commercial high speed Internet service.

**USF (Universal Service Fund)** A US government program that collects money from fees on phone services to fund universal access to communications services across the United States. Among its many goals

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is the mandate to advance the availability of telecom services to all consumers, including those in low income, rural, insular, and high cost areas at rates that are reasonably comparable to those charged in urban areas.

Funds are used to subsidize the provisioning of services to high-cost geographies and constituents that would not be economical for private industry alone to provide. On October 27, 2011, the FCC approved a six-year transfer process that would transition money from the Universal Service Fund High-Cost Program to a new \$4.5 billion per year Connect America Fund for broadband Internet expansion, effectively putting an end to the USF High-Cost Fund by 2018.

**Wireless Internet Service Provider (WISP)** An Internet service provider that allows users to connect to a server through a wireless connection such as Wi-Fi. WISPs provide additional services such as virtual private networking VoIP and location-based content. In the U.S., wireless networking is mainly chosen by isolated municipal Internet Service Providers and large state-wide initiatives. WISPs are more popular in rural areas, where the users may not be able to access cable and DSL wired connections for Internet access.

**Wireless Spectrum** Refers to the radio portion of the electromagnetic spectrum. The radio spectrum spans a certain, limited frequency range. The range of frequencies is fixed and limited, being determined by physics. The range of frequencies with properties useful for cell phones is smaller still. Therefore, in the U.S., the FCC governs the allocation of these frequencies.

**VoIP (Voice over Internet Protocol)** Refers to the communication protocols, technologies, methodologies, and transmission techniques involved in the delivery of voice communications and multimedia sessions over IP networks, such as the Internet. Using IP networks as a transmission medium is in contrast to traditional circuit transmissions used by the PSTN (Public Switched Telephone Network).

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**1,180,000 Class A Units, Each Consisting of One Share of Common Stock and 0.5 of a Series A Warrant to Purchase One Share of Common Stock**  
**and**  
**2,061,700 Class B Units, Each Consisting of One Pre-funded Series B Warrant to Purchase One Share of Common Stock and 0.5 of a Series A Warrant to Purchase One Share of Common Stock**  
**and**  
**885,000 Series C Warrants, Each to Purchase One Class A Unit**  
**and**  
**1,546,319 Series D Warrants, Each to Purchase One Class B Unit**

**PROSPECTUS**

# **Roth Capital Partners , 2015**

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TABLE OF CONTENTS**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 13. Other Expenses of Issuance and Distribution.**

The expenses (other than underwriting discounts and expenses) payable by us in connection with this offering are as follows:

	Amount
SEC registration fee	\$ 1,799.65
FINRA fee	\$ 2,000
Printing and mailing expenses	\$ 5,000
Accounting fees and expenses	\$ 60,000
Legal fees and expenses	\$ 300,000
Transfer agent fees and expenses	\$ 0
Miscellaneous	\$ 0
Total expenses	\$ 368,799.65

All expenses are estimated except for the SEC fee and the FINRA fee.

**ITEM 14. Indemnification of Directors and Officers.**

The Delaware General Corporation Law and certain provisions of our certificate of incorporation and bylaws under certain circumstances provide for indemnification of our officers, directors and controlling persons against liabilities which they may incur in such capacities. A summary of the circumstances in which such indemnification is provided for is contained herein, but this description is qualified in its entirety by reference to our certificate of incorporation, bylaws and to the statutory provisions.

In general, any officer, director, employee or agent may be indemnified against expenses, fines, settlements or judgments arising in connection with a legal proceeding to which such person is a party, if that person's actions were in good faith, were believed to be in our best interest, and with respect to any criminal action or proceeding, such person had no reasonable cause to believe their actions were unlawful. Unless such person is successful upon the merits in such an action, indemnification may be awarded only after a determination by independent decision of the board of directors, by legal counsel, or by a vote of the stockholders, that the applicable standard of conduct was met by the person to be indemnified.

The circumstances under which indemnification is granted in connection with an action brought on our behalf is generally the same as those set forth above; however, with respect to such actions, indemnification is granted only with respect to expenses actually incurred in connection with the defense or settlement of the action. In such actions, unless the court determines otherwise, the person to be indemnified must have acted in good faith and in a manner believed to have been in our best interest, and have not been adjudged liable to the corporation.

Indemnification may also be granted pursuant to the terms of agreements which we are currently party to with each of our directors and executive officers, agreements which we may enter into in the future or pursuant to a vote of stockholders or directors. Delaware law and our certificate of incorporation also grant the power to us to purchase and maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a position, and such a policy may be obtained by us.

A stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. There is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification by us is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

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Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

## ITEM 15. Recent Sales of Unregistered Securities.

All share and price information in Part II of this registration statement has been adjusted to reflect the 1-for-10 reverse stock split of our common stock effected on July 17, 2015.

During the last three completed fiscal years and to date in the current fiscal year, we sold the following unregistered securities:

	# Of Shares	
Capital Raise		
Quarterly issuance of shares of common stock to an employee as part remuneration for services	79	January 16, 2012
Warrants issued to Secure Strategy Group exercisable at \$350.00 per share	858	March 14, 2012
Placement of shares of common stock at \$350.00 each to certain individual investors pursuant to Regulation S	1,143	March 20, 2012
Options granted to employees pursuant to 2009 Option Plan	143	Quarter ended March 31, 2012
Quarterly issuance of shares of common stock to an employee as part remuneration for services	79	April 23, 2012
Payment of interest on \$2 million promissory note to Treco in stock at \$201.30	448	May 2, 2012
Options granted to employees pursuant to 2009 Option Plan	315	Quarter ended June 30, 2012
Quarterly issuance of shares of common stock to an employee as part remuneration for services	77	August 13, 2012
Options granted to employees pursuant to 2009 Option Plan	6,643	Quarter ended September 30, 2012
Payment of interest on \$2 million promissory note to Treco in stock at \$157.50	572	October 8, 2012
Quarterly issuance of shares of common stock to an employee as part remuneration for services	89	November 13, 2012
Quarterly issuance of shares of common stock to an employee as part remuneration for services	98	January 14, 2013
Issuance of shares of common stocks to an employee as remuneration for services	16	January 14, 2013
Issuance of options to MBTH	14,286	January 16, 2013
Warrants issued to MBTH exercisable at \$3.50 per share	4,286	January 16, 2013

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Conversion of MBTH Convertible Note \$15 million	112,782	March 26, 2013
Issuance of shares of common stock to MBTH pursuant to the discharge of all MBTH collateral over the company's assets	14,286	March 26, 2013
Issuance of warrants to Bridge Loan investors exercisable at \$3.50	1,779	Quarter ended March 31, 2013

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Capital Raise	# Of Shares	Quarter ended
Options granted to employees pursuant to 2009 Option Plan	1,074	March 31, 2013
Quarterly issuance of shares of common stock to an employee as part remuneration for services	116	May 1, 2013
Payment of interest on \$2 million promissory note to Treco in stock at \$130.00	693	May 1, 2013
Issuance of warrants to Bridge Loan investors exercisable at \$3.50	585	Quarter ended June 30, 2013
Options granted to employees pursuant to 2009 Option Plan	1,780	Quarter ended June 30, 2013
Issuance of warrants to Bridge Loan investors exercisable at \$3.50	510	July 18, 2013
Issuance of shares of common stock to MBTH and other investors pursuant to conversion of Bridge Loans	218,753	July 18, 2013
Issuance of warrants to MBTH and other investors pursuant to conversion of Bridge Loans	109,378	July 18, 2013
Additional issuance of shares of common stock to MBTH and other investors pursuant to onetime agreement approved on September 30, 2013	159,946	September 30, 2013
Additional issuance of warrants to MBTH and other investors pursuant to onetime agreement approved on September 30, 2013	136,364	September 30, 2013
Payment to MBTH of the differential of the interest rates in stock at \$133.00	1,648	November 19, 2013
Options granted to employees pursuant to 2013 Option Plan	30,563	November 19, 2013
Payment of interest on \$2 million promissory note to Treco in stock at \$259.00	3,475	December 2, 2013
Issuance of shares of common stock to consultant	767	December 2, 2013
Quarterly issuance of shares of common stock to an employee as part remuneration for services	529	December 9, 2013
Quarterly issuance of shares of common stock to an employee as part remuneration for services	1,008	January 15, 2014
Issuance of shares of common stock to directors of the company as part of remuneration for services	898	January 15, 2014
Issuance of shares of common stock to employees pursuant to the 2011 and 2012 accrued bonus	9,921	February 5, 2014
Quarterly issue of shares of common stock to employee as part remuneration for services	755	April 24, 2014
Issuance of shares of common stock to directors of the company as part of remuneration for services	411	April 24, 2014
Issuance of shares of common stock to consultant	1,315	April 24, 2014
Payment of interest on \$2 million promissory note to Treco in stock at \$26.40	3,410	May 15, 2013
	1,273	June 27, 2014

