

AMBARELLA INC  
Form 10-K  
March 25, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended January 31, 2016

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-35667

AMBARELLA, INC.

(Exact name of registrant as specified in its charter)

Cayman Islands	98-0459628
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)
3101 Jay Street	
Santa Clara, California	95054
(Address of principal executive offices)	(Zip Code)

Edgar Filing: AMBARELLA INC - Form 10-K

Registrant's telephone number, including area code: (408) 734-8888

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

Title of each class	Name of each exchange on which registered
Ordinary Share, \$0.00045 Par Value Per Share	NASDAQ Global Market

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

None

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 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 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 the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting company

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

The aggregate market value of the voting and non-voting ordinary shares held by non-affiliates of the Registrant as of July 31, 2015, was approximately \$3.5 billion based upon the closing price reported for such date on the NASDAQ Global Market. For purposes of this disclosure, ordinary shares held by persons known to the Registrant (based on information provided by such persons and/or the most recent schedule 13Gs filed by such persons) to beneficially own

## Edgar Filing: AMBARELLA INC - Form 10-K

more than 5% of the Registrant's ordinary shares and ordinary shares held by officers and directors of the Registrant have been excluded because such persons may be deemed to be affiliates. This determination is not necessarily a conclusive determination for other purposes.

Number of ordinary shares, \$0.00045 par value, outstanding as of January 31, 2016: 32,333,359 shares.

### DOCUMENTS INCORPORATED BY REFERENCE

Certain information is incorporated into Part III of this report by reference to the Proxy Statement for the Registrant's annual meeting of shareholders to be held on or about June 7, 2016 to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

---

## TABLE OF CONTENTS

	Page
<u>PART I</u>	
Item 1. <u>Business</u>	4
Item 1A. <u>Risk Factors</u>	18
Item 1B. <u>Unresolved Staff Comments</u>	40
Item 2. <u>Properties</u>	40
Item 3. <u>Legal Proceedings</u>	41
Item 4. <u>Mine Safety Disclosures</u>	41
<u>PART II</u>	
<u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity</u>	
Item 5. <u>Securities</u>	42
Item 6. <u>Selected Financial Data</u>	44
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	45
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	58
Item 8. <u>Financial Statements and Supplementary Data</u>	59
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	60
Item 9A. <u>Controls and Procedures</u>	60
Item 9B. <u>Other Information</u>	60
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	61
Item 11. <u>Executive Compensation</u>	61
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	61
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	61
Item 14. <u>Principal Accountant Fees and Services</u>	61
<u>PART IV</u>	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	62
<u>Signatures</u>	89
<u>Power of Attorney</u>	89
<u>Exhibits</u>	90

## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. The forward-looking statements are contained principally in, but not limited to, the sections titled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as elsewhere in this Annual Report on Form 10-K. Forward-looking statements are identified by the use of the words “would,” “could,” “will,” “may,” “expect,” “believe,” “should,” “anticipate,” “if,” “future,” “intend,” “plan,” “estimate,” “predict,” “potential,” “targets,” “seek,” “continue,” “foreseeable” or “forecast” and phrases, including the negatives of these terms, or other variations of these terms, that denote future events. Forward-looking statements include, but are not limited to, information concerning our possible or assumed future results of operations, competitive position, industry environment, potential growth opportunities and the effects of competition, our market opportunity, our ability to develop new solutions, our future financial and operating performance, sales and marketing strategy, investment strategy and the results of our investments, research and development, customer and supplier relationships, customer demand, industry trends, our cash needs and capital requirements, and expectations about seasonality, taxes, and operating expenses. These statements reflect our current views with respect to future events and our potential financial performance and are subject to risks and uncertainties that could cause our actual results and financial position to differ materially and adversely from what is projected or implied in any forward-looking statements included in this Annual Report on Form 10-K. These factors include, but are not limited to, the risks described under Item 1A of Part I—“Risk factors,” Item 7 of Part II—“Management’s discussion and analysis of financial condition and results of operations,” elsewhere in this Annual Report on Form 10-K and those discussed in other documents we file with the Securities and Exchange Commission. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. We have no obligation (and expressly disclaim any such obligation) to update or alter any forward-looking statements, whether as a result of new information or otherwise except as otherwise required by securities regulations.

For purposes of this Annual Report, the terms “Ambarella”, “the Company”, “we”, “us” and “our” refer to Ambarella, Inc. and its consolidated subsidiaries.

## PART I

### ITEM 1. BUSINESS

#### Overview

We are a leading developer of semiconductor processing solutions for video that enable high-definition, or HD, video capture, sharing and display. A device that captures video includes four primary components: a lens, an image sensor, a video processor and storage memory. The video processor is the most complex of these four primary components as it converts raw video input into a format that can be stored and distributed efficiently. We combine our processor design capabilities with our expertise in video and image processing, algorithms and software to provide a technology platform that is designed to be easily scalable across multiple applications in a variety of markets and enable rapid and efficient product development. Our system-on-a-chip, or SoC, designs fully integrate HD video processing, image processing, audio processing and system functions onto a single chip, delivering exceptional video and image quality at high compression rates, differentiated functionality and low power consumption.

The inherent flexibility of our technology platform enables us to deliver our solutions for numerous applications in multiple markets. In the camera market, our platform enables the creation of high-quality video content in wearable cameras, automotive aftermarket cameras, professional and consumer Internet Protocol, or IP, security cameras, and cameras incorporated into unmanned aerial vehicles, also referred to as UAVs, drones or flying cameras. Our revenue growth over the last three years has been driven primarily by specialized video and image capture devices such as wearable sports cameras, automotive aftermarket cameras and IP security cameras. In the infrastructure market, our solutions efficiently manage IP video traffic, broadcast encoding and transcoding and IP video delivery applications.

We initially focused our technology platform on the infrastructure market, where we were able to differentiate our solutions for broadcast customers based on high performance, low power consumption, transmission and storage efficiency and small form factor. Leveraging these same capabilities, we then designed high-performance solutions for the camera market. As a result of the advantages of our solutions, we became a leading provider of video processing solutions for cameras that capture both HD video and high-resolution still images simultaneously. In addition, we have released SoC solutions that combine high-resolution video and image capture capabilities with advanced networking, connectivity and application processing functionalities.

We sell our solutions to leading original design manufacturers, or ODMs, and original equipment manufacturers, or OEMs, globally. We refer to ODMs as our customers and OEMs as our end customers, except as otherwise indicated or as the context otherwise requires. In the camera market, our video processing solutions are designed into products from leading OEMs including Axis Communications AB, Carcam Electronics Technology Co., Ltd., Dahua Technology Co., Ltd., Dajiang Innovation Technology Inc., Garmin Ltd., GoPro Inc., Hikvision Digital Technology Co., Qihoo 360 Technology Co. Ltd., Robert Bosch GmbH and affiliated entities, and XiaoYi Technology Co., Ltd., who source our solutions from ODMs including Asia Optical Co. Inc., Chicony Electronics Co., Ltd., Jabil Circuit, Inc., San Jet Technology Corp., Sercomm Corporation, and Sky Light Digital Ltd. In the infrastructure market, our solutions are designed into products from leading OEMs including Harmonic Inc., Motorola Mobility, Inc. (owned by Arris Group, Inc.) and Telefonaktiebolaget LM Ericsson, who source our solutions from leading ODMs such as Plexus Corp. We intend to continue to build and strengthen our relationships with existing customers and also diversify our customer base. Our close relationships with leading ODMs and OEMs often provide us with insight into product roadmaps and trends in the marketplace, which we intend to leverage to identify new opportunities and applications for our solutions. We sell our solutions worldwide using our direct sales force and our logistics providers, including Wintech Microelectronics Co., Ltd., or Wintech. Sales through Wintech represented approximately 67%, 57% and 56% of our revenue for the fiscal years ended January 31, 2016, 2015, and 2014, respectively.

We employ a fabless manufacturing strategy and are currently shipping the majority of our solutions in the 45, 32 and 28 nanometer, or nm, process nodes. As of January 31, 2016, we had 640 employees worldwide, approximately 72% of whom are in research and development. Our headquarters are located in Santa Clara, California, and we also have research and development design centers and business development offices in Taiwan, China, Italy, Japan, and South Korea. For our fiscal years ended January 31, 2016, 2015 and 2014, we recorded revenue of \$316.4 million, \$218.3 million and \$157.6 million, respectively, and net income of \$76.5 million, \$50.6 million and \$25.7 million, respectively. We have generated net income in each quarter beginning with the first quarter of fiscal year 2010, and we have generated cash from operations in each of fiscal years starting from 2009.

Ambarella was founded and incorporated in the Cayman Islands in January 2004. Our principal executive offices are located at 3101 Jay Street, Santa Clara, California. Our website is [www.ambarella.com](http://www.ambarella.com). You can obtain copies of our Forms 10-K, 10-Q, 8-K, and other filings with the Securities and Exchange Commission, or SEC, and all amendments to these filings, free of charge, from our website as soon as reasonably practicable following our filing of any of these reports with the SEC. In addition, you may read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains reports, proxy, and information statements, and other information regarding registrants that file electronically with the SEC at [www.sec.gov](http://www.sec.gov).

## Industry Background

### Trends Impacting the Video Content Creation and Distribution Markets

Video traffic is growing at a significant rate. The market trends that are fundamentally impacting video content creation and distribution include the following:

- **Increasing Number of Video Capture Devices.** Traditionally, HD video has been captured using large, power intensive and expensive dedicated devices. Recent improvements in HD video capture quality, device size and cost have allowed video capture functionality to be incorporated into a broad range of devices. Today, smartphones, tablets, wearable cameras, automotive aftermarket cameras, IP security cameras and UAVs, are increasingly including both HD video capture and high-quality still image capture. In addition to the significant growth in the number of devices, new applications are emerging for video capture devices. Very small HD cameras, or wearable cameras, incorporating connectivity to a smart phone or internet are being developed for new applications such as law enforcement, personal security and social media. In some regions of the world, such as China, Russia, South Korea and Taiwan, video capture devices are being added as aftermarket accessories to automobiles and connected to on-board recording systems to capture video in the event of an incident, which assists the legal and insurance claims process following an accident.
- **Growing User-Generated Content.** Historically, most video content was created by media companies, professional studios and large broadcasters that possessed the equipment, expertise and other resources necessary to produce and distribute such programming. However, with the proliferation of low-cost digital video devices and greater penetration of broadband connectivity, individuals are playing a greater role in content creation and distribution. Websites such as YouTube and Facebook have enabled an effective new channel to widely distribute, store and display video and other rich media. In addition to user-created videos, other user-generated content such as video conferencing and video instant messaging through services provided by Apple, Inc., Google Inc. and Skype, among others, are becoming increasingly popular.
- **Broadband Penetration Enabling the Proliferation of the Video Cloud.** The adoption of high-speed broadband and the proliferation of connected devices such as smartphones, tablets, laptops, desktop computers and connected televisions have allowed consumers to more easily download and share IP video accessed upon demand through the video cloud. The video cloud has led to new business models based on personal content such as streaming video provided by services like YouTube. Additionally, consumers are leveraging the video cloud for security by utilizing an IP camera and cloud infrastructure to watch live HD video streaming on any web connected device. This video cloud application has enabled expansion of the connected home to include intelligent IP surveillance systems that detect activity and then stream encrypted HD video through secure servers and alert end users.
  - **Advancements in Display Technology.** The increasing proliferation of HD displays in television and in mobile connected devices such as laptops, smartphones and tablets is accelerating HD video content growth. This trend highlights the new paradigm of escalating consumer expectations of video quality, such that video is comparable to high-resolution still images, which drove the transition from standard definition to HD, and will drive the transition to ultra high-definition, or UHD. UHD is commonly



referred to as 4K video, which supports up to 4096x2160 pixels per frame, more than four times greater resolution than the current Full HD standard, which supports up to 1920x1080 pixels per frame.

·Requirement for Efficient Video Compression. HD video is increasingly a requirement for consumer video cameras, IP security cameras and for the broadcast of television programs, whether via cable, satellite or IP networks. Uncompressed HD video requires massive amounts of digital data to represent it, necessitating the need for video compression technology to reduce data rates for storage or for transmission of video over networks with limited bandwidth. In broadcast television, an upgrade of networks from H.264 video compression technology to the new high efficiency video coding, or HEVC, video compression technology would support the transition of consumers to 4K video. In consumer cameras, the efficiency of the encoding has a significant impact on video quality, recording time and battery life. In IP security cameras, encoding efficiency is important for realizing the highest image quality possible over bandwidth-limited networks, and for minimizing the costs of cloud-based storage of video content. Additionally, the ability to actively adapt the encoding bit-rate based on changing network bandwidth availability provides the highest possible video quality and enables network traffic management. As consumers increasingly view video on smartphones and tablets, in addition to traditional televisions and PCs, the ability to trans-rate video content in real time to the various resolutions and bit-rates supported by smartphones or tablets is essential.

#### Evolving Requirements for Video Capture and Distribution

Evolving requirements for cameras and broadcast infrastructure equipment typically center around video definition and frame rates, ability to capture high-quality still images and video, advanced video features, analytics, and transcoding capability:

- Higher Definition and Higher Frame Rates. The demand for enhanced video resolution has been increasing in both the camera and infrastructure markets. Consumers expect video quality to be closer to high-resolution still images, which continues to drive the transition from standard definition to Full HD and beyond. Similarly, as new display technologies enable higher resolutions and higher frame rates, we believe consumer demand will drive the requirement for UHD or 4K video capture and transmission. In the market for wearable sports cameras, for example, resolution and frame rate have been the primary factor in consumers' purchasing decisions. In the infrastructure market, consumer demand for viewing Full HD content has prompted broadcasters to seek high-performance solutions.
- Ability to Capture High-Quality Still Images and Video. Historically, consumers have purchased devices that either provide high-quality image capture or record high-quality video. This was the result of consumer preference, as reasonably priced and sized devices would provide only one of those attributes. However, as a result of technological improvements, consumer devices that deliver both attributes have proliferated to the point that a pure video capture device or still image capture device is becoming uncommon. Increasingly, devices are able to simultaneously capture HD video and high-quality still images without adversely impacting the quality of either. We believe devices that can capture Full HD video while encoding a second mobile resolution video for uploading to the Internet or streaming over a Wi-Fi network will expand consumer demand for specialized video capture devices. Additionally advanced low-light processing including high dynamic range and high-ISO processing will continue to improve image quality even in challenging lighting conditions.
- Connectivity. Integrated wireless capability using wireless links such as Bluetooth and Wi-Fi is becoming an increasingly prevalent feature across many classes of video capture devices. Consumers want to watch, control and capture real-time video using their smartphones as the remote control and viewer for wirelessly enabled wearable and sports cameras. Additionally, rather than storing images and video to local media and transferring to a computer later, consumers are demanding the ability to wirelessly transfer and share their video content to websites such as YouTube, Facebook and other online media albums. In video security applications, connectivity to cloud services allows users to monitor surveillance video in real-time on their smartphones or tablets. The storage of video in the cloud also provides protection against theft of the video content and enables users the capability to play back the stored video.
- Ability to Deliver Feature-Rich Video. The addition of de-warping capability allows cameras to utilize a wide angle or "fish eye" lens to cover a wide viewing area. In security applications this capability can allow a single camera to replace multiple cameras and may also eliminate the need for mechanical pan-tilt-zoom in the cameras. In

automotive markets, the ability to combine and display images captured by multiple cameras can allow the automotive camera recorder to capture and display images from the front, rear and sides of the car. Our wide dynamic range, or WDR, and high dynamic range, or HDR, processing capabilities provide greater dynamic range between the lightest and darkest areas of an image, permitting captured still images to reveal details that would otherwise be lost against a bright background. Our new hardware-accelerated three-dimensional image stabilization engine with rolling shutter correction enables stable video recording during high-motion conditions. In flying camera applications this potentially eliminates the need for a mechanical gimbal system.

6

---

· Computer Vision. Computer vision represents the field of methods for acquiring, processing, analyzing, and understanding images and high-dimensional data from the real world in order to automate and integrate a wide range of processes. Computer vision is becoming increasingly important for the development of intelligent video cameras. In the IP security camera market, computer vision can be used for various functions including motion detection to trigger alarms, and the counting and tracking of people. The application of computer vision may be also be used to help control the video encoding process to reduce video bitrates and maximize network efficiency. In the automotive market, the application of computer vision for advanced driver assistance systems, or ADAS, is increasingly being used to help drivers. Automotive analytics functions include lane detection warning system (LDWS) and forward collision warning (FCW). In general, powerful CPUs and dedicated computer vision hardware are required to support the advanced analytics algorithms in video cameras.

· Transcoding. The ability to decode and simultaneously re-encode high-quality video streams in multiple formats, which is commonly referred to as transcoding, using dense, small form factor and power-efficient hardware is a critical requirement for content providers and the video cloud. Given the differing connection speeds and capacities in current communication networks, broadcasters must be able to deliver video to consumers at varying bit-rate and quality levels. Furthermore, the significant increase in the number and types of devices capable of displaying video, from HD televisions to smartphones, requires broadcasters and other distributors to have the capability to provide video content in multiple formats and source resolutions.

#### Our Competitive Strengths

Our platform technology solutions provide performance attributes that satisfy the stringent demands of the camera market, enable integration of HD video and image capture capabilities in portable devices and meet the highest standards of the infrastructure market. We believe that our leadership in HD video and image processing applications is the result of our competitive strengths, including:

- High-Performance, Low Power Video and Image Algorithm Expertise. Our solutions provide Full HD and UHD video at exceptional resolution and frame rates. Our extensive algorithm expertise, which facilitates efficient video and image compression, enables our solutions to achieve low power consumption without compromising performance. Our solutions achieve high storage and transmission efficiencies through innovative and complex video and image compression algorithms that significantly reduce the output bit-rate. This smaller storage footprint directly benefits the performance of our solutions in several ways including lower memory storage requirements and reduced bandwidth needs for transmission, which is more conducive to sharing content between devices. These benefits are particularly important in transcoding and video cloud applications. Our solutions can enable high-performance image capture of up to 30 16-megapixel still images per second. Our solutions can deliver clear images in low light conditions because of our 3D motion compensated temporal filtering, or MCTF, and multiple exposure processing. Additionally, our WDR and HDR processing capabilities provide greater dynamic range between the lightest and darkest areas of an image, permitting captured still images to reveal details that would otherwise be lost against a bright background. Our advanced de-warping capability enables cameras to use wide angle lenses to capture images from a wide area, making it ideal for a variety of IP security camera applications.
- Proprietary Video Processing Architecture. Our proprietary video processing architecture is designed to efficiently integrate our advanced compression algorithms into our SoCs to offer exceptional storage and transmission efficiencies at lower power across multiple products and end markets. We engineered our very-large-scale integration, or VLSI, architecture with a focus on high-performance video compression as opposed to solutions that are based on a still image processing architecture with add-on video capabilities. Due to our primary focus on video processing compression, we believe that our solutions offer exceptional performance metrics with lower power requirements and reduced die sizes. Our integrated algorithms and architecture also enable simultaneous processing of multiple video and image streams.

- **Highly Integrated SoC Solutions Based on a Scalable Platform.** Our product families leverage our core high-performance video processing architecture combined with an extensive set of integrated peripherals, which enables our platform to address the requirements of a variety of applications and end markets. Traditional solutions have generally relied upon significant customization to meet the specific requirements of each market, resulting in longer design cycles and higher development costs. Our flexible and highly-scalable platform enables us to address multiple markets with reduced design cycles and costs. Our platform also enables us to develop fully integrated SoC solutions that provide the system functionalities required by our customers on a single chip. Our extensive system integration expertise enables us to integrate core video processing functionality with many peripheral functions such as multiple inputs and outputs, lens controllers, flash controllers and remote control interfaces to reduce system complexity and interoperability issues. Furthermore, we have successfully migrated our process nodes from 130nm to 14nm since our founding and have a proven track record of developing and delivering multiple solutions with first-pass silicon success. Beginning in fiscal year 2015, we began investing in development of our next generation SoCs in the 14nm process node, and we announced our first 14nm SoC in January 2016.
- **Comprehensive and Flexible Software.** Our years of investment in developing and optimizing our comprehensive and flexible software serve as the foundation of our high-performance video application solutions. Key components of our software include highly customized middleware that integrates many unique features for efficient scheduling and other system-level functions, and firmware that is optimized to reduce power requirements and improve performance. In addition, we provide to our customers fully-functional software development kits with a suite of application programming interfaces or APIs, which allow them to rapidly integrate our solution, adjust product specifications and provide additional functionality to their systems, thereby enabling them to differentiate their product offerings and reduce time to market.
- **Broad Domain Experience in Video Processing and Delivery.** Our engineering team, whose core members have worked together for over 15 years, includes leading innovators in video processing and delivery. Our VLSI team has extensive multi-gigahertz, superscalar CPU design experience from Intel Corporation, Advanced Micro Devices, Inc. and Sun Microsystems, Inc. Our team has developed many industry firsts such as the first single chip MPEG-2 encoder, the first consumer MPEG-2 transcoding SoC, the first single chip HD H.264 encoder and camera SoC and the first 1080p60 and UHD infrastructure SoCs. Our team has developed an ecosystem of high-performance software and hardware solutions that reduce customer system development time and cost, thus allowing for accelerated time-to-market.
- **Key Global Relationships with Leading OEM and ODM Customers.** Our solutions have been designed into top-tier OEM brands currently in the market. We have established collaborative relationships with most of the leading ODMs and OEMs that serve our primary markets. Our collaborations with ODMs give us extensive visibility into critical product design, development and production timelines, and keep us at the forefront of technological innovation, which we intend to leverage to identify new opportunities and applications for our solutions, and we intend to continue to actively engage with ODMs and OEMs at every stage of their design cycles. We actively engage with OEMs on design specifications and with ODMs on product implementation. Additionally, approximately 73% of our employees are located in Asia, primarily in Taiwan and China, strategically placing us near many of our customers and allowing us to provide superior sales, design and technical support and to strengthen our customer relationships.

#### Our Solutions

Our video and image processing SoCs, based on our proprietary technology platform, are highly configurable and satisfy the needs of numerous applications in the camera and infrastructure markets. Our HD video and image processing solutions enable our customers to deliver exceptional quality video and still imagery in small, easy-to-use devices with low power requirements. Our customized software solution includes middleware, firmware and software development kits to optimize system-level functions and allow rapid integration of our solution and specification adjustments.

Camera Market. In addition to enabling small device size and low power consumption, our SoC solutions make possible differentiated functionalities such as simultaneous video and image capture, multiple-stream video capture and wireless connectivity. For example, our solutions enable rugged wearable sports cameras and small form factor wearable cameras that transmit captured video and images to connected devices and the Internet, including social media sites. Additionally, our SoC solutions enable HD and UHD IP security cameras that transmit HD and UHD video efficiently to provide remote monitoring and control. Another use case is the automotive aftermarket camera, particularly popular in emerging markets such as China, Russia, South Korea and Taiwan, which allows consumers to record video constantly and automatically from their automobiles so that there is visual evidence of accidents or other incidents.

8

---

- Infrastructure Market. Our SoC solutions enable high-performance, low power consumption broadcast devices with small form factors, thereby reducing bandwidth needs, energy usage and costs of additional hardware. Our solutions enable an increased number of channels per encoder due to high compression efficiencies. They also make possible a new class of transcoders that can simultaneously encode and stream multiple video formats to different end devices and can change video resolution and transmission rates based on available bandwidth and the display capability of receiving devices.
- Target New Applications Requiring Connectivity, HD Video Processing and Low Power. We intend to leverage our core technology platform to address other video processing markets that have high-performance, robust connectivity, low latency and low power requirements. Examples of markets that we are focused on penetrating are the wearable camera markets which include sports, professional and consumer applications, the market for automotive aftermarket cameras, the professional and consumer IP security camera markets and the UAV or flying camera market. Our camera solutions' ability to provide connectivity and simultaneous high-quality video and image capture in a power efficient system have facilitated preliminary engagements with leaders in the emerging wearable camera markets. Additionally, our high-performance video and image capture, connectivity, capability to stream HD video efficiently and power efficiency have enabled us to develop relationships with leaders in the wearable sports camera market, the market for automotive aftermarket cameras and the IP security camera market, which we intend to expand as those markets continue to develop.
- New and Emerging Markets. We intend to continue to customize and adapt our solutions to meet the needs of additional emerging markets. For example, we are working with end customers to develop video capture devices for both professional and consumer wearable camera applications, such as point-of-view police cameras. In the IP security camera market, we are developing solutions optimized for both professional and consumer applications, including low bit-rate encoding, battery operated devices and low light operation. In addition, we are developing advanced analytics for the consumer and professional IP security, UAV and automotive markets to enhance SoC functionality. We believe advanced analytics on the SoC, such as face recognition, object identification and motion detection will expand the addressable market for our SoC's. In the OEM automotive market, we recently introduced our MotorVu™ 3D 360° Surround View reference design, which brings high quality HD video to multi-camera parking assistance applications and features a dedicated video engine to combine multiple HD video streams for 3D scene rendering, and our solution to support electronic mirrors that utilize cameras and LCD displays.

#### Products

Our technology platform delivers a high-performance, low power video and image processing solution that can be tailored with our software development kits to meet the specific needs of multiple end markets. We also provide customers with guidelines known as reference designs so that they can efficiently incorporate our solutions in their product designs. We currently sell our solutions into the following end markets:

- Wearable Cameras including Sports, Commercial and Social Media. Durable cameras that provide HD video quality increasingly include embedded connectivity to share and display video. Our low power, high-resolution and connected solution can be found in the majority variety of cameras in this end market.
- Automotive Cameras. We sell solutions into several automotive markets both for aftermarket and OEM applications. In the automotive aftermarket, we sell solutions for small video cameras mounted on board vehicles to record traffic accidents and help establish records for insurance and liability purposes. We recently introduced our MotorVu™ 3D 360° Surround View reference design for the automotive OEM market, which brings high quality HD video to multi-camera parking assistance applications and features a dedicated video engine to combine multiple HD video streams for 3D scene rendering. Also for the OEM market, electronic mirrors utilize cameras and LCD displays to augment optical rear view and side view mirrors to provide a wider, unobstructed field of view. Our low power, high-performance, small form factor solutions are well suited for this market.
- Professional IP Security Cameras. These cameras are used for video monitoring and security surveillance in professional applications. Our solutions enable the streaming of multiple video streams to enable remote monitoring at multiple locations. Embedded intelligence supports advanced analytics including motion detection and people

tracking. The cameras often have the ability to operate in low light conditions and over wide temperature ranges in order to be used in outdoor environments.

· Consumer IP Security Cameras. Consumer IP security cameras are designed for home or small business use and are typically connected to cloud services and applications via home networks using WiFi. These cameras may require very low bitrate operation to support HD resolution over limited bandwidth broadband connections, while small form factors may require very low power operation. The implementation of intelligent motion detection may reduce the number of false alarms.

9

---



- UAVs or Drones. These cameras are used for capturing aerial video or photographs. Our high-performance, high frame rate and low power architecture enables improved functionality with Full HD video capture. In addition, our ability to provide high-resolution still image capture and HD video capture simultaneously enables hybrid capability for the user.
- Broadcast and Traffic Management. Broadcasting equipment that enables HD video to be distributed through satellite, cable and IP infrastructures comprises this market. Our flexible digital signal processor, or DSP, architecture, low power requirements and encoding expertise allow our end customers to compress and thus transmit video efficiently optimizing bandwidth and power usage.

The chart below describes our current product lines and target markets:

## Technology

Our semiconductor processing solutions enable HD and UHD (up to 3840x2160p30) video and image processing, video compression, sharing and display while offering exceptional power, size and performance characteristics.

Key differentiators of our technology include:

- algorithms to compress video signals with high compression and power efficiency at multiple operating points;
- algorithms for high-speed image processing with high image quality and power efficiency;
- scalable architecture that covers the gamut of consumer and professional HD video camera and encoding applications from Full HD to UHD performance levels;
- ability to encode multiple video streams simultaneously to support simultaneous recording and video streaming, or streaming to multiple devices with different resolutions;

- ability to capture, process and encode multiple image sensors simultaneously to support multiple viewpoints, including surround view and virtual reality applications;
- algorithms to stabilize video from camera motion in challenging conditions, such as sports and flying cameras;
- low-power architecture with minimal system memory footprint;
- programmable architecture that balances flexibility, quality, power and die size;
- full software development kit comprised of APIs to facilitate integration into customers' products; and
- powerful CPUs and dedicated hardware to support advanced analytics functions; and
- support for transcoding between video formats, for example MPEG-2 to H.264 and H.265.

Our technology platform, comprised of our video and image processors, is based on a high-performance, low-power architecture supported by a high level of system integration. The building blocks of our platform are illustrated below:

Our technology platform enables the capture of high-resolution still images and high-definition video while simultaneously encoding HD video for high-quality storage and lower resolution video for Internet sharing and wireless networking. Multi stream video capture enhances the consumer experience by offering the ability to instantaneously share captured video without having to go through a transcoding process.

### AmbaClear

Our proprietary image signal processing architecture, known as AmbaClear, incorporates advanced algorithms to convert raw sensor data to high-resolution still and high-definition video images concurrently. Image processing algorithms include sensor, lens and color correction, demosaicing, which is a process used to reconstruct a full color image from incomplete color samples, noise filtering, detail enhancement and image format conversion. For example, raw sensor data can be captured at up to 16-megapixel resolution at 60 frames per second and filtered down to two megapixels for HD video processing while selected 16-megapixel frames are concurrently processed by the still image processor. This image processing reduces noise in the input video and improves video quality resulting in better storage and transmission efficiencies. Our WDR and HDR, processing capabilities handle greater dynamic range between the lightest and darkest areas of an image, permitting video images to reveal details that would otherwise be lost against a bright background. Our advanced de-warping capability enables cameras to use wide angle lenses to capture images from a wide area, making it ideal for a variety of IP security camera and surround view applications.

### AmbaCast

Our proprietary HD video processing architecture, known as AmbaCast, incorporates advanced algorithms for motion estimation, motion-compensated 3D temporal filtering, mode decision and rate control. Successful implementation of these computationally intensive steps has helped us maximize compression efficiency. We support all three compression profiles—baseline, main and high—as specified in the H.264. We also support the main profile H.265 video compression standard with up to 2x better compression efficiency compared to our H.264 video compression technology.

Our solutions for the broadcast infrastructure market allow OEMs to offer H.265, H.264 and MPEG-2 encoding formats. All of our video encoding solutions have decoding capabilities as well.

