DSP GROUP INC /DE/
Form 10-K
March 16, 2018

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

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

For the Fiscal Year Ended December 31, 2017

Commission File Number 001-35256

**DSP GROUP, INC.**

(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **94-2683643** |
| (State or other jurisdiction of incorporation and organization) | (I.R.S. Employer Identification No.) |

**5 Shenkar Street Herzelia 4672505 Israel**

(Address of principal executive offices, including zip code)

<u>**972-9-952-9696**</u>

(Registrant's telephone number)

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

Securities registered pursuant to Section 12(g) of the Act:
**Common Stock, $.001 per share**
(Title of class)

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§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 No

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

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

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

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

As of June 30, 2017, the aggregate market value of voting stock held by non-affiliates of the Registrant, based on the closing price of the Common Stock on June 30, 2017 as reported on the NASDAQ Global Select Market, was approximately $137,666,207. Shares of Common Stock held by each officer and director and by each person who owns 5% or more of the outstanding Common Stock have been excluded from this computation in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 6, 2018, the Registrant had outstanding 22,725,242 shares of Common Stock.

Documents incorporated by reference: Portions of the Registrant’s proxy statement to be filed pursuant to Regulation 14A within 120 days after Registrant’s fiscal year end of December 31, 2017 are incorporated herein by reference into Item 5 of Part II and Items 10, 11, 12, 13 and 14 of Part III of this annual report.

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**DSP GROUP, INC.**

*This report and certain information incorporated herein by reference contain forward-looking statements, which are provided under the "safe harbor" protection of the Private Securities Litigation Reform Act of 1995. All statements included or incorporated by reference in this report, other than statements that are purely historical in nature, are forward-looking statements. Forward-looking statements are generally written in the future tense and/or are preceded by words such as "will," "may," "should," "could," "expect," "suggest," "believe," "anticipate," "intend," "plan," or other similar words. Forward-looking statements include statements regarding:*

*Our anticipation that our gross margin on an annual basis will continue to increase in the foreseeable future as our product mix shifts in favor of new products, which generally have higher gross margins;*

*Our expectation that revenues from new, non-cordless products, primarily VoIP and SmartVoice products, will increase in 2018 and expect such revenues to represent a higher percentage of 2018 total revenues, as compared to 2017, and anticipate such revenues to exceed 50% of the total revenues in 2018 for the first time;*

*Our expectation that revenues from cordless telephony will represent less than 50% of our revenues in 2018;*

*Our belief that our past research and development investments in new technologies are paying off;*

*Our belief that the traditional cordless telephony market using fixed-line telephony will continue to decline, potentially steeper than prior years, which will continue to reduce our revenues derived from, and unit sales of, cordless telephony products;*

*Our belief that the market will remain price sensitive for 2018 for our traditional cordless telephony prodcuts and expect that price erosion and the decrease in the average selling prices of such products to continue; and*

*Our belief that our available cash and cash equivalents at December 31, 2017 should be sufficient to finance our operations for the foreseeable future.*

*All forward looking statements included in this Annual Report on Form 10-K are made as of the date hereof, based on information available to us as of the date hereof, and we assume no obligation to update any forward-looking statement. Many factors may cause actual results to differ materially from those express or implied by the forward –looking statements contained in this report. These factors include, but are not limited to, our dependence on one primary distributor, our OEM relationships and competition, as well as those risks described in Part II Item 1A "Risk Factors" of this Form 10-K.*

*DSP Group, Inc. is referred to in this Annual Report as "DSP Group," "we," "us" "our" or "company."*

# PART I

## Item 1. BUSINESS.

### Introduction

DSP Group®, Inc. (NASDAQ: DSPG) is a leading global provider of wireless and audio chipset solutions for converged communications. Delivering semiconductor system solutions with software and hardware reference designs, DSP Group enables original equipment manufacturers (OEMs), original design manufacturers (ODMs), consumer electronics (CE) manufacturers and service providers to cost-effectively develop new revenue-generating products with fast time to market. At the forefront of semiconductor innovation and operational excellence for over three decades, DSP Group provides a broad portfolio of wireless chipsets integrating industry leading standards, including DECT/CAT-iq, ULE, Wi-Fi, PSTN, HDClear™, video and VoIP technologies. DSP Group is a leader in high performance low-power integrated circuits (ICs) for audio and voice signal processing applications. We enable converged voice, audio, video and data connectivity across diverse mobile, consumer and enterprise products – from mobile phones, IoT and wearable devices, connected multimedia screens and home automation & security to cordless phones, VoIP systems and home gateways. Leveraging industry-leading experience and expertise, DSP Group partners with leading CE manufacturers and service providers to reshape the future of converged communications at home, office and mobile on the go devices.

We were incorporated in California in 1987 and reincorporated in Delaware in 1994. We completed our initial public offering in February 1994.

### Industry Environment and Our Business

Our focus on the design of highly-integrated, mixed-signal devices that combine signal processing, complex RF (radio frequency), analog and digital functions enables us to address the complex challenges of integrating various technologies, platforms and processes posed by emerging trends in the industry. Our IC products are customizable, achieve high functionality and performance at reduced power consumption, especially for Internet of Things (IoT) and home automation devices, mobile and wearable products, cordless and IP telephony that require very low power consumption, and can be manufactured in high volumes using cost-effective process technologies. Our systems architecture provides an open design environment for ODMs to design and market their own end products with maximum differentiation.

Our expertise and investment in software development, including Board Support Package (BSP) and drivers layer, telephony, communication stack and application layers in Real-time Operating System (RTOS) and Full Featured Operating System (FFOS) frameworks, enable our customers' fast time to market with cost- and performance-optimized solutions.

With our in-house and acquired innovations and intellectual property, we are able to bring additional value to our existing market verticals and address new market verticals, including markets for IoT, office phones, mobile and wearable devices and consumer and computing devices, thus expanding our market opportunities, including the exciting new voice user interface.

In recognition of the trend towards wireless residential and business connectivity, we developed and are offering leading wireless voice and data transmission solutions for various connectivity applications, including mobile handsets. Since 1999, we have developed and acquired various technologies, including Direct Sequence Spread Spectrum (DSSS), Frequency Hopping Spread Spectrum (FHSS), Orthogonal Frequency Digital Modulation (OFDM), Digital Narrow Band, Complementary Metal Oxide Semiconductor (CMOS), Gallium Arsenide (GaAs) technology, and Silicon Germanium (SiGe) RF chips for 900MHz, 2.4GHz and 5.8GHz Industry Scientific and Medical (ISM) bands, European DECT (1.9GHz), DECT 6.0 (1.8GHz), Korean DECT (1.7GHz), Bluetooth (2.4GHz), Wi-Fi (802.11, 2.4GHz/5GHz), BiCMOS (Bipolar CMOS) and deep sub-micron CMOS technologies.

Moreover, we expanded our DECT solutions beyond cordless telephony to address the IoT market via an ultra low energy flavor of DECT called DECT ULE or ULE. ULE offers numerous technological benefits due to its licensed and interference-free, frequency bands, longer range, RF robustness, propagation through multiple walls, voice and visual support, while using very low power consumption.

During the past few years, we expanded into chips and phones for office and business applications, and are quickly becoming a market leader in this growing segment. Today, DSP Group offers comprehensive systems-on-a-chip (SoC) and solution for VoIP, home, SoHo and office IP phones. VoIP is a technology that enables users to make HD voice calls via a broadband Internet connection rather than an analog phone line. Through successful penetration with tier one customers we achieved over 30% growth in 2017 in this segment.

Furthermore, with mobile and IoT devices playing an increasingly significant role in peoples' lives, in February 2013, we unveiled our HDClear solution, a comprehensive noise suppression and voice quality enhancement product for mobile and IoT devices for always-on devices. The market trend is for mobile and IoT devices to use voice user interface. HDClear capitalizes on this trend by incorporating voice command, voice activation, proprietary noise cancellation, acoustic echo cancellation, and beam forming algorithms, thereby dramatically improving user experience and delivering unparalleled voice quality and speech recognition. Our HDClear solution is both high performance and ultra-low power. This HDClear product family was developed through the acquisition of BoneTone Communications Ltd. ("BoneTone") and the addition of their innovative intelligent noise cancellation algorithms to our low power SoC. In 2015, we secured our first design win for HDClear with a tier one mobile customer and started mass production shipments during the fourth quarter of 2015. In 2016, we shipped our HDClear hardware and software solution in mass production to a tier one mobile customer for one of its flagship mobile phones. We ended 2017 shipping our HDClear solution to two flag ship mobile phones and eight different OEMs for non-mobile phone applications.

Committed to advancing technology across the CE and telecommunications markets, DSP Group is actively involved in prominent industry associations, including the DECT Forum, the European Telecommunications Standards Institute, ULE Alliance and the Wi-Fi Alliance. We also participate in the 3GPP and MIPI alliance. DSP Group is further deeply involved in all stages of defining DECT CAT-iq and ULE standards and is building full eco-systems to support these solutions. We are an active member of the Home Gateway Initiative (HGI), and support the specification activities of CableLabs, which is contributing to the evolution and implementation of CAT-iq in various markets and applications. Such industry involvements enable us to define standards and keep abreast of the latest innovations and requirements. We also maintain close relationships with many world-leading telecommunication service providers, thereby providing us with insight into future plans across the industry.

**Target Markets and DSP Group Products**

In response to market trends, we are concentrating our development efforts on new products and opportunities to leverage our strong technology base and customer relationships to address evolving market opportunities and take advantage of the current market trends in our domain. We focus our efforts on four product areas: (i) SmartVoice products which consist of products targeting mobile, IoT speakers and wearable device markets that incorporate our HDClear technology, as well as other third party advanced voice processing, always on and sensor hub functionality; (ii) office products consisting of VoIP SoC products for Enterprise, SMB and SoHo; (iii) SmartHome products consisting of ULE ICs targeting the growing markets of IoT, smart home devices and home gateways; and (iv) cordless phones which consist of largely DECT SoCs for cordless telephony.

Below is a discussion of our business segments and the products within each segment.

*Home Segment - Products Targeted at SmartHome Products that are Inclusive of Home Gateways and Products for Home Automation (IoT) Markets and Cordless Telephony*

Our DECT and 2.4 GHz technologies are targeted at three broad categories of products: (a) gateways, both home gateways and fixed mobile convergence, (b) home automation & IoT applications, and (c) digital cordless telephony.

As a market leader in DECT and next-generation CAT-iq cordless technology, we offer a wide range of cost-effective, highly integrated SoC solutions. Delivering high-quality audio with notably low power consumption, our field-proven chipset solutions are ideal for highly integrated digital cordless telephony, DECT-enabled gateways and home automation and security. Our chipsets provide a total integrated digital solution and include all required digital baseband, analog interface and RF functionality.

Our Home chipset solutions enable worldwide coverage, supporting all RF bands and cordless protocols, such as:

- 1.7GHz -1.9GHz DECT – used in Europe, U.S. (DECT6.0), Korea, Japan and Latin America; and
- 2.4GHz – used in Japan, China, India and the U.S.; the dominant protocols for this RF band is our proprietary EDCT (Enhanced Digital Cordless Technology) and WDCT (Wireless Digital Cordless Technology) protocols.

This chipset portfolio combines wireless communications technology with a range of telephony features, audio and voice-processing algorithms to provide the industry a low cost and small footprint solution. Enhanced with our hardware and software packages, these chipsets are highly versatile and enable the development of an array of cordless telephony solutions, DECT home gateways and smart-home applications and devices at a lower effort and faster time to market than alternative silicon offerings.

This portfolio supports cordless phones, cordless headsets, remote controls, home DECT-enabled gateways, fixed-mobile convergence solutions and home security and automation devices.

Our home chipset solutions are available in three chipset families:

- The DCE family is a highly integrated, low-power ROM-based chipset solution, delivering enhanced audio and extended range for entry-level applications. The chipset is used to develop fully integrated cordless telephone systems, digital voice recorders (DVRs), digital baby monitors, and other low-to-mid-range audio applications.

Including the industry's most advanced digital cordless solutions, the DCE family maintains multi-line, multi-handset and digital answering machine capabilities, while supporting various RF protocols such as DECT (1.7GHz-1.9GHz), FHSS DECT 2.4GHz, EDCT 2.4GHz and 5.8GHz. Integration of the TeakLite™ RISC DSP core into the DE56, DCE58 and DCE59 baseband chip enables software implementation of a variety of voice coders, and provides a flexible platform for developing a wide range of solutions. With its DSP-based architecture, the chipset enables cost-effective incorporation of the most advanced audio and telephony features.

The DCX family is a low-power, Flash and ROM-based chipset solution targeting mid-to-high-range cordless applications. Built on an open platform with powerful ARM9™ core processing capabilities, the cost-effective DCX family delivers unsurpassed telephony coverage and HD voice features. Combining state-of-the-art RF and ARM9 baseband functions in a single package with a rich set of telephony features and advanced audio-processing capabilities, the DCX provides the best cost-performance solution for mid-to-high-range DECT/DECT6.0/CAT-iq and WDCT cordless applications, home gateway applications, fixed mobile convergence applications and ULE gateways and devices. Supporting all RF bands and comprised of Flash-based chips and a full set of ROM-based products with various memory configurations, the DCX chipset family offers a total integrated solution that includes a digital baseband controller, analog interface, RF transceiver and power amplifier.

The DHX family is a low-power chipset solution for home automation and security. Equipped with audio capabilities and a powerful ARM926™ processor, it implements hibernation features to deliver advanced ULE. Miniature size DHX91 module DHAN-S shortens a customer's time to market and ensures superior performance of DHX91 RF. The ULE base utilizes existing and proven cordless SoCs, functioning as a standalone ULE over the top box (DVF99) and embedded module for home gateways (DCX81).

In 2016, we also began to sell our DHAN-S module for the IoT market. This product offers application developers a turnkey radio solution for DECT ULE nodes, whether battery or AC-powered. This module is built around our DHX91 chipset. The module can serve as a wireless connectivity channel for an application running on an external MCU or a standalone solution using the DHX91's internal ARM926 processor.

We achieved significant milestones in 2016 and 2017 by incorporating DHX91, a ULE SoC; in end customer products for home automation and security applications. Our customers' end products integrating DHX91 went through various field trials and officially launched in the market in 2014. In 2015 and 2016, Panasonic Communications Ltd. ("Panasonic"), Sercomm Corporation, Eurotronic Technology GmbH and several other leading CE brands launched ULE based products that utilizes DECT/ULE for sensors, actuators, voice and video cameras. Moreover, during 2017, Deutsche Telecom launched home automation and control services and products based on our DECT and ULE solutions.

*Office Segment - Products Targeted at the Office Market*

As a leading silicon vendor for enterprise voice, we offer a comprehensive portfolio of solutions for VoIP terminals. Our DVF SoCs family is a comprehensive solution for developing affordable, scalable and green VoIP home and office products. DVF facilitates rapid introduction of embedded features into residential devices such as cordless IP and instant messaging (IM) phones. DVF enables development of low-power enterprise IP, analog terminal adapters (ATAs) and home VoIP phones that offer superb acoustic echo cancellation, high-quality HD voice, multi-line capabilities, and an enhanced user interface (UI). Built on an open platform with multi-ARM processors running on Linux OS, DVF includes IPfonePro™, an extensive SDK for IP phones and ATAs.

During 2010, we launched a new VoIP chipset based on the VegaFireBird SoC and our RF products combining ARM9 and VoIP processing baseband functions in a single package with a rich set of telephony features targeting Corded IP phones for home and office, Analog Terminal Adaptors and Cordless IP Phones. These products support multi line and multi HD voice channels, superior audio processing capabilities including acoustic echo cancellation and superior full duplex speakerphone technologies.

In 2012, we taped-out a new VoIP SoC DVF99xx, which commercially launched in January 2013. Built with two ARM926EJ-S™ cores, this new VoIP SoC provides combined processing speed of 1.1 GHz, and is designed to support

IP phone processing needs - from basic single-line IP phones to high-end multi-line gigabit Ethernet IP phones with large color display and advanced GUI. The DVF99 also integrates multiple hardware accelerators, including a hardware security engine which enables a new class of secure IP phones, an LCD controller, a 2D graphics engine, a high-speed USB 2.0 port, DDR3/DDR2 memory and minimal power consumption. This product was designed to meet the needs of the enterprise IP telephony market.

DVF101, the latest member of the DVF family, which taped out during 2016, provides outstanding cost/performance value for high-end IP phones. Designed specifically to meet Tier 1 requirements, DVF101 fully complements existing solutions, including DVF99 VoIP processors for mid to high-end IP phones. DVF101 is an ideal solution for high-end voice terminals, with high-resolution color display, rich 3D graphical user interface, full HD-voice and Super Wideband Acoustical Echo Cancellation, as well as fully secured communication.

Revenues from our VoIP segment continued its strong growth trajectory in 2017. A third tier one customer successfully launched a series of phones based on our DVF99. In addition, we secured additional design wins with our existing tier one customers for higher end products which are expected to go into production in the 2018 and 2019 timeframe, thereby contributing to further progress in this growing segment.

*SmartVoice - Products Targeted at Mobile Telephony, Consumer Electronics and Wearable Device Markets*

Our SmartVoice product portfolio is enhanced with technology for intelligent voice enhancement and noise elimination. This technology supports two solutions: HDClear and HDMobileSurround™ which are offered as part of the HDClear product line.

The current market trend is for mobile and IoT devices to use voice user interface. Our HDClear high performance and low power solutions continue to garner important design wins with our numerous enabling technologies such as voice command, voice activation, proprietary noise cancellation, acoustic echo cancellation and beam forming algorithms, all of which dramatically improve user experience and deliver unparalleled voice quality and speech recognition.

HDClear-based solutions offer mobile IoT voice quality and intelligibility, while completely removing background noise. Delivering clearer voice calls made from noisy environments, HDClear also maximizes accuracy of Automatic Speech Recognition (ASR) applications in noisy environments by leveraging robust and powerful noise cancellation algorithms. HDClear more effectively isolates voice from ambient noise, thereby drastically lowering Word Error Rate (WER) and dramatically improves the user experience for speech-enabled applications like virtual assistants, voice search, speakerphone conference calls and speech-to-text on mobile and wearable devices, tablets and other consumer devices.