Issuance of shares of common stock to employees pursuant to the  
2011 and 2012 accrued bonus

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Capital Raise	# Of Shares	
Quarterly issue of shares to employee as part remuneration for services	825	August 5, 2014
Issuance of shares to consultant	806	August 5, 2014
Issuance of shares of common stock to directors of the company as part of remuneration for services	560	August 5, 2014
Issuance of shares to consultant	4,310	August 14, 2014
Issuance of shares of common stock to employees pursuant to the 2011 and 2012 accrued bonus	1,695	August 28, 2014
Issuance of shares of common stock to employees pursuant to the 2011 and 2012 accrued bonus	2,000	August 29, 2014
Issuance of commitment shares of common stock to Lincoln Park	17,500	September 19, 2014
Issuance of Series A Warrants	37,500	December 30, 2014
Issuance of Series B Warrants	17,500	February 11, 2015
Issuance of Series B Preferred Stock	84,500	February 11, 2015
Issuance of Series B Warrants	42,250	February 11, 2015
Issuance of shares of common stock for execution of Series B Purchase Agreement	5,310	February 11, 2015
Issuance of Series C Warrants	90,000	February 24, 2015
Issuance of 8% Convertible Notes at a conversion price of \$5.00	233,333 (upon conversion)	June 11, 2015
Issuance of 8% Convertible Notes at a conversion price of \$5.00	93,334 (upon conversion)	July 14, 2015

No underwriters were involved in the foregoing sales of securities. The issuances of the securities described above were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities

Act or Rule 701 promulgated under Section 3(b) of the Securities Act or Regulation S promulgated under the Securities Act. The recipients of securities in some but not all such transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and option agreements issued in such transactions. All recipients had adequate access, through their relationships with us, to information about us.

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**ITEM 16. Exhibits and Financial Statement Schedules.**

(a) The following exhibits are filed as part of this Registration Statement:

Exhibit Number	Description of Exhibit
1.1	Form of Underwriting Agreement
3.1(i)	Amended & Restated Certificate of Incorporation <sup>(1)</sup>
3.1(i)(a)	Amendment to Certificate of Incorporation filed June 11, 2014 <sup>(2)</sup>
3.1(i)(b)	Amendment to Certificate of Incorporation filed July 10, 2015 <sup>(13)</sup>
3.1(i)(c)	Certificate of Designations of Series A Convertible Preferred Stock <sup>(9)</sup>
3.1(i)(d)	Certificate of Designations of Series B Convertible Preferred Stock <sup>(10)</sup>
3.1(i)(e)	Certificate of Designations of Series C Convertible Preferred Stock <sup>(11)</sup>
3.1(ii)	Amended & Restated Bylaws <sup>(14)</sup>
4.1	Form of Common Stock Certificate of the Registrant <sup>(3)</sup>
4.2	Form of Warrant Agreement by and between the Registrant and Continental Stock Transfer & Trust Company and Form of Warrant Certificate for the offering closed July 24, 2013 and August 19, 2013 <sup>(4)</sup>
4.3	Form of Underwriters' Warrant for the offering closed July 24, 2013 <sup>(3)</sup>
4.4	Form of Underwriters' Warrant for the offering closed November 18, 2013 <sup>(3)</sup>
4.5	Form of Warrant issued in December 30, 2014 Offering <sup>(9)</sup>
4.6	Form of Warrant issued in February 11, 2015 Offering <sup>(10)</sup>
4.7	Form of Warrant issued in February 24, 2015 Offering <sup>(11)</sup>
4.8	Form of 8% Convertible Note <sup>(12)</sup>
4.9	Form of Series A Warrant for this offering
4.10	Form of Pre-funded Series B Warrant for this offering
4.11	Form of Series C Warrant for this offering
4.12	Form of Series D Warrant for this offering
5.1	Opinion of Robinson Brog Leinwand Greene Genovese & Gluck P.C.
10.1	2013 Long Term Incentive Plan <sup>(6)</sup>
10.2	Forms of Agreement Under 2013 Long Term Incentive Plan <sup>(6)</sup>
10.3	Loan Documents Between xG Technology and MB Technology Holdings, LLC <sup>(6)</sup>
10.4	Form of Securities Subscription Agreement <sup>(6)</sup>
10.5	Form of Bridge Loan Documents <sup>(6)</sup>
10.6	2004 Option Plan <sup>(6)</sup>
10.7	2005 Option Plan <sup>(6)</sup>
10.8	2006 Option Plan <sup>(6)</sup>
10.9	2007 Option Plan <sup>(6)</sup>
10.10	2009 Option Plan <sup>(6)</sup>
10.11	Forms of Award Documents under the 2004, 2005, 2006, 2007 and 2009 Option Plans <sup>(6)</sup>
10.12	Sunrise Office Lease <sup>(6)</sup>
10.13	Treco Documents <sup>(6)</sup>
10.14	Mats Wennberg Consulting Agreement <sup>(6)</sup>
10.15	Mats Wennberg Warrant Agreement <sup>(6)</sup>





