

AMBARELLA INC  
Form 10-K  
April 04, 2013  
Table of Contents

**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, 2013

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

Edgar Filing: AMBARELLA INC - Form 10-K

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

2975 San Ysidro Way,

Santa Clara, California  
(Address of principal executive offices)

95051  
(Zip Code)

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 January 31, 2013, was approximately \$151 million 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 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, 2013: 27,035,074 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 5, 2013 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 Form 10-K.



**Table of Contents**

**TABLE OF CONTENTS**

	<b>Page</b>
<b><u>PART I</u></b>	
Item 1. <u>Business</u>	4
Item 1A. <u>Risk Factors</u>	20
Item 1B. <u>Unresolved Staff Comments</u>	46
Item 2. <u>Properties</u>	46
Item 3. <u>Legal Proceedings</u>	46
Item 4. <u>Mine Safety Disclosures</u>	46
<b><u>PART II</u></b>	
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	47
Item 6. <u>Selected Financial Data</u>	49
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	49
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	63
Item 8. <u>Financial Statements and Supplementary Data</u>	64
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	65
Item 9A. <u>Controls and Procedures</u>	65
Item 9B. <u>Other Information</u>	65
<b><u>PART III</u></b>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	66
Item 11. <u>Executive Compensation</u>	66
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	66
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	66
Item 14. <u>Principal Accountant Fees and Services</u>	66
<b><u>PART IV</u></b>	
Item 15. <u>Exhibits and Financial Statement Schedules</u>	67
<u>Signatures</u>	94
<u>Power of Attorney</u>	94
<u>Exhibits</u>	95

**Table of Contents**

**FORWARD-LOOKING STATEMENTS**

*This 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 Form 10-K. Forward-looking statements are identified by the use of the words would, could, will, may, expect, believe, should, anticipate, outlook, if, future, intend, plan, estimate, predict, potential, targets, seek or continue and similar words 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, research and development, customer and supplier relationships, industry trends, our cash needs and capital requirements, 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 SEC. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this 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.*

---

**Table of Contents**

**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. 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.

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 sports cameras, automotive aftermarket cameras, professional and consumer Internet Protocol, or IP, security cameras, digital still cameras, or DSCs, telepresence cameras and camcorders. Recently, our presence in the camera market has shifted towards enabling 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 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 are currently selling our fourth generation solutions into the infrastructure market and our fifth generation solutions into the camera market.

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 GoPro, Robert Bosch GmbH and affiliated entities and Samsung Electronics Co., Ltd., who source our solutions from ODMs including Ability Enterprise Co., Ltd., Asia Optical Co. Inc., Chicony Electronics Co., Ltd., DXG Technology Corp., Hon Hai Precision Industry Co., Ltd. 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 Google, Inc.) and Telefonaktiebolaget LM Ericsson, who source our solutions from leading ODMs such as Plexus Corp.

We have shipped approximately 33 million SoCs since our inception in 2004. We employ a fabless manufacturing strategy and are currently shipping the majority of our solutions in the 65, 45 and 32 nanometer, or nm, process nodes. We have a proven track record of developing and delivering multiple solutions with first-pass silicon success. As of January 31, 2013, we had 444 employees worldwide, approximately 75% 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 China, Japan, South Korea and Taiwan. For our fiscal years ended January 31, 2013, 2012 and 2011, we recorded revenue of \$121.1 million, \$97.3 million and \$94.7 million, respectively, and net income of \$18.2 million, \$9.8 million and \$13.9 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 2975 San Ysidro Way, Santa Clara, California. Our website is [www.ambarella.com](http://www.ambarella.com). You

---

## **Table of Contents**

can obtain copies of our Forms 10-K, 10-Q, 8-K, and other filings with the 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, Room 1580, 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. According to the Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2011-2016, mobile video will comprise 71% of total mobile data traffic in 2016, a 90% compound annual growth rate, or CAGR, from 2011 to 2016. 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 telepresence cameras are increasingly including both HD video capture and high-quality still image capture. According to IDC, virtually all camera-enabled smartphones being sold today are capable of capturing and wirelessly transmitting HD video. In the IP video segment of the camera market, growth is being driven by customers demand for HD imaging and networking capabilities to replace aging analog and standard-definition systems currently used for professional and consumer security applications. IDC forecasts the IP security surveillance camera market will grow from 6.6 million units in 2011 to 15.0 million units in 2014. In addition to the significant growth in the number of devices, new applications are emerging for video capture devices. 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 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 than ever before. Websites such as YouTube and Facebook have enabled an effective new channel to widely distribute, store and display video and other rich media. YouTube reports having one trillion video views in 2011, and having 60 hours of video uploaded every minute. 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. According to the 2010 Cisco Report, global video communications traffic will increase over 550% from 2010 to 2015.