### Design Methodology

The success of our technology platform stems from our algorithm-driven design methodology. We test and verify our algorithms on our proprietary architectural model prior to implementing our algorithms in hardware. Our advanced verification methodology validates our approach through simultaneous modeling of architecture, algorithms and the hardware itself. This redundant approach enables us to identify and remediate any weaknesses early in the development cycle, providing a solid foundation on which we build our hardware implementation, and enhances our ability to achieve first-pass silicon success. We have a history of using several process nodes from 130nm through 14nm. In fiscal year 2015, we began investing in development of our next generation SoCs in the 14nm process node and announced our first 14 nm SoC in January 2016. We possess extensive expertise in video and imaging algorithms as well as deep sub-micron digital and mixed-signal design experience.

### SoC Solution

Our SoC designs integrate HD and UHD video processing, image processing, applications processing and system functions onto a single chip, delivering exceptional video and image quality with differentiated features, including advanced wireless connectivity. Our multi-core DSP architecture is highly scalable and balances software programmability with hardware-accelerated performance to achieve extremely low power consumption and maximize camera battery life. The programmable architecture provides our customers with the flexibility they need to quickly develop a wide range of differentiated products. Additionally, our SoCs integrate mixed signal (analog/digital) functionality and high speed interfaces required for interfacing to advanced high-speed CMOS sensors and industry standard interfaces such as USB 3.0 and HDMI 2.0.

Our H2 SoC, which we introduced in January 2016, supports 4K UHD HEVC video resolution at 120 frames per second as well as high frame-rate video for capturing fast-action sports with 1080p video at 240 frames per second or 720p video at 480 frames per second. Our H2 SOC features a new generation image processing pipeline that includes 10-bit HDR video processing and excellent imaging, even in challenging low-light conditions, and a hardware de-warp engine to support wide-angle panoramic camera designs. The H2 SoC includes a 1.2 GHz quad-core ARM® Cortex®-A53 CPU with floating point and NEON™ to provide significant processing power for customer applications, including flying camera flight control, video analytics and wireless networking. The H2 SoC also supports live streaming of a second, low-delay, Full HD video stream for wireless monitoring and camera control. Fabricated in 14nm CMOS technology, the H2 SoC offers low power consumption, enabling 4KP60 resolution video cameras with small form factors.

### Software Development Kit for Connectivity

Our video streaming technology enables the camera's image to be previewed on a smartphone, so the camera can be optimally set up and controlled remotely, or video can be streamed directly to Internet cloud services. To enable this functionality, end customers deploy our Wireless Camera Developer's Kit, or the Kit, which enables the design of cameras that combine still photography and Full or Ultra HD video with wireless video streaming. The Kit leverages our multi-stream encoding capability which supports the recording of Full or Ultra HD video locally while simultaneously recording and streaming a second stream. This Kit enables accelerated end customer product development.

### Computer Vision Technology

Computer vision is a core technology that complements our image processing and video compression technology. Our current SoC solutions have up to four high performance ARM processors with NEON™ acceleration that provide a flexible and cost-effective manner in which to run computer vision algorithms. We are focusing on developing advanced computer vision algorithms and high-performance, low-power hardware acceleration. We believe that enhanced computer vision performance will be critical both to our current video markets, including IP security, wearable, and flying cameras, as well as future markets such as automotive OEM cameras. To accelerate our development, we acquired VisLab S.r.l. in June 2015. VisLab is a developer of computer vision algorithms and intelligent control systems for automotive applications.

### Customers

We sell our solutions to leading ODMs and OEMs globally. We refer to ODMs as our customers and OEMs as our end customers, except as otherwise indicated or as the context otherwise requires. In the camera market, our video processing solutions are designed into products from leading OEMs including Axis Communications AB, Carcam Electronics Technology Co., Ltd., Dahua Technology Co., Ltd., Dajiang Innovation Technology Inc., Garmin Ltd., GoPro Inc., Hikvision Digital Technology Co., Qihoo 360 Technology Co. Ltd., and Robert Bosch GmbH and affiliated entities, and XiaoYi Technology Co., Ltd., who source our solutions from ODMs including Asia Optical Co. Inc., Chicony Electronics Co., Ltd., DigiLife Technologies Co., Jabil Circuit, Inc., San Jet Technology Corp., Sercomm Corporation, and Sky Light Digital Ltd. In the infrastructure market, our solutions are designed into products from leading OEMs including Harmonic Inc., Motorola Mobility, Inc. (owned by Arris Group, Inc.) and Telefonaktiebolaget LM Ericsson, who source our solutions from leading ODMs such as Plexus Corp.

Sales to customers in Asia accounted for approximately 91%, 91% and 88% of our total revenue in the fiscal years ended January 31, 2016, 2015 and 2014, respectively. As many of our OEM end customers or their ODM manufacturers are located in Asia, we anticipate that a majority of our revenue will continue to come from sales to customers in that region. Although a large percentage of our sales are made to customers in Asia, we believe that a significant number of the products designed by these customers and incorporating our SoCs are then sold to consumers globally. In fiscal years 2016, 2015 and 2014, 97%, 94% and 88% of our revenue was attributable to sales of our solutions into the camera market, respectively, and 3%, 6% and 12% of our revenue was attributable to sales of our solutions into the infrastructure market, respectively. To date, all of our sales have been denominated in U.S. dollars.

We work closely with our end customer OEMs and ODMs throughout their product design cycles that often last six to nine months for the camera market, though new products within the camera market may have longer design cycles, and 12 to 18 months for the infrastructure market. As a result, we are able to develop long-term relationships with our customers as our technology becomes embedded in their products. Consequently, we believe we are well positioned to not only be designed into our customers' current products, but also to continually develop next-generation, HD video

and image processing solutions for their future products.

The product life cycles in the camera market typically range from six to 18 months. The product life cycles in the infrastructure market typically range from two to five years, where new product introductions occur less frequently. For many of our solutions, early engagement with our customers' technical staff is necessary for success. To ensure an adequate level of early engagement, our application and development engineers work closely with our customers to adjust product specifications and add functionality into their products.

Approximately 88%, 89% and 85% of our revenue was derived from sales through our logistics provider, Wintech, and through one large direct ODM customer, Chicony Electronics Co., Ltd., or Chicony, for the fiscal years ended January 31, 2016, 2015 and 2014, respectively. We currently rely, and expect to continue to rely, on a limited number of customers for a significant portion of our revenue. In fiscal year 2016, 2015 and 2014, sales directly and through our logistics providers to our five largest ODM and OEM customers collectively accounted for approximately 56%, 64% and 55% of our total revenues, respectively. In fiscal year 2016, 2015 and 2014, sales to our 10 largest ODM and OEM customers collectively accounted for approximately 69%, 74% and 67% of our total revenues, respectively.

## Sales and Marketing

We sell our solutions worldwide using our direct sales force and our logistics providers. We have direct sales personnel covering the United States, Asia and Europe, and we operate sales offices in Santa Clara, California and Hong Kong, and business development offices in China, Japan, South Korea, Sweden and Taiwan. In addition, in each of these locations, other than Sweden, we employ a staff of field applications engineers to provide direct engineering support locally to our customers.

Our sales cycles typically require a significant investment of time and a substantial expenditure of resources before we can realize revenue from the sale of our solutions, if any. Our typical sales cycle consists of a multi-month sales and development process involving our customers' system designers and management and our sales personnel and software engineers. If successful, this process culminates in a customer's decision to use our solutions in its system, which we refer to as a design win. Our sales efforts are typically directed to the OEM of the product that will incorporate our video and image processing solution, but the eventual design and incorporation of our SoC into the product may be handled by an ODM on behalf of the OEM. Volume production may begin within six to 18 months after a design win, depending on the complexity of our customer's product and other factors upon which we may have little or no influence. Once our solutions have been incorporated into a customer's design, they are likely to be used for the life cycle of the customer's product. Conversely, a design loss to a competitor will likely preclude any opportunity for future revenue from such customer's product.

The end markets into which we sell our products have seen significant changes as consumer preferences have evolved in response to new technologies. As a result, the composition of our revenue may differ meaningfully during periods of technology or consumer preference changes. For example, in fiscal year 2011, pocket video revenue represented approximately 40% of total revenue. The proliferation of smartphones and their ability to capture high-quality video and still images significantly impacted this market, decreasing pocket video cameras' contribution to approximately zero percent of total revenue in fiscal year 2013. Conversely, our revenue derived from the wearable sports camera market, the IP security camera market, the automotive aftermarket and UAV camera market supported total revenue growth in the 2012-2016 fiscal years despite the loss of our pocket video revenue. We expect shifts in consumer use of video capture to continue to change over time, as more specialized use cases emerge and video capture continues to proliferate.

Our sales are generally made pursuant to purchase orders received approximately four to 18 weeks prior to the scheduled product delivery date, depending upon agreed terms with our customers and the current manufacturing lead time at the time the purchase order is received. These purchase orders may be cancelled without charge upon notification within an agreed period of time in advance of the delivery date, which may be as short as 30 days. Due to the scheduling requirements of our foundry, assembly and test contractors, we generally provide our contractors with our production forecasts and place firm orders for products with our suppliers up to 20 weeks prior to the anticipated delivery date, usually without a purchase order from our own customers. Our standard warranty provides that our SoCs containing defects in materials, workmanship or performance may be returned for a refund of the purchase price or for replacement, at our discretion.

## Manufacturing

We employ a fabless business model and use third-party foundries and assembly and test contractors to manufacture, assemble and test our solutions. This outsourced manufacturing approach allows us to focus our resources on the design, sales and marketing of our solutions and avoid the cost associated with owning and operating our own manufacturing facility. Our engineers work closely with foundries and other contractors to increase yields, lower manufacturing costs and improve quality. In addition, we believe outsourcing many of our manufacturing and assembly activities provides us the flexibility needed to respond to new market opportunities, simplifies our

operations and significantly reduces our capital requirements. We do not have a guaranteed level of production capacity from any of our suppliers' facilities to produce our solutions. We carefully qualify each of our suppliers and their subcontractors and processes in order to meet the extremely high-quality and reliability standards required of our solutions.

#### Backlog

Our sales are primarily made through standard purchase orders for delivery of products. Our manufacturing production is based on estimates and advance non-binding commitments from customers as to future purchases. We follow industry practice that allows customers to cancel, change or defer orders with limited advance notice prior to shipment. Given this practice, we do not believe that backlog is a reliable indicator of future revenue levels.



## Wafer Fabrication

We have a history of using several process nodes from 130nm through 28nm. We currently manufacture the majority of our solutions in 45nm, 32nm and 28nm silicon wafer production process geometries utilizing the services of several different foundries. In fiscal year 2015, we began investing in development of our next generation SoCs in the 14nm process node, and we announced our first 14nm SoC in January 2016. Currently, the majority of our SoCs are supplied by Samsung Electronics Co., Ltd., or Samsung, in South Korea, from whom we have the option to purchase both fully-assembled and tested products as well as tested die in wafer form for assembly. We also have products supplied by Global UniChip Corporation, or GUC, in Taiwan, from whom we purchase fully-assembled and tested products. The wafers used by GUC in the assembly of our products are manufactured by Taiwan Semiconductor Manufacturing Co., Ltd., or TSMC, in Taiwan.

## Assembly and Testing

Samsung subcontracts the assembly and initial testing of the assembled chips it supplies to us to Signetics Corporation and STATS ChipPAC Ltd. In the case of purchases of tested die from Samsung, we contract the assembly to Advanced Semiconductor Engineering, Inc., or ASE. GUC subcontracts the assembly of the products it supplies to us to ASE and Powertech Technology Inc. Final testing of all of our products is handled by King Yuan Electronics Co., Ltd. or Sigurd Corporation under the supervision of our engineers. All test software and related processes for our products are developed by our engineers. We continually monitor the results of testing at all of our test contractors to ensure that our testing procedures are properly implemented.

As part of our total quality assurance program, our quality management system has been certified to ISO 9001:2000 standards. Our foundry vendors are also ISO 9001 certified.

## Research and Development

We believe our technology is a competitive advantage and we engage in substantial research and development efforts to develop new products and integrate additional features and capabilities into our HD and UHD video processing solutions. We believe that our continued success depends on our ability to both introduce improved versions of our existing solutions and to develop new solutions for the markets that we serve. Our research and development team is comprised of both semiconductor and software designers. Our semiconductor design team has extensive experience in large-scale semiconductor design, including architecture description, logic and circuit design, implementation and verification. Our software design team has extensive experience in development and verification of software for the HD video market. Because the integration of hardware and software is a key competitive advantage of our solutions, our hardware and software design teams work closely together throughout the product development process. The experience of our hardware and software design teams enables us to effectively assess the tradeoffs and advantages when determining which features and capabilities of our solutions should be implemented in hardware and in software.

We have assembled a core team of experienced engineers and systems designers in four research and development design centers located in the United States, China, Italy and Taiwan.

For the fiscal years ended January 31, 2016, 2015 and 2014, our research and development expense was \$82.9 million, \$58.0 million and \$48.8 million, respectively.

## Competition

The global semiconductor market in general, and the video and image processing markets in particular, are highly competitive. We expect competition to increase and intensify as more and larger semiconductor companies enter our markets. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could materially and adversely affect our business, revenue and operating results.

15

---

Currently, our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow markets. In the wearable sports camera market, our primary competitors are vertically integrated divisions of camera device OEMs, including Sony Corporation, or Sony, and Panasonic Corporation, as well as HiSilicon Technologies Co., Ltd., or HiSilicon, and Socionext Inc., or Socionext, a new entity created from the merger of the system LSI businesses of Fujitsu Ltd. and Panasonic Corporation. In the IP security camera market, our primary competitors include Geo Semiconductor, Inc., Grain Media, Inc., HiSilicon, Intel Corporation, or Intel, Movidius Ltd., Qualcomm Incorporated, or Qualcomm, Realtek Semiconductor Corp., Socionext, and Texas Instruments Incorporated, as well as vertically integrated divisions of IP security camera device OEMs, including Axis Communications AB and Sony. In the market for automotive aftermarket cameras, we compete against Allwinner Technology Co., Ltd., Alpha Imaging Technology Corp., Core Logic, Inc., Novatek Microelectronics Corp. and Sunplus Technology Co. Ltd. Our primary competitors in the UAV camera market include HiSilicon, Intel, NVIDIA Corporation and Qualcomm. Our primary competitors in the infrastructure market include Intel, Magnum Semiconductor, Inc. and Texas Instruments Incorporated. Certain of our customers and suppliers also have divisions that produce products competitive with ours. We expect competition in our current markets to increase in the future as existing competitors improve or expand their product offerings and as potential new competitors, such as Broadcom Corporation, MediaTek, Inc. and Samsung, enter these markets.

Our ability to compete successfully depends on elements both within and outside of our control, including industry and general economic trends. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support and other resources, are more established than we are, and have significantly better brand recognition and broader product offerings which may enable them to develop and enable new technology into product solutions better or faster than us and to better withstand adverse economic or market conditions in the future.

Our ability to compete successfully in the rapidly evolving HD video market depends on several factors, including:

- the design and manufacturing of new solutions that anticipate the video processing and integration needs of our customers' next-generation products and applications;
- performance, as measured by video and still picture image quality, resolution and frame processing rates;
- power consumption;
- the ease of implementation by customers;
- the strength of customer relationships;
- the selection of the foundry process technology and architecture tradeoffs to meet customers' product requirements in a timely manner;
- reputation and reliability;
- customer support; and
- the cost of the total solution.

We believe we compete favorably with respect to these factors, particularly because our solutions typically provide high-performance and low power consumption video, efficient integration of our advanced algorithms, exceptional storage and transmission efficiencies at lower power, highly integrated SoC solutions based on a scalable platform, and comprehensive and flexible software. We cannot ensure, however, that our solutions will continue to compete favorably or that we will be successful in the face of increasing competition from new products introduced by existing or new competitors.

## Intellectual Property

We rely on a combination of intellectual property rights, including patents, trade secrets, copyrights and trademarks, and contractual protections, to protect our core technology and intellectual property. As of January 31, 2016, we had 45 issued and allowed patents in the United States plus 28 additional continuation patents, five patents issued in

Europe, three issued patents in China, five issued patents in Japan and 57 pending and provisional patent applications in the United States. The issued and allowed patents in the United States expire beginning in 2024 through 2033. Many of our issued patents and pending patent applications relate to image and video processing and HD video compression.

We may not receive competitive advantages from any rights granted under our patents, and our patent applications may not result in the issuance of any new patents. In addition, any patent we hold may be opposed, contested, circumvented, designed around by a third party or found to be unenforceable or invalidated. Others may develop technologies that are similar or superior to our proprietary technologies, duplicate our proprietary technologies or design around patents owned or licensed by us.

In addition to our own intellectual property, we also use third-party licenses for certain technologies embedded in our SoC solutions. These are typically non-exclusive contracts provided under royalty-accruing or paid-up licenses. These licenses are generally perpetual or automatically renewed for so long as we continue to pay any maintenance fees that may be due. To date, maintenance fees have not constituted a significant portion of our capital expenditures. While we do not believe our business is dependent to any significant degree on any individual third-party license, we expect to continue to use and may license additional third-party technology for our solutions.

We generally control access to and use of our confidential information through employing internal and external controls, including contractual protections with employees, contractors and customers. We rely in part on U.S. and international copyright laws to protect our mask work. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

Despite our efforts to protect our intellectual property, unauthorized parties may still copy or otherwise obtain and use our software, technology or other information that we regard as proprietary intellectual property. In addition, we intend to expand our international operations, and effective patent, copyright, trademark and trade secret protection may not be available or may be limited in foreign countries.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. Our customers have in the past received, and we expect that in the future we may receive, communications from various industry participants alleging infringement of their patents, trade secrets or other intellectual property rights by our solutions. In addition, certain of our end customers have been the subject of lawsuits alleging infringement of patents by products incorporating our solutions. Any lawsuits could subject us to significant liability for damages, invalidate our proprietary rights and harm our business and our ability to compete. Any litigation, regardless of success or merit, could cause us to incur substantial expenses, reduce our sales and divert the efforts of our technical and management personnel. In the event we receive an adverse result in any litigation, we could be required to pay substantial damages, seek licenses from third parties, which may not be available on reasonable terms or at all, cease sale of products, expend significant resources to develop alternative technology or discontinue the use of processes requiring the relevant technology.

#### Employees

At January 31, 2016, we employed a total of 640 people, including 140 in the United States, 466 in Asia, primarily in China and Taiwan and 34 in Europe. We also engage temporary employees and consultants. None of our employees are either represented by a labor union or subject to a collective bargaining agreement. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Information concerning revenue, results of operations, assets and revenue by geographic area is set forth in Item 6, "Selected Financial Data" and Note 15, "Segment Reporting," of Notes to Consolidated Financial Statements of this Annual Report on Form 10-K and is incorporated herein by reference. Information concerning risks attendant to our foreign operations is set forth below in Item 1A, "Risk Factors."



## ITEM 1A. Risk Factors

Certain factors may have a material adverse effect on our business, financial condition and results of operations. You should consider carefully the risks and uncertainties described below, in addition to other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. If any of the following risks actually occurs, our business, financial condition, results of operations, and future prospects could be materially and adversely affected. In that event, the trading price of our ordinary shares could decline, and you could lose part or all of your investment.

### Risks Related to Our Business and Our Industry

If our customers do not design our solutions into their product offerings, or if our customers' product offerings are not commercially successful, our business would suffer.

We sell our video and image processing system-on-a-chip, or SoC, solutions to original equipment manufacturers, or OEMs, who include our SoCs in their products, and to original design manufacturers, or ODMs, who include our SoCs in the products that they supply to OEMs. We refer to ODMs as our customers and OEMs as our end customers, except as otherwise indicated or as the context otherwise requires. Our video and image processing SoCs are generally incorporated into our customers' products at the design stage, which is referred to as a design win. As a result, we rely on OEMs to design our solutions into the products that they design and sell. Without these design wins, our business would be harmed. We often incur significant expenditures developing a new SoC solution without any assurance that an OEM will select our solution for design into its own product. Once an OEM designs a competitor's device into its product, it becomes significantly more difficult for us to sell our SoC solutions to that OEM because changing suppliers involves significant cost, time, effort and risk for the OEM. Furthermore, even if an OEM designs one of our SoC solutions into its product, we cannot be assured that the OEM's product will be commercially successful over time or at all or that we will receive or continue to receive any revenue from that OEM. For example, improved smartphone video capture capabilities, and rapid adoption of smartphones by consumers, led to the decline of an entire category of pocket video cameras aimed at the casual video capture market. In fiscal year 2011, pocket video revenue represented approximately 40% of our total revenue. The proliferation of smartphones and their ability to capture high-quality video and still images significantly impacted this market, decreasing pocket video cameras' contribution to approximately zero percent of our total revenue by fiscal year 2013. Similarly, higher than normal customer inventory levels in the wearable sports camera market significantly impacted our revenue in the fiscal quarter ended January 31, 2016, and may continue to adversely impact our revenue for our first and second quarters of fiscal year 2017. If products or other product categories incorporating our SoC solutions are not commercially successful or experience rapid decline, our revenue and business will suffer.

We depend on a limited number of customers and end customers for a significant portion of our revenue. If we fail to retain or expand our customer relationships, our revenue could decline.

We derive a significant portion of our revenue from a limited number of ODMs who build products on behalf of a limited number of OEMs and from a limited number of OEMs to whom we ship directly. We anticipate that this customer concentration will continue for the foreseeable future. In fiscal year 2016, 2015 and 2014, sales directly and through our logistics providers to our five largest ODM and OEM customers collectively accounted for approximately 56%, 64% and 55% of our total revenues, respectively. In fiscal year 2016, 2015 and 2014, sales to our 10 largest ODM and OEM customers collectively accounted for approximately 69%, 74% and 67% of our total revenues, respectively. In fiscal year 2016, sales to our largest ODM customer accounted for approximately 21% of our total revenue. In fiscal year 2015, sales to our largest ODM customer accounted for approximately 32% of our total

revenue. In fiscal year 2014, sales to our largest ODM customer accounted for approximately 29% of our total revenue. This ODM customer builds products for several OEM customers as well as for its own brand. We believe that our operating results for the foreseeable future will continue to depend on sales to a relatively small number of customers and end-customers. In the future, these customers may decide not to purchase our SoC solutions at all, may purchase fewer solutions than they did in the past or may alter their purchasing patterns. As substantially all of our sales to date have been made on a purchase order basis, these customers may cancel, change or delay product purchase commitments with little or no notice to us and without penalty and may make our revenue volatile from period to period. For example, our largest OEM end customer in fiscal year 2011, Eastman Kodak Company, or Kodak, closed its camera division in January 2012. Similarly, we anticipate that, as a result of higher than normal inventory levels at a major end customer in the wearable sports camera market, our revenues in fiscal year 2017 and, in particular, the first half of the fiscal year, will be significantly and adversely impacted. The loss of a significant customer, or substantial reduction in purchases by a significant customer, could happen again at any time and without notice, and such loss would likely harm our financial condition and results of operations.



In addition, our relationships with some customers may deter other potential customers who compete with these customers from buying our solutions. To attract new customers or retain existing customers, we may have to offer these customers favorable prices on our solutions. In that event, our average selling prices and gross margins would decline. The loss of a key customer, a reduction in sales to any key customer or our inability to attract new customers could seriously impact our revenue and harm our results of operations.

Our customers may cancel their orders, change production quantities or delay production. If we fail to accurately forecast demand for our solutions, revenue shortfalls, or excess, obsolete or insufficient inventory could result.

Our customers typically do not provide us with firm, long-term purchase commitments. Substantially all of our sales are made on a purchase order basis, which permits our customers to cancel, change or delay their product purchase commitments with little or no notice to us and without penalty to them. Because production lead times often exceed the amount of time required by our customers to fill their orders, we often must build SoCs in advance of orders, relying on an imperfect demand forecast to project volumes and product mix.

Our SoCs are incorporated into products manufactured by or for our end customers, and as a result, demand for our solutions is influenced by the demand for our customers' products. Our ability to accurately forecast demand can be adversely affected by a number of factors, including inaccurate forecasting by our customers, miscalculations by our customers of their inventory requirements, changes in market conditions, adverse changes in our product order mix and fluctuating demand for our customers' products. For example, we anticipate that, as a result of higher than normal customer inventory levels at a major end customer in the wearable sports camera market, demand for our solutions in this market in fiscal year 2017 and, in particular, the first half of the fiscal year, will be significantly and adversely impacted. Even after an order is received, our customers may cancel these orders, request a decrease in production quantities or request a delay in the delivery of our solutions. Any such cancellation, decrease or delay subjects us to a number of risks, most notably that our projected sales will not materialize on schedule or at all, leading to unanticipated revenue shortfalls and excess or obsolete inventory that we may be unable to sell to other customers.

Alternatively, if we are unable to project customer requirements accurately, we may not build enough SoCs, which could lead to delays in product shipments and lost sales opportunities in the near term, as well as force our customers to identify alternative sources, which could affect our ongoing relationships with these customers. We have in the past had customers significantly increase their requested production quantities with little or no advance notice. If we do not fulfill customer demands in a timely manner, our customers may cancel their orders and we may be subject to customer claims for cost of replacement. In addition, the rapid pace of innovation in our industry could render portions of our inventory obsolete. Excess or obsolete inventory levels could result in unexpected expenses or increases in our reserves that could adversely affect our business, operating results and financial condition. In addition, any significant future cancellations or deferrals of product orders could harm our margins, increase our write-offs due to product obsolescence and restrict our ability to fund our operations.

Our target markets may not grow or develop as we currently expect and are subject to market risks, any of which could harm our business, revenue and operating results.

To date, our revenue has been attributable to demand for our video and image processing SoCs in the camera and infrastructure markets and the growth of these overall markets. We initially focused on the infrastructure market, and then leveraged our knowledge and experience to design solutions for the camera market. We now derive substantially all of our revenue from the camera market, and our operating results are increasingly affected by trends in the camera market. These trends include demand for higher resolution, increasing functionality, longer battery life, greater storage and connectivity requirements, while accommodating more sophisticated standards for video compression. We may be unable to predict the timing or development of these markets with accuracy. For example, the proliferation of smartphones having the ability to capture high-quality video and still images has significantly impacted the camera

market in a relatively short period of time and continues to impact this market. In the Internet Protocol, or IP, security camera market, a slower than expected adoption rate for digital technology in place of analog solutions could slow the demand for our solutions. If our target markets, such as wearable cameras, automotive aftermarket cameras, IP security cameras, and unmanned aerial vehicle cameras, also referred to as UAVs, drones or flying cameras, do not grow or develop in ways that we currently expect, demand for our video and image processing SoCs may not materialize as expected and our business and operating results could suffer.

Fluctuations in our operating results on a quarterly and annual basis could cause the market price of our ordinary shares to decline.

Our revenue and operating results have fluctuated significantly from period to period in the past and are likely to do so in the future. In particular, our business tends to be seasonal with higher revenue in our third quarter as our customers typically increase their production to meet year-end demand for their products. We also may experience seasonally lower demand in our first quarter in the Asia-based portion of the IP security camera market as a result of industry seasonality and the impact of ODM and OEM factory closures associated with the Chinese New Year holiday. As a result, you should not rely on period-to-period comparisons of our operating results as an indication of our future performance. In future periods, our revenue and results of operations may be below the expectations of analysts and investors, which could cause the market price of our ordinary shares to decline.

Factors that may affect our operating results include:

- fluctuations in demand, sales cycles, product mix, and prices for our products;
- the forecasting, scheduling, rescheduling or cancellation of orders by our customers;
- shifts in consumer preferences and any resultant change in demand for video and image capture devices into which our solutions are incorporated;
  - changes in the competitive dynamics of our markets, including new entrants or pricing pressures;
- delays in our customers' ability to manufacture and ship products that incorporate our solutions caused by internal and external factors beyond our control;
- our ability to successfully define, design and release new solutions in a timely manner that meet our customers' needs;
- changes in manufacturing costs, including wafer, test and assembly costs, mask costs, manufacturing yields and product quality and reliability;
- timely availability of adequate manufacturing capacity from our manufacturing subcontractors;
- the timing of product announcements by our competitors or by us;
- incurrence of research and development and related new products expenditures;
- write-downs of inventory for excess quantities and technological obsolescence;
- future accounting pronouncements and changes in accounting policies;
- volatility in our share price, which may lead to higher stock-based compensation expense;
- general socioeconomic and political conditions in the countries where we operate or where our products are sold or used; and
- costs associated with litigation, especially related to intellectual property.

Moreover, the semiconductor industry has historically been cyclical in nature, reflecting overall economic conditions as well as budgeting and buying patterns of consumers. We expect these cyclical conditions to continue. For example, given the current global economic uncertainty and recent signs of slowing growth in Asia, and China in particular, the demand for our products may be more varied and our customers may be more conservative with the inventory levels they maintain. As a result, our quarterly operating results are difficult to predict, even in the near term. Our expense levels are relatively fixed in the short term and are based, in part, on our expectations of future revenue. If revenue levels are below our expectations, we may experience material impacts on our business, including declines in margins and profitability, or incur losses.

Achieving design wins is subject to lengthy competitive selection processes that require us to incur significant costs. Even if we begin a product design, a customer may decide to cancel or change its product plans, resulting in no revenue from such expenditures.

We are focused on selling our video and image processing solutions to ODMs and OEMs for incorporation into their products at the design stage. These efforts to achieve design wins typically are lengthy, especially in new markets we intend to address, and in any case can require us to both incur design and development costs and dedicate scarce engineering resources in pursuit of a single customer opportunity. We may not prevail in the competitive selection process and, even when we do achieve a design win, we may never generate any revenue despite incurring development expenditures. For example, in the past we had achieved a significant design win and projected substantial future revenue from that end customer as a result of that design win. Subsequently, based on changes in that end customer's assessment of the consumer market, among other factors, the end customer abruptly shut down its business unit with which we achieved the design win, with no notice to us.

These risks are exacerbated by the fact that some of our end customers' products, particularly in the camera market, likely will have short life cycles. Further, even after securing a design win, we have experienced and may again experience delays in generating revenue from our solutions as a result of the lengthy product development cycle typically required, if we generate any revenue at all as a result of any such design win.

Our customers generally take a considerable amount of time to evaluate our solutions. The typical time from early engagement by our sales force to actual product introduction runs from nine to 12 months for the camera market, and 12 to 24 months for the infrastructure market, though it may take longer in new markets we intend to address. The delays inherent in these lengthy sales cycles increase the risk that a customer will decide to cancel, curtail, reduce or delay its product plans, causing us to lose anticipated sales. In addition, any delay or cancellation of a customer's plans could harm our financial results, as we may have incurred significant expense and generated no revenue. Finally, our customers' failure to successfully market and sell their products could reduce demand for our SoC solutions and harm our business, financial condition and results of operations. If we were unable to generate revenue after incurring substantial expenses to develop any of our solutions, our business would suffer.

The average selling prices of video and image processing solutions in our target markets have historically decreased over time and will likely do so in the future, which could harm our revenue and gross margins.