In 2012, we taped-out the DBMD2 chip, which we believe is one of the most efficient voice enhancement processors in the market. It is measures just 2.5 x 2.5mm. Offered with a 36-pin FCCSP and 0.4mm ball pitch, DBMD2 embeds a programmable 32-bit DSP, incorporates advanced connectivity options, including four TDM/I2S ports and SLIMbus, and is equipped with a comprehensive software framework that enables rapid development and fast time-to-market, thereby overcoming the challenges of portable design, real estate and power consumption. DBMD2's low power enables an always-on voice feature for mobile devices. Always-on is a low power decisive natural voice interface for mobile and wearable devices. An average user accesses his/her device tens or hundreds of times per day by physically pressing a screen or a button. A truly always-on technology enables the user to skip this step by using natural voice to access the device even while the device is in standby mode. DBMD2 enables mobile OEMs to offload voice and audio tasks from mobile device CPUs, in addition to running HDClear to enhance ASR accuracy. OEMs can leverage DBMD2's open and flexible architecture to differentiate their products to run their own voice/audio enhancement software for pre- and post-processing.

In 2015, we started commercial shipments of DBMD2 for a wearable device with a leading OEM.

In 2015, we also taped-out a new DBMD4, a chip targeted for ultra-low-power, always-on voice and audio applications. DBMD4 incorporates a suite of voice enhancement algorithms, including noise suppression that significantly improves user experience and accuracy of speech-driven applications, particularly in high noise environments. Offered with a 25-WLCSP and 0.35mm ball pitch, DBMD4 embeds a TeakLite-III DSP core, incorporates advanced connectivity options, including I2S, UART, SPI, I2C ports and SLIMbus, and is equipped with a comprehensive software framework that enables rapid development and fast time-to-market, thereby overcoming the challenges of portable design, real estate and power consumption.

In 2016, we went into production with our design win for our DBMD4 chip with a tier one OEM mobile customer. This has led to significant year over year revenue growth in our SmartVoice segment. In the second half of 2016, we announced two additional design wins for our HDClear in non-smartphone applications that will go into production in the second half of 2017.

In January 2017, we unveiled our new audio and voice enhancement SoC, the DBMD5. This new audio SoC is built to drive clearer human machine voice interactions in multi microphone equipped devices. We are currently working on our next generation voice enhancement SoC which we expect to introduce in 2018.

**Customers**

We are a flexible customer-centric company that proactively partners with our broad base of customers and service providers. As a reliable long-term industry supplier, We maintain a proven track record of operational excellence and successful on-time delivery. With over 10 offices across Asia, Europe and North America, we deliver outstanding local service and support worldwide. We sell our products primarily through distributors and directly to OEMs and ODMs who incorporate our products into consumer products for the worldwide residential wireless communications market and enterprise products for the worldwide office communications market. In 2017, we continued expanding our customer base, and in some cases, increased our share of business with existing customers. Our blue-chip customer base features leading international CE manufacturers, including the world’s top consumer brands, which have deployed our chipset solutions at prominent tier-one telecom operators across the globe, and include: Aprotech, ADB, AEG, Alcatel, Atcom, AT&T, Arris, Atcom, Atlink, Arcadyan, Askey, Audiocodes, Avaya, Ayecom, Baycom, Belgacom, Binatone, British Telecom, Brother, CCT Tech, Cetis, CIG, Cisco, Climax, Comcast, Crow, Cybertan, Grandstream, Deutsche Telekom, Doro, DNI, DTS, DX Antenna, Eclogic, Escene, Eurotronic, Fanvil, Flextronics, Fujitsu, France Telecom, Freebox, Gibson (formerly Philips), Gaoxinqi, Gemtek, Goertek, Foxconn, Grandstream, Huawei, Iflytek, Infinite, Innomedia, Intelbras, Invoxia, JXE, Kaonmedia, Kocom, Korea Telecom, KPN, LG Electronics, Libre, Logitech, Meitu, Mitac, Mitrastar, Motorola, Moimstone, Netgear, NTT, Ooma, Panasonic, Pegatron, Pioneer, Plantronics, Proximus, Sagemcom, Samsung, Sanyo, SAXA, Sercomm, SGW, Sharp, Siemens (Gigaset), SK Telecom, Sony, Spracht, Sumitomo, Sunrise, Swissvoice, Swisscom, TCL, Tecom, Telecom Italia, Telefonica, Telstra, Technicolor, Telefield (RCA), Tinno, T&W, Uniden, Unihan, Urmet, Uwin, Turkcell, Turkish Telecom, Verisure, Verizon, VTech, Vodafone, Wistron, WNC, WONDALINK, Xingtel, Yamaha, Yealink, Yeastar and ZTE.

**International Sales and Operations**

Export sales accounted for 96% of our total revenues for 2017 and 97% of our total revenues for both 2016 and 2015. As most of our sales to foreign entities are denominated in U.S. dollars, we are subject to risks of conducting business internationally. See Note 16 of the attached Notes to Consolidated Financial Statements for the year ended December 31, 2017, for a summary of the geographic breakdown of our revenues and location of our long-lived assets.

Moreover, a portion of our expenses in Israel is paid in the Israeli currency (New Israeli Shekel (NIS)). Our primary expenses paid in NIS are employee salaries and lease payments on our Israeli facilities. As a result, an increase in the value of Israeli currency in comparison to the U.S. dollar could increase the cost of our technology development, research and development expenses and general and administrative expenses. From time to time, we use derivative instruments to minimize the effects of currency fluctuations, but our hedging positions may be partial, may not exist at all in the future or may not succeed in minimizing our foreign currency fluctuation risks.

In addition, a portion of our expenses in Europe is paid in Euro. Our primary expenses paid in Euro are employee salaries and lease and operational payments on our European facilities. As a result, an increase in the value of the Euro in comparison to the U.S. dollar also could increase the cost of our technology development, research and development expenses and general and administrative expenses.

**Sales, Marketing and Distribution**

We market and distribute our products through our direct sales and marketing offices, as well as through a network of distributors. Our sales and marketing team has global reach through our sales offices in Hong Kong, China; Nierenberg, Germany; Los Altos, California; Tokyo, Japan; Herzliya Pituach, Israel, Edinburgh, Scotland; Shanghai and Shenzhen, China and South Korea. In territories where we do not have sales offices, we operate solely through a network of distributors and representatives.

The following table represents our sales as a percentage of our total revenues through our main distributors Tomen Electronics, Ltd. And Ascend Technology Inc., for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31,** | | |
|---|---|---|---|
| **Major Distributors** | **2017** | **2016** | **2015** |
| Tomen Electronics Corporation (“Tomen Electronics”) (1) | 12% | 12% | 16% |
| Ascend Technology Inc. (“Ascend Technology”) | 23% | 16% | 15% |

(1) Panasonic Communications Co., Ltd. has continually accounted for a majority of the sales of Tomen Electronics for 2017, 2016 and 2015.

We also derive a significant amount of revenues from a limited number of customers. The following table represents our sales as a percentage of our total revenues from our main customers for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31,** | | |
|---|---|---|---|
| **Major Customers** | **2017** | **2016** | **2015** |
| Vtech Holdings Ltd. (“Vtech”) | 27% | 29% | 31% |
| Panasonic Communications Ltd. (“Panasonic”) | 10% | 10% | 13% |
| Guo Wei Electronics Ltd. (“Guo Wei”) | * | 9% | 12% |
| Samsung Electronics Ltd. (“Samsung”) | * | 12% | - |

*Less than 10%.

Furthermore, as our products are generally incorporated into consumer products sold by our OEM customers, our revenues may be affected by seasonal buying patterns of consumer products sold by our OEM customers.

**Manufacturing and Design Methodology**

We are ISO9001:2015 certified. This certification is applicable for the design, development, testing and supply of our system-on-chip solutions. We also have well established methodologies and working procedures that are also regularly audited.

We contract product wafer fabrication services mostly from TSMC. A majority of our integrated circuit products at this time are manufactured by TSMC. We intend to continue to use independent foundries to manufacture our products. Our reliance on independent foundries involves a number of risks, including the foundries' ability to achieve acceptable manufacturing yields at competitive costs and their allocation of sufficient capacity to us to meet our needs. While we currently believe we have adequate capacity to support our current sales levels, we may encounter capacity issues in the future. In the event of a worldwide shortage in foundry capacity, we may not be able to obtain a sufficient allocation of foundry capacity to meet our product needs. Shortage or lack of capacity at the foundries we use to manufacture our products may lead to increased operating costs and lower gross margins. In addition, such a shortage could lengthen our products' manufacturing cycle and cause a delay in the shipment of our products to our customers. Unforeseen difficulties with our independent foundries could harm our business, financial condition and results of operations.

We use independent subcontractors located in Asia, to assemble and test certain of our products. We develop detailed testing procedures and specifications for each product and require each subcontractor to use these procedures and specifications before shipping us the finished products. We test and/or assemble our products at Amkor, ASE, Giga Solutions, KYEC and SPIL.

Furthermore, some of our products require an external component in the finished product, which is supplied by a third party, to provide flash memory.

**Competition**

The principal competitive factors in the cordless telephony market include price, performance, system integration level, range, voice quality, customer support and the timing of product introductions by us and our competitors. We believe that we are well positioned from a competitive position. Our principal competitors in the cordless market include Lantiq (acquired by Intel) and Dialog Semiconductors. Similar principal competitive factors affect the VoIP market. We also believe that we are competitive with respect to most of these factors. Our principal competitors in the VoIP market include Broadcom (Broadcom was acquired by Avago Technologies), Dialog Semiconductors, Lantiq, Texas Instruments and new Taiwanese IC vendors.

Similar principal competitive factors affect the Home Automation (DECT ULE) market. An additional competitive factor relating to this market is that we are a newcomer in this market, and this market already has a number of dominant, well-established companies with significant existing market shares. We also believe that we are competitive with respect to most of these factors. Our principal competitors are developers of different wireless home automation technologies, including Analog, Z-wave and Zigbee. Among those, the major competitors for digital home connectivity are Microchip Technology, NXP, Texas Instruments, Sigma Designs (connectivity business in the process of being acquired by Silicon Labs) and Silicon Labs.

Similar principal competitive factors affect the smart audio and noise reduction market. Competitors in this market include Audience (acquired by Knowles Corporation), Cirrus Logic, Conexant (recently acquired by Synaptics) and developers of noise cancellation software running on mobile phones such as NXP and ForteMedia. In addition, there could be a growing trend of our potential and existing customers moving to in-house designs which would make our technologies and products obsolete.

**Research and Development**

Timely development and introduction of new products are essential to maintain our competitive position. We currently conduct most of our product development at our facilities. At December 31, 2017, we had a staff of 200 research and development personnel, of which 135 were located in Israel. We also employ independent contractors to assist with certain product development and testing activities. We spent $36.7 million in 2017, $34.9 million in 2016 and $35.5 million in 2015 on research and development activities.

Due to various new developments in the home residential market, including the rapid deployment of new communication access methods and the rise of alternative technologies in lieu of fixed-line telephony, over the past several years, consistent with our strategy, we have expanded our product lines and developed products and services targeted at wider markets, including office enterprise market and the intensively competitive mobile device market. We will need to continue to invest in research and development, and our research and development expenses may increase in the future, including the addition of new research and development personnel, to keep pace with new and rapidly changing trends in our industry.

**Licenses, Patents and Trademarks**

As of December 31, 2017, we have been granted a total of 138 patents and 44 patents are pending.

We actively pursue foreign patent protection in countries of interest to us. Our policy is to apply for patents or for other appropriate statutory protection when we develop valuable new or improved technology. The status of any patent involves complex legal and factual questions, and the breadth of claims allowed is uncertain. Accordingly, we cannot assure that any patent application filed by us will result in a patent being issued, or that our patents, and any patents that may be issued in the future, will afford adequate protection against competitors with similar technology; nor can we provide assurance that patents issued to us will not be infringed or designed around by others. In addition, the laws of certain countries in which our products are or may be developed, manufactured or sold, including China, Hong Kong, Japan, Korea and Taiwan, may not protect our products and intellectual property rights to the same extent as the laws of the United States.

We attempt to protect our trade secrets and other proprietary information through agreements with our customers, suppliers, employees and consultants, and through other security measures. Although we intend to protect our rights vigorously, we cannot assure that these measures will be successful.

While no material claims involving patent or other intellectual property rights have been brought against us to date, we cannot provide assurance that third parties will not assert claims against us or our customers with respect to existing or future products, or that we will not need to assert claims against third parties to protect our proprietary technology. In addition, patent infringement claims are increasingly being asserted by patent holding companies (so-called patent “trolls”), which do not use technology and whose sole business is to enforce patents against companies, such as us, for monetary gain. Because such patent holding companies do not provide services or use technology, the assertion of our own patents by way of counter-claim may be ineffective. We have received claims that our products infringe upon the proprietary rights of such patent holding companies. In addition, third parties have asserted and may in the future assert intellectual property infringement claims against our customers, which we have agreed in certain circumstances to indemnify and defend against such claims. If litigation becomes necessary to determine the validity of any third party claims or to protect our proprietary technology, it could result in significant expense to us and could divert the efforts of our technical and management personnel, whether or not the claim has any merit and notwithstanding that the litigation is determined in our favor. In the event of an adverse result in any litigation, we could be required to expend significant resources to develop non-infringing technology or to obtain licenses to the technology that is the subject of the litigation. We cannot provide assurance that we would be successful in developing non-infringing technology or that any licenses would be available on commercially reasonable terms.

While our ability to compete may be affected by our ability to protect our intellectual property, we believe that because of the rapid pace of technological change in our industry, our technical expertise and ability to innovate on a timely basis and in a cost-effective manner will be more important in maintaining our competitive position than the protection of our intellectual property. In addition, we believe that due to rapid technological changes in residential telephony, computer telephony and personal computer markets, patents and trade secret protection are important but must be supported by other factors, including expanding the knowledge, ability and experience of our personnel, new product introductions and frequent product enhancements. Although we continue to implement protective measures and intend to defend our intellectual property rights vigorously, we cannot assure that these measures will be successful.

**Backlog**

At December 31, 2017, our backlog was approximately $20.6 million, compared to approximately $23.4 million and $17.2 million at December 31, 2016 and 2015, respectively. We include in our backlog all accepted product purchase orders with respect to which a delivery schedule has been specified for product shipment within one year. Our business is characterized by short-term order and shipment schedules. Product orders in our current backlog are subject to change, sometimes on short notice, due to changes in delivery schedules or cancellation by a purchaser. Accordingly, although useful for scheduling production, backlog as of any particular date may not be a reliable measure of our sales for any future period.

**Employees**

At December 31, 2017, we had 328 employees, including 200 in research and development, 65 in sales and marketing, and 63 in corporate, administration and manufacturing coordination. Competition for personnel in the semiconductor industry in general is intense. We believe that our future prospects will depend, in part, on our ability to continue to attract and retain highly-skilled technical, marketing and management personnel, who are in demand. In particular, there is a limited supply of RF chip designers and highly-qualified engineers with digital signal processing, machine learning and artificial intelligence experience. We believe that our relations with our employees are good.

**Web Site Access to Company's Reports**

Our Internet Web Site address is *www.dspg.com*. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available free of charge through our Web site as soon as reasonably practicable after they are electronically filed with, or furnished to, the Securities and Exchange Commission. We will also provide the reports in electronic or paper form free of charge upon request.

Our website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

**Item 1A. RISK FACTORS.**

*The following risk factors, among others, could in the future affect our actual results of operations and could cause our actual results to differ materially from those expressed in forward-looking statements made by us. These forward-looking statements are based on current expectations and we assume no obligation to update this information. Before you decide to buy, hold, or sell our common stock, you should carefully consider the risks described below, in addition to the other information contained elsewhere in this report. The following risk factors are not the only risk factors facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. Our business, financial condition, and results of operation could be seriously harmed if any of the events underlying any of these risks or uncertainties actually occurs. In that event, the market price for our common stock could decline, and you may lose all or part of your investment.*

***We generate a significant amount of our total revenues from the sale of digital cordless telephony products and our business and operating results may be materially adversely affected if we do not continue to succeed in this competitive market or if sales within the overall cordless digital market continue to decrease.***

Sales of our digital cordless telephony products comprised 54% of our total revenues for 2017, 57% for 2016 and 72% for 2015. Any adverse change in the digital cordless market or in our ability to compete and maintain our competitive position in that market would harm our business, financial condition and results of operations.

With the rapid deployment of new communication access methods, including mobile, wireless broadband, cable and other connectivity, the traditional cordless telephony market using fixed-line telephony is declining and will continue to decline, which reduces our revenues derived from, and unit sales of, cordless telephony products. Moreover, macro-economic trends in the consumer electronics industry may adversely impact our future revenues.

Furthermore, the decline in fixed line telephony together with the prevalence of new communication access methods, including mobile, wireless broadband, cable and other connectivity, has sales of products using fixed-line telephony. A significant majority of our revenues are currently generated from sales of chipsets used in cordless phones that are based on fixed-line telephony, and the continued decline in fixed-line telephony would reduce our revenues derived from, and unit sales of, our digital cordless telephony products.

In addition, the digital cordless telephony market is competitive and is facing pricing pressures, and we expect that competition and pricing pressures will continue. It is possible that we may one day be unable to respond to increased pricing competition for digital cordless telephony processors or other products through the introduction of new products or reduction of manufacturing costs. This inability to compete would have a material adverse effect on our business, financial condition and results of operations. Likewise, any significant delays by us in developing, manufacturing or shipping new or enhanced products in this market also would have a material adverse effect on our business, financial condition and results of operations.

***We rely significantly on revenue derived from a limited number of customers.***

We expect that a limited number of customers, varying in identity from period-to-period, will account for a substantial portion of our revenues in any period. Our four largest customers – VTech, Panasonic through Tomen Electronics, Samsung and Guo Wei accounted for approximately 46%, 59% and 56% of our total revenues for each of 2017, 2016 and 2015, respectively.

The following table represents our sales from our main customers as a percentage of our total revenues for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31,** | | |
|---|---|---|---|
| **Major Customers** | **2017** | **2016** | **2015** |
| VTech Holdings Ltd. | 27% | 29% | 31% |
| Panasonic Communications Ltd. | 10% | 10% | 13% |
| Shenzhen Guo Wei Electronics Ltd. | *% | *% | 12% |
| Samsung Electronics Ltd. | *% | 12% | - |

* less than 10%

Typically, our sales are made on a purchase order basis, and most of our customers have not entered into a long-term agreement requiring it to purchase our products. Moreover, we do not typically require our customers to purchase a minimum quantity of our products, and our customers can generally reschedule the delivery date of their orders on short notice without significant penalties. A significant amount of our revenues will continue to be derived from a limited number of large customers. Furthermore, the primary customers for our products are original equipment manufacturers (OEMs) and original design manufacturers (ODMs) in the cordless digital market. This industry is highly cyclical and has been subject to significant economic downturns at various times, particularly in recent periods. These downturns are characterized by production overcapacity and reduced revenues, which at times may affect the financial stability of our customers. Therefore, the loss of one of our major customers, or reduced demand for products from, or the reduction in purchasing capability of, one of our major customers, could have a material adverse effect on our business, financial condition and results of operations.

