AUDIOCODES LTD
Form 20-F
March 29, 2016

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**FORM 20-F**

.. **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

**OR**

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

**For the fiscal year ended December 31, 2015**

**OR**

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

**OR**

.. **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report _____

For the transition period from _____ to _____

Commission file number 0-30070

AUDIOCODES LTD.
(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)

ISRAEL
(Jurisdiction of incorporation or organization)

1 Hayarden Street, Airport City Lod 7019900, Israel
(Address of principal executive offices)

Shabtai Adlersberg, CEO and President, Tel: 972-3-976-4105, Fax: 972-3-9764040, 1 Hayarden Street, Airport City, Lod 7019900 Israel

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

| Title of each class | Name of each exchange on which registered |
|---|---|
| Ordinary Shares, nominal value NIS 0.01 per share | NASDAQ Global Select Market |

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

As of December 31, 2015, the Registrant had outstanding 37,841,603 Ordinary Shares, nominal value NIS 0.01 per share.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act:

Yes ¨ No x

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934:

Yes ¨ No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x No ¨

Indicate by check mark whether registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files)

Yes x No ¨

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

Large Accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP x International Financial Reporting Standards as issued by the International Accounting Standards Board ¨ Other ¨

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 ¨ Item 18 ¨

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act):

Yes ¨ No x

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**PRELIMINARY NOTE**

This Annual Report contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, or the Securities Act, and Section 21E of the Securities Exchange Act, or the Exchange Act. These forward-looking statements can generally be identified as such because the context of the statement will include words such as may, “will,” “intends,” “plans,” “believes,” “anticipates,” “expects,” “estimates,” “predicts,” “potential,” “continue,” or the negative of these words or words of similar import. Similarly, statements that describe our business outlook or future economic performance, anticipated revenues, expenses or other financial items, introductions and advancements in development of products, and plans and objectives related thereto, and statements concerning assumptions made or expectations as to any future events, conditions, performance or other matters, are also forward-looking statements. Forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results to differ materially from those stated in such statements. Factors that could cause or contribute to such differences include, but are not limited to, those set forth under Item 3.D, “Key Information - Risk Factors” of this Annual Report.

Our actual results of operations and execution of our business strategy could differ materially from those expressed in, or implied by, the forward-looking statements. In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. In evaluating our forward-looking statements, you should specifically consider the risks and uncertainties set forth under Item 3.D, “Key Information - Risk Factors” of this Annual Report.

**PART I**

Unless the context otherwise requires, “AudioCodes,” “us,” “we” and “our” refer to AudioCodes Ltd. and its subsidiaries.

**ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION**

*A. SELECTED FINANCIAL DATA*

The selected financial data, set forth in the table below, have been derived from our audited historical financial statements for each of the years from 2011 through 2015. The selected consolidated statement of operations data for the years ended December 31, 2013, 2014 and 2015, and the selected consolidated balance sheet data as of December 31, 2014 and 2015, have been derived from our audited consolidated financial statements set forth elsewhere in this Annual Report. The selected consolidated statement of operations data for the years ended December 31, 2011 and 2012, and the selected consolidated balance sheet data as of December 31, 2011, 2012 and 2013, have been derived from our previously published audited consolidated financial statements, which are not included in this Annual Report. The selected financial data should be read in conjunction with our consolidated financial statements, and are qualified entirely by reference to these consolidated financial statements.

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| | (In thousands, except per share data) | | | | |
| Statement of Operations Data: | | | | | |
| Revenues: | | | | | |
| Products | $135,827 | $103,651 | $111,750 | $118,561 | $101,990 |
| Services | 20,025 | 23,839 | 25,482 | 33,018 | 37,769 |
| Total revenues | 155,827 | 127,490 | 137,232 | 151,579 | 139,759 |
| Cost of revenues: | | | | | |
| Products | 59,917 | 48,371 | 51,996 | 54,349 | 47,227 |
| Services | 4,228 | 5,923 | 6,568 | 8,243 | 9,744 |
| Total cost of revenues | 64,145 | 54,294 | 58,564 | 62,592 | 56,971 |
| Gross profit | 91,682 | 73,196 | 78,668 | 88,987 | 82,788 |
| Operating expense: | | | | | |
| Research and development, net | 32,150 | 28,677 | 28,194 | 32,275 | 27,996 |
| Selling and marketing | 43,248 | 40,040 | 39,279 | 45,534 | 43,360 |
| General and administrative | 9,028 | 8,214 | 8,456 | 7,677 | 8,726 |
| Total operating expenses | 84,426 | 76,931 | 75,929 | 85,486 | 80,082 |
| Operating income (loss) | 7,256 | (3,735) | 2,739 | 3,501 | 2,706 |
| Financial expenses (income), net | (423) | (453) | (96) | 196 | (442) |
| Income (loss) before taxes on income | 7,679 | (3,282) | 2,835 | 3,305 | 3,148 |
| Income tax expense (benefit), net | 238 | 541 | (1,404) | 3,391 | 2,782 |
| Equity in losses of affiliated companies | 277 | 354 | 21 | - | - |
| Net income (loss) | $7,164 | $(4,177) | $4,218 | $(86) | $366 |
| Basic earnings (loss) per share | $0.17 | $(0.11) | $0.11 | $(0.00) | $0.01 |
| Diluted earnings (loss) per share | $0.17 | $(0.11) | $0.11 | $(0.00) | $0.01 |
| Weighted average number of ordinary shares used in computing basic earnings (loss) per share | 41,438 | 39,125 | 38,241 | 42,286 | 40,178 |
| Weighted average number of ordinary shares used in computing diluted earnings (loss) per share | 41,935 | 39,125 | 39,097 | 42,286 | 40,565 |

| | December 31, | | | | |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| Balance Sheet Data: | | | | | |
| Cash and cash equivalents | $28,257 | $15,219 | $30,763 | $14,797 | $18,908 |
| Short-term and restricted bank deposits, marketable securities and accrued interest | 14,353 | 18,296 | 24,807 | 8,173 | 8,141 |
| Working capital | 55,083 | 46,598 | 64,859 | 34,218 | 30,376 |
| Long-term and restricted bank deposits and long-term marketable securities | 32,943 | 25,013 | 6,697 | 62,750 | 53,328 |
| Total assets | 192,677 | 165,789 | 174,304 | 200,384 | 189,820 |
| Bank loans | 33,155 | 22,913 | 14,477 | 9,791 | 11,370 |
| Long term senior convertible notes | 353 | 353 | - | - | - |
| Total equity | 106,019 | 98,297 | 104,809 | 133,721 | 117,453 |
| Capital stock (*) | 176,998 | 178,623 | 182,220 | 216,743 | 219,496 |

(*) Capital stock represents share capital plus additional paid-in capital, less, for the years ended December 31, 2011 and 2012, carrying amount of the equity component of the senior convertible notes.

**Currency and Exchange Rates**

The following table sets forth the exchange rates for one United States dollar ("US$") expressed in terms of one New Israeli Shekel ("NIS") in effect at the end of the following years (based on the exchange rate on the last day of each year).

| December 31, | | | | |
|---|---|---|---|---|
| 2011 | 2012 | 2013 | 2014 | 2015 |
| 3.821 | 3.733 | 3.471 | 3.889 | 3.902 |

The high and low exchange rates for each month during the previous six months are as follows (NIS per United States $1.00):

| Month | High | Low |
|---|---|---|
| September 2015 | 3.949 | 3.863 |
| October 2015 | 3.923 | 3.816 |
| November 2015 | 3.921 | 3.868 |
| December 2015 | 3.905 | 3.855 |
| January 2016 | 3.983 | 3.913 |
| February 2016 | 3.964 | 3.871 |

The high, low, average (calculated by using the average of the exchange rates on the last day of each month during the period) and closing exchange rates for each of the Company's five previous fiscal years are as follows:

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| High | 3.821 | 4.084 | 3.791 | 3.994 | 4.053 |
| Low | 3.363 | 3.700 | 3.471 | 3.402 | 3.761 |
| Average | 3.579 | 3.858 | 3.609 | 3.577 | 3.884 |
| Period End | 3.821 | 3.733 | 3.471 | 3.889 | 3.902 |

Unless otherwise indicated, in this Annual Report all currency references are to United States dollar.

The exchange rate on March 25, 2016, as reported by the Bank of Israel, for the conversion of United States dollars into New Israeli Shekel was U.S. $1.00 equals NIS 3.842.

*B. CAPITALIZATION AND INDEBTEDNESS*

Not applicable.

C. *REASONS FOR THE OFFER AND USE OF PROCEEDS*

Not applicable.

*D. RISK FACTORS*

We are subject to various risks and uncertainties relating to or arising out of the nature of our business and general business, economic, financing, legal and other factors or conditions that may affect us. We believe that the occurrence of any one or some combination of the following factors could have a material adverse effect on our business, financial condition, cash flows and results of operations.

***Risks Related to Our Business and Industry***

**We reported losses in 2012 and 2014. We may report additional losses in the future.**

We reported a net loss in each of 2012 and 2014. We reported net income in 2011 and 2013 and a small amount of net income in 2015. The majority of our expenses are directly and indirectly related to the number of people we employ. We may increase our expenses based on projections of revenue growth. If at any given time we do not meet our expectations for growth in revenues our expenses incurred in anticipation of projected revenues may cause us to incur a loss. We may not be able to anticipate the correct amount of expenses in relation to our revenue and adjust our variable costs accordingly. As a result, we may report additional losses in the future.

**Our gross profit percentage could be negatively impacted by amortization expenses in connection with acquisitions, increased manufacturing costs and other factors. This could adversely affect our results of operations.**

Our gross profit percentage has fluctuated in the past, including decreases in each of 2012 and 2013. Our gross profit percentage has been negatively affected in the past and could continue to be negatively affected by amortization expenses in connection with acquisitions, expenses related to equity based compensation, increases in manufacturing costs, a shift in our sales mix towards our less profitable products, increased customer demand for longer product warranties, fixed expenses that are applied to a lower revenue base and increased cost pressures as a result of increased competition. Acquisitions of new businesses could also negatively affect our gross profit percentage. A decrease in our gross profit percentage could cause an adverse effect on our results of operations.

**We have depended, and expect to continue to depend, on a small number of large customers. The loss of one or more of our large customers or the reduction in purchases by a significant customer or failure of such customer to pay for the products it purchases from us could have a material adverse effect on our revenues.**

Historically, a substantial portion of our revenues has been derived from large purchases by a small number of original equipment manufacturers, or OEMs, and network equipment providers, or NEPs, systems integrators and distributors. Our top three customers accounted for approximately 27.8% of our revenues in 2013, 27.7% of our revenues in 2014 and 31.4% of our revenues in 2015. Sales to ScanSource Communications Group, our largest customer, accounted for 15.0% of our revenues in 2015, compared to 14.9% of our revenues in 2014 and 17.8% of our revenues in 2013. In addition, sales to Westcon Group accounted for 12.6% of our revenues in 2015 compared to 10.5% of our revenues in 2014. We do not enter into sales agreements in which a customer is obligated to purchase a set quantity of our products. Based on our experience, we expect that our customer base may change from period to period. If we lose a large customer and fail to add new customers, or if purchases made by such customers are significantly reduced, there could be a material adverse effect on our results of operations.

**We have invested significant resources in developing products compatible with Microsoft Skype for Business and related solutions of other partners of ours. If Microsoft or our other partners, such as Genesys, Avaya or Broadsoft, abandon their solutions compatible with our products, decide to promote products of our competitors instead of our products, are unwilling to continue to recognize AudioCodes as a partner or fail to achieve the expected growth of solutions compatible with our products, our results of operations will be adversely affected.**

We have invested significant resources in complying with Microsoft's requirements for the purpose of becoming a Microsoft recognized partner for their unified communication solutions for the enterprise market, which are known as Microsoft Skype for Business (formerly known as Microsoft Skype for Business). We have adapted some of our gateway products, IP phones, session border controllers, survivable branch applications, value added applications and professional services to operate in the Microsoft Skype for Business environment. We believe that recognition as a Microsoft partner enhances our access to and visibility in markets relevant to our products. We are dependent on the users of Microsoft Skype for Business to recognize the utility of our compatible products and purchase them. If Microsoft were to abandon Skype for Business, decide to promote the products of our competitors instead of our products, is unwilling to continue to recognize AudioCodes as a Skype for Business partner or fails to achieve the expected growth of Skype for Business, our results of operations will be adversely affected.

Similarly, we have invested in the development of products and capabilities and achieving certifications for the solutions of other partners of ours, such as Genesys and Avaya contact centers or Broadsoft broadworks. If those partners decide to promote products of our competitors instead of our products, are unwilling to continue to recognize AudioCodes as a partner or fail to achieve the expected growth of solutions compatible with our products, our results of operations may be adversely affected.

**Recent and future economic conditions may adversely affect our business.**

The uncertain economic and credit environment is having a negative impact on business around the world. In the past, the impact of these conditions on the technology industry and our major customers and potential customers has been significant. Conditions may continue to be uncertain or may be subject to deterioration, which could lead to a reduction in consumer and customer spending overall and result in an adverse impact on sales of our products. A disruption in the ability of our significant customers to access liquidity could cause serious disruptions or an overall deterioration of their businesses, which could lead to a significant reduction in their orders of our products and the inability or failure on their part to meet their payment obligations to us, any of which could have a material adverse effect on our results of operations and liquidity. A significant adverse change in a customer's financial and/or credit position could also require us to assume greater credit risk relating to that customer's receivables or could limit our ability to collect receivables related to previous purchases by that customer. As a result, our allowance for doubtful accounts and write-offs of accounts receivable could increase.

**We may need additional financing to operate or grow our business. We may not be able to raise additional financing for our capital needs on favorable terms, or at all, which could limit our ability to grow and to continue our longer term expansion plans.**

We may need additional financing to operate our business or continue our longer term expansion plans. To the extent that we cannot fund our activities and acquisitions through our existing cash resources and any cash we generate from operations, we may need to raise equity or debt funds through additional public or private financings. We cannot be certain that we will be able to obtain additional financing on commercially reasonable terms, or at all. This could inhibit our growth, increase our financing costs or cause us severe financial difficulties.