Average selling prices of semiconductor products in the markets we serve have historically decreased over time, and we expect such declines to continue to occur for our solutions over time. Our gross margins and financial results will suffer if we are unable to offset reductions in our average selling prices by reducing our costs, developing new or enhanced SoC solutions on a timely basis with higher selling prices or gross margins, or increasing our sales volumes. Additionally, because we do not operate our own manufacturing, assembly or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities, and our costs may even increase, which could also reduce our gross margins. In the past, we have reduced the prices of our SoC solutions in anticipation of future competitive pricing pressures, new product introductions by us or our competitors and other factors. Recently, we have experienced competitive pricing pressures at the low ends of the automotive aftermarket camera market and China-based IP security camera market. We expect that we will have to address pricing pressures again in the future, which could require us to reduce the prices of our SoC solutions and harm our operating results.

We expect competition to increase in the future, which could have an adverse effect on our revenue and market share.

The global semiconductor market in general, and the video and image processing markets in particular, are highly competitive. We compete in different target markets to various degrees on the basis of a number of competitive factors, including our solutions' performance, features, functionality, energy efficiency, size, ease with which our

solution may be integrated into our customers' products, customer support, reliability and price, as well as on the basis of our reputation. We expect competition to increase and intensify as more and larger semiconductor companies enter our markets, and as large OEMs grow their internal resources and potentially develop their own semiconductor solutions. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could harm our business, revenue and operating results.

21

---

Our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow markets. In the wearable sports camera market, our primary competitors are vertically integrated divisions of camera device OEMs, including Sony Corporation, or Sony, and Panasonic Corporation, as well as HiSilicon Technologies Co., Ltd., or HiSilicon, and Socionext Inc., or Socionext, a new entity created from the merger of the system LSI businesses of Fujitsu Ltd. and Panasonic Corporation. In the IP security camera market, our primary competitors include Geo Semiconductor, Inc., Grain Media, Inc., HiSilicon, Intel Corporation, or Intel, Movidius Ltd., Qualcomm Incorporated, Realtek Semiconductor Corp., Socionext, and Texas Instruments Incorporated, as well as vertically integrated divisions of IP Security camera device OEMs, including Axis Communications AB and Sony. In the market for automotive aftermarket cameras, we compete against Allwinner Technology Co., Ltd., Alpha Imaging Technology Corp., Core Logic, Inc., Novatek Microelectronics Corp. and Sunplus Technology Co. Ltd. Our primary competitors in the UAV camera market include HiSilicon, Intel, NVIDIA Corporation and Qualcomm. Our primary competitors in the infrastructure market include Intel, Magnum Semiconductor, Inc. and Texas Instruments Incorporated. Certain of our customers and suppliers also have divisions that produce products competitive with ours. We expect competition in our current markets to increase in the future as existing competitors improve or expand their product offerings and as potential new competitors, such as Broadcom Corporation, MediaTek, Inc., and Samsung Electronics Co., Ltd., or Samsung, enter these markets.

Our ability to compete successfully depends on elements both within and outside of our control, including industry and general economic trends. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support and other resources, are more established than we are and have significantly better brand recognition and broader product offerings which may enable them to develop and enable new technology into product solutions better or faster than us and to better withstand adverse economic or market conditions in the future. Our ability to compete will depend on a number of factors, including:

- our ability to anticipate market and technology trends and successfully develop solutions that meet market needs;
- our success in identifying and penetrating new markets, applications and customers;
- our ability to understand the price points and performance metrics of competing products in the marketplace;
- our solutions' performance and cost-effectiveness relative to that of competing products;
- our ability to gain access to leading design tools and product specifications at the same time as our competitors;
- our ability to develop and maintain relationships with key OEMs and ODMs;
- our products' effective implementation of video processing standards;
- our ability to protect our intellectual property;
- our ability to expand international operations in a timely and cost-efficient manner;
- our ability to deliver products in volume on a timely basis at competitive prices;
- our ability to support our customers' incorporation of our solutions into their products; and
- our ability to recruit design and application engineers with expertise in image video and image processing technologies and sales and marketing personnel.

Our competitors may also establish cooperative relationships among themselves or with third parties or acquire companies that provide similar products to ours. As a result, new competitors or alliances may emerge that could acquire significant market share. Any of these factors, alone or in combination with others, could harm our business and result in a loss of market share and an increase in pricing pressure.

We are dependent on sales of a limited number of video and image processing solutions, and a decline in market adoption of these solutions could harm our business.

From inception through January 31, 2016, our revenue has been generated primarily from the sale of a limited number of high-definition, or HD, video and image processing SoC solutions in the camera and infrastructure markets. Moreover, we currently derive substantially all of our revenue from the sale of our SoCs for use in the camera market and we expect to do so for the next several years. As a result, continued market adoption of our SoC solutions in the

camera market is critical to our future success. If demand for our SoC solutions were to decline, or demand for products incorporating our solutions declines, does not continue to grow or does not grow as expected, our revenue would decline and our business would be harmed.

If we fail to develop and introduce new or enhanced solutions on a timely basis, our ability to attract and retain customers could be impaired and our competitive position could be harmed.

We operate in a dynamic environment characterized by rapidly changing technologies and technological obsolescence. To compete successfully, we must design, develop, market and sell enhanced solutions that provide increasingly higher levels of performance and functionality and that meet the cost expectations of our customers. Our existing or future solutions could be rendered obsolete by the introduction of new products by our competitors; convergence of other markets, such as smartphones, with or into the camera market; the market adoption of products based on new or alternative technologies; the emergence of new industry standards for video compression; or the requirement of additional functionality included in our products, such as analytics or computer vision functionality. In addition, the markets for our solutions are characterized by frequent introduction of next-generation and new products, short product life cycles, increasing demand for added functionality and significant price competition. If we or our customers are unable to manage product transitions in a timely and cost-effective manner, our business and results of operations would suffer.

Our failure to anticipate or timely develop new or enhanced solutions in response to technological shifts could result in decreased revenue and our competitors achieving design wins that we sought. In particular, we may experience difficulties with product design, development of new software, manufacturing, marketing or qualification that could delay or prevent our development, introduction or marketing of new or enhanced solutions. In addition, delays in development could impair our relationships with our customers and negatively impact sales of our solutions under development. Moreover, it is possible that our customers may develop their own product or adopt a competitor's solution for products that they currently buy from us. If we fail to introduce new or enhanced solutions that meet the needs of our customers or penetrate new markets in a timely fashion, we will lose market share and our operating results will be adversely affected.

If we fail to penetrate new markets, our revenue and financial condition could be harmed.

In the past several years, a significant amount of our revenue was generated from sales of our products to OEMs and ODMs of high definition, or HD, video cameras and broadcasting infrastructure equipment. Our future revenue growth, if any, will depend in part on our ability to expand within these markets with our video and image processing SoC solutions, particularly for wearable sports cameras, automotive aftermarket cameras, IP security cameras, as well as emerging markets such as the home security and monitoring market, non-sports wearable camera market and the UAV market. Each of these markets presents distinct and substantial risks and, in many cases, requires us to develop new software to address the particular requirements of that market. If any of these markets do not develop as we currently anticipate or if we are unable to penetrate them successfully, our revenue could decline.

Some of these markets are primarily served by only a few large, multinational OEMs with substantial negotiating power relative to us and, in some instances, with internal solutions that are competitive to our products. Meeting the technical requirements and securing design wins with any of these companies will require a substantial investment of our time and resources. We cannot assure you that we will secure design wins from these or other companies or that we will achieve meaningful revenue from the sales of our solutions into these markets.

If we fail to penetrate these or other new markets we are targeting, our revenue likely will decrease over time and our financial condition could suffer.



We do not have long-term supply contracts with our third-party manufacturing vendors, and they may not allocate sufficient capacity to us at reasonable prices to meet future demands for our solutions.

The semiconductor industry is subject to intense competitive pricing pressure from customers and competitors. Accordingly, any increase in the cost of our solutions, whether by adverse purchase price variances or adverse manufacturing cost variances, will reduce our gross margins and operating profit. We currently do not have long-term supply contracts with most of our primary third-party vendors, and we negotiate pricing with our main vendors on a purchase order-by-purchase order basis. Therefore, they are not obligated to perform services or supply product to us for any specific period, in any specific quantities, or at any specific price, except as may be provided in a particular purchase order. Availability of foundry capacity has in the recent past been limited due to strong demand. The ability of our foundry vendors to provide us with a product, which is sole sourced at each foundry, is limited by their available capacity, existing obligations and technological capabilities. Foundry capacity may not be available when we need it or at reasonable prices. None of our third-party foundry or assembly and test vendors has provided contractual assurances to us that adequate capacity will be available to us to meet our anticipated future demand for our solutions. Our foundry and assembly and test vendors may allocate capacity to the production of other companies' products while reducing deliveries to us on short notice. In particular, other companies that are larger and better financed than we are or that have long-term agreements with our foundry or assembly and test vendors may cause our foundry or assembly and test vendors to reallocate capacity to them, decreasing the capacity available to us. Converting or transferring manufacturing from a primary location or supplier to a backup foundry vendor could be expensive and would likely take at least two or more quarters. There are only a few foundries, including Samsung and Taiwan Semiconductor Manufacturing Co., Ltd., or TSMC, that are currently available for certain advanced process technologies that we utilize or may utilize, such as 14 or 10 nanometer. As we continue to develop solutions in advanced process nodes we will be increasingly dependent upon such foundries.

If, in the future, we enter into arrangements with suppliers that include additional fees to expedite delivery, nonrefundable deposits or loans in exchange for capacity commitments or commitments to purchase specified quantities over extended periods, such arrangements may be costly, reduce our financial flexibility and be on terms unfavorable to us, if we are able to secure such arrangements at all. Moreover, if we are able to secure foundry capacity, we may be obligated to use all of that capacity or incur penalties. These penalties could harm our financial results. To date, we have not entered into any such arrangements with our suppliers. If we need additional foundry or assembly and test subcontractors because of increased demand or the inability to obtain timely and adequate deliveries from our current vendors, we may not be able to do so cost-effectively, if at all.

A substantial portion of our revenue is processed through a single logistics provider and the loss of this logistics provider may cause disruptions in our shipments, which may adversely affect our operations and financial condition.

We sell most of our solutions through a single logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, which serves as our non-exclusive sales representative in Asia, other than Japan. Approximately 67%, 57% and 56% of our revenue was derived from sales through Wintech for the fiscal years ended January 31, 2016, 2015 and 2014, respectively. We anticipate that a significant portion of our revenue will continue to be derived from sales through Wintech in the foreseeable future. Our current agreement with Wintech is effective until September 2018, unless it is terminated earlier by either party for any or no reason with 90 days written notice or by failure of the breaching party to cure a material breach within 30 days following written notice of such material breach by the non-breaching party. Our agreement with Wintech will automatically renew for additional successive 12-month terms unless at least 60 days before the end of the then-current term either party provides written notice to the other party that it elects not to renew the agreement. Termination of the relationship with Wintech, either by us or by Wintech, could result in a temporary or permanent loss of revenue. We may not be successful in finding suitable alternative logistics providers on satisfactory terms, or at all, and this could adversely affect our ability to effectively sell our solutions in certain geographical locations or to certain end customers. Additionally, if we terminate our relationship with Wintech, we

may be obligated to repurchase unsold product, which could be difficult or impossible to sell to other end customers. Furthermore, Wintech, or any successor or other logistics providers we do business with, may face issues obtaining credit, which could impair their ability to make timely payments to us.

Deterioration of the financial conditions of our customers could adversely affect our operating results.

Deterioration of the financial condition of our logistics providers or customers could adversely impact our collection of accounts receivable. We regularly review the collectability and creditworthiness of our logistics providers and customers to determine an appropriate allowance for doubtful receivables. Based on our review of our logistics providers and customers, we currently have no reserve for uncollectible accounts. If our uncollectible accounts, however, were to exceed our current or future allowance for doubtful receivables, our operating results would be negatively impacted.

If we do not sustain our growth rate, we may not be able to execute our business plan and our operating results could suffer.

We have experienced significant growth in a short period of time. Our revenue increased from \$21.5 million in fiscal year 2008 to \$316.4 million in fiscal year 2016, including growth rates of 45% and 39% in the last two fiscal years. We may not achieve similar growth rates in future periods. You should not rely on our revenue growth, gross margins or operating results for any prior quarterly or annual periods as an indication of our future operating performance. If we are unable to maintain adequate revenue growth, our financial results could suffer and our stock price could decline.

If we are unable to manage any future growth, we may not be able to execute our business plan and our operating results could suffer.

Our business has grown rapidly. Our future operating results depend to a large extent on our ability to successfully manage any expansion and growth, including the challenges of managing a company with headquarters in the United States and the majority of its employees in Asia. To manage our growth successfully and handle the responsibilities of being a public company, we believe we must effectively, among other things:

- recruit, hire, train and manage additional qualified engineers for our research and development activities, particularly in our offices in Asia and especially for the positions of semiconductor design and systems and applications engineering;
- add additional sales and business development personnel;
- add additional finance and accounting personnel;
- implement and improve our administrative, financial and operational systems, procedures and controls; and
- enhance our information technology support for enterprise resource planning and design engineering by adapting and expanding our systems and tool capabilities, and properly training new hires as to their use.

We are increasing our investment in research and development and other functions to grow our business. We are likely to incur the costs associated with these increased investments earlier than some of the anticipated benefits, and the return on these investments, if any, may be lower, may develop more slowly than we expect or may not materialize.

If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities or develop new solutions, and we may fail to satisfy customer product or support requirements, maintain product quality, execute our business plan or respond to competitive pressures.

We may have difficulty accurately predicting our future revenue and appropriately budgeting our expenses.

The rapidly evolving nature of the markets in which we sell our solutions, combined with substantial uncertainty concerning how these markets may develop and other factors beyond our control, limits our ability to accurately forecast quarterly or annual revenue. In addition, because we record a significant portion of our revenue from sales when we have received notification from our logistics providers that they have sold our products, some of the revenue we record in a quarter may be derived from sales of products shipped to our logistics providers during previous quarters. This revenue recognition methodology limits our ability to forecast quarterly or annual revenue accurately. We are currently expanding our staffing and increasing our expenditures in anticipation of future revenue growth. If our revenue does not increase as anticipated, we could incur significant losses due to our higher expense levels if we are not able to decrease our expenses in a timely manner to offset any shortfall in future revenue.

While we intend to continue to invest in research and development, we may be unable to make the substantial investments that are required to remain competitive in our business.

The semiconductor industry requires substantial investment in research and development in order to bring to market new and enhanced solutions. Our research and development expense was \$82.9 million, \$58.0 million and \$48.8 million in fiscal years 2016, 2015 and 2014, respectively. We expect to increase our research and development expenditures as compared to prior periods as part of our strategy of focusing on the development of innovative and sustainable video and image processing solutions with increased functionality, such as analytics or computer vision capabilities. We are unable to predict whether we will have sufficient resources to maintain the level of investment in research and development required to remain competitive. For example, development in the latest process nodes, such as 14 or 10 nm, can cost significantly more than required to develop in 28 nm. This added cost could prevent us from being able to maintain a technology advantage over larger competitors that have significantly more resources to invest in research and development. In addition, we cannot assure you that the technologies which are the focus of our research and development expenditures will become commercially successful or generate any revenue.

We may experience difficulties demonstrating the value to customers of newer, higher priced and higher margin solutions if they believe existing solutions are adequate to meet end customer expectations.

As we develop and introduce new solutions, we face the risk that customers may not value or be willing to bear the cost of incorporating these newer solutions into their products, particularly if they believe their customers are satisfied with current solutions. Regardless of the improved features or superior performance of the newer solutions, customers may be unwilling to adopt our new solutions due to design or pricing constraints. Owing to the extensive time and resources that we invest in developing new solutions, if we are unable to sell customers new generations of our solutions, our revenue could decline and our business, financial condition, operating results and cash flows could be negatively affected.

The complexity of our solutions could result in unforeseen delays or expenses from undetected defects, errors or bugs in hardware or software which could reduce the market adoption of our new solutions, damage our reputation with current or prospective customers and adversely affect our operating costs.

Highly complex SoC solutions such as ours frequently contain defects, errors and bugs when they are first introduced or as new versions are released. We have in the past and may in the future experience these defects, errors and bugs. If any of our solutions have reliability, quality or compatibility problems, we may not be able to successfully correct these problems in a timely manner or at all. In addition, if any of our proprietary features contain defects, errors or bugs when first introduced or as new versions of our solutions are released, we may be unable to timely correct these problems. Consequently, our reputation may be damaged and customers may be reluctant to buy our solutions, which could harm our ability to retain existing customers and attract new customers, and could adversely affect our financial results. In addition, these defects, errors or bugs could interrupt or delay sales to our customers. If any of these problems are not found until after we have commenced commercial production of a new product, we may incur significant additional development costs and product recall, repair or replacement costs. These problems may also result in claims against us by our customers or others.

The loss of any of our key personnel could seriously harm our business, and our failure to attract or retain qualified management, engineering, sales and marketing talent could impair our ability to grow our business.

We believe our future success depends in large part upon the continuing services of the members of our senior management team and various engineering and other technical personnel. If one or more of our senior executives or other key personnel are unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all, our business may be disrupted, and our financial condition and results of operations may be materially and adversely affected. In addition, if any member of our senior management team or any of our other key personnel joins a competitor or forms a competing company, we may experience material disruption of our operations and development plans and lose customers, know-how and key professionals and staff members, and we may incur increased operating expenses as the attention of other senior executives is diverted to recruit replacements for key personnel. Our industry is characterized by high demand and intense competition for talent, and the pool of qualified candidates is very limited. While we plan to continue to recruit software and system engineers with expertise in video processing technologies, primarily in Taiwan and China, we may not be successful in attracting, retaining and motivating sufficient numbers of technical and engineering personnel to support our anticipated growth. The competition for qualified engineering personnel in our industry, and particularly in Asia, is very intense. If we are unable to hire, train and retain qualified engineering personnel in a timely manner, our ability to grow our business will be impaired. In addition, if we are unable to retain our existing engineering personnel, our ability to maintain or grow our revenue will be adversely affected.

Camera manufacturers incorporate components supplied by multiple third parties, and a supply shortage or delay in delivery of these components could delay orders for our solutions by our customers.

Our customers purchase components used in the manufacture of their cameras from various sources of supply, often involving several specialized components, including lenses and sensors. Any supply shortage or delay in delivery by third-party component suppliers, or a third-party supplier's cessation or shut down of its business, may prevent or delay production of our customers' products. In addition, replacement or substitute components may not be available on commercially reasonable terms, or at all. As a result of delays in delivery or supply shortages of third-party components, orders for our solutions may be delayed or canceled and our business may be harmed. Similarly, errors or defects within a camera system or in the manner in which the various components interact could prevent or delay production of our customers' products, which could harm our business.

We outsource our wafer fabrication, assembly and testing operations to third parties, and if these parties fail to produce and deliver our products according to requested demands in specification, quantity, cost and time, our reputation, customer relationships and operating results could suffer.

We rely on third parties for substantially all of our manufacturing operations, including wafer fabrication, assembly and testing. Currently, the majority of our SoCs are supplied by Samsung in South Korea, from whom we have the option to purchase both fully assembled and tested products as well as tested die in wafer form for assembly. Samsung subcontracts the assembly and initial testing of the assembled chips it supplies to us to Signetics Corporation and STATS ChipPAC Ltd. In the case of purchases of tested die from Samsung, we contract the assembly to Advanced Semiconductor Engineering, Inc., or ASE. We also have products supplied by Global UniChip Corporation, or GUC, in Taiwan, from whom we purchase fully assembled and tested products. The wafers used by GUC in the assembly of our products are manufactured by TSMC in Taiwan. The assembly is done by GUC subcontracted assembly suppliers ASE, and Powertech Technology Inc, or PTI. Final testing of all of our products is handled by King Yuan Electronics Co., Ltd. or Sigurd Corporation under the supervision of our engineers. We depend on these third parties to supply us with material of a requested quantity in a timely manner that meets our standards for yield, cost and manufacturing quality. We do not have any long-term supply agreements with any of our manufacturing suppliers. If one or more of these vendors terminates its relationship with us, or if we encounter any problems with our manufacturing supply chain, our ability to ship our solutions to our customers on time and in the quantity required would be adversely affected, which in turn could cause an unanticipated decline in our sales and damage our customer relationships.

If our foundry vendors do not achieve satisfactory yields or quality, our reputation and customer relationships could be harmed.

The fabrication of our video and image processing SoC solutions is a complex and technically demanding process. Minor deviations in the manufacturing process can cause substantial decreases in yields, and in some cases, cause production to be suspended. Our foundry vendors, from time to time, experience manufacturing defects and reduced manufacturing yields, including in the fabrication of our SoCs. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by our foundry vendors could result in lower than anticipated manufacturing yields or unacceptable performance of our SoCs. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time consuming and expensive to correct. Poor yields from our foundry vendors, or defects, integration issues or other performance problems in our solutions, could cause us significant customer relations and business reputation problems, harm our financial results and give rise to financial or other damages to our customers. Our customers might consequently seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, would likely be time consuming and costly to defend.

Each of our SoC solutions is manufactured at a single location. If we experience manufacturing problems at a particular location, we would be required to transfer manufacturing to a new location or supplier. Converting or transferring manufacturing from a primary location or supplier to a backup fabrication facility could be expensive and could take two or more quarters. During such a transition, we would be required to meet customer demand from our then-existing inventory, as well as any partially finished goods that could be modified to the required product specifications. We do not seek to maintain sufficient inventory to address a lengthy transition period because we believe it is uneconomical to keep more than minimal inventory on hand. As a result, we may not be able to meet customer needs during such a transition, which could delay shipments, cause production delays, result in a decline in our sales and damage our customer relationships.

We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased costs.

We aim to use the most advanced manufacturing process technology appropriate for our products that is available from our third-party foundries. As a result, we periodically evaluate the benefits of migrating our solutions to smaller geometry process technologies in order to improve performance and reduce costs. We believe this strategy will help us remain competitive. These ongoing efforts require us from time to time to modify the manufacturing processes for our products and to redesign some products, which in turn may result in delays in product deliveries. We may face difficulties, delays and increased expense as we transition our products to new processes, such as 14nm or 10nm process nodes, and potentially to new foundries. We depend on Samsung and TSMC, as the principal foundries for our products, to transition to new processes successfully. We cannot assure you that Samsung or TSMC will be able to effectively manage such transitions or that we will be able to maintain our relationship with Samsung or TSMC or develop relationships with new foundries. Moreover, as we transition to more advanced process nodes beyond 28nm, we will be increasingly dependent upon Samsung and TSMC, who are two of the few foundries currently available for certain advanced process technologies. If we or our foundry vendors experience significant delays in transitioning to smaller geometries or fail to efficiently implement transitions, we could experience reduced manufacturing yields, delays in product deliveries and increased costs, all of which could harm our relationships with our customers and our operating results. As new processes become more prevalent, we expect to continue to integrate greater levels of functionality, as well as more end-customer and third-party intellectual property, into our solutions. We may not be able to achieve higher levels of design integration or deliver new integrated solutions on a timely basis.



We rely on third-party vendors to supply software development tools to us for the development of our new products, and we may be unable to obtain the tools necessary to develop or enhance new or existing products.

We rely on third-party software development tools to assist us in the design, simulation and verification of new products or product enhancements. To bring new products or product enhancements to market in a timely manner, or at all, we need software development tools that are sophisticated enough or technologically advanced enough to complete our design, simulations and verifications. In the future, the design requirements necessary to meet consumer demands for more features and greater functionality from our solutions may exceed the capabilities of available software development tools. Unavailability of software development tools may result in our missing design cycles or losing design wins, either of which could result in a loss of market share or negatively impact our operating results.

Because of the importance of software development tools to the development and enhancement of our solutions, our relationships with leaders in the computer-aided design industry, including Cadence Design Systems, Inc., Mentor Graphics Corporation and Synopsys, Inc., are critical to us. We have invested significant resources to develop relationships with these industry leaders. We believe that utilizing next-generation development tools to design, simulate and verify our products will help us remain at the forefront of the video compression market, and develop solutions that utilize leading-edge technology on a rapid basis. If these relationships are not successful, we may be unable to develop new products or product enhancements in a timely manner, which could result in a loss of market share, a decrease in revenue or negatively impact our operating results.

Our failure to adequately protect our intellectual property rights could impair our ability to compete effectively or defend ourselves from litigation, which could harm our business, financial condition and results of operations.

Our success depends, in part, on our ability to protect our intellectual property. We rely primarily on patent, copyright, trademark and trade secret laws, as well as confidentiality and non-disclosure agreements and other contractual protections, to protect our proprietary technologies and know-how, all of which offer only limited protection. The steps we have taken to protect our intellectual property rights may not be adequate to prevent misappropriation of our proprietary information or infringement of our intellectual property rights, and our ability to prevent such misappropriation or infringement is uncertain, particularly in countries outside of the United States. As of January 31, 2016, we had 45 issued and allowed patents in the United States plus 28 additional continuation patents, five patents issued in Europe, three issued patents in China, five issued patents in Japan and 57 pending and provisional patent applications in the United States. Even if the pending patent applications are granted, the rights granted to us may not be meaningful or provide us with any commercial advantage. For example, these patents could be opposed, contested, circumvented, designed around by our competitors or be declared invalid or unenforceable in judicial or administrative proceedings. The failure of our patents to adequately protect our technology might make it easier for our competitors to offer similar products or technologies. Our foreign patent protection is generally not as comprehensive as our U.S. patent protection and may not protect our intellectual property in some countries where our products are sold or may be sold in the future. Many U.S.-based companies have encountered substantial intellectual property infringement in foreign countries, including countries where we sell products. Even if foreign patents are granted, effective enforcement in foreign countries may not be available. For example, the legal environment relating to intellectual property protection in China is relatively weak, often making it difficult to create and enforce such rights. We may not be able to effectively protect our intellectual property rights in China or elsewhere. If such an impermissible use of our intellectual property or trade secrets were to occur, our ability to sell our solutions at competitive prices may be adversely affected and our business, financial condition, operating results and cash flows could be materially and adversely affected.

The legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain and evolving. We cannot assure you that others will not develop or patent similar or superior technologies, products or services, or that our patents, trademarks and other intellectual property will not be challenged, invalidated

or circumvented by others.

Unauthorized copying or other misappropriation of our proprietary technologies could enable third parties to benefit from our technologies without paying us for doing so, which could harm our business. Monitoring unauthorized use of our intellectual property is difficult and costly. Although we are not aware of any unauthorized use of our intellectual property in the past, it is possible that unauthorized use of our intellectual property may have occurred or may occur without our knowledge. We cannot assure you that the steps we have taken will prevent unauthorized use of our intellectual property. Our failure to effectively protect our intellectual property could reduce the value of our technology in licensing arrangements or in cross-licensing negotiations.

We may in the future need to initiate infringement claims or litigation in order to try to protect our intellectual property rights. Litigation, whether we are a plaintiff or a defendant, can be expensive, time-consuming and may divert the efforts of our technical staff and management, which could harm our business, whether or not such litigation results in a determination favorable to us. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not being issued. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. If we are unable to protect our proprietary rights or if third parties independently develop or gain access to our or similar technologies, our business, revenue, reputation and competitive position could be harmed.

Third parties' assertions of infringement of their intellectual property rights could result in our having to incur significant costs and cause our operating results to suffer.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. Certain of our customers have received, and we expect, particularly to the extent we gain greater market visibility, that in the future we may receive, communications from others alleging our infringement of their patents, trade secrets or other intellectual property rights. In addition, certain of our end customers have been the subject of lawsuits alleging infringement of intellectual property rights by products incorporating our solutions, including the assertion that the alleged infringement may be attributable, at least in part, to our technology. Lawsuits resulting from such allegations could subject us to significant liability for damages and invalidate our proprietary rights, though this has not occurred to date. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling products or using technology that contain the allegedly infringing intellectual property;
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property against others;
- incur significant legal expenses;
- pay substantial damages to the party whose intellectual property rights we may be found to be infringing;
- redesign those products that contain the allegedly infringing intellectual property; or
- attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all.

Any significant impairment of our intellectual property rights from any litigation we face could harm our business and our ability to compete.

Any potential dispute involving our patents or other intellectual property could affect our customers, which could trigger our indemnification obligations to them and result in substantial expense to us.

In any potential dispute involving our patents or other intellectual property, our customers could also become the target of litigation. Certain of our customers have received notices from third parties claiming to have patent rights in certain technology and inviting our customers to license this technology, and certain of our end customers have been the subject of lawsuits alleging infringement of patents by products incorporating our solutions, including the assertion that the alleged infringement may be attributable, at least in part, to our technology. Because we indemnify our customers for intellectual property claims made against them for products incorporating our technology, any litigation could trigger technical support and indemnification obligations under some of our license agreements, which could result in substantial expense to us. Although we have not incurred significant indemnity expenses related to intellectual property claims to date, we anticipate that we will receive requests for indemnity in the future pursuant to our license agreements with our customers. In addition, other customers or end customers with whom we do not have formal agreements requiring us to indemnify them may ask us to indemnify them if a claim is made as a condition to awarding future design wins to us. Because some of our ODMs and OEMs are larger than we are and have greater resources than we do, they may be more likely to be the target of an infringement claim by third parties than we would be, which could increase our chances of becoming involved in a future lawsuit. Although we have not yet been subject to such claims, if any such claims were to succeed, we might be forced to pay damages on behalf of our ODMs or OEMs that could increase our expenses, disrupt our ability to sell our solutions and reduce our revenue. In addition to the time and expense required for us to supply support or indemnification to our customers, any such litigation could severely disrupt or shut down the business of our customers, which in turn could hurt our relations with our customers and cause the sale of our products to decrease.

A breach of our security systems may have a material adverse effect on our business.

Our security systems are designed to maintain the physical security of our facilities and information systems and protect our customers', suppliers' and employees' confidential information. Accidental or willful security breaches or other unauthorized access by third parties to our facilities or our information systems or the existence of computer viruses in our data or software could expose us to a risk of information loss and misappropriation of proprietary and confidential information. Security breaches, computer malware and computer hacking attacks have become more prevalent and sophisticated. Experienced computer programmers and hackers may be able to penetrate our security controls and misappropriate or compromise our confidential information or that of third parties or create system disruptions. Computer programmers and hackers also may be able to develop and deploy viruses, worms and other malicious software programs that attack our information systems and cause disruptions of our business. Data security breaches may also result from non-technical means, for example, actions by an employee. Any theft or misuse of this information could result in, among other things, unfavorable publicity, damage to our reputation, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of this information, any of which could have a material adverse effect on our business, financial condition, our reputation, and our relationships with our customers and partners. We also rely on a number of third-party "cloud-based" service providers of corporate infrastructure services relating to, among other things, human resources, electronic communication services and some finance functions, and we are, of necessity, dependent on the security systems of these providers. Any security breaches or other unauthorized access by third parties to the systems of our cloud-based service providers or the existence of computer viruses in their data or software could expose us to a risk of information loss and misappropriation of confidential information. Since the techniques used to obtain unauthorized access or to sabotage systems change frequently and are often not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

We rely on third parties to provide services and technology necessary for the operation of our business. Any failure of one or more of our vendors, suppliers or licensors to provide such services or technology could harm our business.