***We rely on a few distributors for a significant portion of our total revenues and the failure of those distributors to perform as expected would materially reduce our future sales and revenues.***

The following table represents our sales as a percentage of our total revenues through our main distributors Tomen Electronics and Ascend Technology Inc, for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31,** | | |
|---|---|---|---|
| **Major Distributors** | **2017** | **2016** | **2015** |
| Tomen Electronics Corporation | 12% | 12% | 16% |
| Ascend Technology Inc. | 23% | 16% | 15% |

The loss of Tomen Electronics and/or Ascend Technology as our distributors and our inability to obtain satisfactory replacements in a timely manner would materially harm our sales and results of operations.

***Our future success is dependent on market acceptance of our HDClear product family targeted for the mobile device market and on market acceptance of our VoIP products, which are intensively competitive markets with dominant and established players.***

Our ability to increase our revenues and offset declining revenues from our cordless product family are substantially dependent on our ability to gain market share for our HDClear and VoIP product families. Moreover, we are targeting a new market with our HDClear product family, a market with dominant and established players selling to OEM customers with whom they have established relationships. We will need to win over such customers, with whom we do not have established relationships, to gain market share. If we are unable to generate significant revenues from our HDClear product family and gain significant and sustainable market share in the mobile device market, our operating results would be adversely affected. Furthermore, our future growth is also dependent on the market acceptance of our VoIP products, a market where we also compete with existing and potential competitors, many of whom have significantly greater financial, technical, manufacturing, marketing, sales and distribution resources and management expertise than we do. In addition, our continued success and growth in the new markets in which we have recently gained market share, which markets are highly competitive, is highly dependent on our ability to be designed into future flagship products of top tier OEMs.

***The market for mobile device components is highly competitive and we expect competition to intensify in the future.***

The market for mobile device components is highly competitive and characterized by the presence of large companies with significantly greater resources than we have. Our HDClear product family relates only to the voice and audio subsystem of a mobile device and there are only a limited number of OEMs targeted for this market. Our main competitors include Audience (acquired by Knowles Corporation), Conexant (recently acquired by Synaptics) and Cirrus Logic. We also face competition from other companies and could face competition from new market entrants. We also compete against solutions internally developed by OEMs, as well as combined third-party software and hardware systems. Notwithstanding prior design wins with any OEM customer, our HDClear products may be designed out as a result of internal solutions or replacement with software systems in future products of such OEM customer. If we are unable to compete effectively, we may not succeed in achieving additional design wins and may have to lower our pricing to gain design wins, both of which would adversely impact our operating results.

***Because our products are components of end products, if OEMs do not incorporate our products into their end products or if the end products of our OEM customers do not achieve market acceptance, we may not be able to generate adequate sales of our products.***

Our products are not sold directly to the end-user; rather, they are components of end products. As a result, we rely upon OEMs to incorporate our products into their end products at the design stage. Once an OEM designs a competitor's product into its end product, it becomes significantly more difficult for us to sell our products to that customer because changing suppliers involves significant cost, time, effort and risk for the customer. As a result, we may incur significant expenditures on the development of a new product without any assurance that an OEM will select our product for design into its own product and without this "design win" it becomes significantly difficult to sell our products. This is especially the case for our HDClear product family. Moreover, even after an OEM agrees to design our products into its end products, the design cycle is long and may be delayed or discontinued due to factors beyond our control which may result in the end product incorporating our products not to reach the market until long after the initial "design win" with the OEM or not at all. From initial product design-in to volume production, many factors could impact the timing and/or amount of sales actually realized from the design-in. These factors include, but are not limited to, changes in the competitive position of our technology, our customers' financial stability, and our ability to ship products according to our customers' schedule. Moreover, the continued uncertainty about the sustainability of the global economic recovery and outlook may further prolong an OEM customer's decision-making process and design cycle.

Furthermore, we rely on the end products of our OEM customers that incorporate our products to achieve market acceptance. Many of our OEM customers face intense competition in their markets. If end products that incorporate our products are not accepted in the marketplace, we may not achieve adequate sales volume of our products, which would have a negative effect on our results of operations.

***Because our quarterly operating results may fluctuate significantly, the price of our common stock may decline.***

Our quarterly results of operations may vary significantly in the future for a variety of reasons, many of which are outside our control, including the following:

fluctuations in volume and timing of product orders;

timing, rescheduling or cancellation of significant customer orders and our ability, as well as the ability of our customers, to manage inventory;

changes in demand for our products due to seasonal consumer buying patterns and other factors;

timing of new product introductions by us and by our customers or competitors;

changes in the mix of products sold by us or our competitors;

fluctuations in the level of sales by our OEM customers and other vendors of end products incorporating our products;

timing and size of expenses, including expenses to develop new products and product improvements, and expenses resulting from restructuring activities;

the timing and amount of funding from IIA;

entry into new markets, including China, Korea and South America;

our ability to scale our operations in response to changes in demand for our existing products and services or demand for new products requested by our customers;

mergers and acquisitions by us, our competitors and our existing and potential customers; and

general economic conditions, including current economic conditions in the United States and worldwide, and the adverse effects on the semiconductor and consumer electronics industries.

Each of the above factors is difficult to forecast and could harm our business, financial condition and results of operations. Also, we sell our products to OEM customers that operate in consumer markets. As a result, our revenues are affected by seasonal buying patterns of consumer products sold by our OEM customers that incorporate our products and the market acceptance of such products supplied by our OEM customers.

***Our revenues, gross margins and profitability may be materially adversely affected by the continued decline in average selling prices of our products and other factors, including increases in assembly and testing expenses, and raw material and commodity costs.***

We have experienced and will continue to experience a decrease in the average selling prices of our products. Decreasing average selling prices could result in decreased revenues even if the volume of products sold increases. Decreasing average selling prices may also require us to sell our products at much lower gross margin than in the past and reduce profitability. Although we have to date been able to partially offset on an annual basis the declining average selling prices of our products through general operational efficiencies and manufacturing cost reductions by achieving a higher level of product integration and improving our yield percentages, there is no guarantee that our ongoing efforts will be successful or that they will keep pace with the anticipated, continued decline in average selling prices of our products.

In addition to the continued decline in the average selling prices of our products, our gross profit may decrease in the future due to other factors, including the roll-out of new products in any given period and the penetration of new markets which may require us to sell products at a lower margin, our failure to introduce new engineering processes and mix of products sold.

Our gross margins also are affected by the product mix. For example, mature products have lower average gross margins than other products. Therefore, increased sales of certain mature products would lower our gross margins. The pressures in the supply chain make it very difficult for us to increase or even maintain our product pricing, which further adversely affects our gross margins.

Furthermore, increases in the price of silicon wafers, testing costs and commodities such as gold and oil, which may result in increased production costs, mainly assembly and packaging costs, may result in a decrease in our gross margins. Moreover, our suppliers may pass the increase in raw materials and commodity costs onto us which would further reduce the gross margin of our products. In addition, as we are a fabless company, global market trends such as “over-capacity” problems so that there is a shortage of capacity to fulfill our fabrication needs also may increase our raw material costs and thus decrease our gross margin.

***There are several emerging market trends that may challenge our ability to continue to grow our business.***

New technological developments in the home connectivity market may adversely affect our operating results. For example, the prevalence of new communication access methods, including mobile, wireless broadband, cable and other connectivity, as well as the lack of growth in products using fixed-line telephony would reduce our total revenues derived from, and unit sales of, cordless fixed-line telephony products. Our ability to maintain our growth will depend on the expansion of our product lines to capitalize on the emerging access methods and on our success in developing and selling a portfolio of "system-on-a-chip" solutions targeted at wider markets, including the intensively competitive mobile devices market. We cannot assure you that we will succeed in expanding our product lines or portfolio of "system-on-a-chip" solutions, or that they would receive market acceptance.

Furthermore, there is continued threat from alternative technologies accelerating the decline of the fixed-line telephony market. This competition comes from mobile telephony, including emerging dual-mode mobile Wi Fi phones and other innovative applications, such as Skype and iChat. Given that we derive a significant amount of revenues from chipsets incorporated into fixed-line telephony products, if we are unable to develop new technologies in the face of the decline of this market, our business could be materially adversely affected.

***Our future business growth depends on the growth in demand for mobile devices with improved sound quality and always-on capability.***

Our HDClear product family is designed to enhance the sound quality and eliminate background voices for mobile device users and to enable always-on capabilities in mobile and other wearable devices. OEMs and ODMs may decide that the costs of improving sound quality outweigh the benefits or that always-on voice technology is not a required feature, both of which could limit demand for our HDClear product family. Moreover, users may also be satisfied with existing sound quality or blame poor quality on their phone carriers. The market that we are targeting is evolving rapidly and is technologically challenging. New mobile devices with different components or software may be introduced that provide the same functionality as HDClear product family. Our future business growth will depend on the growth of this market and our ability to adapt to technological changes, user preferences and OEM demands. Our business could be materially adversely affected if we fail to do so.

***Because we have significant international operations, we may be subject to political, economic and other conditions relating to our international operations that could increase our operating expenses and disrupt our business.***

Although the majority of end users of the consumer products that incorporate our products are located in the U.S., we are dependent on sales to OEM customers, located outside of the U.S., that manufacture these consumer products. Also, we depend on a network of distributors to sell our products that also are primarily located outside of the U.S. Export sales shipped to manufacturers in Europe and Asia, including Japan and Asia Pacific, represented 96%, 97% and 97% of our total revenues for 2017, 2016 and 2015, respectively. Furthermore, we have material operations in Germany, Hong Kong and India and employ a number of individuals within those foreign operations. As a result, the occurrence of any negative international political, economic or geographic events, as well as our failure to mitigate the challenges in managing an organization operating in various countries, could result in significant revenue shortfalls and disrupt our workforce within our foreign operations. These shortfalls and disruptions could cause our business, financial condition and results of operations to be harmed. Some of the risks of doing business internationally include:

- unexpected changes in foreign government regulatory requirements;
- fluctuations in the exchange rate for the U.S. dollar;
- import and export license requirements;
- imposition of tariffs and other barriers and restrictions;

burdens of complying with a variety of foreign laws, treaties and technical standards;

uncertainty of laws and enforcement in certain countries relating to the protection of intellectual property;

difficulty in collecting accounts receivable and longer payment cycles for international customers than existing customers;

difficulty in staffing and managing foreign operations and maintaining the morale and productivity of employees within foreign operations;

multiple and possibly overlapping tax structures and potentially adverse tax consequences;

political and economic instability, including protectionist policies; and

changes in diplomatic and trade relationships.

One or more of these factors may have a material adverse effect on our future operations and consequently, on our business, financial conditions and operating results.

***In order to sustain the future growth of our business, we must penetrate new markets and our new products must achieve widespread market acceptance.***

In order to increase our sales volume and expand our business, we must penetrate new markets and introduce new products, especially our HDClear product family. We are exploring opportunities to expand sales of our products in China, Japan, Korea and South America. However, there are no assurances that we will gain significant market share in those competitive markets. In addition, due to the cyclical nature of manufacturing capacity issues, the increasing cost of silicon integrated circuits, the continued decline of average selling prices of chipsets and other industry-wide factors, many North American, European and Japanese OEMs are moving their manufacturing sites to Asia. This trend may cause the mix of our OEM customers to change in the future, thereby further necessitating our need to penetrate new markets. Furthermore, to sustain the future growth of our business, we need to introduce new products as sales of our older products taper off. Moreover, the penetration of new competitive markets and introduction of new products could require us to reduce the sale prices of our products or increase the cost per product and thus reducing our total gross profit in future periods. Our revenue growth is dependent on the successful deployment of our new VoIP and HDClear products. Our inability to penetrate such markets and increase our market share in those markets or lack of customer acceptance of those products may harm our business and potential growth.

***Our research and development expenses may increase if the grants we currently receive from the Israeli government are reduced or withheld.***

We currently receive research grants from programs of the IIA. To be eligible for these grants, we must meet certain development conditions and comply with periodic reporting obligations. Although we have met such conditions in the past, should we fail to meet such conditions in the future our research grants may be repayable, reduced or withheld. Such reduction can also take place due to different allocation and methodology that IIA is implementing. The reduction of such research grants may increase our research and development expenses which in turn may reduce our operating income. As an example, in 2017, the amount of grants approved by the IIA was substantially lower than prior years due to different allocation and methodology that IIA has implemented. Our research and development expenses may increase if the grants from the IIA are reduced which may negatively affect our financial results.

***Because the markets in which we compete are subject to rapid changes, our products may become obsolete or unmarketable.***

The markets for our products and services are characterized by rapidly changing technology, short product life cycles, evolving industry standards, changes in customer needs, demand for higher levels of integration, growing competition and new product introductions. This is especially the case for the mobile device market. Our future growth is dependent not only on the continued success of our existing products but also successful introduction of new products. Our ability to adapt to changing technology and anticipate future standards, and the rate of adoption and acceptance of those standards, will be a significant factor in maintaining or improving our competitive position and prospects for growth. If new industry standards emerge, our products or our customers' products could become unmarketable or obsolete, and we could lose market share. We may also have to incur substantial unanticipated costs to comply with these new standards. If our product development and improvements take longer than planned, the availability of our products would be delayed. Any such delay may render our products obsolete or unmarketable, which would have a negative impact on our ability to sell our products and our results of operations.

Because of changing customer requirements and emerging industry standards, we may not be able to achieve broad market acceptance of our products. Our success is dependent, in part, on our ability to:

successfully develop, introduce and market new and enhanced products at competitive prices and in a timely manner in order to meet changing customer needs;

convince leading OEMs to select our new and enhanced products for design into their own new products;

respond effectively to new technological changes or new product announcements by others;

effectively use and offer leading technologies; and

maintain close working relationships with our key customers.

There are no assurances that we will be successful in these pursuits, that the demand for our products will continue or that our products will achieve market acceptance. Our failure to develop and introduce new products that are compatible with industry standards and that satisfy customer requirements, and the failure of our products to achieve broad market acceptance, could have a negative impact on our ability to sell our products and our results of operations.

***Because we depend on independent foundries and other third party suppliers to manufacture and test all of our integrated circuit products, we are subject to additional risks that may materially disrupt our business.***

All of our integrated circuit products are manufactured and tested by independent foundries and other third party suppliers. While these foundries and other third party suppliers have been able to adequately meet the demands of our increasing business, we are and will continue to be dependent upon these foundries and third party suppliers to achieve acceptable manufacturing yields, quality levels and costs, and to allocate to us a sufficient portion of their foundry, assembly and test capacity to meet our needs in a timely manner.

While we currently believe we have adequate capacity to support our current sales levels pursuant to our arrangement with our foundries and other third party suppliers, we may encounter capacity shortage issues in the future. In the event of a worldwide shortage in foundry, assembly and/or test capacity, we may not be able to obtain a sufficient allocation of such capacity to meet our product needs or we may incur additional costs to ensure specified quantities of products and services. Over-capacity at the current foundries and other third party suppliers we use, or future foundries or other third party suppliers we may use, to manufacture and test our integrated circuit products may lead to increased operating costs and lower gross margins. In addition, such a shortage could lengthen our products' manufacturing and testing cycle and cause a delay in the shipment of our products to our customers. This could ultimately lead to a loss of sales of our products, harm our reputation and competitive position, and our revenues could be materially reduced. Our business could also be harmed if our current foundries or other third party suppliers terminate their relationship with us and we are unable to obtain satisfactory replacements to fulfill customer orders on a timely basis and in a cost-effective manner. Moreover, we do not have long term capacity guarantee agreements with our foundries and with other third party suppliers.

In addition, as TSMC produces a significant portion of our integrated circuit products and ASE tests and assembles a significant portion of them, earthquakes, aftershocks or other natural disasters in Asia, or adverse changes in the political situation in Taiwan, could preclude us from obtaining an adequate supply of wafers to fill customer orders. Such events could harm our reputation, business, financial condition, and results of operations.

***Our operating results are affected by general economic conditions and the highly cyclical nature of the semiconductor industry.***

The general worldwide economic conditions remain uncertain which continues to make it difficult for our customers, the end-product customers, our vendors and us to accurately forecast and plan future business activities and make reliable projections. Moreover, we operate within the semiconductor industry which experiences significant fluctuations in sales and profitability. Downturns in the semiconductor industry are characterized by diminished product demand, excess customer inventories, accelerated erosion of prices and excess production capacity. These factors could cause substantial fluctuations in our revenues and in our results of operations. If global economic and market conditions remain uncertain or deteriorate, we could experience a material adverse impact on our business and results of operations.

***Because the manufacture of our products is complex, the foundries on which we depend may not achieve the necessary yields or product reliability that our business requires.***

The manufacture of our products is a highly complex and precise process, requiring production in a highly controlled environment. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by a foundry could adversely affect the foundry's ability to achieve acceptable manufacturing yields and product reliability. If the foundries we currently use do not achieve the necessary yields or product reliability, our ability to fulfill our customers' needs could suffer. This could ultimately lead to a loss of sales of our products and have a negative effect on our gross margins and results of operations.

Furthermore, there are other significant risks associated with relying on these third-party foundries, including:

- risks due to the fact that we have reduced control over production cost, delivery schedules and product quality;
- less recourse if problems occur as the warranties on wafers or products supplied to us are limited; and
- increased exposure to potential misappropriation of our intellectual property.

***As we depend on independent subcontractors, located in Asia, to assemble and test our semiconductor products, we are subject to additional risks that may materially disrupt our business.***

Independent subcontractors, located in Asia, assemble and test our semiconductor products. Because we rely on independent subcontractors to perform these services, we cannot directly control our product delivery schedules or quality levels. We are dependent on these subcontractors to allocate to us a sufficient portion of their capacity to meet our needs in a timely manner. Our future success also depends on the financial viability of our independent subcontractors. If the capital structures of our independent subcontractors weaken, we may experience product shortages, production delays, quality assurance problems, increased manufacturing costs, and/or supply chain disruption. All of this could ultimately lead to a loss of sales of our products, harm our reputation and competitive position, and our revenues could be materially harmed.