**We could be forced to repay our bank debt if we are unable to satisfy the covenants in our loan agreements.**

In 2011, we borrowed $23.8 million, of which $19.9 million is repayable in 20 equal quarterly payments of approximately $1.0 million from December 2011 through September 2017 and the remaining $3.9 million is repayable in 10 equal semiannual payments of $390,000 from June 2012 through December 2016. In December 2015, we borrowed additional amounts of $3 million and 3 million Euro which are repayable in 20 equal quarterly installments from March 2016 through December 2020. If we are unable to make payments when required by these loan

agreements or if we do not comply with covenants in our loan agreements with respect to maintaining shareholders' equity, cash balances, and liabilities to banks at specified levels or achieving certain levels of operating income, we could be required to repay all or a portion of these bank loans prior to their maturity date.

**We may expand our business through acquisitions that could result in diversion of resources and extra expenses. This could disrupt our business and affect our results of operations.**

Part of our strategy is to pursue acquisitions of, or investments in, businesses and technologies or to establish joint ventures to expand our business. The negotiation of acquisitions, investments or joint ventures, as well as the integration of acquired or jointly developed businesses or technologies, could divert our management’s time and resources. Acquired businesses, technologies or joint ventures may not be successfully integrated with our products and operations. The markets for the products produced by the companies we acquire may take longer than we anticipated to develop and to result in increased sales and profits for us. We may not realize the intended benefits of any acquisition, investment or joint venture and we may incur losses from any acquisition, investment or joint venture.

Acquisitions could result in:

- substantial cash expenditures;
- potentially dilutive issuances of equity securities;
- the incurrence of debt and contingent liabilities;

- a decrease in our profit margins;
- amortization of intangibles and potential impairment of goodwill and intangible assets;
- reduction of management attention to other parts of the business;
- failure to invest in different areas or alternative investments;
- failure to generate expected financial results or reach business goals; and
- increased expenditures on human resources and related costs.

If acquisitions disrupt our sales or marketing efforts or operations, our business may suffer.

**If new products we introduce or expect to introduce in the future fail to generate the level of demand we anticipated, we will realize a lower than expected return from our investment in research and development with respect to those products, and our results of operations may suffer.**

Our success is dependent, in part, on the willingness of our customers to transition or migrate to new products, such as our expanded offering of Mediant and IP media products, our residential gateways, our session border controller products, our multi service business routers (MSBRs), our software solutions and value added application products, our services or expected future products. We are involved in a continuous process of evaluating changing market demands and customer requirements in order to develop and introduce new products, features and applications to meet changing demands and requirements. We need to be able to interpret market trends and the advancement of technology in order to successfully develop and introduce new products, features and applications. If potential customers defer transition or migration to new products, our return on our investment in research and development with respect to products recently introduced or expected to be introduced in the near future will be lower than we originally anticipated and our results of operations may suffer.

**Because of the rapid technological development in the communications equipment market and the intense competition we face, our products can become outmoded or obsolete in a relatively short period of time, which requires us to provide frequent updates and/or replacements to existing products. If we do not successfully manage the transition process to the next generation of our products, our operating results may be harmed.**

The communications equipment market is characterized by rapid technological innovation and intense competition. Accordingly, our success depends in part on our ability to develop next generation products in a timely and cost-effective manner. The development of new products is expensive, complex and time consuming. If we do not rapidly develop our next generation products ahead of our competitors, we may lose both existing and potential customers to our competitors. Further, if a competitor develops a new, less expensive product using a different technological approach to delivering informational services over existing networks, our products would no longer be competitive. Conversely, even if we are successful in rapidly developing new products ahead of our competitors, if we do not cost-effectively manage our inventory levels of existing products when making the transition to the new products, our financial results could be negatively affected by high levels of obsolete inventory. If any of the foregoing were to occur, then our operating results would be harmed.

**Our industry is rapidly evolving and we may not be able to keep pace with technological changes, which could adversely affect our business.**

The transmission of multimedia over data networks is rapidly evolving. Short product life cycles place a premium on our ability to manage the transition from current products to new products. Our future success in generating revenues will depend on our ability to enhance our existing products and to develop and introduce new products and product features. These products and features must keep pace with technological developments and address the increasingly sophisticated needs of our customers. The development of new technologies and products is increasingly complex and uncertain. This increases the difficulty in coordinating the planning and production process and can result in delay in the introduction of new technologies and products.

**The increase in the number of IP networks may adversely affect the demand for media gateway products.**

Media gateway products are primarily intended to transcode voice from traditional telephony networks to IP networks and vice versa. Along with the growth in the number of IP networks, there has been an increase in the amount of information that is sent directly from one IP network to another IP network. This direct network communication potentially obviates the need to use a media gateway or transcoding. A reduction in the demand for media gateways may adversely affect the demand for our media gateway products and, in turn, adversely affect our results of operations.

**The ongoing transition to the use of cloud-based software could adversely affect us.**

The use of cloud-based software as a service ("SaaS") is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted in the cloud. Recently, our partners have started adopting this model. For example, Microsoft announced Skype for Business cloud PBX in November 2015 and is encouraging business customers to use that model instead of the on premises alternative. Currently, our revenue is generated primarily from on premises deployments. The transition to cloud-based delivery impacts the architecture and role of our products in the overall solution. We may not succeed in transitioning in time or at all to the new technologies, products, solutions and services adopted by our partners and their customers. We may not succeed in aligning our solutions with our partners' solutions and be unable to bring sufficient value to them or their end customers. Our inability to adapt to the ongoing transition to the use of cloud- based software could have an adverse effect on us.

**New industry standards, the modification of our products to meet additional existing standards or the addition of features to our products may delay the introduction of our products or increase our costs.**

The industry standards that apply to our products are continually evolving. In addition, since our products are integrated into networks consisting of elements manufactured by various companies, they must comply with a number of industry standards and practices established by various international bodies and industry forums. Should new standards gain broad acceptance, we will be required to adopt those standards in our products. We may also decide to modify our products to meet additional existing standards or add features to our products. Standards may be adopted by various industry interest groups or may be proprietary and nonetheless accepted broadly in the industry. It may take us a significant amount of time to develop and design products incorporating these new standards.

**Our OEM customers or potential customers or partners may develop or prefer to develop their own technical solutions, or purchase third party technology, and as a result, would not buy our products.**

Our products are sold also as components or building blocks to large OEMs and NEPs. These customers incorporate our products into their product offerings, usually in conjunction with value-added services of their own or of third parties. OEM or NEP customers or potential customers may prefer to develop their own technology or purchase third party technology. They could also manufacture their own components or building blocks that are similar to the ones we offer. Large customers have already committed significant resources in developing integrated product offerings. Customers may decide that this gives them better profitability and/or greater control over supplies, specifications and performance. Customers may therefore not buy components or products from an external manufacturer such as us. This could have an adverse impact on our ability to sell our products and our revenues.

**We have a limited order backlog. If revenue levels for any quarter fall below our expectations, our results of operations will be adversely affected.**

We have a limited order backlog, which makes revenues in any quarter substantially dependent on orders received and delivered in that quarter. A delay in the recognition of revenue, even from one customer, may have a significant negative impact on our results of operations for a given period. We base our decisions regarding our operating expenses on anticipated revenue trends, and our expense levels are relatively fixed, or require some time for adjustment. Because only a small portion of our expenses varies with our revenues, if revenue levels fall below our expectations, our results of operations will be adversely affected.

**Generally, we sell to original equipment manufacturers, or OEMs, network equipment providers or system integrator customers, as well as to distributors. As a result, we have less information with respect to the actual requirements of end-users and their utilization of equipment. We also have less influence over the choice of equipment by these end-users.**

We typically sell to OEM customers, network equipment providers, and system integrators, as well as to distributors. Our customers usually purchase equipment from several suppliers and may be trying to fulfill one of their customers' specific technical specifications. We rely heavily on our customers for sales of our products and to inform us about market trends and the needs of their customers. We cannot be certain that this information is accurate. If the information we receive is not accurate, we may be manufacturing products for which no customer demand exists or fail to manufacture products that end-users want. Because we are selling products to OEMs, system integrators and distributors rather than directly to end-users, we have less control over the ultimate selection of products by end-users.

**The markets we serve are highly competitive and many of our competitors have competitive advantages over us, which may make it difficult for us to maintain profitability.**

Competition in our industry is intense and we expect competition to increase in the future. Our competitors currently sell products that provide similar benefits to those of the products that we sell. There have been a significant number of mergers and acquisitions and strategic alliances, frequently involving major telecommunications equipment manufacturers acquiring smaller companies, and we expect that this will result in an increasing concentration of market share among these companies, many of whom are our customers.

Our principal competitors in the area of analog media gateways (2 to 24 ports) for access and enterprise are Grandstream, Natex, Iskratel, Zyxel, Adtran, Media5, Cisco, Sangoma, Innovaphone AG, Patton, Dialogic and Edgewater.

In the area of low and mid density digital gateways we face competition from companies such as Sonus Networks, Huawei, Cisco, Dialogic, Genband, Edgewater, Patton, Ferrari and Sangoma.

Our competitors in the area of MSBRs are companies such as Cisco, Juniper, Adtran, One-Access, Patton, Huawei, HP/3COM and Alcatel-Lucent.

Specifically in the area of enterprise class session border controller technology we compete with ACME Packet (acquired by Oracle), Cisco, SIPera (acquired by Avaya), Sonus Networks, NET (acquired by Sonus Networks), Ingate and Edgewater.

Our competitors in the Microsoft Skype for Business certified gateways, session border controller, Survivable Branch Appliance and IP Phone markets include NET (acquired by Sonus Networks), Dialogic, Cisco, Ferrari, ACME Packet (acquired by Oracle) Polycom Snom, Yealink, Patton and HP.

Our principal competitors in the residential gateway market are Fritzbox, Technicolor, Cisco, ADB Global, Sagemcom, ZyXEL, Netgear, Bewan (Pace), Huawei and ZTE.

Our principal competitors in the sale of signal processing chips are Broadcom, Octasic and Mindspeed. Other indirect competition is a result of the integration of VoIP functionality into processors (running VoIP signal processing on generic ARM/MIPS cores), thus decreasing the need for dedicated signal processing chips in the VoIP product. Examples of such manufacturers are Cavium and Texas Instruments. Our principal competitors in the communications board market are Dialogic, Sangoma and PIKA Technologies.

Our principal competitors in the area of IP Phones are comprised of “best-of-breed” IP phone vendors and end-to-end IP telephony vendors. “Best of breed” IP phone vendors sell standards-based SIP phones that can be integrated into any standards-based IP-PBX or hosted IP telephony system. These competitors include Polycom, HP, Grandstream, Yealink and SNOM. End-to-end IP telephony vendors sell IP phones that only work in their proprietary systems. These competitors include Cisco, Avaya, Alcatel-Lucent, Siemens, Aastra (acquired by Mitel) and NEC.

Some of our competitors are also customers of our products and technologies.

Many of our competitors have the ability to offer complete network solutions and vendor-sponsored financing programs to prospective customers. Some of our competitors with broad product portfolios may also be able to offer lower prices on products that compete with ours because of their ability to recoup a loss of margin through sales of other products or services. Additionally, voice, audio and other communications alternatives that compete with our products are being continually introduced.

In the future, we may also develop and introduce other products with new or additional telecommunications capabilities or services. As a result, we may compete directly with VoIP companies and other telecommunications and solution infrastructure providers, some of which may be our customers. Additional competitors may include companies that currently provide communication software products and services. The ability of some of our competitors to bundle other enhanced services or complete solutions with VoIP products could give these competitors an advantage over us.

**Offering to sell system level products that compete with the products manufactured by our customers could negatively affect our business.**

Our product offerings range from media gateway building blocks, such as chips and boards, to media gateways, media servers and session border control products (systems). These products could compete with products offered by our customers. These customers could decide to decrease purchases from us because of this competition. This could result in a material adverse effect on our results of operations.

**Offering to sell directly to carriers or service providers may expose us to requirements for service which we may not be able to meet.**

We also sell our products directly to telecommunications carriers, service providers or other end-users. We have traditionally relied on third party distributors and OEMs to test and/or sell our products and to inform us about the requirements of end-users. We have limited experience selling our products directly to end-user customers. Telecommunications carriers and other service providers have great bargaining power in negotiating contracts. Generally, contracts with end-users tend to be more complex and impose more obligations on us than contracts with third party distributors. We may be unable to meet the requirements of these contracts. If we are unable to meet the conditions of a contract with an end-user customer, we may be required to pay liquidated damages or become subject to liabilities that could result in a material adverse effect on our results of operations.

Selling directly to end-users may adversely affect our relationship with our current third party distributors upon whom we will continue to rely for a significant portion of our sales. Loss of third party distributors and OEMs, or a decreased commitment by them to sell our products as a result of direct sales by us, could adversely affect our sales and results of operations.

**We rely on third-party subcontractors to assemble and original design manufacturers to design and manufacture some of our products, and therefore do not directly control manufacturing costs, product delivery schedules or manufacturing quality.**

Our products are assembled and tested by third-party subcontractors. As a result of our reliance on third-party subcontractors, we cannot directly control product delivery schedules. We have in the past experienced delays in delivery schedules. Any problems that occur and persist in connection with the delivery, quality or cost of the assembly and testing of our products could have a material adverse effect on our business, financial condition and results of operations. This reliance could also lead to product shortages or quality assurance problems, which, in turn, could lead to an increase in the costs of manufacturing or assembling our products.

In addition, we have engaged several original design manufacturers, or ODMs, based in Asia to design and manufacture some of our products and may engage additional ODMs in the future. Any problems that occur and persist in connection with the delivery, quality, cost of the assembly or testing of our products, as well as the termination of our commercial relationship with an ODM or the discontinuance of the manufacturing of the respective products could have a material adverse effect on our business, financial condition and results of operations.

**If a small number of third-party suppliers do not provide us with key components on a timely basis, we may not be able to deliver our products to our customers, and substantial reengineering costs may be incurred.**

Texas Instruments Incorporated supplies all of the chips for our signal processor product line. Our signal processor line is used both as a product line in its own right and as a key component in our other product lines. Motorola and Cavium Networks manufacture all of the communications and network processors currently used in our embedded communications boards and network products.