We rely on third-party vendors to provide critical services, including, among other things, services related to accounting, human resources, information technology and network monitoring that we cannot or do not create or provide ourselves. We depend on these vendors to ensure that our corporate infrastructure will consistently meet our business requirements. The ability of these third-party vendors to successfully provide reliable and high-quality services is subject to technical and operational uncertainties that are beyond our control. While we may be entitled to damages if our vendors fail to perform under their agreements with us, our agreements with these vendors limit the amount of damages we may receive. In addition, we do not know whether we will be able to collect on any award of damages or that these damages would be sufficient to cover the actual costs we would incur as a result of any vendor's failure to perform under its agreement with us. Upon expiration or termination of any of our agreements with third-party vendors, we may not be able to replace the services provided to us in a timely manner or on terms and conditions, including service levels and cost, that are favorable to us, and a transition from one vendor to another vendor could subject us to operational delays and inefficiencies until the transition is complete.

Additionally, we incorporate third-party technology into some of our products, and we may do so in future products. The operation of our products could be impaired if errors occur in the third-party technology we use. It may be more difficult for us to correct any errors in a timely manner, if at all, because the development and maintenance of the technology is not within our control. We cannot assure you that these third parties will continue to make their technology, or improvements to the technology, available to us, or that they will continue to support and maintain their technology. Further, due to the limited number of vendors of some types of technology, it may be difficult to obtain new licenses or replace existing technology. Any impairment of the technology of or our relationship with these third parties could harm our business.

Failure to comply with the U.S. Foreign Corrupt Practices Act, or FCPA, and similar laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.

We face significant risks if we fail to comply with the FCPA and other anti-corruption laws that prohibit improper payments or offers of payment to foreign governments and political parties by us for the purpose of obtaining or retaining business. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses operating in such countries engage in business practices that are prohibited by the FCPA or other applicable laws and regulations. Although we implemented an FCPA compliance program, we cannot assure you that all of our employees and agents, as well as those companies to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of the FCPA or other applicable anti-corruption laws could result in severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracting, which could have a material and adverse effect on our reputation, business, financial condition, operating results and cash flows.

We, our customers and third-party contractors are subject to increasingly complex environmental regulations and compliance with these regulations may delay or interrupt our operations and adversely affect our business.

We face increasing complexity in our procurement, design, and research and development operations as a result of requirements relating to the materials composition of our products, including the European Union's, or EU's, Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, or RoHS, directive, which restricts the content of lead and certain other hazardous substances in specified electronic products put on the market in the EU and similar Chinese legislation relating to marking of electronic products which became effective in March 2007. Failure to comply with these and similar laws and regulations could subject us to fines, penalties, civil or criminal sanctions, contract damage claims, and take-back of non-compliant products, which could harm our business, reputation and operating results. The passage of similar requirements in additional jurisdictions or the tightening of these standards in jurisdictions where our products are already subject to such requirements could cause us to incur significant expenditures to make our products compliant with new requirements, or could limit the markets into which we may sell our products.

Some of our operations, as well as the operations of our contract manufacturers and foundry vendors and other suppliers, are also regulated under various other federal, state, local, foreign and international environmental laws and requirements, including those governing, among other matters, the management, disposal, handling, use, labeling of, and exposure to hazardous substances, and the discharge of pollutants into the air and water. Liability under environmental laws can be joint and several and without regard to comparative fault. We cannot assure you that violations of these laws will not occur in the future, as a result of human error, accident, equipment failure or other causes. Environmental laws and regulations have increasingly become more stringent over time. We expect that our products and operations will be affected by new environmental requirements on an ongoing basis, which will likely result in additional costs, which could adversely affect our business.

Our failure to comply with present and future environmental, health and safety laws could cause us to incur substantial costs, result in civil or criminal fines and penalties and decreased revenue, which could adversely affect our operating results. Failure by our foundry vendors or other suppliers to comply with applicable environmental laws and requirements could cause disruptions and delays in our product shipments, which could adversely affect our relations with our ODMs and OEMs and adversely affect our business and results of operations.

New regulations related to "conflict minerals" may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the Securities and Exchange Commission, or the SEC, has adopted new requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These requirements require companies to perform due diligence, disclose and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. These requirements could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of semiconductor devices, including our products. While these requirements continue to be the subject of litigation and, as a result, uncertainty, we have incurred, and will continue to incur, additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Since our supply chain is complex, we may not be able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free.

We are subject to warranty and product liability claims and to product recalls.

From time to time, we are subject to warranty claims that may require us to make significant expenditures to defend these claims or pay damage awards. In the future, we may also be subject to product liability claims resulting from failure of our solutions. In the event of a warranty claim, we may also incur costs if we compensate the affected customer. We maintain product liability insurance, but this insurance is limited in amount and subject to significant deductibles. There is no guarantee that our insurance will be available or adequate to protect against all claims. We also may incur costs and expenses relating to a recall of one of our customers' products containing one of our devices. The process of identifying a recalled product in consumer devices that have been widely distributed may be lengthy and require significant resources, and we may incur significant replacement costs, contract damage claims from our customers and reputational harm. Costs or payments made in connection with warranty and product liability claims and product recalls could harm our financial condition and results of operations.

Rapidly changing industry standards could make our video and image processing solutions obsolete, which would cause our operating results to suffer.

We design our video and image processing solutions to conform to video compression standards, including MPEG-2, H.264 and H.265, set by industry standards setting bodies such as ITU-T Video Coding Experts Group and the ISO/IEC Moving Picture Experts Group. Generally, our solutions comprise only a part of a camera or broadcast infrastructure equipment device. All components of these devices must uniformly comply with industry standards in order to operate efficiently together. We depend on companies that provide other components of the devices to support prevailing industry standards. Many of these companies are significantly larger and more influential in driving industry standards than we are. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by our customers or by consumers. If our customers or the suppliers that provide other device components adopt new or competing industry standards with which our solutions are not compatible, or if the industry groups fail to adopt standards with which our solutions are compatible, our existing solutions would become less desirable to our customers. As a result, our sales would suffer, and we could be required to make significant expenditures to develop new SoC solutions. For example, if the new H.265 video compression standard is not broadly adopted by our customers or potential customers, sales of our H.265 compliant solutions would suffer and we may be required to expend substantial resources to comply with an alternative video compression standard. In addition, existing standards may be challenged as infringing upon the intellectual property rights of other companies or may be superseded by new innovations or standards.

Products for communications applications are based on industry standards that are continually evolving. Our ability to compete in the future will depend on our ability to identify and ensure compliance with these evolving industry standards, including any new video compression standards. The emergence of new industry standards could render our solutions incompatible with products developed by other suppliers. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our solutions to ensure compliance with relevant standards. If our solutions are not in compliance with prevailing industry standards for a significant period of time, we could miss opportunities to achieve crucial design wins, which could harm our business.

We are subject to the cyclical nature of the semiconductor industry.

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles and wide fluctuations in product supply and demand. The industry experienced a significant downturn during the recent global recession. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Any future downturns could harm our business and operating results. Furthermore, any significant upturn in the semiconductor industry could result in increased competition for access to third-party foundry and assembly capacity. We are dependent on the availability of this capacity to manufacture and assemble our SoC solutions. None of our third-party foundry or assembly contractors has provided assurances that adequate capacity will be available to us in the future.

The use of open source software in our products, processes and technology may expose us to additional risks and compromise our proprietary intellectual property.

Our products, processes and technology sometimes utilize and incorporate software that is subject to an open source license. Open source software is typically freely accessible, usable and modifiable. Certain open source software licenses, such as the GNU General Public License, require a user who intends to distribute the open source software as a component of the user's software to disclose publicly part or all of the source code to the user's software. In addition, certain open source software licenses require the user of such software to make any derivative works of the open source code available to others on terms unfavorable to us or at no cost. This can subject previously proprietary



software to open source license terms.

While we monitor the use of open source software in our products, processes and technology and try to ensure that no open source software is used in such a way as to require us to disclose the source code to the related product, processes or technology when we do not wish to do so, such use could inadvertently occur. Additionally, if a third-party software provider has incorporated certain types of open source software into software we license from such third-party for our products, processes or technology, we could, under certain circumstances, be required to disclose the source code to our products, processes or technology. This could harm our intellectual property position and our business, results of operations and financial condition.

32

---

Some of our operations and a significant portion of our customers and our subcontractors are located outside of the United States, which subjects us to additional risks, including increased complexity and costs of managing international operations and geopolitical instability.

We have research and development design centers and business development offices in China, Japan, Italy, South Korea and Taiwan, and we expect to continue to conduct business with companies that are located outside the United States, particularly in Asia. Even customers of ours that are based in the United States often use contract manufacturers based in Asia to manufacture their products, and these contract manufacturers typically purchase products directly from us. As a result of our international focus, we face numerous challenges and risks, including:

- increased complexity and costs of managing international operations;
- longer and more difficult collection of receivables;
- difficulties in enforcing contracts generally;
- regional economic instability;
- geopolitical instability and military conflicts;
- limited protection of our intellectual property and other assets;
- compliance with local laws and regulations and unanticipated changes in local laws and regulations, including tax laws and regulations;
- trade and foreign exchange restrictions and higher tariffs;
- travel restrictions;
- timing and availability of import and export licenses and other governmental approvals, permits and licenses, including export classification requirements;
- foreign currency exchange fluctuations relating to our international operating activities;
- restrictions imposed by the U.S. government on our ability to do business with certain companies or in certain countries as a result of international political conflicts;
- transportation delays and other consequences of limited local infrastructure, and disruptions, such as large scale outages or interruptions of service from utilities or telecommunications providers;
- difficulties in staffing international operations;
- heightened risk of terrorist acts;
- local business and cultural factors that differ from our normal standards and practices;
- differing employment practices and labor relations;
- regional health issues and natural disasters; and
- work stoppages.

Our third-party contractors and their suppliers are concentrated in South Korea, Taiwan and Japan, a region subject to earthquakes and other natural disasters. Any disruption to the operations of these contractors could cause significant delays in the production or shipment of our products.

The majority of our products are manufactured by or receive components from third-party contractors located in South Korea, Taiwan and Japan. The risk of an earthquake or tsunami in South Korea, Taiwan, Japan and elsewhere in the Pacific Rim region is significant due to the proximity of major earthquake fault lines. For example, in December 2006 a major earthquake occurred in Taiwan and in March 2011 a major earthquake and tsunami occurred in Japan. Although we are not aware of any significant damage suffered by our third-party contractors as a result of such natural disasters, the occurrence of additional earthquakes or other natural disasters could result in the disruption of our foundry vendor or assembly and test capacity. Any disruption resulting from such events could cause significant delays in the production or shipment of our products until we are able to shift our manufacturing, assembling or testing from the affected contractor to another third-party vendor. We may not be able to obtain alternate capacity on favorable terms, or at all.



If our operations are interrupted, our business and reputation could suffer.

Our operations and those of our manufacturers are vulnerable to interruption caused by technical breakdowns, computer hardware and software malfunctions, software viruses, infrastructure failures, fires, earthquakes, floods, power losses, telecommunications failures, terrorist attacks, wars, Internet failures and other events beyond our control. Any disruption in our services or operations could result in a reduction in revenue or a claim for substantial damages against us, regardless of whether we are responsible for that failure. We rely on our computer equipment, database storage facilities and other office equipment, which are located primarily in the seismically active San Francisco Bay Area and Taiwan. If we suffer a significant database or network facility outage, our business could experience disruption until we fully implement our back-up systems.

As a public company, we are subject to additional regulatory compliance requirements, including Section 404 of the Sarbanes-Oxley Act of 2002, and if we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.

We became a public company on October 10, 2012 and have and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. Additionally, in fiscal year 2015, we ceased to be an “emerging growth company”, as defined in the Jumpstart Our Business Startups Act, or the JOBS Act. As a result, we are now, and will continue to be, subject to additional disclosure and compliance requirements associated with being a public company going forward, including but not limited to compliance with the auditor attestation requirement of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as described below.

Rules and regulations such as the Sarbanes-Oxley Act have increased our legal and finance compliance costs and made some activities more time consuming and costly. For example, Section 404 of the Sarbanes-Oxley Act requires that our management report on, and our independent auditors attest to, the effectiveness of our internal control structure and procedures for financial reporting. In the future, we may discover areas of our internal controls that need improvement. If our auditors or we discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market’s confidence in our financial statements and harm our stock price. Any inability to provide reliable financial reports or prevent fraud could harm our business. We may not be able to effectively and timely implement necessary control changes and employee training to ensure continued compliance with the Sarbanes-Oxley Act and other regulatory and reporting requirements. Our recent growth rate could present challenges to maintain the internal control and disclosure control standards applicable to public companies. In the future if our Chief Executive Officer, Chief Financial Officer or independent registered public accounting firm determines that our internal controls over financial reporting are not effective as defined under Section 404, we could be subject to sanctions or investigations by The NASDAQ Stock Market, the SEC, or other regulatory authorities. Furthermore, investor perceptions of our company may suffer, and this could cause a decline in the market price of our ordinary shares. We cannot assure you that in the future we will be able to continue to fully comply with the requirements of the Sarbanes-Oxley Act or that management or our auditors will conclude that our internal controls are effective in future periods. Irrespective of compliance with Section 404, any failure of our internal controls could have a material adverse effect on our stated results of operations and harm our reputation.

If we fail to hire additional finance personnel, strengthen our financial reporting systems and infrastructure, and effectively use our enterprise resource planning system, we may not be able to timely and accurately report our financial results or comply with the requirements of being a public company, including compliance with the Sarbanes-Oxley Act and SEC reporting requirements, which in turn would significantly harm our reputation and our business.

Although we have hired additional accounting and finance personnel with system implementation experience and Sarbanes-Oxley Act compliance expertise, the continued growth of the business may require additional trained

resources to meet the requirements of being a public company. Any inability to recruit and retain such finance personnel would have an adverse impact on our ability to accurately and timely prepare our financial statements. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If our finance and accounting organization is unable for any reason to respond adequately to the demands of being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause the trading price of our ordinary shares to decline and could harm our business, operating results and financial condition.

If we fail to maintain our financial reporting systems, infrastructure and internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately and prevent fraud. We expect to continue incur significant expense and devote substantial management effort toward ensuring compliance with Section 404.

We recently substantially completed implementation of the core modules of a new enterprise resource planning, or ERP, system. This project has required and may continue to require investment of capital and human resources, the re-engineering of processes of our business and the attention of many employees who would otherwise be focused on other aspects of our business. Any deficiencies in the design and implementation of the new ERP system could result in potentially much higher costs than we had incurred and could adversely affect our ability to develop and launch solutions, provide services, fulfill contractual obligations, file reports with the SEC in a timely manner, otherwise operate our business or otherwise impact our controls environment. Any of these consequences could have an adverse effect on our results of operations and financial condition.

Changes to financial accounting standards may affect our results of operations and could cause us to change our business practices.

We prepare our consolidated financial statements to conform to generally accepted accounting principles, or GAAP, in the United States. These accounting principles are subject to interpretation by the American Institute of Certified Public Accountants, the SEC and various bodies formed to interpret and create accounting rules and regulations. Changes in those accounting rules can have a significant effect on our financial results and may affect our reporting of transactions completed before a change is announced. Changes to those rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

The complexity of calculating our tax provision may result in errors that could result in restatements of our financial statements.

We are incorporated in the Cayman Islands and our operations are subject to income and transaction taxes in the United States, China, Hong Kong, Japan, Italy, South Korea, Taiwan and other jurisdictions in which we do business. Due to the complexity associated with the calculation of our tax provision, we have hired independent tax advisors to assist us. If we or our independent tax advisors fail to resolve or fully understand certain issues, there may be errors that could result in us having to restate our financial statements. Restatements are generally costly and could adversely impact our results of operations or have a negative impact on the trading price of our ordinary shares.

Changes in effective tax rates or adverse outcomes resulting from examination of our income tax returns could adversely affect our results.

Our future effective tax rates could be adversely affected if earnings are 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, our income tax returns are subject to continuous examination by the Internal Revenue Service, or 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. We cannot assure you that the outcomes from these continuous examinations will not have an adverse effect on our operating results and financial condition.

Unfavorable tax law changes, an unfavorable governmental review of our tax returns, changes in our geographical earnings mix or imposition of withholding taxes on repatriated earnings could adversely affect our effective tax rate and our operating results.

Our operations are subject to certain taxes, such as income and transaction taxes, in the Cayman Islands, the United States, China, Hong Kong, Japan, Italy, South Korea, Taiwan and other jurisdictions in which we do business. A change in the tax laws in the jurisdictions in which we do business, including an increase in tax rates or an adverse change in the treatment of an item of income or expense, possibly with retroactive effect, could result in a material

increase in the amount of taxes we incur. In particular, past proposals have been made to change certain U.S. tax laws relating to foreign entities with U.S. connections, which may include us. For example, previously proposed legislation has considered treating certain foreign corporations as U.S. domestic corporations (and therefore taxable on all of their worldwide income) if the management and control of the foreign corporation occurs, directly or indirectly, primarily within the United States. If such legislation were enacted, we could, depending on the precise form, be subject to U.S. taxation notwithstanding our domicile outside the United States. In addition, the U.S. government has proposed various other changes to the U.S. international tax system, certain of which could adversely impact foreign-based multinational corporate groups, and increased enforcement of U.S. international tax laws. Although none of these proposed U.S. tax law changes has yet been enacted, and they may never be enacted in their current forms, it is possible that these or other changes in the U.S. tax laws could significantly increase our U.S. income tax liability in the future.

We are subject to periodic audits or other reviews by tax authorities in the jurisdictions in which we conduct our activities. Any such audit, examination or review requires management's time, diverts internal resources and, in the event of an unfavorable outcome, may result in additional tax liabilities or other adjustments to our historical results.

Because we conduct operations in multiple jurisdictions, our effective tax rate is influenced by the amounts of income and expense attributed to each such jurisdiction. If such amounts were to change so as to increase the amounts of our net income subject to taxation in higher-tax jurisdictions, or if we were to commence operations in jurisdictions assessing relatively higher tax rates, our effective tax rate could be adversely affected. In addition, we may determine that it is advisable from time to time to repatriate earnings from subsidiaries under circumstances that could give rise to imposition of potentially significant withholding taxes by the jurisdictions in which such amounts were earned, without our receiving the benefit of any offsetting tax credits, which could also adversely impact our effective tax rate.

We may be classified as a passive foreign investment company which could result in adverse U.S. federal income tax consequences for U.S. holders of our ordinary shares.

Based on the current and anticipated valuation of our assets and the composition of our income and assets, we do not expect to be considered a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for our 2016 fiscal year or the foreseeable future. However, a separate determination must be made at the close of each taxable year as to whether we are a PFIC for that taxable year, and we cannot assure you that we will not be a PFIC for our 2017 fiscal year or any future taxable year. Under current law, a non-U.S. corporation will be considered a PFIC for any taxable year if either (a) at least 75% of its gross income is passive income or (b) at least 50% of the value of its assets, generally based on an average of the quarterly values of the assets during a taxable year, is attributable to assets that produce or are held for the production of passive income. PFIC status depends on the composition of our assets and income and the value of our assets (which may be based in part on the value of our ordinary shares which may fluctuate), including, among others, a pro rata portion of the income and assets of each subsidiary in which we own, directly or indirectly, at least 25% by value of the subsidiary's equity interests, from time to time. Because we currently hold, and expect to continue to hold, a substantial amount of cash or cash equivalents, and because the calculation of the value of our assets may be based in part on the value of our ordinary shares which may fluctuate and may fluctuate considerably given that market prices of technology companies historically often have been volatile, we may be a PFIC for any taxable year. If we were treated as a PFIC for any taxable year during which a U.S. holder held ordinary shares, certain adverse U.S. federal income tax consequences could apply for such U.S. holder.

Fluctuations in exchange rates between and among the currencies of the countries in which we do business may adversely affect our operating results.

Our sales have been historically denominated in U.S. dollars. An increase in the value of the U.S. dollar relative to the currencies of the countries in which our end customers operate could impair the ability of our end customers to cost-effectively integrate our SoCs into their devices which may materially affect the demand for our solutions and cause these end customers to reduce their orders, which would adversely affect our revenue and business. We may experience foreign exchange gains or losses due to the volatility of other currencies compared to the U.S. dollar. A significant portion of our solutions are sold to camera manufacturers located outside the United States, primarily in Asia. Sales to customers in Asia accounted for approximately 91%, 91% and 88% of our total revenue in fiscal years 2016, 2015 and 2014, respectively. Because most of our end customers or their ODM manufacturers are located in Asia, we anticipate that a majority of our future revenue will continue to come from sales to that region. Although a large percentage of our sales are made to customers in Asia, we believe that a significant number of the products designed by these customers and incorporating our SoCs are then sold to consumers globally.

A significant number of our employees are located in Asia, principally Taiwan and China. Therefore, a portion of our payroll as well as certain other operating expenses are paid in currencies other than the U.S. dollar, such as the New Taiwan Dollar and the Chinese Yuan Renminbi. Our operating results are denominated in U.S. dollars and the difference in exchange rates in one period compared to another may directly impact period-to-period comparisons of our operating results. Furthermore, currency exchange rates, particularly the exchange rate between the Chinese Yuan



Renminbi and the U.S. dollar, have been especially volatile in the recent past and these currency fluctuations may make it difficult for us to predict our operating results.

We have not implemented any hedging strategies to mitigate risks related to the impact of fluctuations in currency exchange rates. Even if we were to implement hedging strategies, not every exposure can be hedged and, where hedges are put in place based on expected foreign exchange exposure, they are based on forecasts which may vary or which may later prove to have been inaccurate. Failure to hedge successfully or anticipate currency risks accurately could adversely affect our operating results.

We may make acquisitions in the future that could disrupt our business, cause dilution to our shareholders, reduce our financial resources and harm our business.

In the future, we may acquire other businesses, products or technologies. Other than our acquisition of VisLab S.r.l. in June 2015, we have not made any acquisitions to date and do not have any agreements or commitments for any specific acquisition at this time. Our ability to make and successfully integrate acquisitions is unproven. Our acquisition of VisLab and any future acquisitions may not strengthen our competitive position and may be viewed negatively by our customers, financial markets or investors, and we may not achieve our goals in a timely manner, or at all. In addition, any acquisitions we make could lead to difficulties in integrating personnel, technologies and operations from the acquired businesses and in retaining and motivating key personnel from these businesses. Acquisitions may disrupt our ongoing operations, divert management from their primary responsibilities, subject us to additional liabilities, increase our expenses and adversely impact our business, operating results, financial condition and cash flows. Acquisitions may also reduce our cash available for operations and other uses, and could also result in an increase in amortization expense related to identifiable assets acquired, potentially dilutive issuances of equity securities or the incurrence of debt, any of which could harm our business.

We cannot predict our future capital needs, and we may not be able to obtain additional financing to fund our operations.

We may need to raise additional funds in the future. Any required additional financing may not be available on terms acceptable to us, or at all. If we raise additional funds by issuing equity securities or convertible debt, investors may experience significant dilution of their ownership interest, and the newly-issued securities may have rights senior to those of the holders of our ordinary shares. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility and would also require us to incur interest expense. If additional financing is not available when required or is not available on acceptable terms, we may have to scale back our operations or limit our production activities, and we may not be able to expand our business, develop or enhance our products, take advantage of business opportunities or respond to competitive pressures which could result in lower revenue and reduce the competitiveness of our products.

Our marketable securities portfolio could experience a decline in market value, which could materially and adversely affect our financial results.

As of January 31, 2016, we had approximately \$40.4 million in securities investments. The investments consisted primarily of money market funds, commercial paper, asset-backed securities, U.S. government securities, agency bonds and debt securities of corporations which are focused on the preservation of our capital. We currently do not use derivative financial instruments to adjust our investment portfolio risk or income profile.

These investments, as well as any cash deposited in bank accounts, are subject to general credit, liquidity, market and interest rate risks, which may be exacerbated by unusual events, such as the eurozone crisis and the U.S. debt ceiling crisis, which affected various sectors of the financial markets and led to global credit and liquidity issues. If the global credit market continues to experience volatility or deteriorates, our investment portfolio may be impacted and some or all of our investments may experience other-than-temporary impairment which could adversely impact our financial results and position.

#### Risks Related to Ownership of Our Ordinary Shares

The market price of our ordinary shares may be volatile, which could cause the value of your investment to decline.

Since our initial public offering in October 2012, the market price of our ordinary shares has been highly volatile. The trading price of our ordinary shares is likely to remain volatile and could be subject to wide fluctuations in price in response to various factors, some of which are beyond our control. These factors include:

- changes in financial estimates, including our ability to meet our future revenue and operating profit or loss projections;
- fluctuations in our operating results or those of other semiconductor or comparable companies;
- fluctuations in the economic performance or market valuations of companies perceived by investors to be comparable to us;
- economic developments in the semiconductor industry as a whole;
- general economic conditions and slow or negative growth of related markets;
- announcements by us or our competitors of acquisitions, new products, significant contracts or orders, commercial relationships or capital commitments;

- our ability to develop and market new and enhanced solutions on a timely basis;
- changes in the demand for our customers' products;
- commencement of or our involvement in litigation;
- disruption to our operations;
- any major change in our board of directors or management;
- political or social conditions in the markets where we sell our products;
- changes in governmental regulations; and
- changes in earnings estimates or recommendations by securities analysts.

In addition, the stock market in general, and the market for semiconductor and other technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may cause the market price of our ordinary shares to decrease, regardless of our actual operating performance. These trading price fluctuations may also make it more difficult for us to use our ordinary shares as a means to make acquisitions or to use options to purchase our ordinary shares to attract and retain employees. If the market price of our ordinary shares declines, you may not realize any return on your investment in us and may lose some or all of your investment. In addition, in the past, following periods of volatility in the overall market and the market price of a company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

If securities analysts or industry analysts downgrade our ordinary shares, publish negative research or reports or fail to publish reports about our business, our stock price and trading volume could decline.

The trading market for our ordinary shares will be influenced by the research and reports that industry or securities analysts publish about us, our business and our market. If one or more analysts adversely changes their recommendation regarding our stock or our competitors' stock, our stock price would likely decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets which in turn could cause our stock price or trading volume to decline.

Our actual operating results may differ significantly from our guidance and investor expectations, which would likely cause our stock price to decline.

From time to time, we may release guidance in our earnings releases, earnings conference calls or otherwise, regarding our future performance that represent our management's estimates as of the date of release. If given, this guidance, which will include forward-looking statements, will be based on projections prepared by our management. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control. The principal reason that we expect to release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. With or without our guidance, analysts and other investors may publish expectations regarding our business, financial performance and results of operations. We do not accept any responsibility for any projections or reports published by any such third persons.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. If our actual performance does not meet or exceed our guidance or investor expectations, the trading price of our ordinary shares is likely to decline.

The price of our ordinary shares could decrease as a result of shares being sold in the market.

Sales of a substantial number of our ordinary shares in the public market, or the perception that these sales might occur, could cause the market price of our ordinary shares to decline. Certain holders of our ordinary shares are entitled to rights with respect to registration of such shares under the Securities Act of 1933, as amended, or the Securities Act, pursuant to a registration rights agreement between such holders and us. If such holders, by exercising their registration rights, sell a large number of shares, the market price for our ordinary shares could be adversely affected. If we file a registration statement for the purpose of selling additional shares to raise capital and are required to include shares held by these holders pursuant to the exercise of their registration rights, our ability to raise capital may be impaired.

We filed registration statements on Form S-8 under the Securities Act to register shares for issuance under our 2004 Stock Plan, 2012 Equity Incentive Plan and 2012 Employee Stock Purchase Plan. Our 2012 Equity Incentive Plan and 2012 Employee Stock Purchase Plan provide for automatic increases in the shares reserved for issuance under these plans which could result in additional dilution to our shareholders. These shares can be freely sold in the public market upon issuance and vesting, subject to restrictions provided under the terms of the applicable plan and/or the option agreements entered into with option holders.

We may also issue ordinary shares or securities convertible into ordinary shares from time to time in connection with a financing, acquisition or otherwise. Any such issuance could result in substantial dilution to our existing shareholders and cause the trading price of our stock to decline.

We do not intend to pay dividends on our ordinary shares and, consequently, a shareholder's ability to achieve a return on its investment will depend on appreciation in the price of our ordinary shares.

We have never declared or paid any cash dividends on our ordinary shares and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, shareholders are not likely to receive any dividends on their ordinary shares for the foreseeable future and the success of an investment in our ordinary shares will depend upon any future appreciation in their value. There is no guarantee that our ordinary shares will appreciate in value or even maintain the price at which our shareholders have purchased their shares. Investors seeking cash dividends should not purchase our ordinary shares.

Provisions of our memorandum and articles of association and Cayman Islands corporate law may discourage or prevent an acquisition of us which could adversely affect the value of our ordinary shares.

Provisions of our memorandum and articles of association and Cayman Islands law may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following:

- the division of our board of directors into three classes;
- the right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or due to the resignation or departure of an existing board member;
- prohibition of cumulative voting in the election of directors which would otherwise allow less than a majority of shareholders to elect director candidates;
- the requirement for the advance notice of nominations for election to our board of directors or for proposing matters that can be acted upon at a shareholders' meeting;
- the ability of our board of directors to issue, without shareholder approval, such amounts of preference shares as the board of directors deems necessary and appropriate with terms set by our board of directors, which rights could be senior to those of our ordinary shares;
- the elimination of the rights of shareholders to call a special meeting of shareholders and to take action by written consent in lieu of a meeting; and
- the required approval of a special resolution of the shareholders, being a two-thirds vote of shares held by shareholders present and voting at a shareholder meeting, to alter or amend the provisions of our post-offering memorandum and articles of association.

Holders of our ordinary shares may face difficulties in protecting their interests because we are incorporated under Cayman Islands law.

Our corporate affairs are governed by our amended and restated memorandum and articles of association, by the Companies Law (as the same may be supplemented or amended from time to time) of the Cayman Islands and by the common law of the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under Cayman Islands law are not as clearly established as under statutes or judicial precedent in existence in

jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States and provides significantly less protection to investors. There is no legislation specifically dedicated to the rights of investors in securities and thus no statutorily defined private cause of action specific to investors such as those provided under the Securities Act or the Securities Exchange Act of 1934, as amended. In addition, shareholders of Cayman Islands companies may not have standing to initiate shareholder derivative actions in U.S. federal courts. Therefore, you may have more difficulty in protecting your interests in the face of actions by our management, directors or controlling shareholders than would shareholders of a corporation incorporated in a jurisdiction in the United States due to the comparatively less developed nature of Cayman Islands law in this area.