Moreover, the economic, market, social, and political situations in countries where some of our independent subcontractors are located are unpredictable, can be volatile, and can have a significant impact on our business because we may not be able to obtain product in a timely manner. Market and political conditions, including currency fluctuation, terrorism, political strife, war, labor disruption, and other factors, including natural or man-made disasters, adverse changes in tax laws, tariff, import or export quotas, power and water shortages, or interruption in air transportation, in areas where our independent subcontractors are located also could have a severe negative impact on our operating capabilities.

***We are subject to order and shipment uncertainties and if we are unable to accurately predict customer demand, our business may be harmed.***

We typically sell products pursuant to purchase orders rather than long-term purchase commitments. Customers can generally change or defer purchase orders on short notice without incurring a significant penalty. Given current market conditions, we have less ability to accurately predict what or how many products our customers will need in the future. In addition, we have little visibility into and no control of the demand by our customer’s customers – generally consumer electronics retailers. Furthermore, based on discussions with our customers, we understand that our customers also have less visibility into their product demands. A decrease in the consumer electronics retailers’ demand or a build-up of their inventory, both of which are out of the control of our customers and us, may cause a cancellation, change or deferral of purchase orders on short notice by our customers. Anticipating demand is difficult because our customers and their customers face volatile pricing and unpredictable demand for their own products, and are increasingly focused on cash preservation and tighter inventory management. Based on these trends, our customers are reluctant to place orders with normal lead times, and we are seeing a shift to shorter lead-times and rush orders. However, we place orders with our suppliers based on forecasts of our customers’ demand and, in some instances, may establish buffer inventories to accommodate anticipated demand. Our forecasts are based on multiple assumptions, each of which may introduce error into our estimates. If we overestimate our customers’ demand or our customers overestimate their demand, we may allocate resources to manufacturing products that we may not be able to sell when we expect to, if at all. As a result, we could hold excess or obsolete inventory, which would reduce our profit margins and adversely affect our financial results. Conversely, if we underestimate our customers’ demand or our customers underestimate their demand and insufficient manufacturing capacity is available, we could forego revenue opportunities and potentially lose market share and damage our customer relationships.

Furthermore, we maintain inventory, or hubbing, arrangements with certain of our customers. Pursuant to these arrangements, we deliver products to a customer or a designated third party warehouse based upon the customer's projected needs, but do not recognize product revenue unless and until the customer reports that it has removed our product from the warehouse to incorporate into its end products. Since we own inventory that is physically located in a third party's warehouse, our ability to effectively manage inventory levels may be impaired, causing our total inventory turns to decrease, which could increase expenses associated with excess and obsolete product and negatively impact our cash flow.

***We are dependent on a small number of OEM customers, and our business could be harmed by the loss of any of these customers or reductions in their purchasing volumes.***

We sell our products to a limited number of OEM customers directly or through a network of distributors. Moreover, many North American, European and Japanese OEMs are moving their manufacturing sites to Southeast Asia, as a result of the cyclical nature of manufacturing capacity issues and cost of silicon integrated circuits, the continued decline of average selling prices of chipsets and other industry-wide factors. In addition, OEMs located in Southeast Asia are growing and gaining competitive strength. As a result, the mix of our OEM customers may change in the future. However, we may not succeed in attracting new customers as these potential customers may have pre-existing relationships with our current or potential competitors. This trend also may promote the consolidation of OEMs located in North America, Europe and Japan with OEMs located in Southeast Asia, which may reduce the number of our potential customers and reduce the volume of chipsets the combined OEM customer may purchase from us. However, as is common in our industry, we typically do not enter into long term contracts with our customers in which they commit to purchase products from us. The loss of any of our OEM customers may have a material adverse effect on our results of operations. To attract new customers, we may be faced with intense price competition, which may affect our revenues and gross margins.

***The possible emerging trend of our OEM customers outsourcing their production may cause our revenue to decline.***

We believe there may be an emerging trend of our OEM customers outsourcing their production to third parties. We have invested substantial resources to build relationships with our OEM customers. However the outsourcing companies whom our OEM customers may choose to outsource production may not have prior business relationship with us or may instead have prior or ongoing relationships with our competitors. The emergence of this trend may require us to expend substantial additional resources to build relationships with these outsourcing companies, which would increase our operating expenses. Even if we do expend such resources, there are no assurances that these outsourcing companies will choose to incorporate our chipsets rather than chipsets of our competitors. Our inability to retain an OEM customer once such customer chooses to outsource production would have a material adverse effect on our future revenue.

***Third party claims of infringement or other claims against us could adversely affect our ability to market our products, require us to redesign our products or seek licenses from third parties, and seriously harm our operating results and disrupt our business.***

As is typical in the semiconductor industry, we and our customers have been and may from time to time be notified of claims that we may be infringing patents or intellectual property rights owned by third parties. In addition, patent infringement claims are increasingly being asserted by patent holding companies (so-called patent “trolls”), which do not use technology and whose sole business is to enforce patents against companies, such as us, for monetary gain. Because such patent holding companies do not provide services or use technology, the assertion of our own patents by way of counter-claim may be ineffective. We have received claims that our products infringe upon the proprietary rights of such patent holding companies. In addition, third parties have asserted and may in the future assert intellectual property infringement claims against our customers, which we have agreed in certain circumstances to indemnify and defend against such claims. If litigation becomes necessary to determine the validity of any third party claims, it could result in significant expense to us and could divert the efforts of our technical and management personnel, whether or not the claim has merit and notwithstanding that the litigation is determined in our favor.

If it appears necessary or desirable, we may try to obtain licenses for those patents or intellectual property rights that we are allegedly infringing. Although holders of these types of intellectual property rights commonly offer these licenses, we cannot assure you that licenses will be offered or that the terms of any offered licenses will be acceptable to us. Our failure to obtain a license for key intellectual property rights from a third party for technology used by us could cause us to incur substantial liabilities, suspend the manufacturing of products utilizing the technology or damage the relationship with our customers. Alternatively, we could be required to expend significant resources to develop non-infringing technology. We cannot assure you that we would be successful in developing non-infringing technology. The occurrence of any of these events could harm our business, financial condition or results of operations.

***Because we have significant operations in Israel, we may be subject to political, economic and other conditions affecting Israel that could increase our operating expenses and disrupt our business.***

Our principal research and development facilities are located in the State of Israel and, as a result, at December 31, 2017, 203 of our 328 employees were located in Israel, including 135 out of 200 of our research and development personnel. In addition, although we are incorporated in Delaware, a majority of our directors and executive officers are residents of Israel. Although substantially all of our sales currently are being made to customers outside of Israel, we are nonetheless directly influenced by the political, economic and military conditions affecting Israel. Any major hostilities involving Israel, or the interruption or curtailment of trade between Israel and its present trading partners, could significantly harm our business, operating results and financial condition.

Israel’s economy has been subject to numerous destabilizing factors, including a period of rampant inflation in the early to mid-1980s, low foreign exchange reserves, fluctuations in world commodity prices, military conflicts and civil unrest. In addition, Israel and companies doing business with Israel have been the subject of an economic boycott by the Arab countries since Israel’s establishment. Although they have not done so to date, these restrictive laws and policies may have an adverse impact on our operating results, financial condition or expansion of our business.

Since the establishment of the State of Israel in 1948, a state of hostility has existed, varying in degree and intensity, between Israel and the Arab countries. Although Israel has entered into various agreements with certain Arab countries and the Palestinian Authority, and various declarations have been signed in connection with efforts to resolve some of the economic and political problems in the Middle East, hostilities between Israel and some of its Arab neighbors have recently escalated and intensified. We cannot predict whether or in what manner these conflicts will be resolved. Our results of operations may be negatively affected by the obligation of key personnel to perform military service. In addition, certain of our officers and employees are currently obligated to perform annual reserve duty in the Israel Defense Forces and are subject to being called for active military duty at any time. Although we have operated effectively under these requirements since our inception, we cannot predict the effect of these obligations on the company in the future. Our operations could be disrupted by the absence, for a significant period, of one or more of our officers or key employees due to military service.

***Recently enacted tax legislation in the United States may impact our business.***

We are subject to taxation in the United States, as well as a number of foreign jurisdictions. On December 22, 2017, the U.S. President signed into law federal tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act provides for significant and wide-ranging changes to the U.S. Internal Revenue Code. The reforms are complex, and it will take some time to assess the implications thoroughly. Broadly, the implications most relevant to the company include: a) a reduction in the U.S. federal corporate income tax rate from 35% to 21%, with various "base erosion" rules that may effectively limit the tax deductibility of certain payments made by U.S. entities to non-U.S. affiliates and additional limitations on deductions attributable to interest expense; and b) adopting elements of a territorial tax system. To transition into the territorial tax system, the Tax Cuts and Jobs Act includes a one-time tax on cumulative retained earnings and profits of U.S.-owned (directly or indirectly) foreign subsidiaries, at a rate of 15.5% for earnings represented by cash or cash equivalents and 8.0% for the balance of such earnings. Taxpayers may make an election to pay this tax over eight years. These tax reforms will give rise to significant consequences, both immediately in terms of one-off impacts relating to the transition tax and the measurement of deferred tax assets and liabilities and going forward in terms of the company's taxation expense. An initial review and estimate has been undertaken by us, which will be updated over the coming weeks and months as we work through these complex changes with its advisors. The Tax Act could be subject to potential amendments and technical corrections, any of which could lessen or increase adverse impacts of the law. The final transitional impact of the Tax Act may differ from the estimates provided in this Annual Report, due to, among other things, changes in interpretations of the Tax Act, any legislative action to address questions that arise because of the Tax Act, any changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates we utilized to calculate the transitional impacts, including impacts related to changes to current year earnings estimates and the amount of the repatriation tax. Given the unpredictability of these and other tax laws and related regulations, and their potential interdependency, it is difficult to currently assess the overall effect of such changes. Nonetheless, any material negative effect of such changes to our earnings and cash flow could adversely impact our financial results.

***The tax benefits available to us under Israeli law require us to meet several conditions, and may be terminated or reduced in the future, which would increase our taxes.***

Our facilities in Israel have been granted Approved Enterprise and Beneficiary Enterprise status under the Law for the Encouragement of Capital Investments, 1959, commonly referred to as the "Investment Law," as amended. The Investment Law provides that capital investments in a production facility (or other eligible assets) designated as an Approved Enterprise or Beneficiary Enterprise receive certain tax benefits in Israel. Our investment programs that generate taxable income are currently subject to an average tax rate of up to approximately 10% based on a variety of factors, including percentage of foreign ownership and approvals for the erosion of the tax basis of our investment programs. To be eligible for tax benefits, we must meet certain conditions, relating principally to adherence to the investment program filed with the Investment Center of the Israeli Ministry of Economy and periodic reporting obligations. Although we believe we have met such conditions in the past, should we fail to meet such conditions in the future, we would be subject to corporate tax in Israel at the standard corporate tax rate (24% for 2017) and could be required to refund tax benefits (including with interest and adjustments for inflation based on the Israeli consumer price index) already received. Our average tax rate for our investment programs also may change in the future due to circumstances outside of our control, including changes to legislation. For example, in July 2013, the Investment Law was amended whereby the reduction of corporate tax rate for preferred enterprises was eliminated such that such enterprises, which are subject to the new law, would be subject to a 16% tax rate. Therefore, we cannot provide any assurances that our average tax rate for our investment programs will continue in the future at their current levels, if at all. The termination or reduction of certain programs and tax benefits or a requirement to refund tax benefits (including with interest and adjustments for inflation based on the Israeli consumer price index) already received may have a material adverse effect on our business, operating results and financial condition.

***We may engage in future acquisitions that could dilute our stockholders' equity and harm our business, results of operations and financial condition.***

We have pursued, and will continue to pursue, growth opportunities through internal development and acquisition of complementary businesses, products and technologies. We are unable to predict whether or when any other prospective acquisition will be completed. The process of integrating an acquired business may be prolonged due to unforeseen difficulties and may require a disproportionate amount of our resources and management's attention. We cannot assure you that we will be able to successfully identify suitable acquisition candidates, complete acquisitions, integrate acquired businesses into our operations, or expand into new markets. Further, once integrated, acquisitions may not achieve comparable levels of revenues, profitability or productivity as our existing business or otherwise perform as expected. The occurrence of any of these events could harm our business, financial condition or results of operations. Future acquisitions may require substantial capital resources, which may require us to seek additional debt or equity financing.

Future acquisitions by us could result in the following, any of which could seriously harm our results of operations or the price of our stock:

issuance of equity securities that would dilute our current stockholders' percentages of ownership;

large one-time write-offs;

the incurrence of debt and contingent liabilities;

difficulties in the assimilation and integration of operations, personnel, technologies, products and information systems of the acquired companies;

diversion of management's attention from other business concerns;

contractual disputes;

risks of entering geographic and business markets in which we have no or only limited prior experience; and

potential loss of key employees of acquired organizations.

***We may not be able to adequately protect or enforce our intellectual property rights, which could harm our competitive position.***

Our success and ability to compete is in part dependent upon our internally-developed technology and other proprietary rights, which we protect through a combination of copyright, trademark and trade secret laws, as well as through confidentiality agreements and licensing arrangements with our customers, suppliers, employees and consultants. In addition, we have filed a number of patents in the United States and in other foreign countries with respect to new or improved technology that we have developed. However, the status of any patent involves complex legal and factual questions, and the breadth of claims allowed is uncertain. Accordingly, we cannot assure you that any patent application filed by us will result in a patent being issued, or that the patents issued to us will not be infringed by others. Also, our competitors and potential competitors may develop products with similar technology or functionality as our products, or they may attempt to copy or reverse engineer aspects of our product line or to obtain and use information that we regard as proprietary. Moreover, the laws of certain countries in which our products are or may be developed, manufactured or sold, including Hong Kong, Japan, Korea and Taiwan, may not protect our products and intellectual property rights to the same extent as the laws of the United States. Policing the unauthorized use of our products is difficult and may result in significant expense to us and could divert the efforts of our technical and management personnel. Even if we spend significant resources and efforts to protect our intellectual property, we cannot assure you that we will be able to prevent misappropriation of our technology. Use by others of our proprietary rights could materially harm our business and expensive litigation may be necessary in the future to enforce our intellectual property rights.

***Because our products are complex, the detection of errors in our products may be delayed, and if we deliver products with material defects, our credibility will be harmed, the sales and market acceptance of our products may decrease and product liability claims may be made against us.***

Our products are complex and may contain errors, defects and bugs when introduced. If we deliver products with material errors, defects or bugs, our credibility and the market acceptance and sales of our products could be significantly harmed. Furthermore, the nature of our products may also delay the detection of any such error or defect. If our products contain material errors, defects and bugs, then we may be required to expend significant capital and resources to alleviate these problems. This could result in the diversion of technical and other resources from our other development efforts. Any actual or perceived problems or delays may also adversely affect our ability to attract or retain customers. Furthermore, the existence of any defects, errors or failures in our products could lead to product liability claims or lawsuits against us or against our customers. We generally provide our customers with a standard warranty for our products, generally lasting one year from the date of purchase. Although we attempt to limit our liability for product defects to product replacements, we may not be successful, and customers may sue us or claim liability for the defective products. A successful product liability claim could result in substantial cost and divert management’s attention and resources, which would have a negative impact on our financial condition and results of operations.

***We are exposed to the credit risk of our customers and to credit exposures in weakened markets, which could result in material losses.***

Most of our sales are on an open credit basis. Because of current conditions in the global economy, our exposure to credit risks relating to sales on an open credit basis has increased. We expect demand for enhanced open credit terms, for example, longer payment terms, to continue and believe that such arrangements are a competitive factor in obtaining business. Although we monitor and attempt to mitigate credit risks, including through insurance coverage from time to time, there can be no assurance that our efforts will be effective. Moreover, even if we attempt to mitigate credit risks through insurance coverage, such coverage may not be sufficient to cover all of our losses and we would be subject to a deductible under any insurance coverage. As a result, our future credit risk exposure may increase. Although any losses to date relating to credit exposure of our customers have not been material, future losses, if incurred, could harm our business and have a material adverse effect on our operating results and financial condition. Moreover, the loss of a customer due to its financial default also could harm our future business and potential growth.

***Our executive officers and key personnel are critical to our business, and because there is significant competition for personnel in our industry, we may not be able to attract and retain such qualified personnel.***

Our success depends to a significant degree upon the continued contributions of our executive management team, and our technical, marketing, sales customer support and product development personnel. The loss of significant numbers of such personnel could significantly harm our business, financial condition and results of operations. We do not have any life insurance or other insurance covering the loss of any of our key employees. Because our products are specialized and complex, our success depends upon our ability to attract, train and retain qualified personnel, including qualified technical, marketing and sales personnel. However, the competition for personnel is intense and we may have difficulty attracting and retaining such personnel.

***We may have exposure to additional tax liabilities as a result of our foreign operations.***

We are subject to income taxes in the United States and various foreign jurisdictions. In addition to our significant operations in Israel, we have operations in Germany, the United Kingdom, Hong Kong, China, Japan, South Korea and India. Significant judgment is required in determining our worldwide provision for income taxes and other tax liabilities. In the ordinary course of a global business, there are many intercompany transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities and as an example, we are now under audit for one of our subsidiaries, the outcome of which could have material adverse impact on our financial condition. Our intercompany transfer pricing may be reviewed by the U.S. Internal Revenue Service and by foreign tax jurisdictions. Although we believe that our tax estimates are reasonable, due to the complexity of our corporate structure, the multiple intercompany transactions and the various tax regimes, we cannot assure you that a tax audit or tax dispute to which we may be subject will result in a favorable outcome for us. If taxing authorities do not accept our tax positions and impose higher tax rates on our foreign operations, our overall tax expenses could increase.

***We are exposed to fluctuations in currency exchange rates.***

A significant portion of our business is conducted outside the United States. Export sales to manufacturers in Europe and Asia, including Japan and Asia Pacific, represented 96% of our total revenues for 2017 and 97% of our total revenues for 2016 and 2015. Although most of our revenue and expenses are transacted in U.S. dollars, we may be exposed to currency exchange fluctuations in the future as business practices evolve and we are forced to transact business in local currencies. Moreover, part of our expenses in Israel are paid in Israeli currency, which subjects us to the risks of foreign currency fluctuations between the U.S. dollar and the New Israeli Shekel (NIS) and to economic pressures resulting from Israel’s general rate of inflation. Our primary expenses paid in NIS are employee salaries and lease payments on our Israeli facilities. Furthermore, a portion of our expenses for our European operations are paid in the Euro, which subjects us to the risks of foreign currency fluctuations between the U.S. dollar and the Euro. Our primary expenses paid in the Euro are employee salaries, lease and operational payments on our European facilities. As a result, an increase in the value of the NIS and Euro in comparison to the U.S. dollar could increase the cost of our technology development, research and development expenses and general and administrative expenses, all of which could harm our operating profit. From time to time, we use derivative instruments in order to minimize the effects of currency fluctuations, but our hedging positions may be partial, may not exist at all in the future or may not succeed in minimizing our foreign currency fluctuation risks. Our financial results may be harmed if the trend relating to the devaluation of the U.S. dollars continues for an extended period.