We have not entered into any long-term supply agreements or alternate source agreements with our suppliers and, while we maintain an inventory of critical components, our inventory of chips would likely not be sufficient in the event that we had to engage an alternate supplier for these components.

An unexpected termination of the supply of the chips provided by Texas Instruments or the communications processors supplied by Motorola or Cavium Networks or disruption in their timely delivery would require us to make a large investment in capital and personnel to shift to using chips or signal processors manufactured by other companies and may cause a delay in introducing replacement products. Customers may not accept an alternative product design. Supporting old products or redesigning products may make it more difficult for us to support our products.

**We depend on other sole source suppliers to produce components for us without the benefit of long-term supply agreements or alternative source agreements.**

Some of our sole source suppliers custom produce components for us based upon our specifications and designs while other of our sole source suppliers are the only manufacturers of certain components required by our products. We have not entered into any long-term supply agreements or alternative source agreements with our suppliers and while we maintain an inventory of components from single source providers, our inventory would likely not be sufficient in the event that we had to engage an alternate supplier of these single source components. In the event of any interruption in the supply of components from any of our sole source suppliers, we may have to expend significant time, effort and other resources in order to locate a suitable alternative manufacturer and secure replacement components. If no replacement components are available, we may be forced to redesign certain of our products. Any such new design may not be accepted by our customers. A prolonged disruption in supply may force us to redesign and retest our products. Any interruption in supply from any of these sources or an unexpected technical failure or termination of the manufacture of components could disrupt production, thereby adversely affecting our ability to deliver products and to support products previously sold to our customers.

In addition, if demand for telecommunications equipment increases, we may face a shortage of components from our suppliers. This could result in longer lead times, increases in the price of components and a reduction in our margins, all of which could adversely affect the results of our operations.

**Our customers may require us to produce products or systems to hold in inventory in order to meet their "just in time," or short lead time, delivery requirements. If we are unable to sell this inventory on a timely basis, we could incur charges for excess and obsolete inventory which would adversely affect our results of operations.**

Our customers expect us to maintain an inventory of products available for purchase off the shelf subsequent to the initial sales cycle for these products. This may require us to incur the costs of manufacturing inventory without having a purchase order for the products. The VoIP industry is subject to rapid technological change and volatile customer demands, which result in a short product commercial life before a product becomes obsolete. If we are unable to sell products that are produced to hold in inventory, we will need to write-off all or a part of the inventory value of these products. Write-offs could adversely affect our operating results and financial condition. We wrote off inventory in an aggregate amount of $1.7 million in 2013, $82,000 in 2014 and $724,000 in 2015. We have incurred write-offs as a result of slow moving items, excess inventories, discontinued products and products with market prices lower than cost.

**The right of our customers to return products and their right to exchange products may affect our ability to recognize revenues which could adversely affect the results of our operations.**

Some of our customers expect us to permit them to return some or all of the products they purchase from us. If we contractually agree to allow a customer to return products, the customer may be entitled to a refund for the returned products or to receive a credit for the purchase of replacement products. If we agree to this type of contractual obligation, it could affect our ability to recognize revenues. In addition, if we are not able to resell any products that are returned, we would have to write off this inventory. This could adversely affect our results of operations.

**Our products generally have long sales cycles and implementation periods, which increase our costs in obtaining orders and reduce the predictability of our revenues.**

Our products are technologically complex and are typically intended for use in applications that may be critical to the business of our customers. Prospective customers generally must make a significant commitment of resources to test and evaluate our products and to integrate them into larger systems .. As a result, our sales process is often subject to delays associated with lengthy approval processes that typically accompany the design and testing of new communications equipment. The sales cycles of our products to new customers are approximately six to twelve months after a design win, depending on the type of customer and complexity of the product. This time period may be further extended because of internal testing, field trials and requests for the addition or customization of features. This

delays the time until we realize revenue and results in significant investment of resources in attempting to make sales.

Long sales cycles also subject us to risks not usually encountered in a short sales span, including customers' budgetary constraints, internal acceptance reviews and cancellation. In addition, orders expected in one quarter could shift to another because of the timing of customers' procurement decisions. The time required to implement our products can vary significantly with the needs of our customers and generally exceeds several months; larger implementations can take multiple calendar quarters. This complicates our planning processes and reduces the predictability of our revenues.

**Our proprietary technology is difficult to protect, and our products may infringe on the intellectual property rights of third parties. Our business may suffer if we are unable to protect our intellectual property or if we are sued for infringing the intellectual property rights of third parties.**

Our success and ability to compete depend in part upon protecting our proprietary technology. We rely on a combination of patent, trade secret, copyright and trademark laws, nondisclosure and other contractual agreements and technical measures to protect our proprietary rights. These agreements and measures may not be sufficient to protect our technology from third-party infringement, or to protect us from the claims of others.

Enforcement of intellectual property rights may be expensive and may divert attention of management and of research and development personnel away from our business. Intellectual property litigation could also call into question the ownership or scope of rights owned by us. We believe that at least one of our patents may cover technology related to the ITU G.723.1 standard. Because of our involvement in the standard setting process, we may be required to license certain of our patents on a reasonable and non-discriminatory basis to a current or future competitor, to the extent required to carry out the G.723.1 standard. Additionally, our products may be manufactured, sold, or used in countries that provide less protection to intellectual property than that provided under U.S. or Israeli laws or where we do not hold relevant intellectual property rights.

We believe that the frequency of third-party intellectual property claims is increasing, as patent holders, including entities that are not in our industry and that purchase patents as an investment or to monetize such rights by obtaining royalties, use infringement assertions as a competitive tactic and a source of additional revenue. Any intellectual property claims against us, even if without merit, could cost us a significant amount of money to defend and divert management's attention away from our business. We may not be able to secure a license for technology that is used in our products and we may face injunctive proceedings that prevent distribution and sale of our products even prior to any dispute being concluded. These proceedings may also have a deterrent effect on purchases by customers, who may be unsure about our ability to continue to supply their requirements. We may be forced to repurchase our products and compensate customers that have purchased such infringing products. We may be forced to redesign the product so that it becomes non-infringing, which may have an adverse impact on the results of our operations.

In addition, claims alleging that the development, use, or sale of our products infringes third parties' intellectual property rights may be directed either at us or at our direct or indirect customers. We may be required to indemnify such customers against claims made against them. We may be required to indemnify them even if we believe that the claim of infringement is without merit.

**Multiple patent holders in our industry may result in increased licensing costs.**

There are a number of companies besides us that hold patents for various aspects of the technology incorporated in our industry's standards and our products. We expect that patent enforcement will be given high priority by companies seeking to gain competitive advantages or additional revenues. We have been sued a number of times in recent years for alleged patent infringement. If holders of patents take the position that we are required to obtain a license from them, we cannot be certain that we would be able to negotiate a license agreement at an acceptable price or at all. Our results of operations could be adversely affected by the payment of any additional licensing costs or if we are prevented from manufacturing or selling a product.

**Changes in governmental regulations in the United States or other countries could slow the growth of the VoIP telephony market and reduce the demand for our customers' products, which, in turn, could reduce the demand for our products.**

VoIP and other services are not currently subject to all of the same regulations that apply to traditional telephony. Nevertheless, it is possible that foreign or U.S. federal or state legislatures may seek to impose increased fees and administrative burdens on VoIP, data, and video providers. The FCC requires VoIP service providers to meet various emergency service requirements relating to delivery of 911 calls, known as E911, and to accommodate law enforcement interception or wiretapping requirements, such as the Communications Assistance for Law Enforcement Act, or CALEA. In addition, the FCC may seek to impose other traditional telephony requirements such as disability access requirements, consumer protection requirements, number assignment and portability requirements, and other obligations, including additional obligations regarding E911 and CALEA. The cost of complying with FCC regulations could increase the cost of providing Internet phone service which could result in slower growth and

decreased profitability for this industry, which would adversely affect our business.

The enactment of any additional regulation or taxation of communications over the Internet in the United States or elsewhere in the world could have a material adverse effect on our customers' (and their customers') businesses and could therefore adversely affect sales of our products. We do not know what effect, if any, possible legislation or regulatory actions in the United States or elsewhere in the world may have on private telecommunication networks, the provision of VoIP services and purchases of our products.

**Use of encryption technology in our products is regulated by governmental authorities and may require special development, export or import licenses. Delays in the issuance of required licenses, or the inability to secure these licenses, could adversely affect our revenues and results of operations.**

Growth in the demand for security features may increase the use of encryption technology in our products. The use of encryption technology is generally regulated by governmental authorities and may require specific development, export or import licenses. Encryption standards may be based on proprietary technologies. We may be unable to incorporate encryption standards into our products in a manner that will insure interoperability. We also may be unable to secure licenses for proprietary technology on reasonable terms. If we cannot meet encryption standards, or secure required licenses for proprietary encryption technology, our revenues and results of operations could be adversely affected.

**We are subject to regulations that require us to use components based on environmentally friendly materials. We may be subject to various regulations relating to management and disposal of waste with respect to electronic equipment. Compliance with these regulations has increased our costs. Failure to comply with these regulations could materially adversely affect our results of operations.**

We are subject to an increasing number of telecommunications industry regulations requiring the use of environmentally-friendly materials in telecommunications equipment. For example, pursuant to a European Community directive, telecom equipment suppliers are required to stop using specified materials that are not environmentally friendly. In addition, telecom equipment suppliers that take advantage of an exemption with respect to the use of lead in solders are required by this directive to eliminate the lead in solders from their products by the time set forth by the European Community regulations. We expect that a new date for this exemption will be announced during 2016. Some of our customers may also require products that meet higher standards than those required by the directive, such as complete removal of additional harmful substances from our products. We are dependent on our suppliers for components and sub-system modules, such as semiconductors and purchased assemblies and goods, to comply with these requirements. This may harm our ability to sell our products in regions or to customers that may adopt such directives. Compliance with these directives, especially with respect to the requirement that products eliminate lead solders, has required us to undertake significant expenses with respect to the re-design of our products. In addition, we may be required to pay higher prices for components that comply with this directive. We may not be able to pass these higher component costs on to our customers. Compliance with these regulations have increased and could continue to increase our product design costs. New designs may also require qualification testing with both customers and government certification boards.

Some of our operations use substances regulated under various federal, state, local and international laws governing the environment, including laws governing the management and disposal of waste with respect to electronic equipment. We could incur substantial costs, including fines and civil or criminal sanctions, if we were to violate or become liable under environmental laws or if our products become non-compliant with environmental laws. We also face increasing complexity in our product design and procurement operations as we adjust to new and future requirements relating to the materials that compose our products. The EU has enacted the Waste Electrical and Electronic Equipment Directive, which makes producers of electrical goods financially responsible for specified collection, recycling, treatment and disposal of past and future covered products. Similar legislation has been or may be enacted in other jurisdictions, including the United States, Canada, Mexico, China and Japan.

Our inability or failure to comply with these regulations could have a material adverse effect on our results of operations. In addition, manufacturers of components that use lead solders may decide to stop manufacturing those components prior to the required compliance date. These actions by manufacturers of components could result in a shortage of components that could adversely affect our business and results of operations.

**We have a significant presence in international markets and plan to continue to expand our international operations, which exposes us to a number of risks that could affect our future growth.**

We have a worldwide sales, marketing and support infrastructure that is comprised of independent distributors and value added resellers, and our own personnel resulting in a sales, marketing and support presence in many countries, including markets in North America, Western and Eastern Europe, the Asia Pacific region and Latin America. We expect to continue to increase our sales headcount, our applications development headcount, our field support headcount, our marketing headcount and our engineering headcount and, in some cases, establish new relationships with distributors, particularly in markets where we currently do not have a sales or customer support presence. As we continue to expand our international sales and operations, we are subject to a number of risks, including the following:

- greater difficulty in enforcing contracts and accounts receivable collection, as well as longer collection periods;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business (for example a recent decline in the value of the Russian currency affected our sales in Russia);
- greater difficulty in recruiting local experienced personnel, and the costs and expenses associated with such activities;
- general economic and political conditions in these foreign markets (for example changes in oil prices and the global economy have affected growth and ultimately the demand for our products in China);
- economic uncertainty around the world;
- management communication and integration problems resulting from cultural and geographic dispersion;

risks associated with trade restrictions and foreign legal requirements, including the importation, certification, and localization of our solutions required in foreign countries, such as high import taxes in Brazil and other Latin American markets where we sell our products;

greater risk of unexpected changes in regulatory practices, tariffs, and tax laws and treaties;

the uncertainty of protection for intellectual property rights in some countries;

greater risk of a failure of employees to comply with both U.S. and foreign laws, including antitrust regulations, the U.S. Foreign Corrupt Practices Act (FCPA), and any trade regulations ensuring fair trade practices; and

heightened risk of unfair or corrupt business practices in certain regions and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements.

Any of these risks could adversely affect our international operations, reduce our revenues from outside the United States or increase our operating costs, adversely affecting our business, results of operations and financial condition and growth prospects. There can be no assurance that all of our employees and channel partners will comply with the formal policies we have and will implement, or applicable laws and regulations. Violations of laws or key control policies by our employees and channel partners could result in delays in revenue recognition, financial reporting misstatements, fines, penalties or the prohibition of the importation or exportation of our software and services and could have a material adverse effect on our business and results of operations.

**A significant portion of our revenues is generated outside of the Americas and Israel. We intend to continue to expand our operations internationally and, as a result, our results of operations could suffer if we are unable to manage our international operations effectively.**

Revenues generated outside of the Americas and Israel represented approximately 42% of our revenues in 2013 and 44% of our revenues in 2014 and in 2015. Part of our strategy is to expand our penetration in existing foreign markets and to enter new foreign markets. Our ability to penetrate some international markets may be limited due to different technical standards, protocols or product requirements in different markets. Expansion of our international business will require significant management attention and financial resources. Our international sales and operations are subject to numerous risks inherent in international business activities, including:

·economic and political instability in foreign countries;

·compliance with foreign laws and regulations;

·different technical standards or product requirements;

- staffing and managing foreign operations;

- foreign currency fluctuations;

- export control issues;

- governmental controls;

- import or currency control restrictions;

- local taxation;

- increased risk of collection; and

- burdens that may be imposed by tariffs and other trade barriers.