***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. According to IDC, over two billion people will watch streaming video over the Internet in 2017. 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 to any web connected device. This video cloud application has enabled intelligent IP surveillance systems that detect activity and then stream encrypted HD video through secure servers and alert end users.

---

## **Table of Contents**

***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. According to Nielsen, 67% of U.S. households with televisions now have a HD television and receive HD signals; meanwhile, Apple has introduced HD displays in their iPhones, iPads and MacBooks. These trends highlight 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 H.264 video compression technology to reduce data rates for storage or for transmission of video over networks with limited bandwidth. 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 the smartphones or tablets is essential.

### ***Evolving End User Requirements for Video Capture and Distribution***

Camera users have evolving requirements with respect to connectivity, simplicity and portability including:

***Connectivity.*** Integrated wireless capability using mobile broadband protocols and wireless links such as Bluetooth and Wi-Fi is becoming an increasingly prevalent feature across many classes of video capture devices. Rather than storing images and video to local media and transferring to a computer later, consumers are demanding the ability to transfer and share their video content in real-time to websites such as YouTube, Facebook and online media albums. Consumers want to watch, control and capture real-time video on their smartphones through simple cameras with embedded connectivity, high-performance video and image processing and a rugged form factor. Additionally, consumers are requiring high-performance cameras with robust connectivity to enable security functionalities such as remote monitoring over cloud infrastructure.

***Simplicity.*** Device manufacturers and software developers continually struggle to balance enhanced functionality with a simpler user experience. Consumer preference has moved away from video capture devices with multiple buttons and controls to less complex devices with fewer buttons and more intuitive graphical user interfaces and software applications. Consumers also expect video and images to be captured and stored in a format which can be edited, displayed and shared quickly, easily and without the need to upload to a computer. To provide consumers with increasingly easy-to-use devices and interfaces, video and image capture, OEMs must be able to embed more intelligence in their device platforms to facilitate devices that strike a balance between making decisions for the user and providing the user with the desired level of control. For example, smartphone companion cameras are utilizing easy-to-use camera devices, with no display and limited control functionality on board, and leveraging the intuitive graphical user interfaces of smartphones as the command and control center for view finding and for video playback or sharing.

***Portability and Rugged Durability.*** Consumers are demanding increasingly smaller and portable video capture devices with rugged durability that capture high-quality images and video. Specifically,



---

## **Table of Contents**

consumers want to capture high-quality video and images while being active, such as with wearable sports cameras, or with cameras embedded in accessories such as sunglasses, record possible events such as an accident with an automotive aftermarket camera, or capture security related footage from an IP security camera in an outdoor environment. These growing use cases are all being enabled by technology that allows high performance, low power, still image and video capture in rugged form factors.

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 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 UltraHD or 4K video capture and transmission. In the market for DSCs, for example, resolution, measured in megapixels, has 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. In the future, we believe consumers will demand 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.

***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 cell phones, requires broadcasters and other distributors to have the capability to provide video content in multiple formats and source resolutions.

### ***Impact of Shifts in Consumer Preferences on Video and Image Capture Devices***

The video and image capture device market is impacted by consumer preferences as to form factor and functionality. For example, improved smartphone video capture capabilities, and rapid adoption by consumers of devices with such capabilities, have led to the recent decline of pocket video camera and digital camcorder markets. This movement in consumer preferences has led to growth in more specialized video and image capture devices such as wearable sports cameras, automotive aftermarket cameras and IP security cameras.

### ***Limitations of Current Video Content Creation and Distribution Solutions***

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. Optimizing this process represents a significant engineering challenge that only a limited number of companies have successfully overcome. The processor is based on a suite of signal processing and compression algorithms implemented using hardware specifically built to process video and audio and is supported by system and software architectures to manipulate, store and distribute data efficiently.

## **Table of Contents**

Given the complexity of video processing, meeting all consumer demands in a single device is challenging. As a result, solution providers often compromise on one or more key specifications. For example, in portable consumer devices and networked video applications where power consumption and device size are critical attributes, many video capture devices available in the market today sacrifice image quality in order to achieve low power consumption and a compact form factor.