***Because the markets in which we compete are highly competitive, and many of our competitors have greater resources than we do, we cannot be certain that our products will be accepted in the marketplace or capture market share.***

The markets in which we operate are extremely competitive and characterized by rapid technological change, evolving standards, short product life cycles and price erosion. We expect competition to intensify as current competitors expand their product offerings and new competitors enter the market. Given the highly competitive environment in which we operate, we cannot be sure that any competitive advantages enjoyed by our current products would be sufficient to establish and sustain our new products in the market. Any increase in price or competition could result in the erosion of our market share, to the extent we have obtained market share, and would have a negative impact on our financial condition and results of operations.

In each of our business activities, we face current and potential competition from competitors that have significantly greater financial, technical, manufacturing, marketing, sales and distribution resources and management expertise than we do. These competitors may also have pre-existing relationships with our customers or potential customers. Further, in the event of a manufacturing capacity shortage, these competitors may be able to manufacture products when we are unable to do so. Our principal competitors in the cordless market include Lantiq (acquired by Intel) and Dialog Semiconductors. Our principal competitors in the VoIP market include Broadcom (acquired by Avago Technologies), Dialog Semiconductors, Infineon, Texas Instruments and new Taiwanese IC vendors. Our principal competitors in the smart audio and noise reduction market include Audience (acquired by Knowles Corporation), Cirrus Logic, Conexant (recently acquired by Synaptics) and developers of noise cancellation software running on mobile phones such as

NXP and ForteMedia.

As discussed above, various new developments in the home residential market may require us to enter into new markets with competitors that have more established presence, and significantly greater financial, technical, manufacturing, marketing, sales and distribution resources and management expertise than we do. The expenditure of greater resources to expand our current product lines and develop a portfolio of “system-on-a-chip” solutions that integrate video, voice, data and communication technologies in a wider multimedia market may increase our operating expenses and reduce our gross profit. We cannot assure you that we will succeed in developing and introducing new products that are responsive to market demands.

***An unfavorable government review of our federal income tax returns or changes in our effective tax rates could adversely affect our operating results.***

Our future effective tax rates could be adversely affected by earnings being lower than anticipated in countries where we have lower statutory rates and higher than anticipated in countries where we have higher statutory rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in tax laws, regulations, accounting principles or interpretations thereof. In addition, we are subject to the periodic examination of our income tax returns by the IRS and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of our provision for income taxes, as an example, we are now under audit for one of our subsidiaries. The outcome from this examination may have an adverse effect on our operating results and financial condition.

***Our business operations would be disrupted if the information technology systems we rely on fail to function properly.***

We rely on complex information technology systems to manage our business which operates in many geographical locations. For example, to achieve short delivery lead times and superior levels of customer service while maintaining low levels of inventory, we constantly adjust our production schedules with manufacturers and subcontractors. We develop and adjust these schedules based on end customer demand as communicated by our customers and distributors and based on our inventory levels, manufacturing cycle times, component lead times, and projected production yields. We combine and distribute all of this information electronically over a complex global communications network. Our ability to estimate demand and to adjust our production schedules is highly dependent on this network. Any delay in the implementation of, or disruption in the transition to, new or enhanced processes, systems or controls, could adversely affect our ability to manage customer orders and manufacturing schedules, as well as generate accurate financial and management information in a timely manner. These systems are also susceptible to power and telecommunication disruptions and other system failures. Failure of our IT systems or difficulties in managing them could result in business disruption. Our business could be significantly disrupted and we could be subject to third party claims associated with such disruptions.

***We may experience difficulties in transitioning to smaller geometry process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.***

A growing trend in our industry is the integration of greater semiconductor content into a single chip to achieve higher levels of functionality. In order to remain competitive, we must achieve higher levels of design integration and deliver new integrated products on a timely basis. This will require us to expend greater research and development resources, and may require us to modify the manufacturing processes for some of our products, to achieve greater integration. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to reduce our costs. Although this migration to smaller geometry process technologies has helped us to offset the declining average selling prices of our products, this effort may not continue to be successful. Also, because we are a fabless semiconductor company, we depend on our foundries to transition to smaller geometry processes successfully. We cannot assure you that our foundries will be able to effectively manage the transition. In case our foundries or we experience significant delays in this transition or fail to efficiently implement this transition, our business, financial condition and results of operations could be materially and adversely affected.

***The anti-takeover provisions in our certificate of incorporation and bylaws could prevent or discourage a third party from acquiring us.***

Our certificate of incorporation and bylaws contain provisions that may prevent or discourage a third party from acquiring us, even if the acquisition would be beneficial to our stockholders. Our board of directors also has the authority to fix the rights and preferences of shares of our preferred stock and to issue such shares without a stockholder vote. Our bylaws also place limitations on the authority to call a special meeting of stockholders. Our stockholders may take action only at a meeting of stockholders and not by written consent. We have advance notice procedures for stockholders desiring to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders. In addition, these factors may also adversely affect the market price of our common stock, and the voting and other rights of the holders of our common stock.

***Our stock price may be volatile so you may not be able to resell your shares of our common stock at or above the price you paid for them.***

Announcements of developments related to our business, announcements by competitors, quarterly fluctuations in our financial results, changes in the general conditions of the highly dynamic industry in which we compete or the national economies in which we do business, and other factors could cause the price of our common stock to fluctuate, perhaps substantially. In addition, in recent years, the stock market has experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. These factors and fluctuations could have a material adverse effect on the market price of our common stock.

## Item 1B. UNRESOLVED STAFF COMMENTS.

None.

## Item 2. PROPERTIES.

Our operations in Israel are located in leased facilities of approximately 45,359 square feet located in Herzliya Pituach, Israel. These facilities are leased through December 2018. We have recently signed a lease agreement for our new leased facilities, which are also located in Herzliya Pituach, Israel. The new facilities will be leased for 10 years starting on January 1, 2019. Our subsidiary in Tokyo, Japan has a lease that terminates in October 2018. Our subsidiary in Nuremberg, Germany has a lease that terminates in December 2018. Our subsidiary in Scotland has a lease agreement for its facilities with automatic renewals on a month-to-month basis. Our subsidiary in India has a lease that terminates in August 2020. Our subsidiary in China has 2 lease agreements for its facilities, one in Shenzhen that terminates in September 2020, and the other in Shanghai that terminates in July 2018. Our subsidiary in Hong

Kong entered into a lease agreement that is effective until November 2019. Our subsidiary in South Korea has a lease that terminates in January 2018. We believe that our existing facilities are adequate to meet our needs for the immediate future.

**Item 3. LEGAL PROCEEDINGS.**

From time to time, we may become involved in litigation relating to claims arising from our ordinary course of business activities. Also, as is typical in the semiconductor industry, we have been and may from time to time be notified of claims that we may be infringing patents or intellectual property rights owned by third parties. We currently believe that there are no claims or actions pending or threatened against us, the ultimate disposition of which would have a material adverse effect on us.

**Item 4. Mine Safety Disclosures.**

Not applicable.

## PART II

### Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Our common stock, par value $0.001, trades on the NASDAQ Global Select Market (NASDAQ symbol "DSPG"). The following table presents for the periods indicated the high and low sales prices for our common stock as reported by the NASDAQ Global Select Market:

| Year Ended December 31, 2016 | High | Low |
|---|---|---|
| First Quarter | 10.21 | 7.89 |
| Second Quarter | 10.80 | 8.50 |
| Third Quarter | 12.19 | 9.75 |
| Fourth Quarter | 13.10 | 9.95 |

| Year Ended December 31, 2017 | High | Low |
|---|---|---|
| First Quarter | 14.20 | 9.80 |
| Second Quarter | 13.00 | 11.30 |
| Third Quarter | 13.00 | 10.80 |
| Fourth Quarter | 13.95 | 12.25 |

As of March 6, 2018, there were 22,725,242 shares of common stock outstanding. As of March 6, 2018, the company had approximately 22 holders of record and we believe greater than 3,185 beneficial holders. We have never paid cash dividends on our common stock and presently intend to continue a policy of retaining any earnings for reinvestment in our business.

**Equity Compensation Plan Information**

Information relating to our equity compensation plans will be presented under the caption “Equity Compensation Plan Information” of our definitive proxy statement pursuant to Regulation 14A in connection with the annual meeting of stockholders to be held on May 15, 2018. The definitive proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the end of the fiscal year covered by this report. Such information is incorporated herein by reference.

**Issuer Purchases of Equity Securities**

Our board of directors has previously approved a number of share repurchase plans, including those in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934, for the repurchase of our common stock. In August 2017, our board authorized a $10 million dollar buyback program, inclusive of the shares that remained available for repurchase from previously authorized share repurchase programs.

During the fourth quarter of 2017, we repurchased 10,001 shares of common stock at an average purchase price of $12.52 per share for approximately $0.1 million. The table below sets forth the information with respect to repurchases of our common stock during the three months ended December 31, 2017.

| Period | (a) Total Number of Shares Purchased | (b) Average Price Paid per Share | (c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs | (d) Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs) (1) |
|---|---|---|---|---|
| Month #1 (October 1, 2017 to October 31, 2017) | - | - | - | 758,011 |
| Month #2 (November 1, 2017 to November 30, 2017) | 4,000 | 12.52 | 4,000 | 754,011 |
| Month #3 (December 1, 2017 to December 31, 2017) | 6,001 | 12.52 | 6,001 | 748,010 |

At December 31, 2017, 748,010 shares of our common stock remained available for repurchase under our board authorized share repurchase program. The repurchase program is being affected from time to time, depending on market conditions and other factors, through open market purchases and privately negotiated transactions.

Information relating to our equity compensation plans will be presented under the caption “Equity Compensation Plan Information” of our definitive proxy statement pursuant to Regulation 14A in connection with the annual meeting of stockholders to be held on May 15, 2018. The definitive proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the end of the fiscal year covered by this report. Such information is incorporated herein by reference.

**Stock Performance Graph**

Notwithstanding anything to the contrary set forth in any of the Company's previous or future filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, that might incorporate this proxy statement or future filings made by the Company under those statutes, the Stock Performance Graph shall not be deemed filed with the United States Securities and Exchange Commission and shall not be deemed incorporated by reference into any of those prior filings or into any future filings made by the Company under those statutes.

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on the Standard & Poor's 500 Index and Standard & Poor's Information Technology Index. The period shown commences on December 31, 2012 and ends on December 31, 2017, the end of our last fiscal year. The graph assumes an investment of $100 on December 31, 2012, and the reinvestment of any dividends.

Comparisons in the graph above are based upon historical data and are not indicative of, nor intended to forecast, future performance of our common stock.

**Item 6. SELECTED FINANCIAL DATA.**

The selected historical consolidated financial data presented below is derived from our consolidated financial statements. The selected consolidated financial data set forth below is qualified in its entirety by, and should be read in conjunction with, our consolidated financial statements for the year ended December 31, 2017, and the discussion of our business, operations and financial results in the section captioned, “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

**Year Ended December 31,**

| | **2017** | **2016** | **2015** | **2014** | **2013** |
|---|---|---|---|---|---|
| | **(U.S. dollars in thousands)** | | | | |
| **Statements of Operations Data:** | | | | | |
| Revenues | $124,753 | $137,869 | $144,271 | $143,036 | $151,063 |
| Cost of revenues | 67,058 | 77,023 | 84,411 | 85,992 | 91,237 |
| Gross profit | 57,695 | 60,846 | 59,860 | 57,044 | 59,826 |
| Operating expenses | | | | | |
| Research and development, net | 36,655 | 34,885 | 35,483 | 33,468 | 35,000 |
| General, administrative, sales and marketing | 24,104 | 22,873 | 21,979 | 22,446 | 23,085 |
| Amortization of intangible assets | 1,700 | 1,457 | 1,284 | 1,573 | 1,672 |
| Other income | - | (2,549) | - | - | - |
| Write-off of expired option related to investment in other company | - | - | 400 | - | - |
| Total operating expenses | 62,459 | 56,666 | 59,146 | 57,487 | 59,757 |
| Operating income (loss) | (4,764) | 4,180 | 714 | (443) | 69 |
| Financial and other income | | | | | |
| Financial income, net | 1,669 | 1,227 | 1,175 | 1,204 | 2,457 |
| Income (loss) before taxes | (3,095) | 5,407 | 1,889 | 761 | 2,526 |
| Income tax benefit (expense) | 92 | (594) | (327) | 2,841 | 150 |
| Net income (loss) | $(3,003) | $4,813 | $1,562 | $3,602 | $2,676 |
| Weighted average number of Common Stock outstanding during the period used to compute basic net earnings (loss) per share | 22,229 | 21,800 | 21,924 | 21,968 | 22,249 |
| Weighted average number of Common Stock outstanding during the period used to compute diluted net earnings (loss) per share | 22,229 | 22,887 | 23,340 | 22,954 | 22,906 |
| Basic net income (loss) per share | $(0.14) | $0.22 | $0.07 | $0.16 | $0.12 |
| Diluted net income (loss) per share | $(0.14) | $0.21 | $0.07 | $0.16 | $0.12 |
| **Balance Sheet Data (end of year):** | | | | | |
| Cash, cash equivalents, marketable securities and bank deposits, including restricted deposits | $129,215 | $124,945 | $121,656 | $124,944 | $127,712 |
| Working capital | $51,071 | $52,102 | $38,144 | $38,817 | $42,301 |
| Total assets | $185,199 | $185,944 | $183,962 | $191,179 | $192,265 |
| Total stockholders’ equity | $146,950 | $145,547 | $143,318 | $146,623 | $147,411 |

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| Year Ended December 31, Fiscal Years by Quarter | 2017 | | | | 2016 | | | |
|---|---|---|---|---|---|---|---|---|
| | 4th’ | 3rd’ | 2nd’ | 1st’ | 4th’ | 3rd’ | 2nd’ | 1st’ |
| **Quarterly Data:** | **(Unaudited, U.S. dollars in thousands, except per share amount)** | | | | | | | |
| Revenues | $31,242 | $34,277 | $31,301 | $27,933 | $35,278 | $38,768 | $36,164 | $27,659 |
| Gross profit | $14,944 | $16,007 | $14,497 | $12,247 | $15,894 | $17,350 | $15,885 | $11,717 |
| Net income (loss) | $(129 ) | $578 | $(586 ) | $(2,866 ) | $1,312 | $5,334 | $1,080 | $(2,913 ) |
| Net income (loss) per share — Basic | $(0.01 ) | $0.03 | $(0.03 ) | $(0.13 ) | $0.06 | $0.24 | $0.05 | $(0.13 ) |
| Net income (loss) per share — Diluted | $(0.01 ) | $0.02 | $(0.03 ) | $(0.13 ) | $0.06 | $0.23 | $0.05 | $(0.13 ) |

## Item 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis is intended to provide an investor with a narrative of our financial results and an evaluation of our financial condition and results of operations. The discussion should be read in conjunction with our consolidated financial statements and notes thereto.

*Business Overview*

DSP Group is a leading global provider of wireless chipset solutions for converged communications, delivering system solutions that combine semiconductors and software with reference designs. We provide a broad portfolio of wireless chipsets integrating DECT, Wi-Fi, PSTN and VoIP technologies with state-of-the-art application processors. We also enable converged voice, audio and data connectivity across diverse consumer products – from cordless and VoIP phones to home gateways and connected multimedia screens. In addition, our SmartVoice segment products consist of products targeted at mobile, IoT and wearable device markets that incorporate our HDClear technology, as well as other third party advanced voice processing, always on and sensor hub functionalities.

A majority of our revenues is derived from products targeted for digital cordless telephony. Such revenues currently represent approximately 54% of our total revenues for 2017. We expect that revenues from cordless telephony will represent less than 50% of our revenues in 2018.

Our revenues were $124.8 million for 2017, a decrease of 10% in comparison to 2016. The decrease for 2017 was primarily as a result of decrease in sales of our cordless telephony and SmartVoice products, partially offset by increased sales of our VoIP products. Revenues from our non-cordless products accounted for 46% of our total revenues for 2017, as compared to 43% of our total revenues for 2016.

Revenues derived from the sale of cordless telephony products represented 54% of our total revenues for 2017, as compared to 57% of our total revenues for 2016. Revenues from our home gateway products represented 9% of our total revenues in 2017, as compared to 8% of our total revenues for 2016. Revenues from our VoIP products represented 28% of our total revenues for 2017, as compared to 19% of our total revenues for 2016. Revenues from our SmartVoice products represented 4% of our total revenues for 2017, as compared to 12% of our total revenues for 2016. Revenues from our home automation products represented 5% of our total revenues for 2017, as compared to 4% of our total revenues for 2016. At the start of 2018, we consolidated our home gateway and home automation products into a new product line called SmartHome. Revenues from this product line accounted for 14% of our 2017 revenues as compared to 12% in 2016. We expect that revenues from new, non-cordless products, primarily VoIP and SmartVoice products, to increase in 2018 and expect such revenues to represent a higher percentage of 2018 total revenues, as compared to 2017, and anticipated to exceed 50% of the total revenues in 2018 for the first time.

Our gross margin increased to 46.2% of our total revenues for 2017 from 44.1% for 2016, primary due to (i) a change in the mix of products sold and mix of customers, mostly the shifting of revenues from cordless telephony products to new products with higher gross margins, (ii) an improvement in production yield and direct contribution of certain of our products, and (iii) a decrease in royalties in 2017 as compared to 2016, mostly in our SmartVoice segment. We anticipated that our gross margin on an annual basis will continue to increase in the foreseeable future as our product mix shifts in favor of new products which generally have higher gross margins.

Our operating loss was $4.8 million for 2017, as compared to an operating income of $4.2 million for 2016. The decrease in our operating income is attributed to (i) an increase in our operating expenses in 2017 as compared to 2016, (ii) other income of $2.5 million in 2016, related to the reversal of certain provisions due to the elapse of the applicable statute of limitations and (iii) a decrease in total revenues in 2017 as compared to 2016, offset to some extent by an increase in our gross margins in 2017 as compared to 2016. Our operating expenses increased by 10% to $62.5 million for 2017, as compared to $56.7 million for 2016, mainly as a result of the above mentioned other income recorded in 2016.