If we are unable to address these risks, our foreign operations may be unprofitable or the value of our investment in our foreign operations may decrease.

**The prices of our products may become less competitive due to foreign exchange fluctuations.**

Although we have operations throughout the world, the majority of our revenues and our operating costs in 2015 were denominated in, or linked to, the U.S. dollar. Accordingly, we consider the U.S. dollar to be our functional currency. However, a significant portion of our operating costs in 2015 were incurred in New Israeli Shekels (NIS). During 2015, the NIS depreciated against the U.S. dollar, which resulted in a decrease in the U.S. dollar cost of our operations in Israel. As a result of this differential, from time to time we may experience increases in the costs of our operations outside the United States, as expressed in U.S. dollars. If there is a significant increase in our expenses, we may be required to increase the prices of our products and may be less competitive. Currently, our international sales are denominated primarily in U.S. dollars. Therefore, any devaluation in the local currencies of our customers relative to the U.S. dollar could cause customers to decrease or cancel orders or default on payment.

Our sales to European customers denominated in Euros are increasing. Sales denominated in Euros could make our revenues subject to fluctuation in the Euro/U.S. dollar exchange rate. If the U.S. dollar appreciates against the Euro, we may be required to increase the prices of our products that are denominated in Euros. In 2015, the U.S. dollar appreciated against the Euro, which resulted in an increase in the prices of our products that are denominated in Euros.

**Our independent sales representatives may fail to market our products effectively.**

A significant portion of our marketing and sales involves the aid of independent sales representatives that are not under our direct control. We cannot be certain that our current independent sales representatives will continue to distribute our products or that, even if they continue to distribute our products, they will do so successfully. These representatives are not subject to any minimum purchase requirements and can discontinue marketing our products at any time. In addition, these representatives often market products of our competitors. Accordingly, we must compete for the attention and sales efforts of our independent sales representatives.

**Our products could contain defects, which would reduce sales of those products or result in claims against us.**

We develop complex and evolving products. Despite testing by us and our customers, undetected errors or defects may be found in existing or new products. The introduction of products with reliability, quality or compatibility problems could result in reduced revenues, additional costs, increased product returns and difficulty or delays in collecting accounts receivable. The risk is higher with products still in the development stage, where full testing or certification is not yet completed. This could result in, among other things, a delay in recognition or loss of revenues, loss of market share or failure to achieve market acceptance. We could also be subject to material claims by customers that are not covered by our insurance.

**Obtaining certification of our products by national regulators may be time-consuming and expensive. We may be unable to sell our products in markets in which we are unable to obtain certification.**

Our customers may expect us to obtain certificates of compliance with safety and technical standards set by national regulators, especially standards set by U.S. or European regulators. There is no uniform set of standards, and each national regulator may impose and change its own standards. National regulators may also prohibit us from importing products that do not conform to their standards. If we make any change in the design of a product, we are usually required to obtain recertification of the product. The process of certification may be time-consuming and expensive and may affect the length of the sales cycle for a product. If we are unable to obtain certification of a product in a market, we may be unable to sell the product in that market.

**We depend on a limited number of key personnel who would be difficult to replace.**

Because our products are complex and our market is evolving, the success of our business depends in large part upon the continuing contributions of our management and key personnel. Specifically, we rely heavily on the services of Shabtai Adlersberg, our Chief Executive Officer and President, and Lior Aldema, our Chief Operating Officer and Head of Global Sales. If our Chief Executive Officer or our Chief Operating Officer are unable or unwilling to continue with us, our results of operations could be materially and adversely affected. We do not carry key person insurance for our key personnel.

The success of our business also depends upon our continuing ability to attract and retain other highly-qualified management, technical, sales and marketing personnel. We need highly-qualified technical personnel who are capable of developing technologies and products and providing the technical support required by our customers. We experience competitive pressure with respect to retaining and hiring employees in the high technology sector in Israel. If we fail to hire and retain skilled employees, our business may be adversely affected.

**If we do not manage our operations effectively, our results of operations could be adversely affected.**

We have actively expanded our operations in the past and may continue to expand them in the future. This expansion has required, and may continue to require, the application of managerial, operational and financial resources. We cannot be sure that we will continue to expand, or that we will be able to expand our operations successfully. In particular, our business requires us to focus on multiple markets, including the VoIP, wireline, cable, enterprise unified communications and wireless markets. In addition, we work simultaneously with a number of large OEMs and network equipment providers each of which may have different requirements for the products that we sell to them. We may not have sufficient personnel, or may be unable to devote this personnel when needed, to address the requirements of these markets and customers. If we are unable to manage our operations effectively, our revenues may not increase, our cost of operations may rise and our results of operations may be adversely affected.

As we grow we may need new or enhanced systems, procedures or controls. The transition to such systems, procedures or controls, as well as any delay in transitioning to new or enhanced systems, procedures or controls, may seriously harm our ability to accurately forecast sales demand, manage our product inventory and record and report financial and management information on a timely and accurate basis.

**The growth in our product portfolio means that we have to service and support more products. This may result in an increase in our expenses and an adverse effect on our results of operations.**

The size of our product portfolio has increased and continues to increase. As a result, we are required to provide product support to our customers. Customers have requested that we provide a contractual commitment to support a product for a specified period of time. This period of time may exceed the working life of the product or extend past the period of time that we may intend to manufacture or support a product. We are dependent on our suppliers for the components (hardware and software) needed to provide support and may be unable to secure the components necessary to satisfy our service commitments. We do not have long-term contracts with our suppliers, and they may not be obligated to provide us with products or services for any specified period of time. We may need to purchase an inventory of replacement components and parts in advance in order to try to provide for their availability when needed. This could result in an increased risk of write-offs with respect to our replacement component inventory to the extent that we cannot accurately predict our future requirements under our customer service contracts. If any of our component suppliers cease production, cease operations or refuse or fail to make timely delivery of orders, we may not be able to meet our contractual commitments for product support. We may be required to supply enhanced components or parts as substitutes if the original versions are no longer available. Product support may be costly and any extra service revenues may not cover the hardware and software costs associated with providing long-term support.

**Terrorist attacks, or the threat of such attacks, may negatively impact the global economy which may materially adversely affect our business, financial condition and results of operation and may cause our share price to decline.**

Financial, political, economic and other uncertainties following terrorist attacks throughout the world may negatively impact the global economy. As a result, many of our customers and potential customers have become much more cautious in setting their capital expenditure budgets, thereby restricting their telecommunications procurement. Uncertainties related to the threat of terrorism have had a negative effect on global economy, causing businesses to continue slowing spending on telecommunications products and services and further lengthen already long sales cycles. Any escalation of these threats or similar future events may disrupt our operations or those of our customers, distributors and suppliers, which could adversely affect our business, financial condition and results of operations.

**We are subject to taxation in several countries.**

Because we operate in several countries, we are subject to taxation in multiple jurisdictions. We are required to report to and are subject to local tax authorities in the countries in which we operate. In addition, our income that is derived from sales to customers in one country might also be subject to taxation in other countries. We cannot be sure of the amount of tax we may become obligated to pay in the countries in which we operate. The tax authorities in the countries in which we operate may not agree with our tax position. Our tax benefits from carry forward losses and other tax planning benefits such as Israeli approved enterprise programs, may prove to be insufficient due to Israeli tax limitations, or may prove to be insufficient to offset tax liabilities from foreign tax authorities. Foreign tax authorities may also use our gross profit or our revenues in each territory as the basis for determining our income tax, and our operating expenses might not be considered for related tax calculations, which could adversely affect our results of operations.

***Risks Related to Operations in Israel***

**Conditions in Israel affect our operations and may limit our ability to produce and sell our products and instability in the Middle East may adversely affect us.**

We are incorporated under the laws of the State of Israel, and our principal executive offices and principal research and development facilities are located in the State of Israel. Political, economic and military conditions in Israel directly affect our operations. There has been an increase in unrest and terrorist activity in Israel, which has continued with varying levels of severity for many years through the current period of time. This has led to ongoing hostilities between Israel, the Palestinian Authority, other groups in the West Bank and Gaza Strip, and the northern border of Lebanon, such as the hostilities along Israel's border with the Gaza Strip and the missiles fired from the Gaza Strip into Israel in 2012 and 2013, as well as during the hostilities in the summer of 2014. The future effect of this conflict on the Israeli economy and our operations is unclear. The Israeli-Palestinian conflict may also lead to political instability between Israel and its neighboring countries. Ongoing violence between Israel and the Palestinians, as well as tension between Israel and the neighboring countries, may have a material adverse effect on our business, financial conditions and results of operations.

Recent political events in various countries in the Middle East, such as Syria, Iraq, Iran and Egypt, have weakened the stability of those countries, and have allowed extreme terrorists organizations, such as ISIS, to operate in certain territories in the Middle East. This instability may lead to deterioration of the geo-political conditions in the Middle East. In addition, this instability has affected the global economy and marketplace through fluctuations in oil and gas prices. Our headquarters and research and development facilities are located in the State of Israel. Any events that affect the State of Israel may impact us in unpredictable ways. For example, recent activities of the global movement for a campaign of Boycott, Divestment and Sanctions (BDS) against Israel may adversely affect our sales in certain countries. We have contingent plans for alternative manufacturing and supply sources, but these plans may be insufficient. Should our operations be impacted in a significant way, this may adversely affect the results of our operations.

We cannot predict the effect on us of an increase in these hostilities or any future armed conflict, political instability or violence in the region. Additionally, some of our officers and employees in Israel are obligated to perform annual military reserve duty and are subject to being called for additional active duty under emergency circumstances. Some of our employees live within conflict area territories and may be forced to stay at home instead of reporting to work. We cannot predict the full impact of these conditions on us in the future, particularly if emergency circumstances or an escalation in the political situation occur. If many of our employees are called for active duty, or forced to stay at home, our operations in Israel and our business may be adversely affected.

A number of countries and organizations continue to restrict or ban business with Israel or Israeli companies or companies doing business with Israel or Israeli companies, which may limit our ability to make sales in those countries. In addition, there have been increased efforts by activists to cause companies and consumers to boycott

Israeli goods based on Israeli government policies. Such actions, particularly if they become more widespread, may adversely impact our ability to sell our products.

**We are adversely affected by the changes is the value of the U.S. dollar against the New Israeli Shekel and could be adversely affected by the rate of inflation in Israel.**

We generate most of our revenues in U.S. dollars and, in 2015, a significant portion of our expenses, primarily salaries, related personnel expenses and the leases of our buildings in Israel, were incurred in NIS. We anticipate that a significant portion of our expenses will continue to be denominated in NIS.

Our NIS related costs, as expressed in U.S. dollars, are influenced by the exchange rate between the U.S. dollar and the NIS. During 2013, the NIS appreciated against the U.S. dollar, which resulted in a significant increase in the U.S. dollar cost of our operations in Israel. During 2014 and 2015, the NIS depreciated against the U.S. dollar, which resulted in a decrease in the U.S. dollar cost of our operations in Israel. To the extent the U.S. dollar weakens against the NIS, we could experience an increase in the cost of our operations, which are measured in U.S. dollars in our financial statements, which could adversely affect our results of operations. In addition, in periods in which the U.S. dollar appreciates against the NIS, we bear the risk that the rate of inflation in Israel will exceed the rate of such devaluation of the NIS in relation to the U.S. dollar or that the timing of such devaluations were to lag considerably behind inflation, which will increase our costs as expressed in U.S. dollars.

A decrease in value of the U.S. dollar in relation to the NIS could have the effect of increasing the cost in U.S. dollars of these expenses. Our U.S. dollar-measured results of operations were adversely affected in 2012 and 2013 when the NIS appreciated against the U.S. dollar. This could happen again if the U.S. dollar were to decrease in value against the NIS.

In order to manage the risks imposed by foreign currency exchange rate fluctuations, from time to time, we enter into currency forward and put and call options contracts to hedge some of our foreign currency exposure. We can provide no assurance that our hedging arrangements will be effective. In addition, if we wish to maintain the U.S. dollar-denominated value of our products in non-U.S. markets, devaluation in the local currencies of our customers relative to the U.S. dollar may cause our customers to cancel or decrease orders or default on payment.

Because exchange rates between the NIS and the U.S. dollar fluctuate continuously, exchange rate fluctuations have an impact on our profitability and period-to-period comparisons of our results of operations. In 2015, the value of the U.S. dollar increased in relation to the NIS by 0.3% and the deflation rate in Israel was 1.0%. In 2014, the value of the U.S. dollar increased in relation to the NIS by 12.0% and the deflation rate in Israel was 0.1%. In 2013, the value of the U.S. dollar decreased in relation to the NIS by 7.0% and the inflation rate in Israel was 1.9%. Our results of operations may be adversely affected in case of a decrease in the value of the U.S. dollar to the NIS.

**The Israeli government programs in which we currently participate, and the tax benefits we currently receive require us to meet several conditions and may be terminated or reduced in the future, which would increase our costs.**

Currently there are four programs under the Israeli Law for the Encouragement of Capital Investments, 1959, or the Investment Law, that entitle us to certain tax benefits. Our facilities in Israel have been granted Approved Enterprise status under the Israeli Law for the Encouragement of Capital Investments, 1959, or the Investment Law under four programs of Approved Enterprise. We have two programs that qualify as Beneficiary Enterprises pursuant to an amendment to the Investment Law that came into effect in April 2005. Among other things, the Investment Law, as amended in 2005, provides tax benefits to both local and foreign investors and simplifies the approval process. Such amendments do not apply to investment programs approved prior to December 31, 2004. Therefore, our Approved Enterprise program is not subject to the provisions of the amendment, but our four Beneficiary Enterprise programs are subject to the amendment.

In order to be eligible for tax benefits under the Investment Law, our Approved Enterprise and Privileged Enterprises must comply with various conditions set forth in the Investment Law and the criteria set forth in the applicable certificate of approval for the Approved Enterprise, as well as periodic reporting obligations. If we fail to meet these requirements, we would be subject to corporate tax in Israel at the regular statutory rate. Additionally, some of these programs and the related tax benefits are available to us for a limited number of years, and these benefits expire from time to time. We could also be required to refund tax benefits, with interest and adjustments for inflation based on the Israeli consumer price index. See Note 15 to our Consolidated Financial Statements for additional information with respect to tax benefits under the Investment Law.