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Exhibit Number	Description of Exhibit
10.16	MBC Agreement <sup>(6)</sup>
10.17	Purchase Agreement, dated as of September 22, 2014, by and between the Company and Lincoln Park Capital Fund, LLC <sup>(7)</sup>
10.18	Purchase Agreement, dated as of September 19, 2014, by and between the Company and Lincoln Park Capital Fund, LLC <sup>(7)</sup>
10.19	Purchase Agreement, dated as of November 25, 2014, by and between the Company, Lincoln Park and other investors <sup>(8)</sup>
10.20	Purchase Agreement, dated as of December 30, 2014, by and between the Company and 31 Group, LLC <sup>(9)</sup>
10.21	Purchase Agreement, dated as of February 11, 2015, by and between the Company and 31 Group, LLC <sup>(10)</sup>
10.22	Purchase Agreement, dated as of February 24, 2014, by and between the Company, 31 Group, LLC, and Dominion Capital LLC <sup>(11)</sup>
10.23	Form of Purchase Agreement dated as of June 11, 2015 <sup>(12)</sup>
10.24	Amendment to Purchase Agreement dated as of June 11, 2015 <sup>(13)</sup>
23.1	Consent of Friedman LLP
23.2	Consent of Robinson Brog Leinwand Greene Genovese & Gluck P.C. (included in Exhibit 5.1)
24.1	Power of Attorney (set forth on the signature page of the Registration Statement)
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Schema
101.CAL	XBRL Taxonomy Calculation Linkbase
101.DEF	XBRL Taxonomy Definition Linkbase
101.LAB	XBRL Taxonomy Label Linkbase
101.PRE	XBRL Taxonomy Presentation Linkbase

- (1) Filed as an Exhibit on Form S-1 with the SEC on October 23, 2013.
- (2) Filed as an Exhibit on Current Report on Form 8-K with the SEC on June 13, 2014.
- (3) Filed as an Exhibit on Form S-1/A with the SEC on May 21, 2013.
- (4) Filed as an Exhibit on Current Report to Form 8-K with the SEC on August 19, 2013.
- (5) Filed as an Exhibit on Form S-1/A with the SEC on November 6, 2013.
- (6) Filed as an Exhibit on Form S-1 with the SEC on March 7, 2013.
- (7) Filed as an Exhibit on Current Report on Form 8-K with the SEC on September 24, 2014.
- (8) Filed as an Exhibit on Current Report on Form 8-K with the SEC on November 26, 2014.
- (9) Filed as an Exhibit on Current Report on Form 8-K with the SEC on December 31, 2014.
- (10) Filed as an Exhibit on Current Report on Form 8-K with the SEC on February 12, 2015.
- (11) Filed as an Exhibit on Current Report on Form 8-K with the SEC on February 26, 2015.
- (12) Filed as an Exhibit on Current Report on Form 8-K with the SEC on June 12, 2015.
- (13) Filed as an Exhibit on Current Report on Form 8-K with the SEC on July 20, 2015.
- (14) Filed as an Exhibit on Quarterly Report on Form 10-Q with the SEC on August 30, 2013.
  - (b) Financial Statement Schedules

No financial statement schedules have been provided because the information is not required or is shown either in the financial statements or the notes thereto.



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## **ITEM 17. Undertakings.**

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting certificates in such denominations and registered in such names as required by underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) For purposes of determining any liability under the Securities Act, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Sarasota, State of Florida, on August 4, 2015.

**xG TECHNOLOGY, INC.**  
(Registrant)

/s/ George Schmitt

By:

Chief Executive Officer and Chairman of the Board  
(Principal Executive Officer)

POWER OF ATTORNEY: KNOW ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints George Schmitt and Roger G. Branton, and each of them, his or her true and lawful attorneys-in-fact and agents with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to sign any registration statement for the same offering covered by the Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his, her or their substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates stated.