Notwithstanding our success in increasing our gross margin as a percentage of our overall revenues primarily as a result of increased sales of new products, we expect that our financial condition will continue to be challenged by the expected decline of the cordless telephony market.The traditional cordless telephony market using fixed-line telephony continues to decline, potentially steeper than prior years, which continues to reduce our revenues derived from, and unit sales of, cordless telephony products. Furthermore, a significant majority of our revenues are currently generated from sales of chipsets used in cordless phones that are based on fixed-line telephony. If we are unable to continue to develop new technologies to address alternative connectivity methods, our business could be materially adversely affected.

We see evidence that our past research and development investments in new technologies are paying off. We achieved a number of design wins for our new products and a number of such new products have begun mass shipments. Aggregate revenues derived from our new products were 46%, 43% and 28% of our total revenues for 2017, 2016 and 2015, respectively. Based on a strong pipeline of design wins, our current mix of new products and anticipated commercialization schedules of customers incorporating our new products, we anticipate annual revenues generated from our new products to increase in 2018 as compared to 2017.

However, despite our successes thus far, we can provide no assurances about our continued success in introducing new products and penetrating new markets, as well as our predictions regarding market trends. Furthermore, although our new products targeted for IoT and mobile devices, home control & automation and enterprise VoIP solutions are gradually being introduced into the market, market adoption of such products is at early stages and may require us to increase our research and development spending to capitalize on opportunities in those markets. Moreover, although we have achieved a number of design wins with top-tier OEMs for new products, revenue generated from the commercialization of new products is a measured process as there is generally a long lead time from a design win to commercialization. From initial product design win to volume production, many factors could impact the timing and/or amount of sales actually realized from the design win. In addition to general price sensitivity and price erosion in the markets we operate, the introduction of new products may accelerate price erosion of older products. As a result, we expect the market to remain price sensitive for our traditional cordless telephony products and expect that price erosion and the decrease in the average selling prices of such products to continue. In addition, our continued success and growth in new markets that we have recently gained market share, which markets are highly competitive, is highly dependent on our ability to be designed into future flagship products of top-tier OEMs. Furthermore, various other factors, including increases in the cost of raw materials and commodities and our suppliers passing such increases onto us, increases in silicon wafer costs and increases in production, assembly and testing costs, and shortage of capacity to fulfill our fabrication, assembly and testing needs, all may decrease our gross profit and harm our ability to grow our revenues in future periods.

As of December 31, 2017, our principal source of liquidity consisted of cash and cash equivalents of $21.3 million and marketable securities and short and long term deposits of $107.4 million, totaling $128.7 million.

**Critical Accounting policies**

Our consolidated financial statements are prepared in accordance with U.S. GAAP. In connection with the preparation of the financial statements, we are required to make assumptions and estimates about future events, and apply judgment that affect the reported amounts of assets, liabilities, revenue, expenses and the related disclosure. We base our assumptions, estimates and judgments on historical experience, current trends and other factors that management believes to be relevant at the time the consolidated financial statements are prepared. On a regular basis, management reviews our accounting policies, assumptions, estimates and judgments to ensure that our financial statements are presented fairly and in accordance with U.S. GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumption and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 2, Significant Accounting Policies, of the notes to our consolidated financial statements for the year ended December 31, 2017.

Management believes that the following accounting policies require management's most difficult, subjective and complex judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain. Management has reviewed these critical accounting policies and related disclosures with our independent auditors and audit committee.

| **Description** | **Judgments & Uncertainties** | **Effect if Actual Results Differ from Assumptions** |
|---|---|---|
| **Tax Contingencies:**<br><br>Like most companies, domestic and foreign tax authorities periodically audit our income tax returns. These audits include questions regarding our tax filing positions, including the timing and amount of deductions and the allocation of income among various tax jurisdictions. In evaluating the exposure associated with our various tax filing positions, including | The estimate of our tax contingency reserve contains uncertainty because management must use judgment to estimate the exposure associated with our various tax filing positions.<br><br>According to Financial Accounting Standards Board ("FASB") Accounting Standards Codification | Although management believes that its estimates and judgments about tax contingencies are reasonable, actual results could differ, and we may be exposed to gains or losses that could be material. To the extent we prevail in matters for which reserve has been established, or are required to pay amounts in excess of the reserve, our effective tax rate for a given financial statement period could be materially affected. An unfavorable tax settlement |

state, foreign and local taxes, we record reserves for probable exposures. A number of years may elapse before a particular matter, for which we have established a reserve, is audited and fully resolved.

We report a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. We recognize interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

On December 22, 2017, the 2017 Tax Cuts and Jobs Act (the Tax Act) was enacted into law and the new legislation contains several key tax provisions that affected us, including, among other, a one-time mandatory transition tax on accumulated foreign earnings. We are required to recognize the effect of the tax law changes in the period of enactment, such as determining the transition tax, if any, In December 2017.

("ASC") No. 740, "Income Taxes," the first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement.

would require use of our cash and result in an increase in our effective tax rate for the year of resolution. A favorable tax settlement would be recognized as a reduction in our effective tax rate for the year of resolution.

| Description | Judgments & Uncertainties | Effect if Actual Results Differ from Assumptions |
| --- | --- | --- |
| **Tax Valuation Allowance:**<br><br>We have a valuation allowance for some of our deferred tax assets based on the determination that it is more likely than not that some of these assets will not be realized. | Our management inherently must make estimates to determine the ultimate realization of these assets. The estimate of our tax valuation allowance contains uncertainty because management must use judgment to estimate the expected results for tax purposes. | Although management believes that its estimates and judgments about expected results for tax purposes are reasonable, actual results could differ, and we may be required to record an additional valuation allowance for our deferred tax assets. |
| **Valuation of Long-Lived Assets, Intangible Assets and Goodwill :**<br><br>Goodwill represents the excess of purchase price over the fair value of identifiable net assets acquired in business combination. The goodwill on our consolidated balance sheet is a result of our acquisition of BoneTone and a private company in Asia. The identifiable intangible asset included on our consolidated balance sheet is technology acquired in the BoneTone acquisition and customer relationship in the form of a distribution agreement acquired in the acquisition of a private company in Asia.<br><br>We perform our annual impairment analysis of goodwill and indefinite-lived intangible assets in the fourth quarter of each fiscal year, or more often if there are indicators of impairment. We review intangible assets with finite useful life for potential impairment when events or changes in circumstances indicate the carrying value of those intangible assets may be impaired. We may obtain an appraisal from an independent valuation firm to determine the amount of impairment, if any. In addition to the use of an independent valuation firm, we perform internal valuation analyses and consider other publicly available market information. | We determine fair value using widely accepted valuation techniques, including discounted cash flow and market multiple analyses. These types of analyses require us to make assumptions and estimates regarding industry economic factors and the profitability of future business strategies. It is our policy to conduct impairment testing based on our current business strategy in light of present industry and economic conditions, as well as future expectations. | If management's estimates or related assumptions change in the future, we may be required to record impairment charges for our intangible assets. |

| Description | Judgments & Uncertainties | Effect if Actual Results Differ from Assumptions |
|---|---|---|
| **Contingencies and Other Accrued Expenses:**<br><br>We are from time to time involved in legal proceedings and other claims. We are required to assess the likelihood of any adverse judgments or outcomes to these matters, as well as potential ranges of probable losses. | A determination of the amount of reserve required, if any, for any contingencies and accruals is made after careful analysis of each individual issue. The required reserve may change due to future developments, such as a change in the settlement strategy in dealing with any contingencies, which may result in higher net losses. | If actual results are not consistent with management's assumptions and judgments, we may be exposed to gains or losses that could be material. |
| **Inventory Write-Off:**<br><br>We value our inventory at the lower of the cost of the inventory or fair market value through the establishment of write-off and inventory loss reserve. We have not made any changes in the accounting methodology used to establish our markdown or inventory loss reserves during the past four fiscal years. | Our write-off represents the excess of the carrying value, typically cost, over the amount we expect to realize from the ultimate sale or other disposal of inventory based upon our assumptions regarding forecasted consumer demand, the promotional environment, inventory aging and technological obsolescence. | If management's estimates regarding consumer demand are inaccurate or changes in technology affect demand for certain products in an unforeseen manner, we may be exposed to losses or gains in excess of our established write-off that could be material. |
| **Equity-Based Compensation Expense:**<br><br>Equity-based compensation expense is measured on the grant date based on the fair value of the award and is recognized as an expense over the requisite service periods. | Determining the fair value of equity-based awards on the grant date requires the exercise of judgment, including the amount of equity-based awards that are expected to be forfeited. We consider many factors when estimating expected forfeitures, including types of awards, employee class, and historical experience. Actual results, and future changes in estimates, may differ substantially from our current estimates.<br><br>We estimate the fair value of equity-based awards using a binomial option pricing model. The fair value of an award is affected by our stock price on the date of grant as well as other assumptions, including expected stock price volatility and the expected term of the equity-based award. The risk-free interest rate is based on the yield from U.S. treasury bonds with an equivalent term. Expected volatility is calculated based upon actual | Although management believes that their estimates and judgments about equity-based compensation expense are reasonable, actual results could differ. |

historical stock price movements. The expected term of the equity-based award granted is based upon historical experience and represents the period of time that the award granted is expected to be outstanding. Our expected dividend rate is zero since we do not currently pay cash dividends and do not anticipate doing so in the foreseeable future.

| Description | Judgments & Uncertainties | Effect if Actual Results Differ from Assumptions |
|---|---|---|
| **Marketable Securities:**<br><br>Management determines the appropriate classification for our investments in debt and equity securities at the time of purchase and re-evaluates such determination at each balance sheet date. | The marketable securities are periodically reviewed for impairment. If it is concluded that any of these investments are impaired, management determines whether such impairment is “other-than-temporary.” Factors that are considered in making such a determination include the duration and severity of the impairment, the reason for the decline in value and the potential recovery period, and our intent to sell, or whether it is more likely than not that we will be required to sell, the investment before recovery of its cost basis. If any impairment is considered “other-than-temporary,” the investment is written down to its fair value and a corresponding charge is recorded in financial income, net. | Although management believes that their considerations and judgments about fair value and whether a loss associated with a marketable security is other-than-temporary, actual results could differ. Given current market conditions and uncertainty, management’s judgments could prove to be wrong, and companies with relatively high credit ratings and solid financial conditions may not be able to fulfill their obligations and thereby cause other-than-temporary losses. |

**Results of Operations:**

***Total Revenues***.

The following tables represent our total revenues and our revenues by product family for the years ended December 31, 2017, 2016 and 2015 (dollars in millions):

| | 2017 | YoY Change | 2016 | YoY Change | 2015 |
|---|---|---|---|---|---|
| Total Revenues (1,2) | $124.8 | (10)% | $137.9 | (4)% | $144.3 |
| Cordless (3) | $67.4 | (14)% | $78.6 | (25)% | $104.1 |
| Percentage of total revenues | 54% | | 57% | | 72% |
| Home Gateway (4,5) | $11.2 | 3% | $10.9 | (21.0)% | $13.8 |
| Percentage of total revenues | 9% | | 8% | | 10% |
| Home automation (6) | $6.4 | 9% | $5.9 | 55% | $3.8 |
| Percentage of total revenues | 5% | | 4% | | 3% |
| VoIP (7) | $34.9 | 31% | $26.6 | 20% | $22.2 |
| Percentage of total revenues | 28% | | 19% | | 15% |
| SmartVoice (8,9) | $4.9 | (69)% | $15.9 | 5200% | $0.3 |
| Percentage of total revenues | 4% | | 12% | | - |

1. The decrease in revenues for 2017 as compared to 2016 was primarily as a result of decreased sales of our cordless telephony and SmartVoice products, offset to some extent by increased sales of our VoIP products.
2. The decrease in revenues for 2016 as compared to 2015 was primarily as a result of decreased sales of our cordless telephony products, offset to some extent by increased sales of VoIP and SmartVoice products.
3. The decrease in cordless revenues for both comparable periods was mainly attributable to decreased demand from our customers in all markets.
4. The increase of our home gateway product sales in 2017 as compared to 2016 is mainly attributable to higher demands from our customers.
5. The decrease of our home gateway product sales in 2016 as compared to 2015 is mainly attributable to lower demands from our customers.
6. The increase of our home automation product sales in both comparable periods is attributable to an increase in customers demand for our home automation products resulting from market acceptance of ULE products.
7. The increase in our VoIP sales for both comparable periods is mainly attributable to a growth in market demand for our VoIP products that resulted from the growth of our market share within this domain.
8. The decrease in our SmartVoice revenues in 2017 as compared to 2016 is attributed to a decrease in demand from one of our tier one mobile customer.
9. The increase in our SmartVoice revenues in 2016 as compared to 2015 was attributed to the commencement of sales of our HDClear products in the third quarter of 2015 and the integration of our HDClear product in 2016 in one of our tier one mobile customer’s flagship mobile phones

The following table shows the breakdown of revenues for all product lines for the periods indicated by geographic location based on the geographic location of our customers (in thousands):

| | **Year Ended December 31,** | | |
|---|---|---|---|
| | **2017** | **2016** | **2015** |
| United States | $4,927 | $4,696 | $3,944 |
| Hong Kong | 46,119 | 56,768 | 72,608 |
| Japan | 16,567 | 18,440 | 26,114 |
| Europe | 9,882 | 9,703 | 8,464 |
| China | 16,096 | 10,244 | 10,359 |
| Taiwan | 22,442 | 16,428 | 16,902 |
| Korea | 4,190 | 17,503 | 1,913 |
| Other | 4,530 | 4,087 | 3,967 |
| Total revenues | $124,753 | $137,869 | $144,271 |

Sales to our customers in Taiwan increased in 2017 as compared to 2016, representing a 37% increase in absolute U.S. dollars. The increase in our sales to Taiwan in 2017 resulted from an increase in sales through our distributor, Ascend Technology.

Sales to our customers in China increased in 2017 as compared to 2016, representing a 57% increase in absolute U.S. dollars. The increase in our sales to China in 2017 resulted from a 20% increase in sales through our distributor, Ascend Technology, as well as increased sales to our customers Yealink and Arrow, representing a 38% and 255% increase in sales for the comparable periods, mostly due to sales in our Office segment.

Sales to our customers in Hong Kong decreased for 2017 as compared to 2016, representing a decrease of 19% in absolute U.S.dollars. The decrease in our sales to Hong Kong for the comparable periods resulted mainly from the decrease in sales to VTech of 15% when comparing 2017 to 2016, a decrease in sales to CCT Technology (“CCT”) of 24% when comparing 2017 to 2016, and a decrease of 29% in sales to Guo Wei when comparing 2017 to 2016, mostly resulting from the decline in cordless sales.

The decrease in our sales to Japan for the comparable periods resulted mainly from a decrease in sales to the Japanese domestic market, mostly in cordless products, representing a 13% decrease in absolute dollars for 2017 as compared to 2016, and a decrease in sales through our distributor, Tomen Electronics, to Panasonic of 12% when comparing 2017 to 2016.

Sales to our customers in Korea decreased for 2017 as compared to 2016, representing a decrease of 76% in absolute U.S. dollars. The decrease in our sales to Korea in 2017 resulted mainly from a decrease in demand from a tier one mobile customer.

Sales to our customers in Hong Kong decreased for 2016 as compared to 2015, representing a decrease of 22% in absolute U.S. dollars. The decrease in our sales to Hong Kong for the comparable periods resulted mainly from the decrease in sales to VTech of 11% when comparing 2016 to 2015, a decrease in sales to CCT of 47% when comparing 2016 to 2015, and a decrease of 30% in sales to Guo Wei. The decrease in our sales to Japan for the comparable periods resulted mainly from a decrease in sales to the Japanese domestic market, representing a 40% decrease in absolute dollars for 2016 as compared to 2015 and a decrease in sales through our distributor, Tomen Electronics to Panasonic of 25% when comparing 2016 to 2015.

Sales to our customers in Korea increased for 2016 as compared to 2015, representing an increase of 815% in absolute U.S. dollars. The increase in our sales to Korea in 2016 resulted mainly from an increase in sales to a tier one mobile customer after the commencement of sales of our HDClear products at the end of 2015 and the integration of our HDClear product in 2016 into one of such customer's flagship models.

As our products are generally incorporated into consumer electronics products sold by our OEM customers, our revenues are affected by seasonal buying patterns of consumer electronics products sold by our OEM customers that incorporate our products.

***Significant Customers***. The Japanese and Hong Kong markets and the OEMs that operate in those markets are among the largest suppliers of residential wireless products with significant market share in the U.S. market. The loss of any of our significant customers or distributors could have a material adverse effect on our business, financial condition and results of operations.

The following table represents our sales, as a percentage of our total revenues, through our main customers for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31,** | | |
|---|---|---|---|
| **Major Customers** | **2017** | **2016** | **2015** |
| VTech Holdings Ltd. | 27% | 29% | 31% |
| Panasonic Communications Ltd. | 10% | 10% | 13% |
| Shenzhen Guo Wei Electronics Ltd. | * | *% | 12% |
| Samsung Electronics Ltd. | * | 12% | - |

*Less than 10%.

The following table represents our sales, as a percentage of our total revenues, through our main distributors Tomen Electronics and Ascend Technology for the years ended December 31, 2017, 2016 and 2015:

| | |
|---|---|
| | **Year ended December 31,** |

| **Major Distributors** | **2017** | **2016** | **2015** |
|---|---|---|---|
| Tomen Electronics Corporation (1) | 12% | 12% | 16% |
| Ascend Technology Inc. | 23% | 16% | 15% |

(1) Tomen Electronics sells our products to a limited number of customers. One customer, Panasonic, has continually accounted for a majority of the sales of Tomen Electronics. Sales to Panasonic through Tomen Electronics generated approximately 10%, 10% and 13% of our total revenues for 2017, 2016 and 2015, respectively.

(2) Ascend Technology sells our products to a limited number of customers; however none of those customers accounted for more than 10% of our total revenues for 2017, 2016 or 2015.

***Significant Products***. Revenues from our digital cordless telephony products represented 54%, 57% and 72% of our total revenues for 2017, 2016 and 2015, respectively. We believe that sales of digital cordless telephony products will continue to represent a substantial percentage of our revenues for 2018. We believe that the rapid deployment of new communication access methods, as well as the lack of growth in fixed-line telephony, will reduce our total revenues derived from, and unit sales of, cordless telephony products, for the short and long term.