If the Government of Israel discontinues or modifies these programs and potential tax benefits, our business, financial condition and results of operations could be materially and adversely affected.

**The government grants we have received for research and development expenditures limit our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. If we fail to satisfy these conditions, we may be required to refund grants previously received together with interest and penalties.**

In connection with research and development grants we received from the Office of the Chief Scientist of the Israeli Ministry of Economy, or the OCS, we must pay royalties to the OCS on the revenue derived from the sale of products, technologies and services developed with the grants from the OCS. The terms of the OCS grants and the law pursuant to which grants are made restrict our ability to manufacture products or transfer technologies outside of Israel if OCS grants funded the development of the products or technology, without special approvals from the OCS. Furthermore, the consideration available to our shareholders in a transaction involving the transfer outside of Israel of technology or know-how developed with OCS funding (such as a merger or similar transaction) may be reduced by any amounts that we are required to pay the OCS. These restrictions may limit our ability to enter into agreements for such transactions without OCS approval. We cannot be certain that any approval of the OCS will be obtained on terms that are acceptable to us, or at all.

In order to meet specified conditions in connection with the grants and programs of the OCS, we have made representations to the Government of Israel concerning our Israeli operations. If we fail to meet the conditions related to the grants, including the maintenance of a material presence in Israel, or if there is any material deviation from the representations made by us to the Israeli government, we could be required to refund the grants previously received (together with an adjustment based on the Israeli consumer price index and an interest factor) and would likely be ineligible to receive OCS grants in the future and, in certain cases, may be subject to criminal charges. In addition, manufacturing products outside the State of Israel (as we currently do) increases the rates of royalties to be paid to the OCS. Any inability to receive these grants would result in an increase in our research and development expenses.

In 2015, we recognized a royalty-bearing grant of $5.4 million from the Government of Israel, through the OCS, for the financing of a portion of our research and development expenditures in Israel. The OCS budget has been subject to reductions, which may affect the availability of funds for these prospective grants and other grants in the future. As a result, we cannot be certain that we will continue to receive grants at the same rate, or at all. In addition, the terms of any future OCS grants may be less favorable than our past grant. As of December 31, 2015, we have a contingent obligation to pay royalties in the amount of approximately $45.6 million.

A recent amendment to the R&D Law entered into effect on January 1, 2016. The amendment requires the formation of a new governmental authority to replace the Chief Scientist. Such new authority is required to be established by no later than July 28, 2018 and is expected to establish new guidelines regarding the R&D Law. Such amendment creates uncertainty with respect to the terms of our existing and/or future Chief Scientist programs and incentives as we do not know what guidelines will be adopted by such new authority.

**It may be difficult to enforce a U.S. judgment against us, our officers and directors, assert U.S. securities law claims in Israel or serve process on substantially all of our officers and directors.**

We are incorporated in Israel. Most of our executive officers and directors are nonresidents of the United States, and a majority of our assets and the assets of these persons are located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States against us or any such persons or to effect service of process upon these persons in the United States. Israeli courts may refuse to hear a claim based on a violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel addressing these matters. Additionally, there is doubt as to the enforceability of civil liabilities under the Securities Act and the Exchange Act in original actions instituted in Israel.

**Israeli law and provisions in our articles of association may delay, prevent or make difficult a merger with or an acquisition of us, which could prevent a change of control and therefore depress the price of our shares.**

Provisions of Israeli law may delay, prevent or make undesirable a merger or an acquisition of all or a significant portion of our shares or assets. Israeli corporate law regulates acquisitions of shares through tender offers and mergers, requires special approvals for transactions involving significant shareholders and regulates other matters that may be relevant to these types of transactions. These provisions of Israeli law could have the effect of delaying or preventing a change in control and may make it more difficult for a third party to acquire us, even if doing so would be beneficial to our shareholders. These provisions may limit the price that investors may be willing to pay in the future for our ordinary shares. In addition, our articles of association contain certain provisions that may make it more difficult to acquire us, such as a staggered board, the ability of our board of directors to issue preferred stock and limitations on business combinations with interested shareholders. Furthermore, Israel tax considerations may make potential transactions undesirable to us or to some of our shareholders.

**The rights and responsibilities of our shareholders are governed by Israeli law which may differ in some respects from the rights and responsibilities of shareholders of U.S. corporations.**

Since we are incorporated under Israeli law, the rights and responsibilities of our shareholders are governed by our articles of association and Israeli law. These rights and responsibilities differ in some respects from the rights and responsibilities of shareholders in United States corporations. In particular, a shareholder of an Israeli company has a duty to act in good faith and in a customary manner in exercising its rights and performing its obligations towards the company and other shareholders and to refrain from abusing its power in the company, including, among other things, in voting at a general meeting of shareholders on certain matters, such as an amendment to a company's articles of association, an increase of a company's authorized share capital, a merger of a company and approval of related party transactions that require shareholder approval. In addition, a controlling shareholder or a shareholder who knows that it possesses the power to determine the outcome of a shareholders' vote or to appoint or prevent the appointment of an office holder in a company or has another power with respect to a company, has a duty to act in fairness towards the company. However, Israeli law does not define the substance of this duty of fairness. Some of the parameters and implications of the provisions that govern shareholder behavior have not been clearly determined. These provisions may be interpreted to impose additional obligations and liabilities on our shareholders that are not typically imposed on shareholders of United States corporations.

***Risks Relating to the Ownership of our Ordinary Shares***

**The price of our ordinary shares may fluctuate significantly.**

The market price for our ordinary shares, as well as the prices of shares of other technology companies, has been volatile. Between January 1, 2011 and March 25, 2016, our share price has fluctuated from a low of $1.20 to a high of $9.12. The following factors may cause significant fluctuations in the market price of our ordinary shares:

· fluctuations in our quarterly revenues and earnings or those of our competitors;

· shortfalls in our operating results compared to levels forecast by securities analysts or by us;

· announcements concerning us, our competitors or telephone companies;

· announcements of technological innovations;

· the introduction of new products;

· changes in product price policies involving us or our competitors;

· market conditions in the industry;

· integration of acquired businesses, technologies or joint ventures with our products and operations;

· the conditions of the securities markets, particularly in the technology and Israeli sectors; and

· political, economic and other developments in the State of Israel and worldwide.

In addition, stock prices of many technology companies fluctuate significantly for reasons that may be unrelated or disproportionate to operating results. The factors discussed above may depress or cause volatility of our share price, regardless of our actual operating results.

**Our quarterly results of operations have fluctuated in the past and we expect these fluctuations to continue. Fluctuations in our results of operations may disappoint investors and result in a decline in our share price.**

We have experienced and expect to continue to experience significant fluctuations in our quarterly results of operations. In some periods, our operating results may be below public expectations or below revenue levels and operating results reached in prior quarters or in the corresponding quarters of the previous year. If this occurs, the market price of our ordinary shares could decline.

The following factors have affected our quarterly results of operations in the past and are likely to affect our quarterly results of operations in the future:

· size, timing and pricing of orders, including order deferrals and delayed shipments;

- launching of new product generations;
- length of approval processes or market testing;
- technological changes in the telecommunications industry;
- competitive pricing pressures;
- the timing and approval of government research and development grants;
- accuracy of telecommunication company, distributor and original equipment manufacturer forecasts of their customers' demands;
- changes in our operating expenses;
- disruption in our sources of supply;
- temporary or permanent reduction in purchases by our significant customers; and
- general economic conditions.

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

**Our actual financial results might vary from our publicly disclosed financial forecasts.**

From time to time, we publicly disclose financial forecasts and other performance metrics. Our forecasts reflect numerous assumptions concerning our expected performance, as well as other factors which are beyond our control and which might not turn out to be correct. As a result, variations from our forecasts could be material. Our financial results are subject to numerous risks and uncertainties, including those identified throughout this "Risk Factors" section and elsewhere in this Annual Report. If our actual financial results are worse than our financial forecasts, the price of our ordinary shares may decline. A large portion of our sales is made during the last month of each quarter. As a result, any delay in our receipt of orders could affect our results for a quarter and the accuracy of our forecasts.

**It is our policy that we will generally not provide quarterly forecasts of the results of our operations. This policy could affect the willingness of analysts to provide research with respect to our ordinary shares, which could affect the trading market for our ordinary shares.**

It is our policy that we will generally not provide quarterly forecasts of the results of our operations. This could result in the reduction of research analysts who cover our ordinary shares. Any reduction in research coverage could affect the willingness of investors, particularly institutional investors, to invest in our shares which could affect the trading market for our ordinary shares and the price at which our ordinary shares are traded.

**As a foreign private issuer whose shares are listed on NASDAQ, we follow certain home country corporate governance practices instead of certain NASDAQ requirements.**

As a foreign private issuer whose shares are listed on NASDAQ, we are permitted to follow certain home country corporate governance practices instead of certain requirements contained in the NASDAQ listing rules. We do not comply with the NASDAQ requirement that we obtain shareholder approval for certain dilutive events, such as for the establishment or amendment of certain equity based compensation plans. Instead, we follow Israeli law and practice which permits the establishment or amendment of certain equity based compensation plans to be approved by our board of directors without the need for a shareholder vote, unless such arrangements are for the compensation of directors or the chief executive officer, in which case they also require compensation committee and shareholder approval.

As a foreign private issuer listed on the NASDAQ, we may also elect in the future to follow home country practice with regard to, among other things, director nominations, composition of the board of directors and quorum at shareholders' meetings, as well as not obtain shareholder approval for certain dilutive events.

Accordingly, our shareholders may not be afforded the same protection as provided under NASDAQ's corporate governance rules.

**Our ordinary shares are listed for trading in more than one market and this may result in price variations.**

Our ordinary shares are listed for trading on NASDAQ and on the Tel Aviv Stock Exchange ("TASE"). Trading in our ordinary shares on these markets is made in different currencies (U.S. dollars on NASDAQ and New Israeli Shekels on TASE), and at different times (resulting from different time zones, different trading days and different public holidays in the United States and Israel). Actual trading volume on the TASE is generally lower than trading volume on NASDAQ, and as such could be subject to higher volatility. The trading prices of our ordinary shares on these two markets often differ resulting from the factors described above, as well as differences in exchange rates. Any decrease in the trading price of our ordinary shares on one of these markets could cause a decrease in the trading price of our ordinary shares on the other market.

**We do not anticipate declaring any cash dividends on our ordinary shares.**

We have never declared or paid cash dividends on our ordinary shares and do not plan to pay any cash dividends in the near future.

**U.S. shareholders face certain income tax risks in connection with their acquisition, ownership and disposition of our ordinary shares. In any tax year, we could be deemed a passive foreign investment company, which could result in adverse U.S. federal income tax consequences for U.S. shareholders.**

Based on the composition of our gross income, the composition and value of our gross assets and the amounts of our liabilities for each taxable year from 2004 through 2015, we do not believe that we were a passive foreign investment company, or PFIC, for U.S. federal income tax purposes during any of such tax years. It is likely, however, that we were a PFIC in each of 2001, 2002 and 2003. There can be no assurance that we will not become a PFIC in the current tax year or any future tax year in which, for example, the value of our assets, as measured by the public market valuation of our ordinary shares, declines in relation to the value of our passive assets (generally, cash, cash equivalents and marketable securities). If we are a PFIC for any tax year, U.S. shareholders who own our ordinary shares during such year may be subject to increased U.S. federal income tax liabilities and reporting requirements for such year and succeeding years, even if we cease to be a PFIC in such succeeding years. A U.S. holder of our ordinary shares will be required to file an information return containing certain information required by the U.S. Internal Revenue Service for each year in which we are treated as a PFIC with respect to such holder.

We urge U.S. holders of our ordinary shares to carefully review Item 10E. – "Taxation - U.S. Federal Income Tax Considerations" in this Annual Report and to consult their own tax advisors with respect to the U.S. federal income tax risks related to owning and disposing of our ordinary shares and the consequences of PFIC status.

**We are subject to ongoing costs and risks associated with complying with extensive corporate governance and disclosure requirements.**

As a foreign private issuer subject to U.S. federal securities laws, we spend a significant amount of management time and resources to comply with laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, United States Securities and Exchange Commission ("SEC") regulations and NASDAQ rules. While we have developed and instituted corporate compliance programs and continue to update our programs in response to newly implemented or changing regulatory requirements, we cannot provide assurance that we are or will be in compliance with all potentially applicable corporate regulations. If we fail to comply with any of these regulations, we could be subject to a range of regulatory actions, fines or other sanctions or litigation. In connection with our compliance with the internal control provisions of Section 404 and the other applicable provisions of the Sarbanes-Oxley Act, our management and other personnel devote a substantial amount of time, and may need to hire additional accounting and financial staff, to assure that we comply with these requirements. The additional management attention and costs relating to compliance with the Sarbanes-Oxley Act, the Dodd-Frank Act and other corporate governance requirements could materially and adversely affect our financial results.

The internal control over financial reporting required by Section 404 of the Sarbanes-Oxley Act may not prevent or detect misstatements because of certain of its limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. As a result, even effective internal controls may not provide reasonable assurances with respect to the preparation and presentation of financial statements. We cannot provide assurance that, in the future, our management will not find a material weakness in connection with its annual review of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We also cannot provide assurance that we could correct any such weakness to allow our management to assess the effectiveness of our internal control over financial reporting as of the end of our fiscal year in time to enable our independent registered public accounting firm to state that such assessment will have been fairly stated in our Annual Report on Form 20-F or state that we have maintained effective internal control over financial reporting as of the end of our fiscal year. Discovery and disclosure of a material weakness in our internal control over financial reporting could have a material impact on our financial statements and could cause our stock price to decline.

**The conflict minerals disclosure rules in the United States are complex and compliance with the rules could be difficult.**

We are subject to SEC disclosure obligations relating to our use of so-called "conflict minerals"-columbite-tantalite, cassiterite (tin), wolframite (tungsten) and gold. These minerals are present in a significant number of our products; as

a result, we are required to file a conflicts minerals report with the SEC on an annual basis by May of each year.