Shareholders of Cayman Islands exempted companies, such as our company, have no general rights under Cayman Islands law to inspect corporate records and accounts or to obtain copies of lists of shareholders of the company. Our directors have discretion under our articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

Subject to limited exceptions, under Cayman Islands law, a minority shareholder may not bring a derivative action against the board of directors.

Holders of our ordinary shares may have difficulty obtaining or enforcing a judgment against us because we are incorporated under the laws of the Cayman Islands.

It may be difficult or impossible for you to bring an action against us in the Cayman Islands if you believe your rights have been infringed under U.S. securities laws. There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will in certain circumstances recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits. While there is no binding authority on this point, this is likely to include, in certain circumstances, a non-penal judgment of a United States court imposing a monetary award based on the civil liability provisions of the U.S. federal securities laws. The Grand Court of the Cayman Islands may stay proceedings if concurrent proceedings are being brought elsewhere. There is uncertainty as to whether the Grand Court of the Cayman Islands would recognize or enforce judgments of United States courts obtained against us predicated upon the civil liability provisions of the securities laws of the United States or any state thereof and whether the Grand Court of the Cayman Islands would hear original actions brought in the Cayman Islands against us predicated upon the securities laws of the United States or any state thereof.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

#### ITEM 2. PROPERTIES

Our principal executive offices are located in Santa Clara, California, consisting of approximately 49,000 square feet of office space under a lease that expires in May 2020. This facility accommodates our principal sales, marketing, research and development, finance, and administration activities. We lease approximately 58,000 square feet of office space in Hsinchu, Taiwan under lease agreements that automatically renew each year. The Taiwan facilities accommodate research and development, business development, operations, and administration support. We lease approximately 35,000 square feet of office space in Shanghai and Shenzhen, China, under leases that expire in November 2017 and September 2018, respectively, to support research and business development. We lease additional facilities in Italy for research and development, in Hong Kong for sales and inventory warehousing and in Japan and South Korea for our local business development personnel.





We believe that our existing facilities are well maintained and in good operating condition, and are sufficient for our needs for the foreseeable future. The following table lists our major locations and primary usage as of January 31, 2016:

Major Locations	Approximate Square Footage	Usage
<b>United States:</b>		
Santa Clara, California	49,000	Corporate Headquarters; Sales; Marketing; Research and Development; Finance;
Administration		
<b>Asia Pacific:</b>		
Hsinchu, Taiwan	58,000	Research and Development; Business Development; Operations; Administration
Shanghai, China	16,000	Research and Development; Business Development
Shenzhen, China	19,000	Research and Development; Business Development
Kowloon, Hong Kong	6,000	Sales; Warehousing
Shin-Yokohama, Japan	4,000	Business Development
SeongNam, South Korea	2,000	Business Development
<b>Europe:</b>		
Parma, Italy	4,000	Research and Development

### ITEM 3. LEGAL PROCEEDINGS

We are not engaged in any material legal proceedings at this time.

### 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

## Price Range of Ordinary Shares

Our ordinary shares have been traded on the NASDAQ Global Market under the symbol "AMBA" since October 10, 2012. Prior to that date, there was no public trading market for our ordinary shares. The following table sets forth, for the periods indicated, the high and low sales prices per ordinary share as reported by the NASDAQ Global Market:

	Price Range	
	High	Low
Year Ended January 31, 2016:		
Fourth Quarter	\$64.95	\$34.60
Third Quarter	\$119.99	\$49.00
Second Quarter	\$129.19	\$70.39
First Quarter	\$77.39	\$48.50
Year Ended January 31, 2015:		
Fourth Quarter	\$63.20	\$44.20
Third Quarter	\$46.78	\$27.40
Second Quarter	\$33.81	\$21.60
First Quarter	\$35.38	\$24.47

On March 22, 2016, there were 41 shareholders of record holding our ordinary shares. We cannot estimate the number of beneficial owners since many brokers and other institutions hold our shares on behalf of shareholders. On March 22, 2016, the last reported sale price of our stock was \$40.75 per ordinary share as reported by the NASDAQ Global Market.

We have never declared or paid any cash dividends on our ordinary shares and do not currently intend to do so in the foreseeable future.

## Performance Graph

This performance graph shall not be deemed to be "soliciting material" or "filed" or incorporated by reference in future filings with the Securities and Exchange Commission, or subject to the liabilities of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

The following graph shows a comparison from October 10, 2012 (the date our ordinary shares commenced trading on the NASDAQ) through January 31, 2016 of the cumulative total return for our ordinary shares, the NASDAQ Composite Index and the Philadelphia Semiconductor Index. The comparisons in the graph are historical and are not intended to forecast or be indicative of possible future performance of our ordinary shares.

Comparison of 39 months Cumulative Total Return

Purchases of Equity Securities by the Issuer and Recent Sales of Unregistered Securities

None.

## ITEM 6. SELECTED FINANCIAL DATA

The following table sets forth selected financial data as of and for the last five fiscal years, and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Item 8, "Financial Statements and Supplementary Data," and other financial data included elsewhere in this report. Our historical results of operations are not necessarily indicative of results of operations to be expected for any future period.

## Selected Consolidated Statements of Operations Data:

	Year Ended January 31,				
	2016	2015	2014	2013	2012
	(in thousands, except per share data)				
Revenue	\$316,373	\$218,278	\$157,608	\$121,066	\$97,257
Income from operations	\$84,679	\$51,861	\$27,917	\$19,906	\$11,255
Net income	\$76,508	\$50,571	\$25,654	\$18,188	\$9,821
Net income per share attributable to ordinary shareholders:					
Basic	\$2.42	\$1.70	\$0.93	\$0.64	\$0.32
Diluted	\$2.27	\$1.57	\$0.85	\$0.60	\$0.30

## Selected Consolidated Balance Sheet Data:

	As of January 31,				
	2016	2015	2014	2013	2012
	(in thousands)				
Cash, cash equivalents and marketable securities	\$307,893	\$207,994	\$143,394	\$100,494	\$58,944
Working capital	320,828	229,889	151,834	108,318	54,875
Total assets	410,615	284,284	183,307	138,603	81,739
Total liabilities	61,159	47,073	26,946	26,271	24,390
Redeemable convertible preference shares	—	—	—	—	50,900
Total shareholders' equity	349,456	237,211	156,361	112,332	6,449

On June 25, 2015, we completed the acquisition of VisLab S.r.l., for \$30.0 million in cash. Of this total purchase price, \$4.1 million was attributed to intangible assets, \$25.3 million was attributed to goodwill, and \$0.6 million was attributed to net assets acquired. A deferred tax liability of \$1.3 million related to the intangible assets was recorded to account for the difference between financial reporting and tax basis at the acquisition date, with an addition to goodwill.

In November 2015, the Financial Accounting Standards Board ("FASB") issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes. To simplify the presentation, the new guidance requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. An entity can elect to adopt the guidance either (1) prospectively for all deferred tax assets and liabilities, or (2) retrospectively by reclassifying the comparative balance sheet. We have adopted this standard in the fourth quarter of fiscal year 2016 on a prospective basis. The adoption of this new guidance resulted in all deferred tax assets and liabilities being

classified as noncurrent in the consolidated balance sheet as of January 31, 2016. The prior periods were not restated for the adoption of this deferred taxes presentation standard.

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

### Overview

We are a leading developer of semiconductor processing solutions for video that enable high-definition, or HD, video capture, sharing and display. We combine our processor design capabilities with our expertise in video and image processing algorithms and software to provide a technology platform that is designed to be easily scalable across multiple applications and enable rapid and efficient product development. Our system-on-a-chip, or SoC, designs fully integrate HD video processing, image processing, audio processing and system functions onto a single chip, delivering exceptional video and image quality, differentiated functionality and low power consumption.

We sell our solutions to leading original design manufacturers, or ODMs, and original equipment manufacturers, or OEMs, globally. We refer to ODMs as our customers and OEMs as our end customers, except as otherwise indicated or as the context otherwise requires. In the camera market, our solutions enable the creation of high-quality video content primarily for wearable sports cameras, Internet Protocol, or IP, security cameras, unmanned aerial vehicle cameras, also referred to as UAVs, drones or flying cameras, and automotive aftermarket cameras. In the infrastructure market, our solutions efficiently manage IP video traffic, broadcast encoding, transcoding and IP video delivery applications.

Our sales cycles typically require a significant investment of time and a substantial expenditure of resources before we can realize revenue from the sale of our solutions, if any. Our typical sales cycle consists of a multi-month sales and development process involving our customers' system designers and management along with our sales personnel and software engineers. If successful, this process culminates in a customer's decision to use our solutions in its system, which we refer to as a design win. Our sales efforts are typically directed to the OEM of the product that will incorporate our video and image processing solution, but the eventual design and incorporation of our SoC into the product may be handled by an ODM on behalf of the OEM. Volume production may begin within six to 18 months after a design win, depending on the complexity of our customer's product and other factors upon which we may have little or no influence. Once one of our solutions has been incorporated into a customer's design, we believe that our solution is likely to remain a component of the customer's product for its life cycle because of the time and expense associated with redesigning a product or substituting an alternative solution. Conversely, a design loss to a competitor will likely preclude any opportunity for us to generate future revenue from such customer's product. Even if we obtain a design win and our SoC remains a component through the life cycle of a customer's product, the volume and timing of actual sales of our SoCs to the customer depend upon the production, release and market acceptance of that product, none of which are within our control.

### Fiscal Year 2016 Financial Highlights and Trends

· We recorded revenue of \$316.4 million, an increase of 44.9% as compared to fiscal year 2015. The increase over the prior fiscal year was primarily due to strong demand for our A9, A7L, S2L and A12 SoCs in the IP security, UAV, automotive aftermarket and wearable sports camera markets. The strong growth in the IP security camera market reflected a broader adoption of our S2L SoC by current customers in the professional security market as well as the addition of new customers in the home security and monitoring market. Despite the strong revenue growth in the IP security camera market, we experienced some softness in the China region in the second half of fiscal year 2016, which partially offset stronger results in other geographic regions in the period. Although UAVs are in the early stage of market adoption, we experienced strong growth in fiscal year 2016 due to the launch of new models from an existing customer and initial adoption by new customers. In the automotive aftermarket, which is dominated by demand from Asia, revenues grew as customer demand for more feature-rich products increased which is well suited to our product offerings. Although the revenue in the wearable sports camera market increased in fiscal year 2016 as compared to fiscal year 2015, we saw a decline in this market in the second half of fiscal year 2016 as a result of

high inventory levels at a major end customer. In addition, we anticipate that these high inventory levels at our customer in the wearable sports camera market will significantly and adversely impact our revenues in fiscal year 2017, particularly the first half of the fiscal year. For the twelve months ended January 31, 2016, the increases in the camera market was partially offset by a year-over-year decline in the infrastructure market resulting from continued weak market conditions in the United States and Europe as system manufacturers continue to delay investment in network upgrades to the new H.265 compression technology.

· We recorded operating income of \$84.7 million, an increase of 63.3% as compared to fiscal year 2015, primarily due to continuing growth in revenues, as well as efficient control of product costs and operating expenses.

45

---



- We generated cash flows from operating activities of \$123.6 million in fiscal year 2016, as compared to \$52.3 million in fiscal year 2015. The increase was primarily due to increased net income as adjusted for increased non-cash stock-based compensation. The increase also was attributable to decreased accounts receivable associated with the timing of payments from customers, decreased inventory purchase associated with a decrease in near term revenue forecasts, increased deferred revenue associated with the timing of inventory shipments by our logistics providers and increased long-term liabilities associated with unrecognized tax benefits. The increase was partially offset by decreased liabilities associated with the timing of payments to suppliers as well as income tax payables.
- On June 25, 2015, we completed the acquisition of VisLab S.r.l., a privately-held Italian company that develops computer vision and intelligent control systems for automotive and other commercial applications, including Advanced Driver Assistance Systems and several generations of autonomous vehicle driving systems, for \$30.0 million in cash. Of this total purchase price, \$4.1 million was attributed to intangible assets, \$25.3 million was attributed to goodwill, and \$0.6 million was attributed to net assets acquired.

#### Factors Affecting Our Performance

**Design Wins.** We closely monitor design wins by customer and end market. We consider design wins to be critical to our future success, although a design win may not successfully materialize into revenue, and even if they result in revenue, the amount generated by each design win can vary significantly. Our long-term sales expectations are based on forecasts from customers and internal estimations of customer demand factoring in the expected time to market for end customer products incorporating our solutions and associated revenue potential. Our ability to accurately forecast demand, however, can be adversely affected by a number of factors, including inaccurate forecasting by our customers, miscalculations by our customers of their inventory requirements, changes in market conditions, adverse changes in our product order mix and fluctuating demand for our customers' products.

**Pricing, Product Cost and Margin.** Our pricing and margins depend on the volumes and the features of the solutions we provide to our customers. Additionally, we make significant investments in new solutions for both cost improvements and new features that we expect to drive revenue and maintain margins. In general, solutions incorporated into more complex configurations, such as those used in high-performance camera or infrastructure applications, have higher prices and higher gross margins as compared to solutions sold into lower performing, more competitive camera applications. Our average selling price, or ASP, can vary by market and application due to market-specific supply and demand, the maturation of products launched in previous years and the launch of new products.

We continually monitor the cost of our solutions. As we rely on third-party manufacturers for the production of our products, we maintain a close relationship with these suppliers to continually monitor production yields, component costs and design efficiencies.

**Shifting Consumer Preferences.** Our revenue is subject to consumer preferences, regarding form factor and functionality, and how those preferences impact the video and image capture electronics that we support. For example, improved smartphone video capture capabilities, and the rapid adoption by consumers, led to the decline of pocket video cameras aimed at the video and image capture market. The current video and image capture market is now characterized by a greater volume of more specialized video and image capture devices that are less likely to be replaced with smartphones, such as wearable, including sports, IP security, UAV and automotive aftermarket cameras. This increasing specialization of video capture devices has changed our customer base and end markets and has impacted our revenue. In the future, we expect further changes in the market to continue to impact our business performance.

**Continued Concentration of Revenue by End Market.** Historically, our revenue has been significantly concentrated in a small number of end markets. In fiscal year 2010, the majority of our revenue came from the pocket video, camcorder and infrastructure markets. Since that time, we have developed technologies to provide solutions for new

markets such as the wearable, including sports, IP security, UAV and automotive aftermarket camera markets. We believe these new markets can continue to facilitate revenue growth and customer diversification. Since fiscal year 2013, the wearable sports and IP security markets have been our largest end markets and sales into these markets collectively generated the majority of our revenue. While we will continue to expand our end market exposure, such as to non-sports wearable cameras and UAVs, we anticipate that sales to a limited number of end markets will continue to account for a significant percentage of our total revenue for the foreseeable future. Our end market concentration may cause our financial performance to fluctuate significantly from period to period based on the success or failure of products that our SoCs are designed into as well as the overall growth or decline in the video capture markets in which we compete. In addition, we derive a significant portion of our revenue from a limited number of ODMs who build products on behalf of a limited number of OEMs and from a limited number of OEMs to whom we ship directly. We believe that our operating results for the foreseeable future will continue to depend on sales to a relatively small number of customers.

Ability to Capitalize on Connectivity Trend. Mobile connected devices are ubiquitous today and play an increasingly prominent role in consumers' lives. The constant connectivity provided by these devices has created a demand for connected electronic peripherals such as video and image capture devices. Our ability to capitalize on these trends by supporting our end customers in the development of connected peripherals that seamlessly cooperate with other connected devices and allow consumers to distribute and share video and images with online media platforms is critical for our success. We have added wireless communication functionality into our solutions for wearable, including sports, IP security, UAV and automotive aftermarket cameras. The combination of our compression technology with wireless connectivity enables wireless video streaming and uploading of videos and images to the Internet. Our solutions enable IP security camera systems to stream video content to either cloud infrastructure or connected mobile devices, and our solutions for wearable, including sports, and UAV cameras allow consumers to quickly stream or upload video and images to social media platforms.

Sales Volume. A typical camera design win that successfully launches into the marketplace can generate a wide range of sales volumes for our solutions, depending on the end market demand for our customers' products. This can depend on several factors, including the reputation of the end customer, market penetration, product capabilities, size of the end market that the product addresses and our end customers' ability to sell their products. In certain cases, we may provide volume discounts on sales of our solutions, which may be offset by lower manufacturing costs related to higher volumes. In general, our customers with greater market penetration and better branding tend to develop products that generate larger volumes over the product life cycle.

Customer Product Life Cycle. We estimate our customers' product life cycles based on the customer, type of product and end market. In general, products launched in the camera market have shorter life cycles than those sold into the infrastructure market. We typically commence commercial shipments from six to 18 months following a design win; however, in some markets, more lengthy product and development cycles are possible, depending on the scope and nature of the project. A portable consumer device typically has a product life cycle of six to 18 months. In the infrastructure market, the product life cycle can range from 24 to 60 months.

## Results of Operations

The following table sets forth our historical operating results for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(dollars in thousands)		
Revenue	\$316,373	\$218,278	\$157,608
Cost of revenue	111,029	79,142	57,761
Gross profit	205,344	139,136	99,847
Operating expenses:			
Research and development	82,927	57,978	48,777
Selling, general and administrative	37,738	29,297	23,153
Total operating expenses	120,665	87,275	71,930
Income from operations	84,679	51,861	27,917
Other income (loss), net	530	175	(22)
Income before income taxes	85,209	52,036	27,895
Provision for income taxes	8,701	1,465	2,241
Net income	\$76,508	\$50,571	\$25,654



The following table sets forth our historical operating results as a percentage of revenue of each line item for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
Revenue	100 %	100 %	100 %
Cost of revenue	35	36	37
Gross profit	65	64	63
Operating expenses:			
Research and development	26	27	31
Selling, general and administrative	12	13	15
Total operating expenses	38	40	46
Income from operations	27	24	17
Other income (loss), net	—	—	—
Income before income taxes	27	24	17
Provision for income taxes	3	1	1
Net income	24 %	23 %	16 %

## Revenue

We derive substantially all of our revenue from the sale of HD video and image processing SoC solutions to OEMs and ODMs, either directly or through our logistics providers. Our SoC solutions have been used in the camera and infrastructure markets, although we expect the primary market for our solutions for the foreseeable future will be in the camera market as the infrastructure market continues to decline due to delays in investments in network upgrades. We derive a substantial portion of our revenue from sales made indirectly through our logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, and directly to one large ODM customer, Chicony Electronics Co., Ltd., or Chicony.

We typically experience seasonal fluctuations in our quarterly revenue with our third fiscal quarter normally being the highest revenue quarter. This fluctuation has been driven primarily by increased sales in the camera market as our customers build inventories in preparation for the holiday shopping season. More generally, our average selling prices fluctuate based on the mix of our solutions sold in a period which reflects the impact of both changes in unit sales of existing solutions as well as the introduction and sales of new solutions. Our solutions are typically characterized by a life cycle that begins with higher average selling prices and lower volumes, followed by broader market adoption, higher volumes and average selling prices that are lower than initial levels.

The end markets into which we sell our products have seen significant changes as consumer preferences have evolved in response to new technologies. As a result, the composition of our revenue may differ meaningfully during periods of technology or consumer preference changes. We expect shifts in consumer use of video capture to continue to change over time, as more specialized use cases emerge and video capture continues to proliferate.

## Cost of Revenue and Gross Margin

Cost of revenue includes the cost of materials such as wafers processed by third-party foundries, costs associated with packaging, assembly and test, and our manufacturing support operations such as logistics, planning and quality

assurance. Cost of revenue also includes indirect costs such as warranty, inventory valuation reserves and other general overhead costs.

We expect that our gross margin may fluctuate from period to period as a result of changes in average selling price, product mix and the introduction of new products by us or our competitors. In general, solutions incorporated into more complex configurations, such as those used in high-performance cameras or infrastructure applications, have higher prices and higher gross margins, as compared to solutions sold into the lower performance, more competitive camera applications. As semiconductor products mature and unit volumes sold to customers increase, their average selling prices typically decline. These declines may be paired with improvements in manufacturing yields and lower wafer, packaging and test costs, which offset some of the margin reduction that could result from lower selling prices. We believe that our gross margin will decline in the future as we continue to penetrate the highly competitive camera market.

## Research and Development

Research and development expense consists primarily of personnel costs, including salaries, stock-based compensation and employee benefits. The expense also includes costs of development incurred in connection with our collaborations with our foundry vendors, costs of licensing intellectual property from third parties for product development, costs of development for software and hardware tools, cost of fabrication of mask sets for prototype products, and allocated depreciation and facility expenses. All research and development costs are expensed as incurred. We expect our research and development expense to increase in absolute dollars as we continue to enhance and expand our product features and offerings.

## Selling, General and Administrative

Selling, general and administrative expense consists primarily of personnel costs, including salaries, stock-based compensation and employee benefits for our sales, marketing, finance, human resources, information technology and administrative personnel. The expense also includes professional service costs related to accounting, tax, legal services, and allocated depreciation and facility expenses. We expect our selling expense to increase in absolute dollars as we expand the size of our sales and marketing organization to support our anticipated growth. We expect our general and administrative expense to increase in absolute dollars but remain relatively flat as a percentage of revenue as we continue to maintain the infrastructure necessary to operate as a public company, which includes increased audit and legal fees, costs to comply with the Sarbanes-Oxley Act of 2002, the rules and regulations applicable to companies listed on The NASDAQ Stock Market, investor relations costs, and higher insurance premiums.

## Other Income (Loss), Net

Other income (loss), net consists primarily of investment interest income and gains and losses from foreign currency transactions and remeasurements.

## Provision for Income Taxes

We are incorporated in the Cayman Islands and conduct business in several countries such as the United States, China, Taiwan, Hong Kong, South Korea, Italy and Japan, and we are subject to taxation in those jurisdictions. As such, our worldwide operating income is subject to varying tax rates and our effective tax rate is highly dependent upon the geographic distribution of our earnings or losses and the tax laws and regulations in each geographical region. Consequently, we have experienced lower effective tax rates as a substantial percentage of our operations are conducted in lower-tax jurisdictions. If our operational structure was to change in such a manner that would increase the amount of operating income subject to taxation in higher-tax jurisdictions, or if we were to commence operations in jurisdictions assessing relatively higher tax rates, our effective tax rate could fluctuate significantly on a quarterly basis and/or be adversely affected.

## Comparison of the Fiscal Years Ended January 31, 2016, 2015 and 2014

### Revenue

Year Ended January 31,			Change			
2016	2015	2014	2016		2015	
			Amount	%	Amount	%

Edgar Filing: AMBARELLA INC - Form 10-K

(dollars in thousands)

Revenue	\$316,373	\$218,278	\$157,608	\$98,095	44.9%	\$60,670	38.5%
---------	-----------	-----------	-----------	----------	-------	----------	-------

Revenue increased for the fiscal year ended January 31, 2016 compared to the fiscal year ended January 31, 2015 primarily due to strong demand for our A9, A7L, S2L and A12 SoCs in the IP security, UAV, automotive aftermarket and wearable sports camera markets. The strong growth in the IP security camera markets reflected a broader adoption of our S2L SoC by current customers in the professional security market as well as the addition of new customers in the home security and monitoring market. Despite the strong revenue growth in the IP security camera market, we experienced some softness in the China region in the second half of fiscal year 2016, which partially offset stronger results in other geographic regions in the period. Although UAVs are in the early stage of market adoption, we experienced strong growth in fiscal year 2016 due to the launch of new models from an existing customer and initial adoption by new customers. In the automotive aftermarket, which is dominated by demand from Asia, revenues grew as customer demand for more feature-rich products increased which is well suited to our product offerings. Although the revenue in the wearable sports camera market increased in fiscal year 2016 as compared to fiscal year 2015, we saw a decline in this market in the second half of fiscal year 2016 as a result of high inventory levels at a major end customer. In addition, we anticipate that these high inventory levels at our customer in the wearable sports camera market will significantly and adversely impact our revenues in fiscal year 2017, particularly the first half of the fiscal year.



For the twelve months ended January 31, 2016, the increases in the camera markets were partially offset by a year-over-year decline in the infrastructure market resulting from continued weak market conditions in the United States and Europe, as system manufacturers continue to delay investment in network upgrades to the new H.265 compression technology. Infrastructure revenue declined as a percentage of total revenue from 6.0% for the twelve months ended January 31, 2015 to 3.0% for the twelve months ended January 31, 2016. We anticipate that infrastructure revenue will continue to decline as a percentage of our total revenue for the foreseeable future.

Revenue increased for the fiscal year ended January 31, 2015 compared to the fiscal year ended January 31, 2014 primarily due to strong demand for our A5S, A7L and A9 SoCs in the IP security, wearable sports and automotive aftermarket camera markets. In addition, the initial ramp of our A5S and A9 chips into the UAV market also contributed to the revenue growth in fiscal year 2015. The increase was partially offset by a year over year decline in the infrastructure market as a result of continued weak market conditions in the United States and Europe, as system manufacturers have delayed investment in network upgrades to the new H.265 compression technology. Infrastructure revenue declined as a percentage of total revenue from 12.0% for the twelve months ended January 31, 2014 to 6.0% for the twelve months ended January 31, 2015.

#### Cost of Revenue and Gross Margin

	Year Ended January 31,			Change		2015	
	2016	2015	2014	Amount	%	Amount	%
	(dollars in thousands)						
Cost of revenue	\$111,029	\$79,142	\$57,761	\$31,887	40.3%	\$21,381	37.0%
Gross profit	205,344	139,136	99,847	66,208	47.6%	39,289	39.3%
Gross margin	64.9%	63.7%	63.4%	—	1.2%	—	0.3%

Cost of revenue increased for the fiscal years ended January 31, 2016 and 2015, respectively, primarily due to increases in the number of SoCs sold into the camera market. The increases were partially offset by cost reductions received from suppliers for certain SoCs due to increased purchase volumes.

Gross margin increased for the fiscal years ended January 31, 2016 and 2015, respectively, primarily due to a higher percentage of revenues associated with shipments of our higher gross margin A9 and A7L chips into the wearable sports, UAV and automotive camera markets. The increases were partially offset by continuing revenue declines in the higher gross margin infrastructure business, and for the fiscal year ended January 31, 2016, the introduction of the lower margin S2L SoC into the price competitive Asia IP security camera market. We anticipate that gross margin will decrease over the next twelve months as revenues from the Asia IP security camera market and the consumer IP security market grow as a percentage of our total revenue. Infrastructure revenue declined as a percentage of total revenue from 12.0% for the twelve months ended January 31, 2014 to 6.0% for the twelve months ended January 31, 2015, and declined as a percentage of total revenue to 3.0% for the twelve months ended January 31, 2016.

#### Research and Development

Edgar Filing: AMBARELLA INC - Form 10-K

	Year Ended January 31,			Change		2015	
	2016	2015	2014	2016	%	Amount	%
	(dollars in thousands)						
Research and development	\$82,927	\$57,978	\$48,777	\$24,949	43.0%	\$9,201	18.9%

Research and development expense increased for the fiscal year ended January 31, 2016 compared to the fiscal year ended January 31, 2015 primarily due to increases in engineering headcount, product development costs and facility allocation costs. Our research and development engineering headcount increased to 460 at January 31, 2016 compared to 365 at January 31, 2015, including 33 employees hired as a result of the VisLab acquisition in the second quarter of fiscal year 2016. The increased engineering headcount resulted in an increase in salary related expenses of approximately \$7.8 million in fiscal year 2016. The increases were also attributable to additional stock-based compensation of approximately \$10.4 million in fiscal year 2016, as a result of the issuance of options and restricted stock units for newly hired employees, our annual evergreen stock program for existing employees and the increase in the stock price of our ordinary shares in the first half of fiscal year 2016. The product development costs expended on our next generation SoCs increased by approximately \$8.0 million in fiscal year 2016. The increased product development costs were partially offset by \$2.5 million in payments from customers who agreed to share development costs for the twelve months ended January 31, 2016. The increased engineering headcount also resulted in additional facility allocation costs of approximately \$1.4 million for the twelve months ended January 31, 2016.

Research and development expense increased for the fiscal year ended January 31, 2015 compared to the fiscal year ended January 31, 2014 primarily due to increases in engineering headcount, product development costs and facility allocation costs. Our research and development engineering headcount increased to 365 at January 31, 2015 compared to 358 at January 31, 2014, resulting in an increase in salary related expenses of approximately \$2.7 million in fiscal year 2015. The increases were also attributable to additional stock-based compensation of approximately \$3.6 million in fiscal year 2015, as a result of the issuance of options and restricted stock units for newly hired employees, our annual evergreen stock program for existing employees and the employee stock purchase plan. The product development costs expended on the development of our next generation SoCs increased by approximately \$1.9 million in fiscal year 2015. The increased development costs were partially offset by a \$0.9 million in payment from one customer who agreed to share development costs. In fiscal year 2014, we entered into a lease agreement for our new headquarters located in Santa Clara, California, and in fiscal year 2015, we continued the expansion of our enterprise resource planning system, resulting in additional facility allocation costs of approximately \$1.8 million for the fiscal year ended January 31, 2015.

#### Selling, General and Administrative

	Year Ended January 31,			Change			
	2016	2015	2014	2016	2015	2016	2015
	(dollars in thousands)			Amount	%	Amount	%
Selling, general and administrative	\$37,738	\$29,297	\$23,153	\$8,441	28.8%	\$6,144	26.5%

Selling, general and administrative expense increased for the fiscal year ended January 31, 2016 compared to the fiscal year ended January 31, 2015 primarily due to increases in headcount and outside professional services. Our selling, general and administrative headcount increased to 163 at January 31, 2016 compared to 144 at January 31, 2015, resulting in an increase in salary related expenses of approximately \$2.9 million in fiscal year 2016. The increases were also attributable to additional stock-based compensation of approximately \$4.7 million in fiscal year 2016, as a result of the issuance of options, restricted stock and restricted stock units for newly hired employees, our annual evergreen stock program for existing employees and the increase in the stock price of our ordinary shares in the first half of fiscal year 2016. In addition, we incurred approximately \$0.8 million of additional expenditures on

outside professional services for the twelve months ended January 31, 2016 to support the VisLab acquisition in the second quarter of fiscal year 2016.

Selling, general and administrative expense increased for the fiscal year ended January 31, 2015 compared to the fiscal year ended January 31, 2014 primarily due to an additional \$5.7 million in compensation as a result of increases in headcount and stock-based compensation from issuance of options and restricted stock units for newly hired employees, our annual evergreen stock program for existing employees and the employee stock purchase plan. In addition, we incurred approximately \$0.7 million of additional expenditures on outside professional services to support the continued development of our enterprise resource planning system, to meet the requirements of the Sarbanes-Oxley Act, and the compliance requirements of being a public company for the fiscal year ended January 31, 2015.