Signature	Title	Date
/s/ George Schmitt	Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	August 4, 2015
George Schmitt /s/ Roger G. Branton	Chief Financial Officer (Principal Financial and Accounting Officer)	August 4, 2015
Roger G. Branton /s/ John C. Coleman	Director	August 4, 2015
John C. Coleman /s/ Richard L. Mooers	Director	August 4, 2015
Richard L. Mooers /s/ Gary Cuccio	Director	August 4, 2015
Gary Cuccio	Director	August 4, 2015

/s/ Raymond M. Sidney

Raymond M. Sidney  
/s/ Kenneth Hoffman

Director

August 4, 2015

Kenneth Hoffman  
/s/ James T. Conway

Director

August 4, 2015

James T. Conway

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10.7	2005 Option Plan <sup>(6)</sup>
10.8	2006 Option Plan <sup>(6)</sup>
10.9	2007 Option Plan <sup>(6)</sup>
10.10	2009 Option Plan <sup>(6)</sup>
10.11	Forms of Award Documents under the 2004, 2005, 2006, 2007 and 2009 Option Plans <sup>(6)</sup>
10.12	Sunrise Office Lease <sup>(6)</sup>
10.13	Treco Documents <sup>(6)</sup>
10.14	Mats Wennberg Consulting Agreement <sup>(6)</sup>
10.15	Mats Wennberg Warrant Agreement <sup>(6)</sup>
10.16	MBC Agreement <sup>(6)</sup>
10.17	Purchase Agreement, dated as of September 22, 2014, by and between the Company and Lincoln Park Capital Fund, LLC <sup>(7)</sup>
10.18	

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- Purchase Agreement, dated as of September 19, 2014, by and between the Company and Lincoln Park Capital Fund, LLC<sup>(7)</sup>
- 10.19 Purchase Agreement, dated as of November 25, 2014, by and between the Company, Lincoln Park and other investors<sup>(8)</sup>
- 10.20 Purchase Agreement, dated as of December 30, 2014, by and between the Company and 31 Group, LLC<sup>(9)</sup>
- 10.21 Purchase Agreement, dated as of February 11, 2015, by and between the Company and 31 Group, LLC<sup>(10)</sup>
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Exhibit Number	Description of Exhibit
10.22	Purchase Agreement, dated as of February 24, 2014, by and between the Company, 31 Group, LLC, and Dominion Capital LLC <sup>(11)</sup>
10.23	Form of Purchase Agreement dated as of June 11, 2015 <sup>(12)</sup>
10.24	Amendment to Purchase Agreement dated as of June 11, 2015 <sup>(13)</sup>
23.1	Consent of Friedman LLP
23.2	Consent of Robinson Brog Leinwand Greene Genovese & Gluck P.C. (included in Exhibit 5.1)
24.1	Power of Attorney (set forth on the signature page of the Registration Statement)
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Schema
101.CAL	XBRL Taxonomy Calculation Linkbase
101.DEF	XBRL Taxonomy Definition Linkbase
101.LAB	XBRL Taxonomy Label Linkbase
101.PRE	XBRL Taxonomy Presentation Linkbase

- (1) Filed as an Exhibit on Form S-1 with the SEC on October 23, 2013.
  - (2) Filed as an Exhibit on Current Report on Form 8-K with the SEC on June 13, 2014.
  - (3) Filed as an Exhibit on Form S-1/A with the SEC on May 21, 2013.
  - (4) Filed as an Exhibit on Current Report to Form 8-K with the SEC on August 19, 2013.
  - (5) Filed as an Exhibit on Form S-1/A with the SEC on November 6, 2013.
  - (6) Filed as an Exhibit on Form S-1 with the SEC on March 7, 2013.
  - (7) Filed as an Exhibit on Current Report on Form 8-K with the SEC on September 24, 2014.
  - (8) Filed as an Exhibit on Current Report on Form 8-K with the SEC on November 26, 2014.
  - (9) Filed as an Exhibit on Current Report on Form 8-K with the SEC on December 31, 2014.
  - (10) Filed as an Exhibit on Current Report on Form 8-K with the SEC on February 12, 2015.
  - (11) Filed as an Exhibit on Current Report on Form 8-K with the SEC on February 26, 2015.
  - (12) Filed as an Exhibit on Current Report on Form 8-K with the SEC on June 12, 2015.
  - (13) Filed as an Exhibit on Current Report on Form 8-K with the SEC on July 20, 2015.
  - (14) Filed as an Exhibit on Quarterly Report on Form 10-Q with the SEC on August 30, 2013.
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