Revenues from our home gateway products represented 9%, 8% and 10% of our total revenues for 2017, 2016 and 2015, respectively. Revenues from our home automation products represented 5%, 4% and 3% of our total revenues for 2017, 2016 and 2015, respectively. Revenues from SmartHome products, comprising of home gateways and home automoation products, represented 14%, 12% and 13% of our total revenues for 2017, 2016 and 2015, respectively.

Revenues from our VoIP products represented 28%, 19% and 15% of our total revenues for 2017, 2016 and 2015, respectively.

Revenues from our SmartVoice products represented 4%, 12% and 0% of our total revenues for 2017, 2016 and 2015, respectively.

***Gross Profit.*** Gross profit as a percentage of revenues was 46.2% for 2017, 44.1% for 2016 and 41.5% for 2015. The increase in our gross profit for 2017 as compared to 2016 was primary due to (i) a change in the mix of products sold and mix of customers, mostly the shifting of revenues from cordless telephony products to new products with higher gross margins, (ii) an improvement in production yield and direct contribution of certain of our products, and (iii) a decrease in royalties paid in 2017, as compared to 2016, mainly in our SmartVoice segment. Those factors were partially offset by a decrease in total revenues in 2017 as compared to 2016. The increase in our gross profit for 2016 as compared to 2015 was primary due to (i) a change in the mix of products sold and mix of customers, mostly the shifting of revenues from cordless telephony products to new products with higher gross margin, and (ii) an improvement in production yield and direct contribution of certain of our products. These were partially offset by a decrease in total revenues in 2016 as compared to 2015 and by an increase in royalties paid in 2016, as compared to 2015, mainly in our SmartVoice segment.

As gross profit reflects the sale of chips and chipsets that have different margins, changes in the mix of products sold and customers have impacted and will continue to impact our gross profit in future periods. Our gross profit may decrease in the future due to a variety of factors, including the continued decline in the average selling prices of our products, changes in the mix of products sold and customers, our failure to achieve cost reductions, roll-out of new products in any given period, our success in introducing new engineering processes to reduce manufacturing costs, increases in the cost of raw materials such as gold, oil and silicon wafers, and increases in production, assembly and testing costs. Moreover, our suppliers may pass the increase in the cost of raw materials and commodities onto us which would further reduce the gross margins of our products. There are no guarantees that our ongoing efforts in cost reduction and yield improvements will keep pace with the anticipated continuing decline in average selling prices of our products.

Cost of goods sold consists primarily of costs of wafer manufacturing and fabrication, assembly and testing of integrated circuit devices and related overhead costs, and compensation and associated expenses related to manufacturing and testing support, inventory obsolesce and logistics personnel.

***Operating Expenses.*** Our operating expenses were $62.5 million for 2017, $56.7 million for 2016 and $59.1 million for 2015. The increase in operating expenses for 2017 as compared to 2016 was primarily attributable to (i) other income of $2.5 million recorded in 2016 related to the reversal of certain provisions due to the elapse of the applicable statute of limitations, (ii) an increase in research and development expenses in the amount of $1.8 million, mostly attributable to a decrease in funding from the Israeli Innovation Authority ("IIA") in an amount of $1.2 million in 2017 as compared to 2016, (iii) an increase in sales and marketing expenses in an amount of $0.4 million, and (iv) an increase in general and administrative expenses in an amount of $0.8 million, mostly due to an increase in legal expenses in an amount of $0.4 million in 2017 as compared to 2016.

The decrease in operating expenses for 2016 as compared to 2015 was primarily attributable to (i) other income of $2.5 million in 2016 related to the reversal of certain provisions due to the elapse of the applicable statute of limitations, (ii) a decrease in research and development expenses in the amount of $0.6 million, and (iii) a decrease in general and administrative expenses in amount of $0.9 million. These above mentioned factors were partially offset by an increase in sales and marketing expenses in the amount of $1.8 million for 2016 as compared to 2015.

Our operating loss was $4.8 for 2017, as compared to operating income of $4.2 million and $0.7 million for 2016 and 2015, respectively. The decrease in operating income in 2017 as compared to 2016 was mainly due to the decrease in revenues and an increase in operating expenses in 2017 as compared to 2016, partially offset by an increase in gross margins in 2017 as compared to 2016.

The increase in operating income in 2016 as compared to 2015 was mainly due to an increase in gross margins in 2016 as compared to 2015 and a decrease in operating expenses in 2016 as compared to 2015 by $2.4 million. Those factors were partially offset by a decrease in our total revenues for 2016 as compared to 2015.

***Research and Development Expenses.*** Our research and development expenses, net, were $36.7 million for 2017, $34.9 million for 2016 and $35.5 million for 2015. The increase for 2017 in research and development expenses, net, as compared to 2016, was mainly due to (i) a decrease in funding from the IIA in an amount of $1.2 million in 2017 as compared to 2016, (ii) an increase in development tools expenses in 2017 as compared to 2016 in an amount of $0.4 million, and (iii) an increase in salaries and related expenses as compared to 2016, mainly due to the devaluation of the U.S dollar against the NIS. Those increases were partially offset by a decrease of $0.6 million in subcontractor, IP and tape out expenses for 2017, as compared to 2016.

The decrease for 2016 in research and development expenses, net, as compared to 2015, was mainly due to a decrease in IP expenses in 2016 as compared to 2015 in the amount of $1.6 million, which was partially offset by an increase in payroll, labor contractors, depreciation, and other payroll-related expenses associated with R&D employees.

The IIA funding was recognized as a deduction of our research and development expenses, net. As a result of receipt of IIA funding, royalties may be payable to the IIA in the future based on a percentage of revenues derived from sales of products whose development was facilitated by the IIA funding. The obligation to pay these royalties is contingent on actual sales of these products.

Our research and development expenses, net, as a percentage of our total revenues were 29%, 25% and 25% for the years ended on December 31, 2017, 2016 and 2015, respectively. The increase in research and development expenses, net, as a percentage of total revenues for 2017 as compared to 2016 was mainly due to an increase in research and development expenses, net and a decrease in revenues for the comparable periods.

Research and development expenses consist mainly of payroll expenses to employees involved in research and development activities, expenses related to tapeout and mask work, subcontracting, labor contractors and engineering expenses, depreciation and maintenance fees related to equipment and software tools used in research and development, and facilities expenses associated with and allocated to research and development activities.

***Sales and Marketing Expenses***. Our sales and marketing expenses were $14.3 million for 2017, $13.9 million for 2016 and $12.1 million for 2015. The increase in sales and marketing expenses between 2017 and 2016 was mainly attributable to (i) an increase in consulting services, (ii) an increase in payroll and related expenses as compared to 2016, mainly due to the devaluation of the U.S. dollar against the NIS, and (iii) an increase in equity based compensation expenses of $0.3 million in 2017 compared to 2016. Those factors were partially offset by a decrease in sales commissions on sales of SmartVoice products in 2017 as compared to 2016 due to lower revenues from such segment.

The increase in sales and marketing expenses between 2016 and 2015 was mainly attributable to (i) an increase in sales commissions on sales of SmartVoive products, (ii) an increase in payroll expenses and (iii) an increase in equity based compensation expenses of $0.2 million in 2016 compared to 2015.

Our sales and marketing expenses as a percentage of our total revenues were 11%, 10% and 8% for 2017, 2016 and 2015, respectively. The increase in sales and marketing expenses as a percentage of total revenues for 2017 as compared to 2016 was mainly due to a decrease in absolute dollars of the total revenues and an increase in sales and marketing expenses for 2017 as compared to 2016.

Sales and marketing expenses consist mainly of sales commissions, payroll expenses to direct sales and marketing employees, travel, trade show expenses, and facilities expenses associated with and allocated to sales and marketing activities.

***General and Administrative Expenses.*** Our general and administrative expenses were $9.8 million, $9.0 million and $9.9 million for 2017, 2016 and 2015, respectively. The increase in general and administrative expenses for 2017 as compared to 2016 was mainly due to (i) an increase in legal expenses due to the reimbursement of legal expenses in the amount of $0.4 million in 2016 as a result of the finalization of an arbitration proceeding, and (ii) an increase in equity based compensation expenses of $0.3 million in 2017 as compared to 2016.

The decrease in general and administrative expenses for 2016 as compared to 2015 was mainly due to (i) a decrease in legal expenses and the reimbursement of legal expenses in the amount of $0.4 million in 2016 as a result of the finalization of an arbitration proceeding and (ii) a decrease in equity based compensation expenses of $0.2 million in 2016 compared to 2015, offset to some extent by an increase in payroll expenses in 2016, as compared to 2015.

General and administrative expenses as a percentage of our total revenues were 8%, 7% and 7% for the three years ended December 31, 2017, 2016 and 2015, respectively. The increase in general and administrative expenses as a percentage of total revenues for 2017 as compared to 2016 was mainly due to a decrease in absolute dollars of the total revenues and an increase in general and administrative expenses for 2017 as compared to 2016.

Our general and administrative expenses consist mainly of payroll expenses for management and administrative employees, accounting and legal fees, expenses related to investor relations as well as facilities expenses associated with general and administrative activities.

***Amortization of Intangible Assets***. During 2017, 2016 and 2015, we recorded an expense of $1.7 million, $1.5 million and $1.3 million, respectively, relating to the amortization of intangible assets associated with prior acquisitions. The increase in 2017 compared to 2016 is attributable to additional amortization of intangible assets related to the acquisition of a private company in Asia in the second half of 2016.

The increase in 2016 compared to 2015 is attributable to the same reason mentioned above - additional amortization of intangible assets related to the acquisition of a private company in Asia in 2016.

***Write-off of Expired Option Related to Investment in Other Company***. In November 2013, we made an investment of $2.2 million in a private company in Asia in return for approximately 14% of the equity of the company on a fully diluted basis. We also had the option to acquire the remaining equity of this private company until December 31, 2014. The terms and conditions of the investment were modified in November 2014, including an extension of the option to acquire the remaining equity of the company to December 31, 2015. We did not exercise the purchase option by the expiration date, and as a result we recorded a write-off of $0.4 million associated with the investment in 2015.

***Other Income.*** During the third quarter of 2016, we recorded other income in the amount of $2.5 million related to the reversal of certain provisions due to the elapse of the applicable statute of limitations.

***Financial Income, net.*** Financial income, net, was $1.7 million, $1.2 million and $1.2 million for the three years ended December 31, 2017, 2016 and 2015. The increase in financial income, net, in 2017 as compared to 2016 was mainly due to an increase in foreign exchange rates income by $0.2 million and an increase of $0.2 million in marketable securities and deposits interest in 2017 as compared to 2016, resulting from an increase in interest rates.

Our total cash, cash equivalents, marketable securities and short and long term deposits, including restricted deposits, were $129.2 million as of December 31, 2017, as compared to $124.9 million as of December 31, 2016.

***Provision for Income Taxes.*** In 2017, we had a tax benefit of $0.1 compared to taxes on income of $0.6 million for 2016, and $0.3 million for 2015.

The tax benefit for 2017 was mainly attributed to an income from amortization of deferred tax liability related to intangible assets acquired in connection with prior acquisitions in the amount of $0.4 million, offset to some extent by current tax expenses that were recorded in the amount of $0.3 million.

The taxes on income for 2016 were mainly attributed to current tax expenses that were recorded in the amount of $1 million, offset to some extent by an income from amortization of deferred tax liability related to intangible assets acquired in connection with prior acquisitions in the amount of $0.4 million.

The taxes on income for 2015 were mainly attributed to current tax expenses that were recorded in the amount of $0.7 million, offset to some extent by an income from amortization of deferred tax liability related to intangible assets acquired in connection with the BoneTone acquisition in the amount of $0.4 million.

***Tax Cuts and Jobs Act.*** On December 22, 2017, the U.S. President signed into law federal tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”). Broadly, the implications of the Tax Act most relevant to the company include: a) a reduction in the U.S. federal corporate income tax rate from 35% to 21%, and b) adopting elements of a territorial tax system. To transition into the territorial tax system, the Tax Act includes a one-time tax of 15.5% on cumulative retained earnings and profits of U.S.-owned (directly or indirectly) foreign subsidiaries. An initial review of the Tax Act has been undertaken by us and based on such review, we believe we are not subject to any transitional tax because the company does not currently have any positive cumulative earnings and profits in its foreign subsidiaries. The Tax Act could be subject to potential amendments and technical corrections. Given the unpredictability of these and other tax laws and related regulations, and their potential interdependency, it is difficult to currently assess the overall effect of such tax changes on the impact on our financial statements.

***Description of Segments.***

We operate under three reportable segments.

Our segment information has been prepared in accordance with ASC 280, “Segment Reporting.” Operating segments are defined as components of an enterprise engaging in business activities about which separate financial information is available that is evaluated regularly by the company’s chief operating decision-maker (“CODM”) in deciding how to allocate resources and assess performance. Our CODM is our Chief Executive Officer, who evaluates the Company’s performance and allocates resources based on segment revenues and operating income.

Our operating segments are as follows: Home, Office and SmartVoice. The classification of our business segments is based on a number of factors that our management uses to evaluate, view and run the company’s business operations, which include, but are not limited to, customer base, homogeneity of products and technology.

A description of the types of products provided by each business segment is as follows:

Home - Wireless chipset solutions for converged communication at home. Such solutions include integrated circuits targeted for cordless phones sold in retail or supplied by telecommunication service providers, home gateway devices supplied by telecommunication service providers which integrate the DECT/CAT-iq functionality, integrated circuits addressing home automation applications, as well as fixed-mobile convergence solutions. We have recently combined the home gateway and home automation products into a single product line called SmartHome. In this segment, (i) revenues from cordless telephony products exceeded 10% of our total consolidated revenues and amounted to 54%, 57% and 72% of our total revenues for 2017, 2016 and 2015, respectively, and (ii) revenues from home gateway products amounted to 9%, 8% and 10% of our total revenues for 2017, 2016 and 2015, respectively.

Office - Comprehensive solution for Voice-over-IP (VoIP) office products, including office solutions that offer businesses of all sizes low-cost VoIP terminals with converged voice and data applications. Revenues from our VoIP products represented 28%, 19% and 15% of our total revenues for 2017, 2016 and 2015, respectively. No revenues derived from other products in the office segment exceeded 10% of our total consolidated revenues for the years 2017, 2016 and 2015.

SmartVoice (formerly called “Mobile”) - Products for the SmartVoice market that provides voice activation and recognition, voice enhancement, always-on and far-end noise elimination targeted for mobile phone, mobile headsets and other devices that incorporate our voice recognition, noise suppression and voice quality enhancement HDClear technology. Revenues derived from mobile products in the SmartVoice segment represented 4%, 12% and 0% of our total revenues for 2017, 2016 and 2015, respectively. No products in the SmartVoice segment exceeded 10% of our total consolidated revenues for the years 2017, 2016 and 2015.

**Segment data:**

We derive the results of our business segments directly from our internal management reporting system and by using certain allocation methods. The accounting policies we use to derive business segment results are substantially the same as those we use for consolidation of our financial statements. Management measures the performance of each business segment based on several metrics, including earnings from operations. Management uses these results, in part, to evaluate the performance of, and to assign resources to, each of the business segments. We do not allocate to our business segments certain operating expenses, which we manage separately at the corporate level. These unallocated costs include primarily amortization of purchased intangible assets, equity-based compensation expenses and certain corporate governance costs.

We do not allocate any assets to segments and, therefore, no amount of assets is reported to management and disclosed in the financial information for segments. Selected operating results information for each business segment was as follows for the years ended December 31, 2017, 2016 and 2015:

| | **Year ended December 31** | | | | | |
|---|---|---|---|---|---|---|
| | **Revenues** | | | **Income (loss) from operations** | | |
| | **2017** | **2016** | **2015** | **2017** | **2016** | **2015** |
| **Home** | $85,021 | $95,388 | $121,714 | $16,256 | $17,715 | $24,815 |
| **Office** | $34,879 | $26,590 | $22,216 | $9,105 | $(2,961) | $(4,861) |
| **SmartVoice** | $4,853 | $15,891 | $341 | $(20,798) | $(5,190) | $(10,308) |
| **Total** | $124,753 | $137,869 | $144,271 | $4,563 | $9,564 | $9,646 |

Sales to our customers in the home segment decreased for 2017 as compared to 2016, representing a decrease of 11% in absolute U.S. dollars, and decreased for 2016 as compared to 2015, representing a decrease of 22% in absolute U.S. dollars. The decrease in our home segment sales for 2017 as compared to 2016 was mainly attributable to a decline in market demands over the comparative periods, which were partially offset by an increase in sales of our home automation and home gateway products in 2017 as compared to 2016. The decrease in our home segment sales for 2016 as compared to 2015 was mainly attributable to the decline in market demands, and a decrease in the average selling prices of cordless phones over the comparative periods and a decrease in sales of home gateway products, offset to some extent by an increase in sales of home automation products.

Sales to our customers in the office segment increased for 2017 as compared to 2016, representing an increase of 31% in absolute U.S. dollars. Sales to our customers in the office segment increased for 2016 as compared to 2015, representing an increase of 20% in absolute U.S. dollars. The increase in our office segment sales for both comparable periods was mainly due to an increase in our market share of VoIP products.

Sales to our customers in the SmartVoice segment decreased significantly for 2017 as compared to 2016, representing a decrease of 69% in absolute U.S. dollars. The decrease in our SmartVoice segment sales for 2017, as compared to 2016 was mainly due to a decrease in demand from one of our tier one mobile customers. The increase in our SmartVoice segment sales for 2016, as compared to 2015 was mainly due to the integration of our HDClear product in one of our tier one customer's flagship mobile phones.

The reconciliation of segment operating results information to our consolidated financial information is included in Note 16 to our consolidated financial statements.

**LIQUIDITY AND CAPITAL RESOURCES**

***Operating Activities.*** We generated $8.5, $16.5 and $12.2 million of cash and cash equivalents from our operating activities during 2017, 2016 and 2015, respectively. The decrease in net cash generated by operating activities for 2017, as compared to 2016, was mainly as a result of (i) a decrease in net profit in 2017 as compared to 2016, (ii) a decrease in accounts payable in an amount of $3.9 million during 2017 as compared to $0.6 million during 2016, and (iii) an increase in other accounts receivable and prepaid expenses in an amount of $1.1 million during 2017 as compared to a decrease of $1.0 million during 2016. The above mentioned factors were partially offset by (i) a decrease in accounts receivable in an amount of $5.7 million during 2017 as compared to a decrease of $0.2 million during 2016.