Other Income (Loss), Net

	Year Ended			Change	
	January 31, 2016	2015	2014	2016 Amount%	2015 Amount%
	(dollars in thousands)				
Other income (loss), net	\$530	\$175	\$(22)	\$355 202.9%	\$197 895.5%

The increase in other income (loss), net, for the fiscal year ended January 31, 2016 compared to the fiscal year ended January 31, 2015 was primarily due to approximately \$170,000 of additional net interest income from marketable security investments and an increase of approximately \$178,000 of net gains from fluctuations in exchange rates in foreign currency transactions.

The increase in other income (loss), net, for the fiscal year ended January 31, 2015 compared to the fiscal year ended January 31, 2014 was primarily due to approximately \$150,000 of net interest income from marketable security investments.

#### Provision for Income Taxes

	Year Ended January 31,			Change		2015	
	2016	2015	2014	Amount	%	Amount	%
	(dollars in thousands)						
Provision for income taxes	\$8,701	\$1,465	\$2,241	\$7,236	493.9%	\$(776)	(34.6)%
Effective tax rate	10	% 3	% 8	% —	7	% —	(5 )%

Income tax expense and effective tax rate increased in fiscal year 2016 as compared to fiscal year 2015 primarily due to a favorable change in our geographic mix of profits, offset by a \$6.1 million of valuation allowance related to our U.S. federal research and development credit carryforwards.

Income tax expense and effective tax rate decreased in fiscal year 2015 as compared to fiscal year 2014 primarily due to a favorable change in our geographic mix of profits as well as an increase in federal research and development credit, partially offset by non-deductible stock-based compensation expenses.

#### Liquidity and Capital Resources

##### Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
Net cash provided by operating activities	\$123,561	\$52,258	\$34,350
Net cash used in investing activities	(34,796 )	(40,061 )	(1,688 )
Net cash provided by financing activities	9,000	14,700	10,238

Net increase in cash	\$97,765	\$26,897	\$42,900
----------------------	----------	----------	----------

#### Net Cash Provided by Operating Activities

Fiscal year 2016 compared to fiscal year 2015: Cash provided by operating activities increased primarily due to increased net income as adjusted for increased non-cash stock-based compensation. The increase was also attributable to decreased accounts receivable associated with the timing of payments from customers, decreased inventory purchases associated with a decrease in our near term revenue forecasts, increased deferred revenue associated with the timing of inventory shipments by our logistics providers and increased long-term liabilities associated with unrecognized tax benefits. The increase was partially offset by decreased liabilities associated with the timing of payments to suppliers as well as income tax payables.

Fiscal year 2015 compared to fiscal year 2014: Cash provided by operating activities increased primarily due to increased net income, adjusted for increased non-cash stock-based compensation, and increased liabilities associated with the timing of payments to suppliers as well as income tax payables. The increase was partially offset by increased accounts receivable associated with higher revenues and the timing of payments from customers, increased inventory purchases to support continuing growth of sales, increased deferred tax assets as a result of higher stock-based compensation, as well as decreased deferred revenue from the timing of shipments to our logistics provider and resulting sell-through revenue recognition.

### Net Cash Used in Investing Activities

Fiscal year 2016 compared to fiscal year 2015: Net cash used in investing activities decreased primarily due to the receipt of approximately \$28.6 million in cash from selling and maturities of debt securities and approximately \$7.0 million less of debt securities purchased during the period. The decrease was partially offset by the payment of \$30.0 million for the acquisition of VisLab in the second quarter of fiscal year 2016.

Fiscal year 2015 compared to fiscal year 2014: Net cash used in investing activities increased primarily due to \$40.0 million investments in highly liquid, short-term marketable securities, net of cash receipts from the sale or maturity of a portion of these investments.

### Net Cash Provided by Financing Activities

Fiscal year 2016 compared to fiscal year 2015: Net cash provided by financing activities decreased primarily due to approximately \$2.4 million of decreased option exercises and approximately \$3.3 million less of excess tax benefits associated with stock-based compensation.

Fiscal year 2015 compared to fiscal year 2014: Net cash provided by financing activities increased primarily due to an additional \$2.1 million in cash proceeds from option exercises and contributions from participants in the employee stock purchase plan and an additional \$2.4 million of recognized excess tax benefits from increased stock-based compensation.

### Sources of Liquidity

As of January 31, 2016 and 2015, we had cash, cash equivalents and marketable securities of approximately \$307.9 million and \$208.0 million, respectively. In fiscal year 2015, we invested \$40.0 million in highly liquid, short-term marketable securities. We hold these investments as available-for-sale securities and mark them to market. As of January 31, 2016, these securities had a fair value of approximately \$40.4 million with insignificant unrealized losses caused by fluctuations in market value and interest rates.

### Operating and Capital Expenditure Requirements

We have generated net income in each quarter beginning with the first quarter of fiscal year 2010, and we have generated cash from operations in each of fiscal years 2009 to 2016. We believe that our anticipated cash generated from operations and our existing cash balances will be sufficient to meet our anticipated cash requirements through at least the next 12 months. In the future, we expect our operating and capital expenditures to increase as we increase headcount, expand our business activities, and implement and enhance our information technology platforms. We expect our accounts receivable and inventory balances to increase, and could be partially offset by increases in accounts payable, which will result in a greater need for working capital. If our available cash balances are insufficient to satisfy our future liquidity requirements, we may seek to sell equity or convertible debt securities or borrow funds commercially. The sale of equity and convertible debt securities may result in dilution to our shareholders and those securities may have rights senior to those of our ordinary shares. If we raise additional funds through the issuance of convertible debt securities, these securities could contain covenants that would restrict our operations. We may require additional capital beyond our currently anticipated amounts. Additional capital may not be available to us on reasonable terms, or at all.

Our short- term and long-term capital requirements will depend on many factors, including the following:

- our ability to generate cash from operations;

- our ability to control our costs;
- the emergence of competing or complementary technologies or products;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights, or participating in litigation-related activities; and
- our acquisition of complementary businesses, products and technologies.

53

---



## Contractual Obligations, Commitments and Contingencies

The following table summarizes our outstanding contractual obligations as of January 31, 2016:

	Payment Due by Period as of January 31, 2016 (in thousands)					
	Total	Less	1-3 Years	3-5 Years	More	All
		than			than	
		1 Year			5	
<b>Contractual Obligations</b>						
Facilities under operating leases <sup>(1)</sup>	\$8,157	\$2,255	\$3,855	\$2,047	\$ —	\$—
Technology license or other obligations under						
operating leases <sup>(2)</sup>	3,730	3,589	141	—	—	—
Purchase obligations <sup>(3)</sup>	19,734	19,734	—	—	—	—
Unrecognized tax benefits, including interest <sup>(4)</sup>	10,917	—	—	—	—	10,917
<b>Total</b>	<b>\$42,538</b>	<b>\$25,578</b>	<b>\$3,996</b>	<b>\$2,047</b>	<b>\$ —</b>	<b>\$10,917</b>

- (1) Facilities under operating leases represent facilities with initial lease terms in excess of one year. They are located in Santa Clara (California), China, Hong Kong, and Japan. The lease for our Santa Clara headquarters has a seven-year term and terminates in fiscal year 2021. The lease for our Shanghai facility has a seven-year term and terminates in fiscal year 2018. The lease for our Shenzhen facility has a three-year term and terminates in fiscal year 2019. The Hong Kong facility has a three-year term and terminates in fiscal year 2017. The leases for our Japan facilities have two-year terms and terminate in fiscal year 2017 and 2018, respectively.
- (2) Technology license obligations under operating leases represent future cash payments for software or other technology licenses which are used in product design or daily operation.
- (3) Purchase obligations consist primarily of inventory purchase obligations with our independent contract manufacturers.
- (4) Unrecognized tax benefits, including interest, represent our liabilities for uncertain tax positions as of January 31, 2016. We are unable to reasonably estimate the timing of payments in individual years due to uncertainties in the timing of the effective settlement of tax positions.

## Stock Options and Restricted Stock Units

Grants of stock-based awards are key components of the compensation packages we provide to attract and retain certain employees to align their interests with the interests of existing shareholders. We recognize that these stock-based awards dilute existing shareholders and have sought to limit the number of shares granted while providing competitive compensation packages. As of January 31, 2016, a total of 4.0 million outstanding stock options and unvested restricted stock and restricted stock units, will potentially dilute our earnings per share. This potential dilution will only result if outstanding options vest and are exercised and restricted stock and restricted stock units vest and are settled. As of January 31, 2016, 90% of our outstanding options had exercise prices less than the then market price of our ordinary shares.

## Off-Balance Sheet Arrangements

As of January 31, 2016, we did not engage in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

#### Recent Accounting Pronouncements

See Note 1, “Organization and Summary of Significant Accounting Policies—Recent Accounting Pronouncements” of the Notes to the Consolidated Financial Statements, included in Part IV, Item 15 of this report, for a full description of recent accounting standards, including the respective dates of adoption and effects on our consolidated financial position, results of operations and cash flows.

## Critical Accounting Policies and Significant Management Estimates

The preparation of audited consolidated financial statements in conformity with U.S. generally accepted accounting principles, or GAAP, requires us to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reported periods. On an ongoing basis, we evaluate our estimates and assumptions, including those related to (i) the collectibility of accounts receivable; (ii) write down of excess and obsolete inventories; (iii) intangible assets and goodwill; (iv) the estimated useful lives of long-lived assets; (v) impairment of long-lived assets and financial instruments; (vi) warranty obligations; (vii) the valuation of stock-based compensation awards and financial instruments; (viii) the probability of performance objectives achievement; (ix) the realization of tax assets and estimates of tax liabilities, including reserves for uncertain tax positions; and (x) the recognition and disclosure of contingent liabilities. These estimates and assumptions are based on historical experience and on various other factors which we believe to be reasonable under the circumstances. We may engage third-party valuation specialists to assist with estimates related to the valuation of financial instruments and assets associated with various contractual arrangements. Such estimates often require the selection of appropriate valuation methodologies and significant judgment. Actual results could differ from these estimates under different assumptions or circumstances and such differences could be material.

We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgment and estimates:

### Revenue Recognition

We generate revenue from the sales of our SoCs to OEMs or ODMs, either directly or through logistics providers. Revenue from sales directly to OEMs and ODMs is recognized upon shipment provided persuasive evidence of an arrangement exists, legal title to the products and risk of ownership have transferred, the fee is fixed or determinable, and collection of the resulting receivable is reasonably assured. We provide our logistics providers with the rights to return excess levels of inventory and to future price adjustments. Given the inability to reasonably estimate these price changes and returns, revenue and costs related to shipments to logistics providers are deferred until we receive notification from our logistics providers that they have sold our products. Information reported by our logistics providers includes product resale price, quantity and end customer shipment information as well as remaining inventory on hand. At the time of shipment to a logistics provider, we record a trade receivable as there is a legally enforceable right to receive payment, reduce inventory for the value of goods shipped as legal title has passed to the logistics provider and defer the related margin as deferred revenue in the consolidated balance sheets. Any price adjustments are recorded as a change to deferred revenue at the time the adjustments are agreed upon.

Arrangements with certain OEM customers provide for pricing that is dependent upon the end products into which our SoCs are used. These arrangements may also entitle us to a share of the product margin ultimately realized by the OEM. The minimum guaranteed amount of revenue related to the sale of products subject to these arrangements is recognized when all other elements of revenue recognition are met. Any amounts at the date of shipment invoiced in excess of the minimum guaranteed contract price are deferred until the additional amounts we are entitled to are fixed or determinable. Additional amounts earned by us resulting from margin sharing arrangements and determination of the end products into which the products are ultimately incorporated are recognized when end customer sales volume is reported to us.

We also enter into engineering service agreements with certain customers. These agreements may include multiple deliverables, such as software development services, licensing of intellectual property and post-contract customer support, or PCS. We do not sell separately any of these components and do not have Vendor Specific Objective Evidence, or VSOE, for the deliverables. Accordingly, revenues from these agreements are deferred for any amounts

billed until delivery of all the elements. If the agreements include PCS, the revenues are recognized ratably over the estimated supporting periods. The revenue from engineering service agreements was not material for the fiscal years ended January 31, 2016, 2015 and 2014, respectively.

#### Cash Equivalents and Marketable Securities

We consider all highly liquid investments with original maturities of less than three months at the time of purchase to be cash equivalents. Investments that are highly liquid with original maturities at the time of purchase greater than three months are considered as marketable securities.

We classify these investments as “available-for-sale” securities carried at fair value, based on quoted market prices of similar assets, with the unrealized gains or losses reported, net of tax, as a separate component of shareholders’ equity and included in accumulated other comprehensive income (loss) in the consolidated balance sheets. The amortization of security premiums and accretion of discounts and the realized gains and losses are both recorded in other income (loss), net in the consolidated statements of operations. We review our investments for possible other-than-temporary impairments on a regular basis. If any loss on investment is believed to be other-than-temporary, a charge will be recorded and a new cost basis in the investment will be established. In evaluating whether a loss on a security is other-than-temporary, we consider the following factors: 1) general market conditions, 2) the duration and extent to which the fair value is less than cost, 3) our intent and ability to hold the investment.

For securities in an unrealized loss position which is deemed to be other-than-temporary, the difference between the security’s then-current amortized cost basis and fair value is separated into (i) the amount of the impairment related to the credit loss (i.e., the credit loss component) and (ii) the amount of the impairment related to all other factors (i.e., the non-credit loss component). The credit loss component is recognized in earnings. The non-credit loss component is recognized in accumulated other comprehensive loss. Due to the relative short term nature of the investments, there have been no other-than-temporary impairments recorded to date.

#### Inventory Valuation

We record inventories at the lower of cost or market. The cost includes materials and other production costs and is computed using standard cost on a first-in, first-out basis. Inventory reserves are recorded for estimated obsolescence or unmarketable inventories based on forecast of future demand and market conditions. If actual market conditions are less favorable than projected, or if future demand for the Company’s products decreases, additional inventory write-downs may be required. Once inventory is written down, a new accounting cost basis is established and, accordingly, any associated reserve is not reversed until the inventory is sold or scrapped. There have been no material inventory losses recognized to date.

#### Business Combinations and Intangible Assets

We allocate the fair value of purchase price to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, especially with respect to intangible assets, our management makes significant estimates and assumptions.

Critical estimates in valuing certain intangible assets include, but are not limited to, replacement cost. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

#### Goodwill and In-Process Research and Development

Goodwill and in-process research and development (IPR&D) are required to be tested for impairment at least annually or sooner whenever events or changes in circumstances indicate that the assets may be impaired. We have a single reporting unit for goodwill impairment test purposes based on our business and reporting structure.

We do not amortize goodwill. Acquired in process research and development, or IPR&D, is capitalized at fair value as an intangible asset and amortization commences upon completion of the underlying projects. When a project underlying reported IPR&D is completed, the corresponding amount of IPR&D is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life.



## Stock-Based Compensation

We measure stock-based compensation for equity awards granted to employees and directors based on the estimated fair value on the grant date, and recognize that compensation as expense using the straight-line attribution method for service condition awards or using the graded-vesting attribution method for awards with performance conditions over the requisite service period, which is typically the vesting period of each award. We determine the fair value of restricted stock and restricted stock units based on the fair market value of our ordinary shares on the grant date. We use the Black-Scholes option pricing model to determine the fair value of stock options. Determining the fair value of stock options on the grant date requires the input of various assumptions, including stock price of the underlying ordinary share, the exercise price of the stock option, expected volatility, expected term, risk-free interest rate and dividend rate. The expected term is calculated using the simplified method as prescribed in the guidance provided by the Securities and Exchange Commission, as neither relevant historical experience nor other relevant data are available to estimate future exercise behavior. The expected volatility is based on the historical volatilities of similar companies whose share prices are publicly available for a period commensurate with the expected term. The risk-free interest rate is derived from the average U.S. Treasury constant maturity rates during the respective periods commensurate with the expected term. The expected dividend yield is zero because we have not historically paid dividends and have no present intention to pay dividends. We use historical data to estimate pre-vesting award forfeitures and record stock-based compensation only for those awards that are expected to vest. Forfeitures are estimated at the time of grant and revised if necessary in subsequent periods if actual forfeitures differ from estimates.

We recognize non-employee stock-based compensation expense based on the estimated fair value of the equity instrument. The fair value of the non-employee awards is remeasured at each reporting period until services required under the arrangement are completed, which is the vesting date.

## Net Income Per Ordinary Share

We apply the two-class method to calculate and present net income per ordinary share. Under the two-class method, net income is allocated between ordinary shares and other participating securities based on their participating rights. Participating securities are defined as securities that may participate in undistributed earnings with ordinary shares, whether that participation is conditioned upon the occurrence of a specified event or not. Basic net income per ordinary share is computed by dividing net income allocable to ordinary shares by the weighted-average number of ordinary shares outstanding for the period. Diluted net income per ordinary share is computed by dividing net income allocable to ordinary shares and income allocable to participating securities, to the extent they are dilutive, by the weighted-average number of ordinary shares outstanding, including the dilutive effects of participating securities on an if-converted basis plus the dilutive effects of ordinary shares. Our potential dilutive ordinary share equivalents consist of incremental ordinary shares issuable upon the exercise of options, upon the issuance of shares pursuant to the Amended and Restated 2012 Employee Stock Purchase Plan and upon release of vested restricted stock and restricted stock units.

We perform an assessment as to whether instruments granted in stock-based payment transactions are participating securities. Stock-based payment awards that have not yet vested meet the definition of a participating security provided the right to receive the dividend is non-forfeitable and non-contingent. These participating securities should be included in the computation of basic net income per ordinary share under the two-class method. We have concluded that our non-vested early-exercised options meet the definition of a participating security and should be included in the computation of basic net income per ordinary share.

## Income Taxes

We record income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements or tax returns. In estimating future tax consequences, generally all expected future events other than enactments or changes in the tax law or rates are considered. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

We apply authoritative guidance for the accounting for uncertainty in income taxes. The guidance requires that tax effects of a position be recognized only if it is “more likely than not” to be sustained based solely on its technical merits as of the reporting date. Upon estimating our tax positions and tax benefits, we consider and evaluate numerous factors, which may require periodic adjustments and which may not reflect the final tax liabilities. We adjust our financial statements to reflect only those tax positions that are more likely than not to be sustained under examination.

As part of the process of preparing consolidated financial statements, we are required to estimate our taxes in each of the jurisdictions in which we operate. We estimate actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as accruals and allowances not currently deductible for tax purposes. These differences result in deferred tax assets, which are included in the consolidated balance sheets. In general, deferred tax assets represent future tax benefits to be received when certain expenses previously recognized in the consolidated statements of operations become deductible expenses under applicable income tax laws, or loss or credit carryforwards are utilized.



In assessing whether deferred tax assets may be realized, we consider whether it is more likely than not that some portion or all of deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income.

We make estimates and judgments about our future taxable income based on assumptions that are consistent with our plans and estimates. Should the actual amounts differ from estimates, the amount of valuation allowance could be materially impacted. Any adjustment to the deferred tax asset valuation allowance would be recorded in the income statement for the periods in which the adjustment is determined to be required.

#### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We had cash, cash equivalents and marketable securities totaling \$307.9 million and \$208.0 million at January 31, 2016 and 2015, respectively. Our cash is deposited in standard bank accounts and certificates of deposit. The cash equivalents and marketable securities consist primarily of investments in debt securities. Our cash is held for working capital purposes. We do not enter into investments for trading or speculative purposes.

##### Interest Rate Fluctuation Risk

The primary objectives of our investment activities are to preserve principal, provide liquidity and maximize income without significantly increasing risk. Some of the securities we invest in are subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, we maintain our portfolio of short-term investments in a variety of debt securities with high liquidity. We do not enter into investments for trading or speculative purposes. A 10% change in interest rates will not have a material impact on our future interest income or investment fair value. The risk associated with fluctuating interest rates is limited to our investment portfolio.

##### Foreign Currency Risk

To date, all of our product sales and inventory purchases have been denominated in U.S. dollars. We therefore have not had any foreign currency risk associated with these two activities. The functional currency of all of our entities is the U.S. dollar. Our operations outside of the United States incur operating expenses and hold assets and liabilities denominated in foreign currencies, principally the New Taiwan Dollar and the Chinese Yuan Renminbi. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates, and certain currency exchange rates, such as the exchange rate between the Chinese Yuan Renminbi and the U.S. dollar, have been especially volatile in the recent past. Given that the operating expenses that we incur in currencies other than U.S. dollars have not been a significant percentage of our total revenue, we believe that the exposure to foreign currency fluctuation risk from operating expenses is not material at this time. As we grow our operations, our exposure to foreign currency risk could become more significant. To date, we have not entered into any foreign currency exchange contracts and currently do not expect to enter into foreign currency exchange contracts for trading or speculative purposes.



## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

## Financial Statements

The financial statements required by this Item are set forth as a separate section of this Annual Report on Form 10-K. See Item 15 for a listing of financial statements provided in the section titled “Financial Statements.”

## Supplementary Data (Unaudited)

The following table sets forth unaudited supplementary quarterly financial data for the two year period ended January 31, 2016. In management’s opinion, the unaudited data has been prepared on the same basis as the audited information and includes all adjustments necessary for a fair presentation of the data for the periods presented.

	For the Three Months Ended							
	Apr. 30, 2015	Jul. 31, 2015	Oct. 31, 2015	Jan. 31, 2016	Apr. 30, 2014	Jul. 31, 2014	Oct. 31, 2014	Jan. 31, 2015
	(in thousands, except per share data)							
Revenue	\$71,013	\$84,193	\$93,200	\$67,967	\$40,921	\$46,968	\$65,689	\$64,700
Cost of revenue	25,095	29,345	31,938	24,651	15,325	16,432	24,130	23,255
Gross profit	45,918	54,848	61,262	43,316	25,596	30,536	41,559	41,445
Operating expenses:								
Research and development	16,583	20,840	22,062	23,442	12,914	13,497	15,584	15,983
Selling, general and administrative	9,010	9,087	8,873	10,768	6,755	6,875	7,324	8,343
Total operating expenses	25,593	29,927	30,935	34,210	19,669	20,372	22,908	24,326
Income from operations	20,325	24,921	30,327	9,106	5,927	10,164	18,651	17,119
Other income	27	127	169	207	49	39	40	47
Income before income taxes	20,352	25,048	30,496	9,313	5,976	10,203	18,691	17,166
Provision for income taxes	1,498	1,951	1,035	4,217	716	893	364	(508)
Net income	\$18,854	\$23,097	\$29,461	\$5,096	\$5,260	\$9,310	\$18,327	\$17,674
Net income per share attributable to								
ordinary shareholders:								
Basic	\$0.61	\$0.73	\$0.93	\$0.16	\$0.18	\$0.32	\$0.61	\$0.58
Diluted	\$0.56	\$0.68	\$0.87	\$0.15	\$0.17	\$0.29	\$0.57	\$0.53

For the quarter ended January 31, 2016, we recorded a valuation allowance of \$ 6.1 million, representing the portion of our deferred tax assets that may not be realizable in future periods. Net income per ordinary share for the year is computed independently and may not equal the sum of the quarterly net income per ordinary share.

Our quarterly revenues and operating results are difficult to forecast. Therefore, we believe that period-to-period comparisons of our operating results will not necessarily be meaningful, and should not be relied upon as an indication of future performance. Also, operating results may fall below our expectations and the expectations of analysts or investors in one or more future quarters. If this were to occur, the market price of our ordinary shares would likely decline. For further information regarding the quarterly fluctuation of our revenues and operating results, see Item 1A, “Risk Factors—Fluctuations in our operating results on a quarterly and annual basis could cause the market price of our ordinary shares to decline”.



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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. The term “disclosure controls and procedures” (as defined in Rules 13a- 15(e) and 15d- 15(e)) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based upon such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of January 31, 2016, our disclosure controls and procedures were effective at the reasonable assurance level.

Management’s Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act. The Company’s internal control over financial reporting is 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. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

Management has evaluated the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on this evaluation, management has concluded that our internal control over financial reporting was effective as of January 31, 2016.

The effectiveness of our internal control over financial reporting as of January 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which appears herein.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the Company’s fiscal quarter ended January 31, 2016 that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

Inherent Limitations of Disclosure Controls and Internal Control over Financial Reporting

Because of their inherent limitations, our disclosure controls and procedures and our internal control over financial reporting may not prevent material errors or fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. The effectiveness of our disclosure controls and procedures and our internal control over financial reporting is subject to risks, including that the controls may become inadequate because of changes in conditions or that the degree of compliance with our policies or procedures may deteriorate.

ITEM 9B. OTHER INFORMATION

Not applicable.

### PART III

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

We have a Code of Business Conduct and Ethics for all of our directors, officers and employees. We also have a Code of Ethics for Finance Team applicable to our Chief Executive Officer, Chief Financial Officer and other Senior Financial Officers. These documents are available on our website at <http://investor.ambarella.com/governance.cfm>. To date, there have been no waivers under our Code of Business Conduct and Ethics and Code of Ethics for Finance Team. We will post any amendments or waivers, if and when granted, of our Code of Business Conduct and Ethics and Code of Ethics for Finance Team on our website.

#### ITEM 11. EXECUTIVE COMPENSATION

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

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

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

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

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

#### ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information responsive to this item is incorporated herein by reference to our Proxy Statement for our 2016 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K.

## PART IV

## ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

## (a)(1) Financial Statements

The following consolidated financial statements of the Registrant and Report of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm, are included herewith:

Financial Statement Description	Page
• <u>Report of Independent Registered Public Accounting Firm</u>	63
• <u>Consolidated Balance Sheets As of January 31, 2016 and 2015</u>	64
• <u>Consolidated Statements of Operations For the Years Ended January 31, 2016, 2015 and 2014</u>	65
• <u>Consolidated Statements of Comprehensive Income (Loss) For the Years Ended January 31, 2016, 2015 and 2014</u>	66
• <u>Consolidated Statements of Shareholders' Equity For the Years Ended January 31, 2016, 2015 and 2014</u>	67
• <u>Consolidated Statements of Cash Flows For</u>	68



the Years Ended

January 31,

2016, 2015 and

2014

• Notes to

Consolidated

Financial

Statements

69

(a)(2) Financial Statement Schedule

Financial statement schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or the notes thereto.

(b) Exhibits

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

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Ambarella, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive income, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Ambarella, Inc. and its subsidiaries at January 31, 2016 and January 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended January 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our audits (which were integrated audits in fiscal years 2015 and 2016). We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

/s/ PricewaterhouseCoopers LLP

San Jose, CA

March 25, 2016

## AMBARELLA, INC.

## CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	January 31, 2016	January 31, 2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$268,056	\$170,291
Marketable securities	39,837	37,703
Accounts receivable, net	39,408	40,180
Inventories	18,167	21,693
Restricted cash	7	8
Deferred tax assets, current	—	1,990
Prepaid expenses and other current assets	4,170	3,506
Total current assets	369,645	275,371
Property and equipment, net	3,448	3,075
Deferred tax assets, non-current	4,626	3,936
Intangible assets, net	4,178	—
Goodwill	26,601	—
Other assets	2,117	1,902
Total assets	\$410,615	\$284,284
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	14,175	21,036
Accrued liabilities	23,778	18,699
Income taxes payable	787	748
Deferred tax liabilities, current	—	92
Deferred revenue, current	10,077	4,907
Total current liabilities	48,817	45,482
Deferred revenue, non-current	—	198
Other long-term liabilities	12,342	1,393
Total liabilities	61,159	47,073
Commitments and contingencies (Note 14)		
Shareholders' equity:		
Preference shares, \$0.00045 par value per share, 20,000,000 shares authorized and no		
shares issued and outstanding at January 31, 2016 and January 31, 2015, respectively	—	—
Ordinary shares, \$0.00045 par value per share, 200,000,000 shares authorized at	15	14
January 31, 2016 and January 31, 2015, respectively; 32,333,359 shares issued and		
outstanding at January 31, 2016; 30,837,529 shares issued and outstanding at		

Edgar Filing: AMBARELLA INC - Form 10-K

January 31, 2015		
Additional paid-in capital	176,306	140,564
Accumulated other comprehensive loss	(7 )	(1 )
Retained earnings	173,142	96,634
Total shareholders' equity	349,456	237,211
Total liabilities and shareholders' equity	\$410,615	\$284,284

See accompanying notes to consolidated financial statements.

AMBARELLA, INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)

	Year Ended January 31,		
	2016	2015	2014
Revenue	\$316,373	\$218,278	\$157,608
Cost of revenue	111,029	79,142	57,761
Gross profit	205,344	139,136	99,847
Operating expenses:			
Research and development	82,927	57,978	48,777
Selling, general and administrative	37,738	29,297	23,153
Total operating expenses	120,665	87,275	71,930
Income from operations	84,679	51,861	27,917
Other income (loss), net	530	175	(22 )
Income before income taxes	85,209	52,036	27,895
Provision for income taxes	8,701	1,465	2,241
Net income	\$76,508	\$50,571	\$25,654
Net income per share attributable to ordinary shareholders:			
Basic	\$2.42	\$1.70	\$0.93
Diluted	\$2.27	\$1.57	\$0.85
Weighted-average shares used to compute net income per share			
attributable to ordinary shareholders:			
Basic	31,633,936	29,742,653	27,680,778
Diluted	33,755,709	32,278,127	30,172,563

See accompanying notes to consolidated financial statements.

AMBARELLA, INC.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in thousands)

	Year Ended January 31,		
	2016	2015	2014
Net income	\$76,508	\$50,571	\$25,654
Other comprehensive loss:			
Unrealized losses on investments	(6 )	(1 )	—
Other comprehensive loss, net of tax	(6 )	(1 )	—
Comprehensive income	\$76,502	\$50,570	\$25,654

See accompanying notes to consolidated financial statements.

AMBARELLA, INC.