The preparation of our report is dependent upon the implementation and operation of our systems and processes and information supplied by our suppliers of products that contain, or potentially contain, conflict minerals. We have incurred and will continue to incur costs associated with complying with the supply chain due diligence procedures required by the SEC. To the extent that the information that we receive from our suppliers is inaccurate or inadequate or our processes in obtaining that information do not fulfill the SEC's requirements, we could face both reputational and SEC enforcement risks. In addition, our efforts to comply with the disclosure rules and to otherwise implement conflict-free sourcing policies could result in changes to our supply chain that could disrupt existing supply sources or cause more uncertainty with respect to our supply chain.

## ITEM 4. INFORMATION ON THE COMPANY

### A. HISTORY AND DEVELOPMENT OF THE COMPANY

AudioCodes Ltd. was incorporated in 1992 under the laws of the State of Israel. Our principal executive offices are located at 1 Hayarden Street, Airport City, Lod, 7019900 Israel. Our telephone number is +972-3-976-4000. Our agent in the United States is AudioCodes Inc., 27 World’s Fair Drive, Somerset, New Jersey 08873.

**MAJOR DEVELOPMENTS SINCE JANUARY 1, 2015**

New R&D Center

In April 2014, the Israeli Office of the Chief Scientist (OCS) approved a three-year program (2014-2016) for approximately NIS100 million (equal to approximately $25.7 million based on the exchange rate in effect as of December 31, 2014) to enable us to establish an advanced innovative research and development center for cloud computing technologies and Unified Communications. In May 2014, the research and development center was established. As of December 31, 2015, we employed 80 engineers at the research and development center. We expect that a significant portion of the cost of this project will be reimbursed to us through grants from the OCS pursuant to this program. The grants are subject to conditions relating to grants by the OCS. Funding for the whole term of the program is subject to the continued review and approval of the progress of the project by the OCS.

Software Enterprise Session Border Controller

Network Function Virtualization (NFV) continues to increase penetration in the service provider space. Service providers seek to harmonize their infrastructure on common off the shelf servers, instead of using proprietary hardware. In 2015, AudioCodes continued to invest in NFV by adding more capabilities to its software SBC product line. This includes software-based transcoding, support and integration with OpenStack framework and an SBC AMI in Amazon Web Services cloud.

IP Phones

During 2015, we continued to evolve our IP Phones offering for Microsoft Skype for Business, contacts centers and hosted business services by developing additional capabilities and offering tighter manageability and control of the phones from the One Voice Operations Center. Additionally, we introduced the 405 IP Phone for price-sensitive customers and to help our penetration into Asia Pacific and Latin American markets.

Multi-Service-Business-Routers

During 2015, we continued to evolve our MSBR product line with more hardware configurations as required by service provider customers and more advanced capabilities such as Virtual Redundant Routing Protocol (VRRP), used to achieve enhanced reliability and availability of routing paths.

One Voice Operations Center

Our One Voice operations center ("OVOC") offers management applications for large-scale cloud or premise-based unified communications deployments. It monitors, manages and operates AudioCodes' session border controllers (SBC), media gateways, Microsoft survivable branch appliances (SBA), multi-service business routers (MSBR) and IP phones. During 2015 we invested in the following modules and functionalities of OVOC:

AudioCodes Routing Manager (ARM): In 2015, we launched the first version of ARM. ARM enables system administrators of large and multi-site enterprise VoIP networks to manage their call routing and policy enforcement configuration in a unified logical view. ARM is a centralized solution aimed at simplifying the task of managing increasingly complex VoIP networks, thereby saving time and reducing operational costs. ARM enables routing policies to be enforced based on a multi-variate decision mechanism and supports centralized dial plans and call routing within multi-vendor environments. ARM enables operational efficiency delivered with intuitive GUI for network views, and single-click network topology creation. ARM is a highly scalable solution providing control over many network elements.

Session Experience Manager (SEM): In 2015 we launched the "SIP trunk Monitoring (STM)" service. SIP trunk monitoring is a cloud-based service to monitor, analyze and alert in real time VoIP call failures and voice quality issues. SIP trunk monitoring is targeted for enterprises with from 50 up to 2,000 SIP trunk sessions, looking for a cost effective OPEX-based SIP trunk monitoring service. The STM, is a fully featured Session Experience Manager to cover a single SBC which may be connected to multiple SIP trunks.

Element Management System (EMS): In 2015, we added support for AudioCodes multi-service business routers (MSBR), including Zero-touch provisioning for MSBR Devices. We added to the EMS enhanced security capabilities and updates, as well as support for SBC license pool managed by the EMS automatically.

CloudBond 365

During 2014, AudioCodes expanded its portfolio specifically designed for Microsoft Skype for Business, Exchange online and Office 365. We launched One Box 365, One Box 365 Pro edition and the One Box 365 Enterprise edition product family that provide an all-in-one Skype for Business appliance solution. During 2015, we rebranded OneBox 365 to CloudBond 365. We continued to develop further capabilities for CloudBond 365 to make it more comprehensive in functionality and integration with the reset of the AudioCodes products.

Acquisition of Active Communications Europe

On December 31, 2015, we acquired Active Communications Europe, a leading provider of communications solutions that increase the effectiveness of departments, individuals and organizations. Active Communications Europe is a Microsoft Silver Partner specializing in unified communications. We believe that this acquisition will improve our ability to serve the growing market for Microsoft Skype for Business Online, Office 365 and Cloud PBX.

We acquired Active Communications Europe for a purchase price of $3 million, payable $2 million in cash at closing and $500,000 on each of the first and second anniversaries of the closing date. The deferred payments may be paid in cash or our ordinary shares at our option. We are also obligated under an earn-out arrangement pursuant to which we have agreed to pay up to an additional $2 million based on attaining certain sales targets over the next three years. In exceptional circumstances, the amount of the earn-out may increase. Following the transaction, Active Communications Europe became a wholly owned subsidiary of AudioCodes.

**PRINCIPAL CAPITAL EXPENDITURES**

We have made and expect to continue to make capital expenditures in connection with expansion of our production capacity. The table below sets forth our principal capital expenditures incurred for the periods indicated (amounts in thousands):

| | **Year Ended December 31** | | |
|---|---|---|---|
| | 2013 | 2014 | 2015 |
| Computers and peripheral equipment | $1,478 | $1,775 | $848 |
| Office furniture and equipment | 101 | 108 | 732 |
| Leasehold improvements | 7 | 655 | 446 |
| Total | $1,586 | $2,538 | $2,026 |

B. BUSINESS OVERVIEW

**Introduction**

AudioCodes designs, develops and sells advanced Voice over-IP (VoIP) and converged VoIP and data networking solutions, products and applications that facilitate secured, resilient and high quality Unified Communications (UC) and Contact Center (CC) services whether deployed on-premise or delivered from the cloud. Providing IP Phones, Customer Premise Equipment (CPE), and cloud-based platforms and applications, our solutions and products are geared to meet the growing needs of enterprises and service providers realigning their operations towards the transition to All-IP networks and hosted business services.

AudioCodes is a VoIP technology market leader focused on converged VoIP and data communications offering technology, products and solutions for Enterprise Unified Communications, contact centers, service provider business services, mobile VoIP and Cloud virtualized Data Centers. Our products are deployed globally in enterprise, service provider cloud networks. AudioCodes' products include IP phones, session border controllers (SBC), media gateways, Multi-Service Business Routers (MSBRs), residential gateways, media servers, mobile communications solutions, value added applications, life cycle management solutions and professional services. AudioCodes high definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user experience in emerging voice communications services.

AudioCodes' vision is to be the innovative leading supplier of converged VoIP and data solutions for enterprises, Value Added Resellers (VARs), System Integrators (SIs), service providers and Over the Top (OTT) communication providers worldwide. AudioCodes VoIP technology contains voice quality enhancements and best-of-breed VoIP network elements, and has a proven track record in product and network interoperability with the industry's leading companies.

With over 22 years in the telecommunications market, AudioCodes' offers a broad range of solutions for both enterprise and service provider deployments. These solutions are built around our field-proven VoIP product range. With full support for industry standard protocols such as SIP, and proven interoperability with all industry leading soft switches, PBXs, IP-PBXs and unified communications platforms, AudioCodes delivers innovative solutions for virtually any voice communications environment, offering reduced total cost of ownership (TCO), enhanced features, and superior voice quality.

**Historical Overview**

AudioCodes was established in 1993 to develop its low-bit-rate speech compression technology. Our first achievement was developing the speech compression algorithm that was selected by the International Telecommunication Union (ITU) as a basis for the ITU-T G.723.1 standard.

Over the years, AudioCodes continued to expand our focus. Our development and expansion focused on different technologies and solutions as VoIP progressed:

- 1993-1997 – Algorithm Development
- 1995-2007 – Chips, Blades
- 2002-2015 – Networking Products
- 2011-2015 – Solutions and Services

Through acquisitions and partnerships, we were able to grow our business and expand our focus, while taking advantage of our core competence – voice processing and knowhow – which gave us the ability to mix and match technologies and become a solutions provider.

We expanded to compact PCI boards, achieving a transition to a higher capacity that helped develop the gateway market. In 2001, AudioCodes released its first media gateway independent platform, based on our blade and chip technology. The first product was an analog media gateway that was followed by a family of media gateways combining analog and digital interfaces. We then began to develop and sell high density media gateways and media servers.

We entered the field of call recording in 2004 when we acquired Ai-Logix. Ai-Logix was a leading provider of advanced voice recording technology and integration cards for the call recording and voice/data logging industries. AudioCodes used VoIP communications boards as we leveraged Ai-Logix’s technology, strategic partnerships and customer base. We currently sell our call recording solutions mainly in the connection with Microsoft solutions.

In 2006, we teamed with BroadSoft to help service providers deliver hosted VoIP service. By 2009, we had launched a strategic initiative with Broadsoft to simplify deployments of IP voice networks and, in 2014, BroadSoft and AudioCodes announced that they were collaborating on "One Voice for Hosted Services". The One Voice initiative included BroadSoft's unified communication services and AudioCodes' IP phones, routers, SBCs and gateways serving as a one stop shop for service providers that are offering enterprises next generation VoIP services.

AudioCodes continued to expand its product portfolio with session border controllers, multi-service business gateways/routers and IP Phones to be able to offer a wider range of products for leading UC and CC software vendors.

In January 2013, AudioCodes launched “AudioCodes One Voice for Microsoft Skype for Business”, a unified product and service program intended to simplify and accelerate voice-enablement of Microsoft Skype for Business (now Skype for Business) implementations with a complete portfolio of IP phones, media gateways, enterprise session border controllers (E-SBCs), survivable branch appliances (SBAs), session experience manager (SEM) network management tools, support and professional services. The program supports migration to Microsoft Skype for Business and co-existence with current telephony systems in multi-site and multi-national deployment.

On December 31, 2015, AudioCodes acquired Active Communications Europe to further strengthen our ability to provide advanced software solutions for the emerging Microsoft Skype for Business online application.

AudioCodes began working in the call center telecommunications sector in 2003 with VoiceGenie, which was acquired by Alcatel-Lucent-owned Genesys in 2006. In 2011, we were designated a vendor in the Genesys SIP Select program specifically for our Mediant 1000 and Mediant 2000 gateway products, that provide the interface between the PSTN and Genesys SIP Server. We now collaborate with Genesys on software SBC products, IP Phones, gateways, and manageability solutions.

AudioCodes now has tens of millions of SBC, media gateway and media server channels deployed in over 100 countries across the globe. Our high availability platforms (Mediant media gateways, Mediant session border controllers and IPmedia media servers) cover the spectrum of low, mid and high-density applications for service providers and large enterprises.

**INDUSTRY BACKGROUND AND MARKET TRENDS**

The networking and telecommunications industries continue to experience rapid change. Below are some of the major market trends affecting the industry, as well as the evolving focus of AudioCodes solutions and products.

**Unified Communications**

With the move to VoIP and the network integration between voice and data based on Ethernet and IP, enterprises can adopt a unified communications and collaboration solution. Unified communications solutions integrate all means of communications into a single platform, providing on line (e.g., voice, data presence, instant messaging, white boarding and desktop sharing) and off line (voice mail, email and fax) integration into a single communication system shared across a variety of end user devices. Unified communications can be accessed through devices such as PCs, tablets, desktop phones or mobile smartphones. Unified communications can be either on-premises or cloud based. Alternatively, enterprises can adopt a hybrid approach where they keep the real time media path portion of their unified communications on-premises and the applications hosted in the cloud.

**Unified Communications as a Service (UCaaS)**

Unified communications as a service (UCaaS) is a delivery model in which a variety of communication and collaboration applications and services are hosted by a third-party provider in public or private cloud data center and delivered over the Wide Area Network (WAN). In this category, the growth of hosted business services is widely affecting the communications world. Enterprises are adopting hosted and cloud services. Hosted unified communications and contact centers that are driven by Microsoft, BroadSoft, Interactive Intelligence, Genesys and others are gaining traction within the enterprise community and are growing fast as an alternative to on-premises solutions. Microsoft's Skype for Business unified communications offering is the market leader in this area. Microsoft's Cloud PBX offering is expected to have a significant impact on the market. However, among other limitations (including regional availability, regulatory and quality of service issues), the online version of this offering does not yet have all the features of the Skype for Business Server. Microsoft is offering a hybrid structure which will mix on-premises functionality for corporate and call center users, allowing integration with legacy systems, with initial deployment of cloud services, laying the foundation for a smooth transition to the full cloud solution at some point.

**SIP Trunking**

SIP trunking is a VoIP service based on SIP by which service providers deliver IP telephone connectivity services to customers equipped with SIP-based private branch exchange (IP-PBX) and unified communications facilities. More

and more service providers are adopting SIP trunking as the technology of choice for connecting on-premise IP based business voice systems. SIP trunking technology is not new. For several years, Over the Top (OTT) service providers, sometimes called alternative service providers or Internet Telephony Service Providers (ITSP), have offered competitive voice services based on SIP trunking technology while the traditional telco companies continue to offer legacy PSTN services. Market data shows a clear migration of telcos moving towards SIP trunking services as well.