The increase in net cash generated by operating activities for 2016, as compared to 2015, was mainly as a result of (i) an increase in net profit in 2016 as compared to 2015 (ii) an increase in accrued compensation and benefits in an amount of $2.6 million during 2016 as compared to $0.2 million during 2015, (iii) a decrease in other accounts receivable and prepaid expenses in amount of $1.0 million during 2016 as compared to an increase of $1.0 million during 2015, and (iv) a decrease in accounts payable in an amount of $0.6 million during 2016 as compared to a decrease of $2.2 million during 2015. The above mentioned increase was partially offset by a decrease in inventories in the amount of $1.7 million during 2016, as compared to a decrease in inventories in the amount of $4.1 million during 2015.

***Investing Activities.*** We invest excess cash in marketable securities of varying maturities, depending on our projected cash needs for operations, capital expenditures and other business purposes. During 2017, we purchased $49.8 million of investments in marketable securities and deposits, as compared to $55.5 million during 2016 and $41.0 million during 2015. During the same periods, $21.5 million, $35.1 million and $20.1 million, respectively, of investments in marketable securities matured and were called by the issuer. During the same periods, $19.2 million, $14.3 million and $13.2 million, respectively, of investments in marketable securities were sold. Additionally, during 2017, 2016 and 2015, $8.3 million, $5.6 million and $2.6 million, respectively, of short term deposits matured.

As of December 31, 2017, the amortized cost of our marketable securities and deposits was approximately $108.6 million and their stated market value was approximately $107.4 million, representing an unrealized loss of approximately $1.2 million.

During 2016, we completed the acquisition of a private company in Asia by acquiring the remaining 86% of equity of that company. As part of the acquisition, we paid $0.5 million to the company's shareholders.

Our capital equipment purchases for 2017, consisting primarily of research and development software tools, computers and other peripheral equipment, engineering test and lab equipment, leasehold improvements, furniture and fixtures, totaled $0.8 million, as compared to $2.1 million for 2016, and $2.3 million for 2015.

***Financing Activities.*** During 2017, we repurchased 0.4 million shares of our common stock at an average purchase price of $11.54 per share for an aggregate amount of $4.5 million. In addition, during 2017, we received $1.5 million upon the exercise of employee stock options.

During 2016, we repurchased 1.1 million shares of our common stock at an average purchase price of $10.14 per share for an aggregate amount of $10.7 million. In addition, during 2016, we received $1.5 million upon the exercise of employee stock options.

Our board of directors has previously approved a number of share repurchase plans, including those in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934, for the repurchase of our common stock.

In August 2017, our board authorized a $10 million buyback program, inclusive of the shares that remained available for repurchase from previously authorized share repurchase plans.

At December 31, 2017, approximately 0.7 million shares of our common stock are available for repurchase under our board authorized share repurchase program.

As of December 31, 2017, we had cash and cash equivalents totaling approximately $21.3 million and marketable securities and time deposits of approximately $107.4 million. Out of total cash, cash equivalents and marketable securities of $128.7 million, $117.6 million was held by foreign entities. Our intent is to permanently reinvest earnings of our foreign operations and our current operating plans do not demonstrate a need to repatriate foreign earnings to fund our U.S. operations. However, if these funds were needed for our operations in the United States, we would be required to accrue and pay taxes in several countries to repatriate these funds. The determination of the amount of taxes related to the repatriation of these earnings is not practicable, as it may vary based on various factors such as the location of the cash and the effect of regulation in the various jurisdictions from which the cash would be repatriated.

Our working capital at December 31, 2017 was approximately $51.1 million, as compared to $52.1 million as of December 31, 2016. The decrease in working capital was mainly due to (i) the repurchase of our common stock in the amount of $4.5 during 2017, and (ii) the replacement of short term marketable securities and deposits with long term marketable securities and deposits. The above mentioned decreases were offset to some extent by the net cash of $8.5

million generated by operating activities during 2017. We believe that our current cash, cash equivalents, cash deposits and market securities will be sufficient to meet our cash requirements for both the short and long term.

In addition, as part of our business strategy, we may evaluate potential acquisitions of businesses, products and technologies. Accordingly, a portion of our available cash may be used at any time for the acquisition of complementary products or businesses. Such potential transactions may require substantial capital resources, which may require us to seek additional debt or equity financing. We cannot assure you that we will be able to successfully identify suitable acquisition candidates, complete acquisitions, integrate acquired businesses into our current operations, or expand into new markets. Furthermore, we cannot assure you that additional financing will be available to us in any required time frame and on commercially reasonable terms, if at all. See the section of the risk factors entitled “*We may engage in future acquisitions that could dilute our stockholders*’ *equity and harm our business, results of operations and financial condition*.” for more detailed information.

***Contractual Obligations***

The following table aggregates our material expected obligations and commitments as of December 31, 2017 (in thousands):

| | **Payment Due By Period** | | | | |
|---|---|---|---|---|---|
| **Contractual Obligations** | **Total** | **Less Than 1 Year** | **2-3 Years** | **4-5 Years** | **More Than 5 Years** |
| Operating Lease Commitments (1) | $14,968 | $2,961 | $2,822 | $2,296 | $6,889 |
| Net Pension Liability (2) | 1,410 | 9 | 19 | 58 | 1,324 |
| Development tools lease and other (3) | 4,414 | 1,746 | 2,668 | - | - |
| Total Contractual Obligations | $20,792 | $4,716 | $5,509 | $2,354 | $8,213 |

(1) Represents mainly operating lease payments for facilities and vehicles under non-cancelable lease agreements. See Note 13 to notes to our consolidated financial statements for the year ended December 31, 2017.

(2) Includes estimates of gross contributions and future payments required to meet the requirements of several defined benefit plans. The amounts presented in the table are not discounted and do not take into consideration staff turnover assumptions.

(3) Represents lease payments for development tools and other non-cancelable lease agreements.

At December 31, 2017, we had a liability for unrecognized tax benefits and an accrual for the payment of related interests totaling $1.3 million. Due to uncertainties related to those tax matters, we currently are unable to make a reasonably reliable estimate of when cash settlement with a taxing authority will occur. We believe a change in the amount of unrecognized tax benefit is reasonably possible in the next 12 months due to the examination of the tax returns of one of our subsidiaries. We currently cannot provide an estimate of the range of change in the amount of the unrecognized tax benefits due to the ongoing status of the examination.

***Off-Balance Sheet Arrangements.***

We do not have any off-balance sheet arrangements, as such term is defined in recently enacted rules by the Securities and Exchange Commission, that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to investors.

**Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

***Interest Rate Risk.*** It is our policy not to enter into interest rate derivative financial instruments, except for hedging of foreign currency exposures discussed below. We do not currently have any significant interest rate risk since we do not have any financial obligations.

The majority of our cash and cash equivalents are invested in high grade certificates of deposits with major U.S., European and Israeli banks. Generally, cash and cash equivalents and short term deposits may be redeemed and therefore minimal credit risk exists with respect to them. Nonetheless, cash deposits with these banks exceed the Federal Deposit Insurance Corporation (“FDIC”) insurance limits in the U.S. or similar limits in foreign jurisdictions to the extent such deposits are even insured in such foreign jurisdictions. While we monitor on a systematic basis the cash balances and adjust the balances as appropriate, these balances could be impacted if one or more of the financial institutions with which we deposit our funds fails or is subject to other adverse conditions in the financial or credit markets. To date we have experienced no loss of principal or lack of access to our cash; however, we can provide no assurances that access to our cash will not be affected if the financial institutions that we hold our cash fail or if there is significant instability in the financial and credit markets.

We hold an investment portfolio of marketable securities consisting principally of debentures of U.S. and European corporations, and state and political subdivisions of the U.S. government. We intend, and have the ability, to hold investments in marketable securities with a decline in fair value until an anticipated recovery of any temporary declines in their market value. We typically do not attempt to reduce or eliminate our market exposures on our investment securities because the majority of our investments are short-term. However, we can provide no assurances that we will recover present declines in the market value of our investments.

Interest rate fluctuations relating to our cash and cash equivalents and within our investment portfolio have not had, and we do not currently anticipate such fluctuations will have, a material effect on our financial position on an annual or quarterly basis.

***Foreign Currency Exchange Rate Risk***. A significant part of our sales and expenses are denominated in U.S. dollars. Part of our expenses in Israel are paid in NIS, which subjects us to the risks of foreign currency fluctuations between the U.S. dollar and the NIS. Our primary expenses paid in NIS are employee salaries and lease payments on our Israeli facilities. Furthermore, a portion of our expenses for our European operations are paid in the Euro, which subjects us to the risks of foreign currency fluctuations between the U.S. dollar and the Euro. Our primary expenses paid in Euro are employee salaries, lease and operational payments on our European facilities. To partially protect the company against an increase in value of forecasted foreign currency cash flows resulting from salary and lease payments denominated in NIS during 2017, we instituted a foreign currency cash flow hedging program. The option and forward contracts used are designated as cash flow hedges, as defined by FASB ASC No. 815," Derivatives and Hedging," and are all effective as hedges of these expenses. For more information about our hedging activity, see Note 2 to our notes to our consolidated financial statements for the year ended December 31, 2017. An increase in the value of the NIS and the Euro in comparison to the U.S. dollar could increase the cost of our research and development expenses and general and administrative expenses, all of which could harm our operating profit. Although we currently are using a hedging program to minimize the effects of currency fluctuations relating to the NIS, our hedging position is partial, may not exist at all in the future and may not succeed in minimizing our foreign currency fluctuation risks.

**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

**CONSOLIDATED FINANCIAL STATEMENTS**

**AS OF DECEMBER 31, 2017**

**IN U.S. DOLLARS**

**INDEX**

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|---|---|
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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Stockholders and the Board of Directors of DSP GROUP, Inc.

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of DSP GROUP, Inc. (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 16, 2018 expressed an unqualified opinion thereon.

**Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

| | |
|---|---|
| | /s/ Kost Forer Gabbay & Kasierer |
| Tel-Aviv, Israel | KOST FORER GABBAY & KASIERER |
| March 16, 2018 | A Member of Ernst & Young Global |

We have served as the Company's auditor since 1998.

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders of DSP GROUP, Inc.

**Opinion on Internal Control over Financial Reporting**

We have audited DSP GROUP, Inc.`s (the "Company") internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, and the related consolidated statements of income (loss), changes in stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017 and the related notes, and our report dated March 16, 2018 expressed an unqualified opinion thereon.

**Basis for Opinion**

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures, as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

**Definition and Limitations of Internal Control Over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

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Tel-Aviv, Israel KOST FORER GABBAY & KASIERER
March 16, 2018 A Member of Ernst & Young Global

**DSP GROUP, INC.**

**CONSOLIDATED BALANCE SHEETS**

**U.S. dollars in thousands**

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | $ *21,324* | $ *17,752* |
| Restricted deposits | *524* | *70* |
| Marketable securities and short-term deposits (Note 3) | *24,697* | *29,031* |
| Trade receivables | *13,416* | *19,069* |
| Other accounts receivable and prepaid expenses (Note 4) | *3,167* | *2,331* |
| Inventories (Note 5) | *9,422* | *9,748* |
| **Total current assets** | *72,550* | *78,001* |
| PROPERTY AND EQUIPMENT, NET (Note 6) | *3,184* | *4,130* |
| NON-CURRENT ASSETS: | | |
| Long-term marketable securities and long-term deposits (Note 3) | *82,669* | *78,092* |
| Long-term prepaid expenses and lease deposits | *1,541* | *1,329* |
| Deferred income taxes (Note 14) | *1,043* | *918* |
| Severance pay fund | *15,190* | *12,751* |
| Intangible assets, net (Note 7) | *2,779* | *4,480* |
| Goodwill | *6,243* | *6,243* |
| **Total non-current assets** | *109,465* | *103,813* |
| **Total assets** | $ *185,199* | $ *185,944* |

The accompanying notes are an integral part of the consolidated financial statements.

**DSP GROUP, INC.**

**CONSOLIDATED BALANCE SHEETS**

**U.S. dollars in thousands, except share and per share data**

| | December 31, 2017 | December 31, 2016 |
|---|---|---|
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Trade payables | $ *8,660* | $ *12,540* |
| Accrued compensation and benefits | *8,699* | *8,666* |
| Income tax accruals and payables | *1,232* | *1,137* |
| Accrued expenses and other accounts payable (Note 9) | *2,888* | *3,556* |
| **Total current liabilities** | *21,479* | *25,899* |
| NON-CURRENT LIABILITIES: | | |
| Deferred income taxes, net (Note 14) | *424* | *787* |
| Accrued severance pay | *15,463* | *12,908* |
| Accrued pensions (Note 10) | *883* | *803* |
| **Total non-current liabilities** | *16,770* | *14,498* |
| COMMITMENTS AND CONTINGENCIES (Note 13) | | |
| STOCKHOLDERS' EQUITY (Note 12): | | |
| Capital stock: | | |
| Common stock, $0.001 par value - Authorized: 50,000,000 shares at December 31, 2017 and 2016; Issued and outstanding: 22,432,660 and 21,931,157 shares at December 31, 2017 and 2016, respectively | *22* | *22* |
| Additional paid-in capital | *372,041* | *366,121* |
| Treasury stock at cost, 12,043,904 shares at December 31, 2017 | *(118,397)* | *(122,632)* |
| Accumulated other comprehensive loss | *(1,874)* | *(1,852)* |
| Accumulated deficit | *(104,842)* | *(96,112)* |
| **Total stockholders' equity** | *146,950* | *145,547* |
| **Total liabilities and stockholders' equity** | $ *185,199* | $ *185,944* |

The accompanying notes are an integral part of the consolidated financial statements.

**DSP GROUP, INC.**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

**U.S. dollars and shares in thousands, except per share data**

| | Year ended December 31, | | |
|---|---|---|---|
| | **2017** | **2016** | **2015** |
| Revenues | $124,753 | $137,869 | $144,271 |
| Costs of revenues (1) | 67,058 | 77,023 | 84,411 |
| Gross profit | 57,695 | 60,846 | 59,860 |
| Operating expenses: | | | |
| Research and development, net (2) | 36,655 | 34,885 | 35,483 |
| Sales and marketing (3) | 14,315 | 13,867 | 12,103 |
| General and administrative (4) | 9,789 | 9,006 | 9,876 |
| Amortization of intangible assets | 1,700 | 1,457 | 1,284 |
| Other income (Note 10) | - | (2,549) | - |
| Write-off of expired option related to investment in other company | - | - | 400 |
| **Total operating expenses** | 62,459 | 56,666 | 59,146 |
| Operating income (loss) | (4,764) | 4,180 | 714 |
| Financial income, net (Note 11) | 1,669 | 1,227 | 1,175 |
| Income (loss) before income tax benefit (expense) | (3,095) | 5,407 | 1,889 |
| Income tax benefit (expense) | 92 | (594) | (327) |
| Net income (loss) | $(3,003) | $4,813 | $1,562 |
| Net earnings (loss) per share: | | | |
| Basic | $(0.14) | $0.22 | $0.07 |
| Diluted | $(0.14) | $0.21 | $0.07 |
| Weighted average number of shares used in per share computations of: | | | |
| Basic net earnings (loss) per share | 22,229 | 21,800 | 21,924 |
| Diluted net earnings (loss) per share | 22,229 | 22,887 | 23,340 |

(1) Includes equity-based compensation expense in the amount of $352, $328 and $300 for the years ended December 31, 2017, 2016 and 2015, respectively.

(2) Includes equity-based compensation expense in the amount of $2,349, $2,205 and $2,201for the years ended December 31, 2017, 2016 and 2015, respectively.

(3) Includes equity-based compensation expense in the amount of $1,115, $806 and $641 for the years ended December 31, 2017, 2016 and 2015, respectively.

(4) Includes equity-based compensation expense in the amount of $2,045, $1,749 and $1,950 for the years ended December 31, 2017, 2016 and 2015, respectively.

The accompanying notes are an integral part of the consolidated financial statements.

**DSP GROUP, INC.**

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)**

**U.S. dollars in thousands**

| | Year Ended December 31, | | |
|---|---|---|---|
| | **2017** | **2016** | **2015** |
| Net income: | $(3,003) | $4,813 | $1,562 |
| Other comprehensive income (loss): | | | |
| Available-for-sale securities: | | | |
| Changes in unrealized gains/losses | (158) | (617) | (230) |
| Reclassification adjustments for losses included in net income (loss) | 50 | 17 | 24 |
| Net change | (108) | (600) | (206) |
| Cash flow hedges: | | | |
| Changes in unrealized gains (losses) | 163 | 45 | (38) |
| Reclassification adjustments for (gains) losses included in net income (loss) | (172) | (1) | 621 |
| Net change | (9) | 44 | 583 |
| Change in unrealized components of defined benefit plans: | | | |
| Gains (losses) arising during the period | 24 | (117) | 63 |
| Amortization of actuarial loss and prior service benefit | 22 | 14 | 20 |
| Net change | 46 | (103) | 83 |
| Foreign currency translation adjustments, net | 49 | 74 | (161) |
| Other comprehensive income (loss) | (22) | (585) | 299 |
| Comprehensive income | $(3,027) | $4,228 | $1,861 |

**DSP GROUP, INC.**

**STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**

**U.S. dollars and shares in thousands**

| | Number of shares of common stock | Common stock amount | Additional paid-in capital | Treasury stock at cost | Accumulated other comprehensive income (loss) | Accumulated deficit | Total stockholders' equity |
|---|---|---|---|---|---|---|---|
| Balance at December 31, 2014 | *21,844* | $ *22* | $ *355,906* | $ *(122,387)* | $ *(1,566* ) | $ *(85,352* ) | $ *146,623* |
| Issuance of treasury stock upon purchase of common stock under employee stock purchase plan | *233* | **) -* | - | *2,269* | - | *(500* ) | *1,769* |
| Issuance of treasury stock upon exercise of stock options, stock appreciation rights and restricted stock units by employees and directors | *791* | *1* | *25* | *7,689* | - | *(6,473* ) | *1,242* |
| Purchase of treasury stock | *(1,295* ) | *(1* ) | - | *(13,268* ) | - | - | *(13,269* ) |
| Equity-based compensation expenses | | - | *5,092* | - | - | - | *5,092* |
| Net income | | - | - | - | - | *1,562* | *1,562* |
| Change in accumulated other comprehensive income | | - | - | - | *299* | - | *299* |
| Balance at December 31, 2015 | *21,573* | $ *22* | $ *361,023* | $ *(125,697)* | $ *(1,267* ) | $ *(90,763* ) | $ *143,318* |

*) Represents an amount lower than $1.

The accompanying notes are an integral part of the consolidated financial statements.

**DSP GROUP, INC.**

**STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**

**U.S. dollars and shares in thousands**

| |
|---|
| **Number of shares of common stock** |