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in thousands, except share data)

	Outstanding Ordinary Shares	Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Total
	Shares	\$		\$		
Balance--January 31, 2013	27,035,074	\$ 12	\$ 91,911	—	\$ 20,409	\$ 112,332
Exercise of stock options, dollar amounts net of unvested stock options exercised early	1,160,286	1	6,919	—	—	6,920
Vesting of early exercised stock options	—	—	143	—	—	143
Vesting of restricted stock units	174,888	—	—	—	—	—
Employee stock purchase plan	341,973	—	1,744	—	—	1,744
Exercise of warrants to purchase ordinary shares	36,292	—	130	—	—	130
Stock-based compensation expense related to stock awards granted to employees and consultants	—	—	8,535	—	—	8,535
Excess income tax benefit associated with stock-based compensation	—	—	903	—	—	903
Net income	—	—	—	—	25,654	25,654
Balance--January 31, 2014	28,748,513	13	110,285	—	46,063	156,361
Exercise of stock options, dollar amounts net of unvested stock options exercised early	1,456,944	1	8,507	—	—	8,508
Vesting of early exercised stock options	—	—	59	—	—	59
Vesting of restricted stock units	484,296	—	—	—	—	—
Employee stock purchase plan	147,776	—	2,735	—	—	2,735
Stock-based compensation expense related to stock awards granted to employees and consultants	—	—	15,692	—	—	15,692
Excess income tax benefit associated with stock-based compensation	—	—	3,286	—	—	3,286
Net unrealized gains (losses) on investments - net of taxes	—	—	—	(1 )	—	(1 )
Net income	—	—	—	—	50,571	50,571
Balance--January 31, 2015	30,837,529	14	140,564	(1 )	96,634	237,211
Exercise of stock options	567,888	1	5,175	—	—	5,176
Vesting of restricted stock and restricted stock units	848,756	—	—	—	—	—
Employee stock purchase plan	79,186	—	3,100	—	—	3,100
Stock-based compensation expense related to stock awards granted to employees and consultants	—	—	31,094	—	—	31,094



Edgar Filing: AMBARELLA INC - Form 10-K

Excess income tax benefit associated with stock-based compensation	—	—	(3,627 )	—	(3,627 )
Net unrealized gains (losses) on investments - net of taxes	—	—	—	(6 )	(6 )
Net income	—	—	—	—	76,508
Balance--January 31, 2016	32,333,359	\$ 15	\$ 176,306	\$ (7 )	\$ 173,142
					\$ 349,456

See accompanying notes to consolidated financial statements.

AMBARELLA, INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended January 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net income	\$76,508	\$50,571	\$25,654
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation of property and equipment	1,606	1,335	1,096
Amortization/accretion of marketable securities	525	675	—
Loss on disposal of long-lived assets	13	21	13
Stock-based compensation	31,094	15,692	8,535
Excess income tax benefits associated with stock-based compensation	—	(3,286 )	(903 )
Other non-cash items, net	142	26	—
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	1,262	(21,343 )	1,316
Inventories	3,627	(11,241 )	(1,534 )
Prepaid expenses and other current assets	(572 )	(563 )	(375 )
Deferred tax assets	1,291	(3,184 )	(442 )
Other assets	(114 )	307	63
Accounts payable	(6,880 )	12,715	1,270
Accrued liabilities	4,189	6,837	(2,642 )
Income taxes payable	244	3,490	807
Deferred tax liabilities	43	83	9
Deferred revenue	4,939	274	1,380
Other long-term liabilities	5,644	(151 )	103
Net cash provided by operating activities	123,561	52,258	34,350
Cash flows from investing activities:			
Acquisition, net of cash acquired	(29,905 )	—	—
Investment in a private company	—	(290 )	—
Purchase of investments	(52,786 )	(59,807 )	—
Sales of investments	17,732	8,729	—
Maturities of investments	32,248	12,668	—
Net proceeds from disposal of fixed assets	—	—	13
Purchase of property and equipment	(2,085 )	(1,361 )	(1,701 )
Net cash used in investing activities	(34,796 )	(40,061 )	(1,688 )
Cash flows from financing activities:			
Proceeds from exercise of stock options, warrants, and employee stock purchase plan, net of repurchase of stock options			
	9,000	11,414	9,360
Payment for initial public offering cost	—	—	(25 )
Excess income tax benefits associated with stock-based compensation	—	3,286	903

Edgar Filing: AMBARELLA INC - Form 10-K

Net cash provided by financing activities	9,000	14,700	10,238
Net increase in cash and cash equivalents	97,765	26,897	42,900
Cash and cash equivalents at beginning of period	170,291	143,394	100,494
Cash and cash equivalents at end of period	\$268,056	\$170,291	\$143,394
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$1,618	\$1,069	\$1,766
Supplemental disclosure of noncash investing activities:			
Increase in accrued liabilities related to non-monetary assets purchases	\$43	\$75	\$24

See accompanying notes to consolidated financial statements

## AMBARELLA, INC.

### Notes to Consolidated Financial Statements

#### 1. Organization and Summary of Significant Accounting Policies

##### Organization

Ambarella, Inc. (the “Company”) was incorporated in the Cayman Islands on January 15, 2004. The Company is a developer of semiconductor processing solutions for video that enable high-definition video capture, sharing and display. The Company combines its processor design capabilities with its expertise in video and image processing, algorithms and software to provide a technology platform that is designed to be easily scalable across multiple applications and enable rapid and efficient product development. The Company’s system-on-a-chip, or SoC, designs fully integrate high-definition video processing, image processing, audio processing and system functions onto a single chip, delivering exceptional video and image quality, differentiated functionality and low power consumption.

The Company sells its solutions to leading original design manufacturers, or ODMs, and original equipment manufacturers, or OEMs, globally.

##### Basis of Consolidation

The Company’s fiscal year ends on January 31. The consolidated financial statements of the Company and its subsidiaries have been prepared in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”). All intercompany transactions and balances have been eliminated in consolidation.

##### Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reported periods. Actual results could differ from those estimates.

On an ongoing basis, management evaluates its estimates and assumptions, including those related to (i) the collectibility of accounts receivable; (ii) write down of excess and obsolete inventories; (iii) intangible assets and goodwill; (iv) the estimated useful lives of long-lived assets; (v) impairment of long-lived assets and financial instruments; (vi) warranty obligations; (vii) the valuation of stock-based compensation awards and financial instruments; (viii) the probability of performance objectives achievement; (ix) the realization of tax assets and estimates of tax liabilities, including reserves for uncertain tax positions; and (x) the recognition and disclosure of contingent liabilities. These estimates and assumptions are based on historical experience and on various other factors which the Company believes to be reasonable under the circumstances. The company may engage third-party valuation specialists to assist with estimates related to the valuation of financial instruments and assets associated with various contractual arrangements. Such estimates often require the selection of appropriate valuation methodologies and significant judgment. Actual results could differ from these estimates under different assumptions or circumstances.

##### Concentration of Risk

The Company’s products are manufactured, assembled and tested by third-party contractors located primarily in Asia. The Company does not have long-term agreements with these contractors. A significant disruption in the operations of

one or more of these contractors would impact the production of the Company's products which could have a material adverse effect on its business, financial condition and results of operations.

A substantial portion of the Company's revenue is derived from sales through its logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, which serves as its non-exclusive sales representative in Asia other than Japan, and through one large direct ODM customer, Chicony Electronics Co., Ltd., or Chicony. Termination of the relationship with Wintech could result in a temporary or permanent loss of revenue and obligation to repurchase unsold product. Furthermore, any credit issues from these two customers could impair their abilities to make timely payment to the Company. See Note 15 for additional information regarding concentration with these two customers.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, marketable securities and accounts receivable. The Company maintains its cash primarily in checking and money market accounts with reputable financial institutions. Cash deposits held with these financial institutions may exceed the amount of insurance provided on such deposits. The Company has not experienced any material losses on deposits of its cash. The cash equivalents and marketable securities consist primarily of money market funds, asset-backed securities, commercial paper, U.S. government securities, agency bonds and debt securities of corporations which management assesses to be highly liquid, in order to limit the exposure of each investment. The Company does not hold or issue financial instruments for trading purposes.

The Company performs ongoing credit evaluations of each of its customers and adjusts credit limits based upon payment history and the customer's credit worthiness. The Company regularly monitors collections and payments from its customers.

#### Foreign Currency Transactions

The U.S. dollar is the functional currency for the Company and its subsidiaries. Monetary assets and liabilities denominated in non-U.S. currencies are re-measured to U.S. dollars using current exchange rates in effect at the balance sheet date. Nonmonetary assets and liabilities are re-measured to U.S. dollars using historical exchange rates. Monetary and other accounts are re-measured to U.S. dollars using average exchange rates in effect during each period. Gains or losses from foreign currency re-measurement are included in other income (loss), net in the consolidated statements of operations, and, to date, have not been material.

#### Fair Value of Financial Instruments

The fair value accounting is applied to all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed in the financial statements on a recurring basis. The carrying amounts reflected in the consolidated balance sheets for cash equivalents, accounts receivable, accounts payable, accrued liabilities and other current liabilities, approximate fair value due to the short-term nature.

#### Cash Equivalents and Marketable Securities

The Company considers all highly liquid investments with original maturities of less than three months at the time of purchase to be cash equivalents. Investments that are highly liquid with original maturities at the time of purchase greater than three months are considered as marketable securities.

The Company classifies these investments as "available-for-sale" securities carried at fair value, based on quoted market prices of similar assets, with the unrealized gains or losses reported, net of tax, as a separate component of shareholders' equity and included in accumulated other comprehensive income (loss) in the consolidated balance sheets. The amortization of security premiums and accretion of discounts and the realized gains and losses are both recorded in other income (loss), net in the consolidated statements of operations. The Company reviews its investments for possible other-than-temporary impairments on a regular basis. If any loss on investment is believed to be other-than-temporary, a charge will be recorded and a new cost basis in the investment will be established. In evaluating whether a loss on a security is other-than-temporary, the Company considers the following factors: 1) general market conditions, 2) the duration and extent to which the fair value is less than cost, 3) the Company's intent and ability to hold the investment.

For securities in an unrealized loss position which is deemed to be other-than-temporary, the difference between the security's then-current amortized cost basis and fair value is separated into (i) the amount of the impairment related to the credit loss (i.e., the credit loss component) and (ii) the amount of the impairment related to all other factors (i.e.,

the non-credit loss component). The credit loss component is recognized in earnings. The non-credit loss component is recognized in accumulated other comprehensive loss. Due to the relative short term nature of the investments, there have been no other-than-temporary impairments recorded to date.

#### Trade Accounts Receivable and Allowances for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not include finance charges. The Company performs ongoing credit evaluation of its customers and generally requires no collateral. The Company assesses the need for allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments by considering factors such as historical collection experience, credit quality, aging of the accounts receivable balances and current economic conditions that may affect a customer's ability to pay. There were no material write-offs of accounts receivable for fiscal years 2016, 2015 and 2014, respectively. There was no material allowance for doubtful accounts recorded as of January 31, 2016 and 2015, respectively.

## Inventories

The Company records inventories at the lower of cost or market. The cost includes materials and other production costs and is computed using standard cost on a first-in, first-out basis. Inventory reserves are recorded for estimated obsolescence or unmarketable inventories based on forecast of future demand and market conditions. If actual market conditions are less favorable than projected, or if future demand for the Company's products decrease, additional inventory write-downs may be required. Once inventory is written down, a new accounting cost basis is established and, accordingly, any associated reserve is not reversed until the inventory is sold or scrapped. There were no material inventory losses recognized for the fiscal years ended January 31, 2016, 2015 and 2014, respectively.

## Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful life of three years for computer equipment, computer software, machinery, equipment and furniture and fixture. Leasehold improvements are amortized over the shorter of the lease term or their estimated useful lives. Repairs and maintenance are charged to expense as incurred.

## Internal-Use Software

The Company capitalizes certain software that is acquired and developed solely for internal use. The capitalization costs include fees for services provided to develop software during the application development stage, costs incurred to obtain software, and certain costs for employees who are directly associated with and who directly devote time to the project. The capitalization begins when the preliminary project stage is completed and ceases no later than the point at which the project is substantially complete and ready for its intended use after all substantial testing is completed. The internal-use software is amortized over its estimated useful life. Repairs and maintenance are charged to expense as incurred. As of January 31, 2016, the Company has capitalized approximately \$1.7 million of internal-use software and has been recorded in property and equipment, net on the consolidated balance sheets.

## Business Combinations and Intangible Assets

The Company allocates the fair value of purchase price to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, especially with respect to intangible assets, management makes significant estimates and assumptions.

Critical estimates in valuing certain intangible assets include, but are not limited to, replacement cost. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

## Goodwill and In-Process Research and Development

The Company does not amortize goodwill. Acquired in-process research and development, or IPR&D, is capitalized at fair value as an intangible asset and amortization commences upon completion of the underlying projects. When a project underlying reported IPR&D is completed, the corresponding amount of IPR&D is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life.



#### Impairment of Long-Lived Assets Including Goodwill and Other Acquired Intangible Assets

The Company reviews property and equipment and intangible assets, excluding goodwill, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset, or asset group, may not be recoverable. Determination of recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset, or asset group to estimated undiscounted future cash flows expected to be generated by the asset, or asset group. If the carrying amount of an asset or asset group exceeds its estimated undiscounted future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset or asset group exceeds the estimated fair value of the asset or asset group. Fair value is determined based on the estimated discounted future cash flows expected to be generated by the asset or asset group. Events or changes in circumstances that may indicate that an asset is impaired include significant decreases in the market value of an asset, significant underperformance relative to expected historical or projected future results of operations, a change in the extent or manner in which an asset is utilized, significant declines in the estimated fair value of the overall Company for a sustained period, shifts in technology, loss of key management or personnel, changes in the Company's operating model or strategy and competitive forces. There has been no occurrence of events to date that would trigger an impairment analysis. As such, no impairment charge has been recognized as of January 31, 2016.

The Company tests the goodwill for impairment at least annually, or more frequently if events or changes in circumstances indicate that the asset may be impaired. The Company has a single reporting unit for goodwill impairment test purposes based on its business and reporting structure. No goodwill impairment has been identified to date.

#### Cost Method Investment

The Company accounts for its investment in a privately held company under the cost method and reports the investment in other assets in the consolidated balance sheets. The Company monitors the carrying value of the investment and records a reduction in carrying value when a decline in value is deemed to be other than temporary. To date, there have been no identified events or changes in circumstances that may have a significant adverse effect on the fair value of this investment and the Company has not recognized any impairment losses related to this investment.

#### Revenue Recognition

The Company generates revenue from the sales of its SoCs to OEMs or ODMs, either directly or through logistics providers. Revenue from sales directly to OEMs and ODMs is recognized upon shipment provided persuasive evidence of an arrangement exists, legal title to the products and risk of ownership have transferred, the fee is fixed or determinable, and collection of the resulting receivable is reasonably assured. The Company provides its logistics providers with the rights to return excess levels of inventory and to future price adjustments. Given the inability to reasonably estimate these price changes and returns, revenue and costs related to shipments to logistics providers are deferred until the Company has received notification from its logistics providers that they have sold the Company's products. Information reported by the Company's logistics providers includes product resale price, quantity and end customer shipment information as well as remaining inventory on hand. At the time of shipment to a logistics provider, the Company records a trade receivable as there is a legally enforceable right to receive payment, reduces inventory for the value of goods shipped as legal title has passed to the logistics provider and defers the related margin as deferred revenue in the consolidated balance sheets. Any price adjustments are recorded as a change to deferred revenue at the time the adjustments are agreed upon.

Arrangements with certain OEM customers provide for pricing that is dependent upon the end products into which the Company's SoCs are used. These arrangements may also entitle the Company to a share of the product margin ultimately realized by the OEM. The minimum guaranteed amount of revenue related to the sale of products subject to

these arrangements is recognized when all other elements of revenue recognition are met. Any amounts at the date of shipment invoiced in excess of the minimum guaranteed contract price are deferred until the additional amounts the Company is entitled to are fixed or determinable. Additional amounts earned by the Company resulting from margin sharing arrangements and determination of the end products into which the products are ultimately incorporated are recognized when end customer sales volume is reported to the Company.

The Company also enters into engineering service agreements with certain customers. These agreements may include multiple deliverables, such as software development services, licensing of intellectual property and post-contract customer support, or PCS. The Company does not sell separately any of these components and does not have Vendor Specific Objective Evidence, or VSOE, for the deliverables. Accordingly, revenues from these agreements are deferred for any amounts billed until delivery of all the elements. If the agreements include PCS, the revenues are recognized ratably over the estimated supporting periods. The revenue from engineering service agreements was not material for the fiscal years ended January 31, 2016, 2015 and 2014, respectively.

## Cost of Revenue

Cost of revenue includes cost of materials, cost associated with packaging and assembly, testing and shipping, cost of personnel, stock-based compensation, logistics and quality assurance, warranty cost, royalty expense, write-downs of inventories and allocation of overhead.

## Warranty Costs

The Company typically provides warranty on its products. The Company accrues for the estimated warranty costs at the time when revenue is recognized. The warranty accruals are regularly monitored by management based upon historical experience and any specifically identified failures. While the Company engages in extensive product quality assessment, actual product failure rates, material usage or service delivery costs could differ from estimates and revisions to the estimated warranty liability would be required. The Company's warranty accruals were not material for the fiscal years ended January 31, 2016, 2015 and 2014, respectively.

## Research and Development

Research and development costs are expensed as incurred and consist primarily of personnel costs, product development costs, which include engineering services, development software and hardware tools, license fees, cost of fabrication of masks for prototype products, other development materials costs, depreciation of equipment used in research and development and allocation of facilities costs.

## Selling, General and Administrative

Selling, general and administrative expense consists of personnel costs, travel and trade show costs, legal expenses, other professional services and occupancy costs. Advertising expenses were not material for the fiscal years ended January 31, 2016, 2015 and 2014, respectively.

## Operating Leases

The Company recognizes rent expense on a straight-line basis over the term of the lease. The difference between rent expense and rent payment is recorded as deferred rent and is included in accrued liabilities in the consolidated balance sheets.

## Stock-Based Compensation

The Company measures stock-based compensation for equity awards granted to employees and directors based on the estimated fair value on the grant date, and recognizes that compensation as expense using the straight-line attribution method for service condition awards or using the graded-vesting attribution method for awards with performance conditions over the requisite service period, which is typically the vesting period of each award. The Company determines the fair value of restricted stock and restricted stock units based on the fair market value of its ordinary shares on the grant date. The Company uses the Black-Scholes option pricing model to determine the fair value of stock options. Determining the fair value of stock options on the grant date requires the input of various assumptions, including stock price of the underlying ordinary share, the exercise price of the stock option, expected volatility, expected term, risk-free interest rate and dividend rate. The expected term is calculated using the simplified method as prescribed in the guidance provided by the Securities and Exchange Commission, as neither relevant historical experience nor other relevant data are available to estimate future exercise behavior. The expected volatility is based on the historical volatilities of similar companies whose share prices are publicly available for a period commensurate with the expected term. The risk-free interest rate is derived from the average U.S. Treasury constant maturity rates

during the respective periods commensurate with the expected term. The expected dividend yield is zero because the Company has not historically paid dividends and has no present intention to pay dividends. The Company uses historical data to estimate pre-vesting award forfeitures and records stock-based compensation only for those awards that are expected to vest. Forfeitures are estimated at the time of grant and revised if necessary in subsequent periods if actual forfeitures differ from estimates.

The Company recognizes non-employee stock-based compensation expense based on the estimated fair value of the equity instrument. The fair value of the non-employee awards is remeasured at each reporting period until services required under the arrangement are completed, which is the vesting date.

## Income Taxes

The Company records income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in its financial statements or tax returns. In estimating future tax consequences, generally all expected future events other than enactments or changes in the tax law or rates are considered. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company applies authoritative guidance for the accounting for uncertainty in income taxes. The guidance requires that tax effects of a position be recognized only if it is “more likely than not” to be sustained based solely on its technical merits as of the reporting date. Upon estimating the Company’s tax positions and tax benefits, the Company considered and evaluated numerous factors, which may require periodic adjustments and which may not reflect the final tax liabilities. The Company adjusts its financial statements to reflect only those tax positions that are more likely than not to be sustained under examination.

As part of the process of preparing consolidated financial statements, the Company is required to estimate its taxes in each of the jurisdictions in which it operates. The Company estimates actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as accruals and allowances not currently deductible for tax purposes. These differences result in deferred tax assets, which are included in the consolidated balance sheets. In general, deferred tax assets represent future tax benefits to be received when certain expenses previously recognized in the consolidated statements of operations become deductible expenses under applicable income tax laws, or loss or credit carryforwards are utilized.

In assessing whether deferred tax assets may be realized, management considers whether it is more likely than not that some portion or all of deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income.

The Company makes estimates and judgments about its future taxable income based on assumptions that are consistent with its plans and estimates. Should the actual amounts differ from estimates, the amount of valuation allowance could be materially impacted. Any adjustment to the deferred tax asset valuation allowance would be recorded in the income statement for the periods in which the adjustment is determined to be required.

## Net Income Per Ordinary Share

The Company applies the two-class method to calculate and present net income per ordinary share. Under the two-class method, net income is allocated between ordinary shares and other participating securities based on their participating rights. Participating securities are defined as securities that may participate in undistributed earnings with ordinary shares, whether that participation is conditioned upon the occurrence of a specified event or not. Basic net income per ordinary share is computed by dividing net income allocable to ordinary shares by the weighted-average number of ordinary shares outstanding for the period. Diluted net income per ordinary share is computed by dividing net income allocable to ordinary shares and income allocable to participating securities, to the extent they are dilutive, by the weighted-average number of ordinary shares outstanding, including the dilutive effects of participating securities on an if-converted basis plus the dilutive effects of ordinary shares. The Company’s potential dilutive ordinary share equivalents consist of incremental ordinary shares issuable upon the exercise of options, upon the issuance of shares pursuant to the Amended and Restated 2012 Employee Stock Purchase Plan, or ESPP, and upon release of vested restricted stock and restricted stock units.

The Company performs an assessment as to whether instruments granted in stock-based payment transactions are participating securities. Stock-based payment awards that have not yet vested meet the definition of a participating

security provided the right to receive the dividend is non-forfeitable and non-contingent. These participating securities should be included in the computation of basic net income per ordinary share under the two-class method. The Company has concluded that its non-vested early-exercised options meet the definition of a participating security and should be included in the computation of basic net income per ordinary share.

#### Comprehensive Income (Loss)

Comprehensive income (loss) includes unrealized gains or losses from available-for-sale securities that are excluded from net income.

## Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606). The new guidance clarifies the principles and develops a common revenue recognition guidance for U.S. GAAP and International Financial Reporting Standards (the “IFRS”). Under the new guidance, an entity is required to recognize an amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The original effective date of the ASU would have required the public companies to adopt the standard for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early application is not permitted. In July 2015, the FASB voted to amend the ASU by approving a one-year deferral of the effective date as well as providing the option to early adopt the standard on the original effective date. The deferral results in this new revenue standard being effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. Accordingly, the Company may adopt the standard in its first quarter of fiscal year 2019. The new revenue guidance may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. The Company is currently evaluating the impact of adoption on its financial position, results of operations and disclosures.

In August 2014, the FASB issued ASU No. 2014-15, Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. In connection with each annual and interim period, management is required to assess whether there is substantial doubt about an entity’s ability to continue as a going concern within one year after the issuance date, and to provide related footnote disclosures in certain circumstances. The new guidance is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early adoption is permitted. This ASU is not expected to have an impact on the Company’s financial statements or disclosures.

In April 2015, the FASB issued ASU No. 2015-05, Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement. ASU No. 2015-05 provides the guidance of the accounting for fees paid by a customer in a cloud computing arrangement. If a cloud computing arrangement includes a license to internal-use software, then the entity should account for the software license consistent with the acquisition of internal-use software. If a cloud computing arrangement does not include a software license, the entity should account for the arrangement as a service contract. The new guidance will be effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2015. Early adoption is permitted. An entity can elect to adopt the guidance either (1) prospectively to all arrangements entered into or materially modified after the effective date or (2) retrospectively. This ASU is not expected to have an impact on the Company’s financial statements or disclosures.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory. The new guidance changes the measurement principle for inventory from the lower of cost or market to lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. It applies to entities that measure inventory using a method other than last-in, first-out (LIFO) and the retail inventory method (RIM). The new guidance will be effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years and should be applied prospectively. Early adoption is permitted as of the beginning of an interim or annual reporting period. The Company is currently evaluating the impact of adoption on its financial position, results of operations and disclosures.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes. To simplify the presentation, the new guidance requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. As a result, each jurisdiction will now only have one net noncurrent deferred tax asset or liability. The guidance does not change the existing requirement that only permits offsetting within a jurisdiction – that is, companies are still prohibited from offsetting deferred tax liabilities from one jurisdiction against deferred tax assets of another jurisdiction. The new guidance is effective for public business

entities in fiscal years beginning after December 15, 2016, including interim periods within those years. Early adoption is permitted. An entity can elect to adopt the guidance either (1) prospectively for all deferred tax assets and liabilities, or (2) retrospectively by reclassifying the comparative balance sheet. If applied prospectively, an entity is required to include a statement that prior periods were not retrospectively adjusted. If applied retrospectively, an entity is also required to include quantitative information about the effects of the change on prior periods. The Company has adopted this standard in the fourth quarter of its fiscal year 2016 on a prospective basis. The adoption of this new guidance resulted in all deferred tax assets and liabilities being classified as noncurrent in the consolidated balance sheet as of January 31, 2016. The presentation of deferred tax assets and liabilities in the consolidated balance sheet as of January 31, 2015, has not been retrospectively adjusted.

In February 2016, the FASB issued ASU 2016-02 "Leases (Topic 842)." This standard requires entities that lease assets to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The standard is effective for fiscal years and the interim periods within those fiscal years beginning after December 15, 2018. The guidance is required to be applied by the modified retrospective transition approach. Early adoption is permitted. The Company is currently assessing the impact of the adoption of this new guidance on its financial position, results of operations and disclosures.



## 2. Financial Instruments and Fair Value

The Company invested a portion of its cash in debt securities that are denominated in United States dollars. The investment portfolio consists of money market funds, asset-backed securities, commercial paper, U.S. government securities, agency bonds and debt securities of corporations. All of the investments are classified as available-for-sale securities and reported at fair value in the consolidated balance sheets as follows:

	As of January 31, 2016			
	Amortized Cost (in thousands)	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	\$530	\$ —	\$ —	\$530
Commercial paper	2,598	—	—	2,598
Corporate bonds	21,342	7	(9 )	21,340
Asset-backed securities	4,586	—	(1 )	4,585
U.S. government securities	9,274	4	(6 )	9,272
Agency bonds	2,044	—	(2 )	2,042
Total cash equivalents and marketable securities	\$40,374	\$ 11	\$ (18 )	\$40,367

	As of January 31, 2015			
	Amortized Cost (in thousands)	Unrealized Gains	Unrealized Losses	Fair Value
Money market funds	\$2,427	\$ —	\$ —	\$2,427
Commercial paper	1,497	—	—	1,497
Corporate bonds	32,356	9	(10 )	32,355
Asset-backed securities	3,851	—	—	3,851
Total cash equivalents and marketable securities	\$40,131	\$ 9	\$ (10 )	\$40,130

	As of	
	January 31, 2016	January 31, 2015
	(in thousands)	
Included in cash equivalents	\$530	\$2,427
Included in marketable securities	39,837	37,703
Total cash equivalents and marketable securities	\$40,367	\$40,130

The contractual maturities of the investments at January 31, 2016 and 2015 were as follows:

	As of	
	January	January
	31,	31,
	2016	2015
	(in thousands)	
Due within one year	\$33,449	\$37,559
Due within one to two years	6,918	2,571
Total cash equivalents and marketable securities	\$40,367	\$40,130

The unrealized losses on the available-for-sale securities were caused by fluctuations in market value and interest rates as a result of the economic environment. As the decline in market value was attributable to changes in market conditions and not credit quality, and because the Company neither intended to sell nor was it more likely than not that it will be required to sell these investments prior to a recovery of par value, the Company did not consider these investments to be other-than temporarily impaired as of January 31, 2016 and 2015, respectively.

The following fair value hierarchy is applied for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments.

Level 3—Unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value. The inputs require significant management judgment or estimation.

The Company measures the fair value of money market funds using quoted prices in active markets for identical assets and classifies them within Level 1. The fair value of the Company's investments in other debt securities are obtained based on quoted prices for similar assets in active markets, or model driven valuations using significant inputs derived from or corroborated by observable market data and are classified within Level 2.

The following tables present the fair value of the financial instruments measured on a recurring basis as of January 31, 2016 and 2015, respectively:

	As of January 31, 2016			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Money market funds	\$530	\$530	\$—	\$—
Commercial paper	2,598	—	2,598	—
Corporate bonds	21,340	—	21,340	—
Asset-backed securities	4,585	—	4,585	—
U.S. government securities	9,272	—	9,272	—
Agency bonds	2,042	—	2,042	—
Total cash equivalents and marketable securities	\$40,367	\$530	\$39,837	\$—
	As of January 31, 2015			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Money market funds	\$2,427	\$2,427	\$—	\$—
Commercial paper	1,497	—	1,497	—
Corporate bonds	32,355	—	32,355	—
Asset-backed securities	3,851	—	3,851	—
Total cash equivalents and marketable securities	\$40,130	\$2,427	\$37,703	\$—

### 3. Inventories

Inventories at January 31, 2016 and 2015 consisted of the following:

	As of January 31,	
	2016	2015
	(in thousands)	
Work-in-progress	\$9,474	\$13,805
Finished goods	8,693	7,888
Total	\$18,167	\$21,693

## 4. Property and Equipment, net

Depreciation expense was approximately \$1.6 million, \$1.3 million and \$1.1 million for the years ended January 31, 2016, 2015 and 2014, respectively. Property and equipment at January 31, 2016 and 2015 consisted of the following:

	As of January 31,	
	2016	2015
	(in thousands)	
Computer equipment and software	\$6,421	\$5,310
Machinery and equipment	2,706	2,234
Furniture and fixtures	492	456
Leasehold improvements	1,429	1,215
Construction in progress	253	64
	11,301	9,279
Less: accumulated depreciation and amortization	(7,853 )	(6,204)
Total property and equipment, net	\$3,448	\$3,075

## 5. Acquisition

On June 25, 2015, the Company completed the acquisition of VisLab S.r.l. (“VisLab”), a privately held Italian company that develops computer vision and intelligent control systems for automotive and other commercial applications, including Advanced Driver Assistance Systems and several generations of autonomous vehicle driving systems, for \$30.0 million in cash. This acquisition will enable extensive and robust computer vision support in future solutions targeting the Company's core markets, including automotive, IP security, wearable, and flying cameras. Of the total purchase price of \$30.0 million, \$4.1 million was attributed to intangible assets, \$25.3 million was attributed to goodwill, and \$0.6 million was attributed to net assets acquired. The goodwill represents the excess value of the purchase price over the aggregate fair value of the tangible and intangible assets acquired and primarily represents the intangible assets that do not qualify for separate recognition and the future development initiatives of the assembled workforces. Goodwill is not expected to be deductible for tax purposes.

Pro forma and actual result of operations for this acquisition have not been presented because it is not material to the consolidated results of operations.

## 6. Goodwill and Intangible Assets

On June 25, 2015, the Company completed the acquisition of VisLab. As a result, there was \$25.3 million of goodwill and \$4.1 million of intangible assets recorded in the consolidated balance sheet. A deferred tax liability of \$1.3 million related to the intangible assets was recorded to account for the difference between financial reporting and tax basis at the acquisition date, with an addition to goodwill. The Company does not amortize goodwill. The intangible assets primarily consist of IPR&D. Acquired IPR&D is capitalized at fair value as an intangible asset and amortization commences upon completion of the underlying projects. When a project underlying reported IPR&D is completed, the corresponding amount of IPR&D is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life. As of January 31, 2016, there was no IPR&D amortized. And there were no goodwill or intangible asset impairments for the twelve months ended January 31, 2016.