**All IP Transformation**

Many telcos are moving towards a complete replacement of their legacy TDM networks with all-IP networks. Among the factors that drive telcos to replace legacy networks are end of life of the traditional TDM switches, real estate that is occupied by these switches and energy savings, together with the need to compete with the growing alternative service providers. Two typical strategies employed for the business sector by service providers in the move towards app-IP networks are placing CPEs (VoIP Media Gateways, Session Border Controllers or Multi-Service-Business-Routers) to connect the customers' legacy or IP equipment or systems to their IP network, or alternatively aggregate large number of TDM links (PRI primarily) at centralized Point of Presences utilizing large capacity VoIP Media Gateways.

**Network Function Virtualization (NFV)**

NFV is a transition of network infrastructure services to run on virtualized computing infrastructure using cloud technology, management and orchestration solutions to provide network functionality with dynamic scaling of load as well as self-healing of virtual network functions (VNFs). The significance of software only virtualized products for the telecommunications market is increasing as operators and enterprises are seeking to move away from dedicated hardware platforms to common generic computing platforms that are enabling data centers. NFV aims to leverage standard IT virtualization technology to consolidate potentially all network functions (including SBCs) onto industry standard high volume servers, switches and storage, which could be located in datacenters, network nodes and on end user premises (vCPE – virtual customer premise equipment and vE-CPE – virtual enterprise customer premise equipment). NFV infrastructure, management and orchestration promises to introduce agility and enable quick introduction of new services to service providers' networks, similar to those characterizing internet and cloud services. There are a number of challenges that NFV needs to address, including real time performance, scale, resilience, management and automation. These and other technical challenges are being addressed in a network operator-led industry specification group under the auspices of ETSI, an industry standards setting body.

**WebRTC**

WebRTC is a free, open project that provides web browsers and mobile applications with real-time communications (RTC) capabilities via simple application programing interface, or APIs. The WebRTC components have been optimized to best serve this purpose. WebRTC enables rich, high quality RTC applications to be developed for the standard web browser, mobile platforms, and content delivery systems, and allows them all to communicate via a common set of protocols. The WebRTC initiative is a project supported by Google, Microsoft, Mozilla and Opera, among others. Over 400 vendors are now active in the market. WebRTC support is available by default mainstream web browsers like Chrome, Edge, Opera and Firefox, and also as a library for developing mobile applications. WebRTC is making a major impact in real time communications as it is natively supported by web browsers and therefore does not require a user to download a specific application. Similar to other open source projects, WebRTC makes a complex technology (such as voice compression and packetization, mitigation of network impairments, security and encryption of real time sessions and peer to peer connectivity of devices regardless of their location) accessible to the big and growing community of web developers, allowing them to quickly and easily develop real time communications services without requiring specific knowhow in voice and video communications. To enable connecting SIP based communication services (e.g., enterprise unified communications or contact centers) with WebRTC, a WebRTC gateway is required to mediate between the incompatible media and signaling of the different systems. WebRTC gateway functionality may be standalone or incorporated into an SBC.

**Software-Defined Networking (SDN)**

SDN is an emerging technology and architecture for designing, building and operating networks that brings a degree of agility and flexibility to networking, similar to what abstraction, virtualization and orchestration have brought to server and storage infrastructures. SDN architecture decouples the network control and forwarding functions enabling the network control to become directly programmable and the underlying infrastructure to be abstracted for applications and network services. Similar to NFV, SDN technology is expected to reduce OPEX and CAPEX associated with building and maintaining networks and also enable innovation.

**Mobility**

Wireline service providers are facing increased pressure to add new revenue generating services, and can now use their customers' mobile devices, such as smartphones and tablets, to deliver next generation mobile services by using VoIP over Wi-Fi or cellular data. Service providers can offer mobility services to reduce customers' cellular roaming costs and divert roaming user's revenue from the mobile providers to themselves. In parallel, enterprises are increasingly relying on a mobile workforce and are requiring communications services and solutions that enable employee mobility and productivity.

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**BUSINESS STRATEGY**

AudioCodes' vision is to become a leading strategic supplier of VoIP and converged VoIP and data solutions for service providers and enterprises worldwide. The following are key elements of our strategy:

*Maintain and extend technological leadership*. We intend to capitalize on our expertise in voice compression technology and voice signaling protocols and proficiency in designing voice communications systems. We continually upgrade our product lines with additional functionalities, interfaces and densities. We have invested heavily and are committed to continued investment in developing technologies that are key to providing high performance voice, data and fax transmission over packet networks and to be at the forefront of technological evolution in our industry.

*Strengthen and expand strategic relationships with key partners and customers*. We sell our products to service providers worldwide, leading enterprise channels, regional and global system integrators, global equipment manufacturers and value-added resellers (VAR), in the telecommunications and networking industries and establish and maintain long-term working relationships with them. We work closely with our customers to engineer products and solutions that meet their particular needs. The on-going development and integration cycles frequently result in close working relationships with our customers and partners. By focusing on leading solution vendors, system integrators and channels with large volume potential, we believe that we reach a substantial segment of our potential customer base while controlling the cost and complexity of our marketing efforts.

*Expand and enhance the development of highly-integrated products*. We plan to continue designing, developing and introducing new product lines and product features that address the increasingly sophisticated needs of our customers. We believe that our knowledge of core technologies and system design expertise enable us to offer better solutions that are more complete and contain more features than competitive alternatives. We believe that the best opportunities for our growth and profitability will come from offering a broad range of highly-integrated network product lines and product features, the integration of data services into our VoIP products, and the expansion into the unified communications and contact center markets.

*Build upon existing technologies to penetrate new markets*. The technology we developed originally for the OEM market has served us in building products that now sell into the service provider and enterprise markets. The same products and technology can also be used to create application-specific products and solutions, which helps us penetrate and serve various types of customers. Key segments that we focus on are unified communications, contact centers, SIP trunking and hosted services markets that have been adopting VoIP solutions.

*Work close to market and customers*. Our partners and customers are distributed around the world, and part of our ability to serve them is by being close by. For this reason, we are investing in building local operations in key countries and regions, including sales, marketing and support resources to closely serve our partners and customers.

*Develop a network of strategic partners*. We sell our products through, or in cooperation with, customers that can offer or certify our products as part of a full-service solution to their customers. We expect to further develop our strategic partner relationships with solution providers, system integrators and other service providers in order to increase our customer base. Our strategic partners include companies such as Microsoft, BroadSoft, Genesys, and Interactive Intelligence.

*Acquire complementary businesses and technologies*. We may pursue the acquisition of complementary businesses and technologies or the establishment of joint ventures to broaden our product offerings, enhance the features and functionality of our systems, increase our penetration in targeted markets and expand our marketing and distribution capabilities.

*Engage enterprise customers in direct sales effort.* We are pursuing a strategy of engaging large enterprise customers on a global level, as part of the AudioCodes product fit within leading enterprise solutions, mainly with Microsoft and Genesys. Our ability to engage these enterprises directly enhances our ability to influence procurement decisions. This, in turn, is designed to increase demand, which is expected to allow our business partners to fulfill this demand based on their relationship with AudioCodes.

*Develop and expand professional services offering.* AudioCodes has a rich portfolio of product-led services. We offer to our customers expert professional services to assist them with design, implementation and support of our products. We are planning to expand our services offering in line with the new products and solutions.

**AUDIOCODES SOLUTIONS, PRODUCTS AND SERVICES**

Overview

Our products facilitate the transmission of voice, data and fax over packet networks. We have incorporated our algorithms, technologies and systems design expertise in both our networking and technology product lines.

We typically categorize our revenues from products and services into two main business lines: network and technology. Network products consist of customer premises equipment, or CPE, gateways for the enterprise and service provider (or carrier) markets and of carrier-grade-oriented low- and mid-density media gateways for service providers and ESBCs. Complementing our media gateways and session border gateways as network products are our multi-service business routers (MSBR), IP phones, media servers, mobile VoIP solutions and value added application products. Sales of network products accounted for approximately 66% of our revenues in 2013, 62% of our revenues in 2014 and 65% of our revenues in 2015. Network services accounted for approximately 18% of our revenues in 2013 and 26% of our revenues in 2014 and in 2015.

Technology products are enabling in nature and consist of our chips and boards business products. These are sold primarily to original equipment manufacturers, or OEMs, through distribution channels. Our chips and boards serve as building blocks that our customers incorporate in their products. In contrast, our networking products are used by our customers as part of a broader technological solution and are a box level product that interacts directly with other third party products. Sales of technology products accounted for approximately 15% of our revenues in 2013, 13% of our revenues in 2014 and 11% of our revenues in 2015. Technology services accounted for approximately 1% of our revenues in 2013 and less than 1% of our revenues in 2014 and in 2015.

To support today’s complex multi-service networks, AudioCodes has developed a comprehensive professional services program intended to provide responsive, preventive, and consultative support of AudioCodes networking products. AudioCodes professional services support networking devices, applications and infrastructures, allowing large organizations and service providers to realize the potential of a high-performance multi-service network. The foundation for AudioCodes professional services is a network life-cycle model based on the four basic phases of planning, design, implementation and operations. The result is a specially designed portfolio of complementary and synergistic service components.

Services accounted for approximately 19% of our revenues in 2013, 22% of our revenues in 2014 and 27% of our revenues in 2015.

AudioCodes Solutions

Solutions for Microsoft Skype for Business

AudioCodes One Voice for Skype for Business includes AudioCodes’ Microsoft-qualified end-to-end voice elements, wide-ranging services and extensive expertise to enhance Microsoft Skype for Business voice implementations. These products and services are suitable for all Microsoft-approved unified communications architectures, including on-premise, cloud-based and hybrid.

Coexistence, Migration and SIP Trunking allow for smooth and controlled migration of existing telephony system or telephony. AudioCodes delivers a comprehensive solution for migration, integration and SIP trunking connectivity. Compatible with virtually any PBX, AudioCodes' simplified dialing plan AD integration protects investment in legacy equipment.

Security and Fraud Prevention solutions prevent attacks causing voice disruptions, theft of services or other threats exposing a customer's voice infrastructure. AudioCodes secures the integration of unified communications and external voice services with attack detection and topology hiding.

Devices and Productivity improves employee efficiency while integrating UC into the work environment. AudioCodes delivers desk phone products that are intuitive to work with and deliver excellent quality.

Compliance and recording meets regulatory and compliance requirements. AudioCodes helps businesses address compliance and regulation with E911 location services support and compliance recording.

Resiliency and recovery enables recovery from failures and survival of voice network interruptions. AudioCodes has a broad portfolio of resiliency products and solutions. AudioCodes products are designed for functionality and cost effectiveness.

All-in-One Voice Solution is based on CloudBond™ 365 and enables a wide range of solutions for cloud-hybrid deployments, remote branch offices, PBX replacement and UC pilots.

Skype for Business Management Solutions deliver operational excellence with full life-cycle management. AudioCodes One Voice Operations Center is a management suite providing full coverage of the entire set of actions required to manage a voice network in a Skype for Business unified communications environment.

Enterprise UC and PBX Connectivity

AudioCodes' products are essential elements of an enterprise telephony network, adding VoIP capabilities to existing TDM equipment, or complementing IP-PBX or unified communications deployments with media gateway, IP phone, and enterprise session border controller (E-SBC) solutions.

AudioCodes' suite of products provides the scalability, flexibility and reliability needed to aid the successful deployment of best-of-breed, SIP-based enterprise communications systems. The solution delivers SIP and TDM Trunking, analog device connectivity, and enterprise branch survivability.

Managed IP Phone

Comprehensive IP phone management is the key to an excellent user experience. Voice remains the most fundamental method of employee collaboration and the ability to control the user experience is critical for improved productivity.

AudioCodes Managed IP Phones solution defines the IP phone as an IT-managed entity and delivers unique and complete life-cycle management of end-user desktop devices. The solution provides administrators with powerful and easy-to-use tools to simplify tasks such as configuration, troubleshooting and monitoring to increase efficiency and ensure user satisfaction.

With the ability to deploy devices, monitor voice quality, identify problems and fix them rapidly and efficiently, AudioCodes' solution is designed to deliver employee satisfaction, increased productivity and lower IT expenses.

Solutions for Contact Centers

VoIP and Unified Communications have drastically altered and evolved the business environment in which modern contact centers operate. The new IP Contact Center offers lower costs, greater flexibility, higher customer satisfaction, improved productivity and increased revenue.

AudioCodes VoIP network solutions for Contact Centers are designed to help enterprises and service providers in their transition towards an all-IP voice infrastructure by providing the network elements required to enable and

support the smooth operation of the contact center application suite while mitigating the risks of migrating into an IP environment.

NFV

The adoption by service providers of Network Function Virtualization (NFV) and virtualization of the edge enables them to quickly introduce new innovative communication services to their customers without the overhead typically associated with hardware-based solution deployments. Realizing this opportunity requires flexible Virtual Network Function (VNF) Session Border Controllers (SBCs) capable of running both as service provider access and peering SBCs, as well as VNFs on Virtual Enterprise CPE devices (vE-CPE).

AudioCodes offers a comprehensive and flexible set of solutions spanning from vE-CPE devices that can host third party VNFs as well as a scalable virtual SBC. AudioCodes' virtual SBC runs on any vE-CPE device, as well as in the service provider's NFV cloud, functioning as an access or peering SBC. By offering a single scalable product, covering all capacity needs with one unified control and management interface, service providers can leverage its deployment and maintenance simplicity to introduce new communications services rapidly and cost-effectively.

SIP Trunking Solutions

AudioCodes' SIP Trunking solutions are used by service providers deploying SIP Trunking services. These solutions allow service providers to benefit from quick, easy and reliable deployments as well as address their customers' needs to continue using their existing PBX and IP-PBX systems while migrating from TDM to SIP Trunking services. This migration can be done with minimum business disruption while providing high quality communication services. Additionally, the modular design of AudioCodes SIP Trunking devices enables service providers to leverage SIP Trunking services to allow for quick and easy remote migration to hosted UC services in the future.

PSTN Migration

AudioCodes' PSTN migration solutions are targeted at fixed-line service providers who are transforming their TDM fixed-line networks to all-IP. The solutions consist of a set of scalable CPE devices, central office gateways, and management and monitoring application suites, working seamlessly together and designed to enable fixed-line providers a quick, reliable and cost-effective path from TDM to All-IP services.