## 7. Accrued Liabilities

Accrued liabilities at January 31, 2016 and 2015 consisted of the following:

	As of January 31,	
	2016	2015
	(in thousands)	
Accrued employee compensation	\$14,512	\$11,318
Accrued warranty	234	203
Accrued rebates	824	254
Accrued product development costs	6,339	5,004
Other accrued liabilities	1,869	1,920
Total accrued liabilities	\$23,778	\$18,699

## 8. Deferred Revenue and Deferred Cost

Deferred revenue and related cost at January 31, 2016 and 2015 consisted of the following:

	As of January 31,	
	2016	2015
	(in thousands)	
Deferred revenue on product shipments	\$12,201	\$4,663
Deferred revenue from licenses & services	1,653	1,610
Deferred cost of revenue on product shipments	(3,777)	(1,168)
Total deferred revenue, net	\$10,077	\$5,105

## 9. Other Long-Term Liabilities

Other long-term liabilities at January 31, 2016 and 2015 consisted of the following:

	As of January	
	31,	2015
	2016	2015
	(in thousands)	
Unrecognized tax benefits, including interest	\$10,917	\$1,391
Deferred tax liabilities, non-current	1,423	—
Other long-term liabilities	2	2

Total other long-term liabilities	\$12,342	\$1,393
-----------------------------------	----------	---------

## 10. Capital Stock

### Preference shares

After completion of the Company's initial public offering, or IPO, a total of 20,000,000 preference shares, with a \$0.00045 par value per share, were authorized. There were no shares issued and outstanding as of January 31, 2016 and 2015, respectively.

### Ordinary shares

200,000,000 ordinary shares were authorized at January 31, 2016 and 2015, respectively. As of January 31, 2016 and 2015, the following ordinary shares were reserved for future issuance:

	As of January 31,	
	2016	2015
Shares reserved for options, restricted stock and restricted stock units	5,027,475	5,055,845
Shares reserved for employee stock purchase plan	974,273	667,990



## 11. Employee Benefits and Stock-based Compensation

### 401(k) Plan

The Company maintains a defined contribution 401(k) plan (the “401(k) Plan”) for all of its eligible U.S. employees. Under the 401(k) Plan, eligible employees may contribute up to the Internal Revenue Service annual contribution limitation. The Company is responsible for administrative costs of the Plan. The Company has not had any matching contributions to date.

### Stock Option Plans

**2004 Stock Plan.** The 2004 Stock Plan provides for the grant of incentive stock options (“ISOs”) within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”), nonstatutory stock options (“NSOs”), stock purchase rights to acquire restricted stock and restricted stock units. Upon the completion of the IPO, no additional awards will be granted under the 2004 Plan and the 2004 Plan was terminated. However, all outstanding stock options and other awards previously granted under the 2004 Plan will remain subject to the terms of the 2004 Plan.

**2012 Equity Incentive Plan.** The 2012 Equity Incentive Plan, or EIP, permits the grant of ISOs, within the meaning of Section 422 of the Code, to employees of the Company and any of the Company’s subsidiary corporations, and the grant of NSOs, stock appreciation rights, restricted stock, restricted stock units, performance units, performance shares, deferred stock units and dividend equivalents to employees, directors and consultants of the Company and any of the Company’s subsidiary corporations’ employees and consultants.

The exercise price of ISOs granted to a holder of more than 10% of the voting power of all classes of the Company’s shares shall be no less than 110% of fair market value on the grant date. The exercise price of ISOs granted to other employees and NSOs shall be no less than 100% of fair market value on the grant date. Options granted under the Plan have a term of up to 10 years from grant date. Options granted to new employees generally vest 25% on the first anniversary service date of the grant and remainder vest ratably over the following 36 months. Vesting schedules for other option grants vary and are subject to approval by the board of directors.

Restricted stock and restricted stock units granted to new employees generally vest as to 1/4th of the shares on the first anniversary service date of the grant and 1/16th of the shares vest every 3 months thereafter, so as to be 100% vested on the fourth anniversary of the vesting commencement date. Vesting schedules for other service and performance condition awards vary and are subject to approval by the board of directors; provided that the performance awards shall not vest at all until the performance conditions are achieved and are subject to the award’s holders continuing to provide services to the Company through such vesting dates. The performance condition awards are automatically forfeited in their entirety, without any cost to or action by the Company, if there has been no achievement of the performance. The holders of restricted stock have voting power and other rights with respect to such shares, provided, however, that such shares are held in escrow and subject to forfeiture until the shares vested.

On February 1, 2015 and 2014, the Company added 1,387,689 and 1,297,555 ordinary shares, respectively, to the ordinary shares reserved for issuance, pursuant to an “evergreen” provision contained in the EIP. Pursuant to such provision, on February 1st of each fiscal year, the number of ordinary shares reserved for issuance under the EIP is automatically increased by a number equal to the lesser of (i) 3,500,000 ordinary shares, (ii) four and one half percent (4.5%) of the aggregate number of ordinary shares outstanding on January 31st of the preceding fiscal year, or (iii) a lesser number of shares that may be determined by the Company’s Board of Directors.

**2012 Employee Stock Purchase Plan.** The ESPP permits eligible participants to purchase ordinary shares at a discount through contributions of up to 15% of their eligible compensation, subject to any IRS limitations. The ESPP provides

for offering and purchase periods of six months in duration. The purchase price of ordinary shares is 85% of the lower of the closing market price of the Company's ordinary shares on the first trading day of each offering period or on the purchase date.

On February 1, 2015 and 2014, the Company added 385,469 and 359,356 ordinary shares, respectively, to the ordinary shares reserved for issuance, pursuant to an "evergreen" provision contained in the ESPP. Pursuant to such provision, on February 1st of each fiscal year, the number of ordinary shares reserved for issuance under the ESPP is automatically increased by a number equal to the lesser of (i) 1,500,000 ordinary shares, (ii) one and one quarter percent (1.25%) of the aggregate number of ordinary shares outstanding on such date, or (iii) an amount determined by the Company's Board of Directors or a duly authorized committee of the Board of Directors.

## Stock-based Compensation

The following table presents the classification of stock-based compensation for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
<b>Stock-based compensation:</b>			
Cost of revenue	\$657	\$343	\$178
Research and development	19,082	8,654	4,887
Selling, general and administrative	11,355	6,695	3,470
<b>Total stock-based compensation</b>	<b>\$31,094</b>	<b>\$15,692</b>	<b>\$8,535</b>

In fiscal year 2016, the Company granted 268,394 shares of restricted stock awards. As of January 31, 2016, total unrecognized compensation cost related to unvested stock options was \$11.4 million and is expected to be recognized over a weighted-average period of 2.47 years. Total unrecognized compensation cost related to unvested restricted stock units was \$96.8 million and is expected to be recognized over a weighted-average period of 3.15 years. Total unrecognized compensation cost related to unvested restricted stock was \$12.8 million and is expected to be recognized over a weighted-average period of 3.32 years.

The following table sets forth the weighted-average assumptions used to estimate the fair value of the stock options and employee stock purchase plan awards for the periods indicated:

	Year Ended January 31,					
	2016		2015		2014	
<b>Stock Options:</b>						
Volatility	57 %	64 %	65 %			
Risk-free interest rate	1.74%	1.93%	1.55%			
Expected term (years)	6.08	6.01	6.06			
Dividend yield	0 %	0 %	0 %			
<b>Employee stock purchase plan awards:</b>						
Volatility	63 %	49 %	52 %			
Risk-free interest rate	0.21%	0.07%	0.04%			
Expected term (years)	0.5	0.5	0.5			
Dividend yield	0 %	0 %	0 %			

The following table summarizes stock option activities for the periods indicated:

	Option Outstanding		Weighted- Average Grant-date Fair Value	Total Intrinsic Value of options Exercised (in thousands)	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
	Shares	Exercise Price	Value			
Outstanding at January 31, 2013	4,344,535	\$ 6.07				
Granted	255,520	18.14	\$ 10.85			
Exercised	(1,160,286)	5.96		\$ 18,217		
Forfeited	(81,063 )	10.34				
Outstanding at January 31, 2014	3,358,706	6.92				
Granted	428,781	36.33	\$ 21.37			
Exercised	(1,456,944)	5.84		\$ 46,427		
Forfeited	(48,634 )	13.38				
Outstanding at January 31, 2015	2,281,909	13.00				
Granted	179,700	71.36	\$ 38.81			
Exercised	(567,888 )	9.11		\$ 37,603		
Forfeited	(40,331 )	35.65				
Outstanding at January 31, 2016	1,853,390	\$ 19.36			5.89	\$ 43,396
Exercisable at January 31, 2016	1,363,880	\$ 10.23			4.93	\$ 40,341
Vested and expected to vest at January 31, 2016	1,822,252	\$ 18.84			5.84	\$ 43,285

Exercisable shares include options with early exercise rights. The vested and expected-to-vest options are calculated based on vesting schedule of each grant as of the reporting date.

The intrinsic value of options outstanding, exercisable and expected-to-vest options are calculated based on the difference between the fair market value of the Company's ordinary shares on the reporting date and the exercise price. The closing price of the Company's ordinary shares was \$39.68 on January 31, 2016, as reported by The NASDAQ Global Market. The intrinsic value of exercised options is calculated based on the difference between the fair market value of the Company's ordinary shares on the exercise date and the exercise price.

The following table summarizes restricted stock and restricted stock units activities for the periods indicated:

	Shares	Weighted- Average Grant-Date Fair Value
Unvested at January 31, 2013	339,217	\$ 9.99
Granted	1,265,472	14.78

Edgar Filing: AMBARELLA INC - Form 10-K

Vested	(174,888 )	11.91
Forfeited	(19,712 )	11.97
Unvested at January 31, 2014	1,410,089	14.02
Granted	1,111,204	38.60
Vested	(484,296 )	17.39
Forfeited	(56,549 )	19.93
Unvested at January 31, 2015	1,980,448	26.82
Granted	1,314,387	66.14
Vested	(769,779 )	27.82
Forfeited	(29,568 )	42.11
Unvested at January 31, 2016	2,495,488	\$ 47.04

As of January 31, 2016, the aggregate intrinsic value of unvested restricted stock and restricted stock units was \$99.0 million.

## Non-employee Stock-based Compensation

The fair value of awards granted to non-employees is determined on the grant date and remeasured at the end of each reporting period until such awards vest. The non-employee stock-based compensation was not material for the years ended January 31, 2016, 2015 and 2014, respectively.

## 12. Net Income Per Ordinary Share

The following table sets forth the computation of basic and diluted net income per ordinary share for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands, except share and per share data)		
<b>Numerator:</b>			
Net income	\$76,508	\$50,571	\$25,654
Less: amount allocable to unvested early exercised options	—	(11)	(31)
Net income allocable to ordinary shareholders - basic	\$76,508	\$50,560	\$25,623
Undistributed earnings reallocated to ordinary shareholders	—	1	2
Net income allocable to ordinary shareholders - diluted	\$76,508	\$50,561	\$25,625
<b>Denominator:</b>			
Weighted-average ordinary shares outstanding	31,633,992	29,749,354	27,713,998
Less: weighted-average unvested early exercised options subject to repurchase	(56)	(6,701)	(33,220)
Weighted-average ordinary shares - basic	31,633,936	29,742,653	27,680,778
<b>Effect of potentially dilutive securities:</b>			
Employee stock options	1,245,341	1,818,401	2,034,500
Restricted stock and restricted stock units	865,863	704,788	316,350
Employee stock purchase plan	10,569	12,285	138,461
Warrants to purchase ordinary shares	—	—	2,474
Weighted-average ordinary shares - diluted	33,755,709	32,278,127	30,172,563
<b>Net income per ordinary share:</b>			
Basic	\$2.42	\$1.70	\$0.93
Diluted	\$2.27	\$1.57	\$0.85

Earnings per share (EPS) of ordinary shares was calculated using the two-class method required for participating securities. Net income has been allocated to the ordinary shares and participating securities based on their respective rights to share in net income and weighted-average outstanding during the periods.

Edgar Filing: AMBARELLA INC - Form 10-K

The following weighted-average potentially dilutive securities were excluded from the computation of diluted net income per ordinary share as their effect would have been antidilutive:

	Year Ended January 31,		
	2016	2015	2014
Options to purchase ordinary shares	109,958	217,514	183,859
Restricted stock and restricted stock units	163,994	167,702	1,576
Employee stock purchase plan	9,073	36,110	10,597
Early exercised options subject to repurchase	56	6,701	33,220
	283,081	428,027	229,252

## 13. Income Taxes

Income before income taxes consisted of the following for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
U.S. operations	\$3,190	\$1,978	\$1,990
Non-U.S. operations	82,019	50,058	25,905
Income before income taxes	\$85,209	\$52,036	\$27,895

Income tax provision consisted of the following for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
<b>Current:</b>			
U.S. federal tax	\$5,273	\$3,135	\$1,738
U.S. state taxes	541	93	23
Non-U.S. foreign taxes	1,874	1,348	1,058
	7,688	4,576	2,819
<b>Deferred:</b>			
U.S. federal tax	1,050	(3,208)	(952)
U.S. state taxes	—	—	341
Non-U.S. foreign taxes	(37)	97	33
	1,013	(3,111)	(578)
Provision for income taxes	\$8,701	\$1,465	\$2,241

Income tax provision differed from the amounts computed by applying the U.S. federal income tax rate of 34% to pretax income as a result of the following for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
U.S. federal tax at statutory rate	\$28,971	\$17,692	\$9,484
U.S. state taxes	541	90	361
Non-U.S. foreign tax differential	(26,253)	(15,644)	(7,674)
Stock-based compensation	2,896	1,601	927
U.S. R&D credit	(3,517)	(2,298)	(858)
Valuation allowance	6,090	—	—
Other	(27)	24	1



Edgar Filing: AMBARELLA INC - Form 10-K

Provision for income taxes	\$8,701	\$1,465	\$2,241
----------------------------	---------	---------	---------

84

---

Temporary differences that gave rise to significant portions of the Company's deferred tax assets and liabilities at January 31, 2016 and 2015 were as follows:

	As of January 31,	
	2016	2015
	(in thousands)	
Deferred tax assets:		
Federal and state credits	\$ 11,852	\$ 6,465
Expenses not currently deductible	2,331	1,590
Stock-based compensation	2,503	2,044
Gross deferred tax assets	16,686	10,099
Valuation allowance	(12,072)	(3,996)
Total deferred tax assets	\$ 4,614	\$ 6,103
Deferred tax liabilities		
Property and equipment	(1,378)	(199)
Foreign deferred	(33)	(70)
Net deferred tax assets	\$ 3,203	\$ 5,834

Tax valuation allowance for the periods indicated below were as follows:

	Balance at Beginning of Period (in thousands)	Additional Charged to Expenses	Additions Charged to Other Account	Deductions Charged to Expenses or Other Accounts	Balance at End of Period
<b>Tax Valuation Allowance</b>					
Year ended January 31, 2016	\$ 3,996	8,076	—	—	\$ 12,072
Year ended January 31, 2015	\$ 2,302	1,694	—	—	\$ 3,996
Year ended January 31, 2014	\$ 1,243	1,059	—	—	\$ 2,302

The Company conducts its business in several countries and regions and is subject to taxation in those jurisdictions. The Company is incorporated in the Cayman Islands with foreign subsidiaries in the U.S., China, Taiwan, Italy and other foreign countries and regions. As such, the Company's worldwide operating income is subject to varying tax rates and its effective tax rate is highly dependent upon the geographic distribution of its earnings or losses and the tax laws and regulations in each geographical region. Consequently, the Company has experienced lower effective tax rates as a substantial amount of its operations are conducted in lower-tax jurisdictions. If the Company's operational structure was to change in such a manner that would increase the amount of operating income subject to taxation in higher-tax jurisdictions, or if the Company was to commence operations in jurisdictions assessing relatively higher tax rates, its effective tax rate could fluctuate significantly on a quarterly basis and/or be adversely affected. Dividend distributions received from the Company's U.S. subsidiary and certain other foreign subsidiaries may be subject to

local country withholding taxes when, and if, distributed. Deferred tax liabilities have not been recorded on unremitted earnings of certain subsidiaries because management's intent is to indefinitely reinvest any undistributed earnings in those subsidiaries. If dividend distributions from those subsidiaries were to occur, the liability as of January 31, 2016 would be \$3.9 million. Cumulative undistributed earnings of foreign subsidiaries for which no deferred taxes have been provided approximated \$32.8 million at January 31, 2016.

As of January 31, 2016 and 2015, the Company had deferred tax assets (net of deferred tax liabilities) before valuation allowance, of \$15.3 million and \$9.8 million, respectively. Realization of the deferred tax assets is dependent upon future taxable income, if any, the amount and timing of which are uncertain.

The Company has \$33.1 million and \$7.4 million of federal and California net operating loss carryovers as of January 31, 2016, all of which relate to excess tax benefit from stock-based compensation. The authoritative guidance prohibits the recognition of a deferred tax asset for excess stock-based compensation. Such unrecognized deferred tax benefit will be accounted for as a credit to shareholders' equity, if and when realized, through a reduction in income taxes payable. The federal and California net operating loss carryovers begin to expire in fiscal year 2035.

The Company also has Federal and California state research and development credit carryforwards of approximately \$6.1 million and \$8.7 million, respectively, at January 31, 2016. The Federal credits begin to expire in fiscal year 2034. The California credits can be carried forward indefinitely.

The Company reports its U.S. state deferred tax assets and related valuation allowance, net of the U.S federal tax rate of 34%. As of January 31, 2016, the Company has recorded a valuation allowance of \$12.1 million against all of its U.S. federal research credit and all U.S. state deferred tax assets due to uncertainty regarding the future utilization of these deferred tax assets.

Utilization of the research credit carryforwards may be subject to an annual limitation due to the ownership percentage change limitations as defined by the U.S. Internal Revenue Code Section 382, as amended, and similar state provisions. The annual limitation may result in the expiration of the U.S. Federal and state research credit carryforwards before utilization. The Company does not expect any tax credit carryforwards to expire as a result of a Section 382 limitation.

The Company applies the provisions of FASB's guidance on accounting for uncertainty in income taxes. As of January 31, 2016, the Company had approximately \$30.2 million in unrecognized tax benefits, \$6.3 million of which would affect the Company's effective tax rate if recognized. The following table sets forth a reconciliation of the beginning and ending amount of unrecognized tax benefits:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
Beginning balance:	\$4,671	\$3,583	\$3,018
Additions based on tax positions related to the			
current year	17,169	1,284	539
Additions for tax positions of prior years	8,810	324	62
Reductions for tax positions in prior years	(37 )	—	—
Settlements for prior periods	—	(43 )	—
Lapse of applicable statute of limitations	(402 )	(477 )	(36 )
Ending balance:	\$30,211	\$4,671	\$3,583

The Company classified \$10.8 million and \$1.2 million of income tax liabilities as other long term liabilities as of January 31, 2016 and 2015, respectively, because payment of cash or settlement is not anticipated within one year from the balance sheet date.

The Company recognizes interest and penalties related to uncertain tax positions as a component of income tax expense. The Company recorded \$6,000, \$7,000 and \$37,000 of interest expense and penalties related to uncertain tax positions for the years ended January 31, 2016, 2015 and 2014, respectively. The Company recorded noncurrent liabilities of \$166,000 and \$160,000 related to interest and penalties for uncertain tax positions at January 31, 2016 and 2015, respectively.

The Company is subject to income tax in the U.S. federal jurisdiction and various state and foreign jurisdictions. The U.S. Internal Revenue Service has concluded its audit of the Company's Federal income tax return for the fiscal year ended January 31, 2010 with no adjustments.

The Company believes that an adequate provision has been made for any adjustments that may result from tax examinations. However, the outcome of tax audits cannot be predicted with certainty. If any issues addressed in the Company's tax audits are resolved in a manner not consistent with management's expectations, the Company could be required to adjust its provision for income tax in the period such resolution occurs. Although timing of the resolution and/or closure of audits is highly uncertain, the Company does not believe it is reasonably possible that its unrecognized tax benefits would materially change in the next 12 months.

As of January 31, 2016, the Company's long-term income taxes payable, including estimated interest and penalties, was approximately \$10.9 million. The Company was unable to make a reasonably reliable estimate of the timing of payments in individual years due to uncertainties in the timing of tax audits, if any, or their outcomes.

On July 27, 2015, in *Altera Corp. v. Commissioner*, the United States Tax Court issued an opinion invalidating the 2003 final Treasury regulations that requires participants in a qualified cost-sharing arrangement to share stock-based compensation. At this time, the U.S. Department of the Treasury has not withdrawn the requirement to include stock-based compensation in intercompany cost-sharing arrangements from its regulations. In February 2016, the IRS appealed the ruling to the United States Court of Appeals for the Ninth Circuit. Due to the uncertainty related to the final resolution of this issue, the Company has not recorded tax benefits in its Consolidated Statements of Operations for the year ended January 31, 2016. The Company will continue to monitor ongoing developments and potential impacts to its consolidated financial statements.

#### 14. Commitments and Contingencies

The Company leases its principal facilities and time-based software licenses under operating lease agreements. Net operating lease expenses for the years ended January 31, 2016, 2015 and 2014 were approximately \$6.8 million, \$5.8 million and \$5.0 million, respectively. Future annual minimum payments under these operating agreements with initial lease terms in excess of one year are as follows:

Fiscal Year	As of January 31, 2016 (in thousands)
2017	\$ 5,844
2018	2,282
2019	1,714
2020	1,532
2021	515
Total future annual minimum lease payments	\$ 11,887

#### Contract Manufacturer Commitments

The Company's components and products are procured and built by independent contract manufacturers based on sales forecasts. These forecasts include estimates of future demand, historical trends, analysis of sales and marketing activities, and adjustment of overall market conditions. The Company regularly issues purchase orders to independent contract manufacturers which are cancelable only upon the agreement between the Company and the third-party. As of January 31, 2016 and 2015, total manufacturing purchase commitments were approximately \$19.7 million and \$27.5 million, respectively.

#### Indemnification

The Company, from time to time, in the normal course of business, indemnifies certain vendors with whom it enters into contractual relationships. The Company has agreed to hold the other party harmless against third party claims in connection with the Company's future products. The Company also indemnifies certain customers against third party

claims related to certain intellectual property matters. It is not possible to determine the maximum potential amount of liability under these indemnification obligations due to the limited history of prior indemnification claims and the unique facts and circumstances that are likely to be involved in each particular claim. The Company has not made payments under these obligations and no liabilities have been recorded for these obligations on the consolidated balance sheets as of January 31, 2016 and 2015, respectively.

#### 15. Segment Reporting

The Company operates in one reportable segment related to the development and sales of low-power, high-definition video products. The Chief Executive Officer of the Company has been identified as the Chief Operating Decision Maker (the “CODM”) and manages the Company’s operations as a whole and for the purpose of evaluating financial performance and allocating resources, the CODM reviews financial information presented on a consolidated basis accompanied by information by customer and geographic region.

## Geographic Revenue

The following table sets forth the Company's revenue by geographic region for the periods indicated:

	Year Ended January 31,		
	2016	2015	2014
	(in thousands)		
Hong Kong	\$284,722	\$196,372	\$135,382
Asia Pacific	3,930	2,358	2,809
United States	8,855	6,677	7,128
North America other than United States	9,953	6,076	4,594
Europe	8,913	6,795	7,695
Total revenue	\$316,373	\$218,278	\$157,608

As of January 31, 2016, substantially all of the Company's long-lived assets were located in the United States and Asia Pacific region with approximate net amount of \$1.6 million and \$1.5 million, respectively. As of January 31, 2015, substantially all of the Company's long-lived assets were located in the United States and Asia Pacific region with approximate net amount of \$1.8 million and \$1.0 million, respectively.

## Major Customers

The customers representing 10% or more of revenue and accounts receivable were Wintech, the Company's logistic provider, and Chicony, a direct ODM customer, which combined accounted for approximately 88%, 89% and 85% of total revenue for the years ended January 31, 2016, 2015 and 2014, respectively. Accounts receivable with these two customers combined accounted for approximately \$32.5 million and \$36.2 million as of January 31, 2016 and 2015, respectively.

## 16. Related-Party Transactions

The Company considers an entity to be a related party if it owns more than 10% of the Company's total voting stock at the end of each reporting period or if an officer or employee of an entity also serves on the Company's board of directors or if it is a significant shareholder and has material business transactions with the Company.

In fiscal year 2015, the Company added additional software license commitments to its existing software license agreement with Cadence Design Systems, Inc. ("Cadence"). A member of the Company's Board of Directors is also the Chief Executive Officer, President and a Director of Cadence. Under these license commitments, the Company committed to pay an aggregate amount of \$7.5 million payable through January 2017. The Company paid \$2.8 million, \$2.3 million and \$1.7 million under these agreements for the years ended January 31, 2016, 2015 and 2014, respectively. License expenses related to these agreements included in research and development expense were approximately \$2.7 million, \$1.9 million and \$1.7 million for the years ended January 31, 2016, 2015 and 2014, respectively.



In addition to the related party transactions noted above, the Company recognized revenue from sales to Wintech, the Company's logistics provider. Wintech, along with an affiliate, owned approximately 4.6% of the Company's voting stock as of January 31, 2013, but has sold such stock and is no longer a significant shareholder of the Company as of January 31, 2016 and 2015, respectively. The Company recognized revenue from sales to Wintech of approximately \$210.6 million, \$125.1 million and \$88.7 million for the years ended January 31, 2016, 2015 and 2014, respectively. As of January 31, 2016 and 2015, the Company had receivables from Wintech of approximately \$20.6 million and \$12.1 million, respectively.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 25, 2016.

AMBARELLA, INC.

By: /s/ George Laplante  
George Laplante, Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints George Laplante as his true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to (i) act on, sign, and file with the Securities and Exchange Commission any and all amendments to this Annual Report on Form 10-K, together with all schedules and exhibits thereto, (ii) act on, sign, and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, and (iii) take any and all actions that may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on March 25, 2016.

Signature	Title
/s/ Feng-Ming Wang Feng-Ming Wang	President, Chief Executive Officer, Executive Chairman and Director (Principal Executive Officer)
/s/ George Laplante George Laplante	Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Les Kohn Les Kohn	Chief Technical Officer and Director
/s/ Chenming C. Hu	Director

Chenming  
C. Hu

/s/  
Christopher  
B. Paisley Director  
Christopher  
B. Paisley

/s/ Jeff  
Richardson Director  
Jeff  
Richardson

/s/ Lip-Bu  
Tan Director  
Lip-Bu Tan

/s/ Andrew  
W.  
Verhalen Director  
Andrew W.  
Verhalen

EXHIBITS INDEX

Exhibit

Number	Description
2.1(1)	Quota Purchase Agreement, dated as of June 25, 2015, by and among the Registrant, the University of Parma, Alberto Broggi, Massimo Bertozzi, Paolo Grisler, Pietro Cerri, Rean Fedriga, Paolo Medici, Luca Bombini, Stefano Cattani, Mirko Felisa, Pier Paolo Porta, and Paolo Zani.
3.1(2)	Amended and Restated Memorandum of Association and Second Amended and Restated Articles of Association of the Registrant
4.1(3)	Third Amended and Restated Investors' Rights Agreement, dated January 5, 2012, by and among Ambarella, Inc. and certain of its shareholders
10.1.1(2)*	Amended and Restated 2004 Stock Plan
10.1.2(4)*	Form of Stock Option Agreement under Amended and Restated 2004 Stock Plan
10.1.3(2)*	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2004 Stock Plan
10.2.1(2)*	2012 Equity Incentive Plan
10.2.2(4)*	Form of Stock Option Agreement under 2012 Equity Incentive Plan
10.2.3(2)*	Form of Restricted Stock Agreement under 2012 Equity Incentive Plan
10.2.4(2)*	Form of Restricted Stock Unit Agreement under 2012 Equity Incentive Plan
10.3(1)*	Amended and Restated 2012 Employee Stock Purchase Plan
10.4(2)*	Form of Indemnification Agreement
10.5(4)*	Offer Letter entered into by Ambarella, Inc. with George Laplante dated March 3, 2011, as amended
10.6.1(4)*	Form of Change of Control and Severance Agreement, entered into by Ambarella, Inc. with the Chief Executive Officer, Chief Financial Officer and Chief Technology Officer
10.6.2(4)*	Form of Change of Control and Severance Agreement, entered into by Ambarella, Inc. with executive officers other than the Chief Executive Officer, Chief Financial Officer and Chief Technology Officer
10.7.1(3)*	Description of Executive Bonus Plan For Fiscal Year 2013
10.7.2(5)*	Description of Executive Bonus Plan For Fiscal Year 2014
10.7.3(6)*	Description of Executive Bonus Plan For Fiscal Year 2015

- 10.7.4(7)\* Description of Executive Bonus Plan For Fiscal Year 2016
- 10.8.1(8) Sales Representative Agreement dated January 31, 2011 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
- 10.8.2(8) Amendment No. 1 to Sales Representative Agreement dated February 1, 2012 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
- 10.8.3(9) Amendment No. 2 to Sales Representative Agreement dated October 1, 2012 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
- 10.8.4 (1) Amendment to the Sales Representative Agreement dated August 1, 2015 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
- 10.9.1(10) Lease Agreement dated March 1, 2013 by and between Ambarella Corporation and Westcore Jay, LLC.
- 10.9.2 (1) Second Amendment to Lease Agreement dated as of August 27, 2015 by and between Ambarella Corporation and DPF JAY OWNER, LLC.
- 21.1 List of subsidiaries of the registrant
- 23.1 Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm

- 24.1 Power of Attorney (included in signature page).
- 31.1 Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 31.2 Certification of Principal Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
- 32.1± Certification of Principal Executive Officer and Principal Financial Officer Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. §1350.

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Schema Linkbase Document

101.CAL XBRL Taxonomy Calculation Linkbase Document

101.DEF XBRL Taxonomy Definition Linkbase Document

101.LAB XBRL Taxonomy Labels Linkbase Document

101.PRE XBRL Taxonomy Presentation Linkbase Document

(1) Incorporated by reference to the Form 10-Q filed on September 8, 2015.

(2) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.

(3) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on August 22, 2012.

(4) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.

(5) Incorporated by reference to the Form 8-K filed on March 11, 2013.

(6) Incorporated by reference to the Form 8-K filed on March 21, 2014.

(7) Incorporated by reference to the Form 8-K filed on March 2, 2015.

(8) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 26, 2012.

(9) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on October 5, 2012.

(10) Incorporated by reference to the Form 10-K filed on April 4, 2013.

\*Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate

±In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management's Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 hereto are deemed to accompany this Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.