AudioCodes enables fixed-line service providers the ability to benefit from a wide-range of PSTN migration solutions that cover on-premises CPE, street cabinet and central office PSTN to IP migration option, business customers from SOHOs up to large enterprises, PRI, ISDN and analog interface and configuration, and VoIP gateway, Session Border Controller (SBC), routing and NFV applications.

UCaaS

Designed to enable reliable and quality delivery of cloud-based services, AudioCodes' UCaaS solutions are comprised of a comprehensive portfolio of hardware and software products. AudioCodes solutions are used by service providers who are deploying Cloud and Hosted UC services. Based on their survivability, resiliency, high voice quality assurance, and advanced remote management features, AudioCodes' UCaaS solutions enable service providers to deliver to their business customers reliable and quality cloud services, as well as provide them with the confidence they need to place their key communications functions in the cloud.

MobilityPLUS

AudioCodes MobilityPLUS enables operators to offer mobile voice, video and messaging, over cellular data and Wi-Fi networks.

AudioCodes MobilityPLUS offers a large-scale platform, comprised of comprehensive backend servers, cellular to Wi-Fi handover and a variety of white label mobile applications. AudioCodes MobilityPLUS supports Apple® iOS™ and Google Android™ for smartphones, tablets, soft clients supporting Microsoft Windows™ for PCs and laptops and WebRTC client for web browsers.

VocaNom

AudioCodes VocaNOM is a cloud-driven voice communication application for businesses and organizations allowing voice-based dialing and routing. VocaNom is improving internal communication between employees and staff as well as external calls to suppliers (outbound) or from customers (inbound). VocaNOM provides a solution for the problem of managing multiple business contacts and dialing on the go. The solution allows dialing by voice as the organizational phone directory is fully synced into the cloud alongside the speech recognition algorithms designed by AudioCodes.

AUDIOCODES PRODUCTS

Core Technologies

*Narrowband and Wideband (HDVoIP) Voice Compression Algorithms*

Voice compression techniques are essential for the transmission of voice over packet networks. Voice compression exploits redundancies within a voice signal to reduce the bit rate required to digitally represent the voice signal, from 64 kilobits per second, or kbps, down to low bit rates ranging from 5.3 kbps to 8 kbps, while still maintaining acceptable voice quality. A bit is a unit of data. Different voice compression algorithms, or coders, make certain tradeoffs between voice quality, bit rate, delay and complexity to satisfy various network requirements. Use of voice activity detection techniques and silence removal techniques further reduce the transmission rate by detecting the silence periods embedded in the voice flow and discarding the information packets which do not contribute to voice intelligibility.

We are one of the innovators in developing low bit rate voice compression technologies. Our patented MP-MLQTM coder was adopted in 1995 by the ITU as the basis for the G.723.1 voice coding standard for audio/visual applications over circuit-switched telephone networks. By adhering to this standard, system manufacturers guarantee the interoperability of their equipment with the equipment of other vendors.

We also provide wideband compression techniques that provide high definition VoIP quality, which expands the sampled frequency range from the traditional narrowband frequency range of 3.3Khz to over 7Khz, providing better voice quality and intelligibility, and a better user expertise. This technology is expanding and is expected to become a de-facto standard for future VoIP communications.

*Advanced Digital Signal Processing Algorithms*

To provide a complete voice over packet communications solution, we have developed a library of digital signal processing functions designed to complement voice compression coders with additional functionality, including: echo cancellation; voice activity detection; facsimile and data modem processing; and telephony signaling processing. Our extensive experience and expertise in designing advanced digital signal processing solutions allows us to implement algorithms using minimal processing memory and power resources.

Our algorithms include:

*Echo cancellation.* Low bit rate voice compression techniques introduce considerable delay, necessitating the use of echo cancellation algorithms. The key performance criterion of an echo canceller is its ability to deal with large echo reflections, long echo delays, fast changing echo characteristics, diverse telecommunications equipment and network effects. Our technology achieves low residual echo and fast response time to render echo effects virtually unnoticeable.

*Fax transmission.* There are two widely used techniques for real time transmission of fax over networks based on Internet protocols: fax relay and fax spoofing. Fax relay takes place when a fax is sent from a fax machine through a gateway over networks based on Internet protocols in real time to a fax machine at the other end of the network. At the gateway, the analog fax signals are demodulated back into digital data, converted into packets, routed over the packet network and reassembled at the receiving end. Fax relay is used when the round trip network delay is small (typically below one second). When the round trip network delay increases, one of the fax machines may time out while waiting for a response from the other fax machine to arrive.

*Data modem technology.* We have developed data modem technologies that facilitate data relay over packet networks. Our data modem relay software algorithms support all existing data modem standards up to a bit rate of 14.4 kbps.

*Telephony signaling processing.* Various telephony signaling standards and protocols are employed to route calls over the traditional telephone network, some of which use “in-band” methods, which means that the signaling tones are sent over the telephone line just like the voice signal. As a result, in-band signaling tones may have to undergo the compression process just like the voice signal. Most low bit-rate voice coders, however, are optimized for speech signals and exhibit poor tone transfer performance. To overcome this, our processors are equipped with tone detection and tone generation algorithms. To provide seamless transparency between the traditional telephone network and packet networks for signaling, we employ various digital signal processing techniques for efficient tone processing.

*Voice Communications Software*

To transmit the compressed voice and fax over packet networks, voice packetization processes are required to construct and deconstruct each packet of data for transmission. The processing involves breaking up information into packets and adding address and control fields information according to the specifications of the appropriate packet network protocol. In addition, the software provides the interface with the signal processors and addresses packet delay and packet loss issues.

*Media Processing*

Our media processing products provide the enabling technology and platforms for developing enhanced voice service applications for legacy and next generation networks. We have developed media processing technologies such as message recording/playback, announcements, voice coding and mixing and call progress tone detection that enable our customers to develop and offer advanced revenue generating services such as conferencing, network announcements, voice mail and interactive voice response.

Our media processing technology is integrated into our enabling technology platforms like Voice over Packet processors and VoIP blades, as well as into our network platforms like the Mediant media gateways and the IPMedia media servers. The same technology is also integrated into our multi-service business gateways, enabling the use of these platforms to run third party VoIP software, offloading media processing from the host CPU.

*Addressing Multiple Networks and Standards Concurrently*

Convergence of wireline and wireless networks is becoming a key driver for deployment of voice over packet networks, enabling operators to use common equipment for both networks, thus lowering capital expenditures and operating expenses, while offering enriched services.

Our voice over packet products provide a cost-effective solution for these convergence needs, complying with the requirements of broadband wireline operators using xDSL technologies, cable operators, mobile operators, FTTx operators, Internet telephony service providers, or ITSPs, and virtual network operators (VNOs). This includes support for relevant vocoders (wireline and wireless concurrently), interfaces and protocols.

Our products are also positioned to support the requirement of all types of enterprise customers. From SOHO, SMB all the way up to large enterprises, our products can provide integrated VoIP services and service provider access to enterprises in multiple vertical markets.

*Hardware Architectures for Dense Multi-Trunk Voice over Packet Systems*

Our voice over packet product offerings include high density, multi-trunk voice over packet systems for standards-based open telecommunications platforms in access equipment. Multi-trunk processing is centered on a design encompassing two key processing elements, signal processors performing voice, fax and data processing and a communications processor. Overall system performance, reliability, capacity, size, cost and power consumption are optimized, based on our hardware architecture, which supports high throughput rates for multi-trunk processing. On-board efficient network and system interfaces relieve the system controller from extensive real time data transfer and processing of data streams.

*Carrier Grade System Expertise*

To provide state of the art carrier grade media gateways, we have developed a wide expertise in a number of fields essential to such a product line. We have developed or integrated the various components required to implement a full digital media gateway solution that behaves as a unified entity to the external world. This required a major investment in adapting standard cPCI and MicroTCA (AMC) platforms to our needs. Such adaptation included optimizing power supply and cooling requirements, adding centralized shelf controllers, fabric switches and alarm cards to the chassis. Another aspect of the expertise we developed relates to high availability software and hardware design. High availability is a required feature in any carrier grade media gateway platform. We have also developed a sophisticated EMS to complete our offering. Our EMS enables the user to provision and monitor a number of media gateways from a centralized location.

Networking products

**Session Border Controllers (SBC) and Media Gateways (MG)**

AudioCodes' Mediant family of Session Border Controllers (SBCs) and Media Gateways (MG) is a line of versatile IP communications platforms that connect VoIP and TDM networks.

SBCs are deployed at the border between the enterprise and the service provider. In the enterprise environment, they form an effective demarcation point between a business's VoIP network and a service provider's SIP Trunk, performing SIP protocol mediation and media handling (interoperability) and securing the enterprise VoIP network. In the service provider core, SBC provides security and protocol normalization.

The Mediant SBC family includes a range of platforms that offer cost-efficient SBC and hybrid gateway functionality (SIP to TDM, SIP to SIP).

AudioCodes' family of High-Availability Media Gateways is a line of highly reliable IP communications platforms that connect VoIP and TDM networks. Featuring NEBS Level 3 compliance and cost-effective redundancy configurations, the AudioCodes platforms meet the stringent availability requirements of service providers. AudioCodes High-Availability Media Gateways serve as an efficient junction between VoIP networks, legacy TDM equipment, and the PSTN. They interwork with most market-leading softswitches, application servers, IP-PBXs, and other standards-based VoIP elements.

AudioCodes' MediaPack 1xx series of Analog VoIP Gateways are cost-effective, stand-alone VoIP gateways that provide superior voice technology for connecting legacy telephones, fax machines and PBX systems with IP telephony networks and IP-based PBX systems. The MediaPack 1xx gateways are fully interoperable with leading softswitches and SIP servers and support a wide variety of service provider and enterprise applications.

Service providers can use MediaPack gateways to connect Multi-Tenant Units (MTUs), IP Centrex subscribers, payphones, and rural users over wireless and satellite links.

Enterprises can use MediaPack gateways to connect their legacy PBX systems over an IP infrastructure. In addition, in IP Centrex and central IP-PBX applications, MediaPack enhances remote location availability and provides Stand Alone Survivability (SAS) when there is no IP connection between branch locations and a central SIP server, SIP proxy or central IP-PBX.

The new MediaPack(MP)-1288 is a high density analog media gateway. Supporting up to 288 analog ports in a compact 3U chassis. The MP-1288 offers a cost-effective solution for organizations transitioning to all-IP that need to integrate large numbers of analog devices into their new infrastructure. The MP-1288 enables these organizations to protect the investment made in their analog devices and cabling while enjoying the functional and cost benefit of the move to the all-IP infrastructure.

**Multi-Service Business Routers (MSBR)**

AudioCodes' family of Multi-Service Business Routers (MSBR) offers service providers a range of all-in-one SOHO, SMB and SME routers combining access, data, voice and security onto a single device. It is designed for managed data, SIP trunking, hosted PBX, and cloud-based services, and allows service providers to deploy flexible and cost-effective solutions.

AudioCodes' Multi-Service Business Routers allows service providers to provide their business customers much more than just an internet connection. In addition to its integrated powerful routing and security software, the MSBR also features a multi-core architecture that aids consistent high performance, allowing end customers to maximize their broadband connections for both data and voice applications.

Service providers offering hosted PBX or SIP trunking communication services will benefit from AudioCodes' MSBR, which includes integrated voice gateway, analog and digital interfaces with various codecs that support analog phones, fax, PBX and PSTN connectivity, and session border controllers (SBC).

**IP Phones**

The AudioCodes 400HD series of IP Phones includes a range of easy-to-use, feature-rich products for the service provider hosted services, enterprise IP telephony and contact center markets. Based on the same advanced, field-proven underlying technology as our other VoIP products, AudioCodes high quality IP phones enable systems integrators and end-customers to build end-to-end VoIP solutions.

**Managed IP Phones solution**

AudioCodes IP phones can be offered as part of our of Managed IP Phones solution which defines the IP phone as an IT-managed entity and delivers complete life-cycle management of end-user desktop devices.

**CloudBond 365**

AudioCodes CloudBond™ 365 is a modular, adaptable solution for the data center, customer premises or the branch. A versatile all-in-one Skype for Business appliance designed for hybrid environments, it combines Skype for Business server, the Cloud-PBX and the service provider's voice services. While Microsoft's Cloud PBX offering is still evolving into a full PBX replacement, CloudBond 365 bridges the gap, creating the critical bond between tUC and the developing cloud business.

**Survivable Branch Appliances**

AudioCodes' family of Survivable Branch Appliances (SBA) is a line of enterprise-class integrated CPEs designed to ensure access to data and voice services in the event of a WAN outage. AudioCodes SBAs are an element in multisite Skype for Business deployments, and are fully certified by Microsoft for use with Skype for Business Server.

A Survivable Branch Appliance (SBA) is a hardware device that ensures the availability of enterprise-wide voice service and voice mail. It also contains a public switched telephone network (PSTN) gateway for use in the event of VoIP failure. As part of our One Voice for Skype for Business portfolio, AudioCodes offers Survivable Branch Appliances that fit any enterprise location size, providing branch office voice resiliency for up to 1000 users.

**One Voice Operations Center**

AudioCodes One Voice Operations Center (OVOC) is a suite of life-cycle management applications for large scale cloud or premise-based unified communications deployments. OVOC is a management suite providing full coverage of the entire set of actions required to manage a voice network in a Unified Communications environment. It provides a powerful Network Operation Center (NOC), a complete end-to-end network control, service assurance capabilities and comprehensive optimization and future planning tools. The AudioCodes One Voice Operations Center manages, monitors and operates the entire AudioCodes One Voice portfolio, including SBCs and Media Gateways, Microsoft SBAs and IP phones.

The AudioCodes' Element Management System (EMS) is an advanced solution for centralized, standards-based management of AudioCodes' One Voice™ product portfolio including the Mediant VoIP product family, MediaPack Media Gateways, Microsoft Skype for Business Survivable Branch Appliances, and 400HD IP phones family. AudioCodes' EMS covers all aspects of efficient operation, administration, management and provisioning of these voice network products. AudioCodes' EMS enables service providers, hosted services and large enterprises deploying