The performance of video and image compression technology has become increasingly important as file sizes have grown and video traffic volumes have increased. Many current compression solutions are developed from architectures that were originally optimized for still image processing needs or lower resolution videos. As a result, these solutions use inefficient video compression algorithms, which limit overall system performance, increase storage and power consumption requirements and slow video-transfer speeds and upload times. In the infrastructure market, solutions based on inefficient architectures tend to consume more power and have bigger form factors, thereby lowering the number of available channels per encoder and limiting the ability to deliver multiple streams of video simultaneously.

Many leading camera OEMs have used proprietary technologies to try to address these technical challenges. However, many of these OEMs are vertically integrated and generally allocate fewer resources to semiconductor design solutions than are necessary, and hence are not generally able to produce low-cost leading edge technologies quickly and efficiently.

## **Our Solution**

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 wearable cameras and DSCs 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. A more recent use case that has become a significant part of our revenue is the automotive aftermarket camera, particularly 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.

**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.

**New and Emerging Markets.** We intend to continue to customize and adapt our solutions to meet the needs of additional large and emerging markets. For example, we are leveraging our expertise in still image and video capture to pursue new opportunities within the DSC market, such as mirrorless cameras. According to IDC, the mirrorless camera market is expected to grow from 3.5 million units in 2011 to 13.1 million units in 2015 representing a 40% CAGR. Additionally, we are working with end customers to develop video capture devices for emerging wearable camera applications.

---

**Table of Contents****Our Competitive Strengths**

Our platform technology solutions provide performance attributes that meet the highest standards of the infrastructure market, satisfy the stringent demands of the camera market and enable integration of HD video and image capture capabilities in portable devices. 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 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 Wide Dynamic Range, or WDR, 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. The confluence of our image and video processing expertise allows us to penetrate high-performance applications such as the high-end DSC market.

***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 32nm since our founding and have a proven track record of developing and delivering multiple solutions with first-pass silicon success.

***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

---

## **Table of Contents**

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 infrastructure SoC. 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. We actively engage with OEMs on design specifications and with ODMs on product implementation. Additionally, approximately 76% 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 Strategy**

Our objective is to be the leading provider of processing solutions for the capture, sharing and display of HD video and still imagery. Key elements of our strategy are to:

***Extend Our Technology Leadership.*** We intend to continue to invest in the development of video and image processing solutions designed to meet evolving consumer demands such as higher performance, lower cost, lower power, connectivity and interoperability with other connected devices. We intend to leverage our existing technical expertise and continue to invest significant resources both in our current solutions and in developing solutions that address new markets as well as new segments of existing markets. We will continue to recruit and develop expertise in the area of high-performance processor design and algorithm and software development, and build on our proprietary intellectual property position in HD video processing. We believe that continued investment in our proprietary technology platform will enable us to increase our technological leadership in terms of the performance and the functionality of our solutions. Examples of our technology leadership are the recent introductions of our A7L and A9 SoCs. Our A7L SoC delivers full 1080p HD H.264 video at 60 frames per second and allows for the capture of 30 16-megapixel still images per second. Our A7L SoC enables consumers with connected cameras to simultaneously capture Full HD video while encoding a second, mobile resolution video for uploading to the Internet or streaming over a Wi-Fi network. Our A9 SoC captures full 4K video at 30 frames per second initially enabling the development of cost effective video capture devices for the consumer and professional IP security camera markets.

***Deepen and Expand Our Customer Relationships.*** 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 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, and we intend to continue to actively engage with ODMs and OEMs at every stage of their design cycles. Once integrated into a customer's design, our product lifecycles tend to be for the life of the product, and we intend to maintain our incumbent position with our customers by continually improving our solutions to meet their evolving needs. An example of an opportunity to expand our customer relationships is in the DSC camera market, where prospective camera end customers have heretofore primarily utilized

---

## **Table of Contents**

internal resources to develop their video and image processing devices. We believe as video formats evolve toward UHD and beyond, complexity of design will greatly increase the required investment for in-house innovation, making high-performance merchant solutions, such as ours, more attractive to potential camera end customers.

***Target New Applications Requiring Connectivity, HD Video Processing and Low Power.*** We intend to leverage our core technology platform to address other 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 sports camera market, the market for automotive aftermarket cameras, the IP security camera market and the mirrorless DSC 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 emerging leaders in the mirrorless and DSC 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 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.

***Leverage Our Global Business Infrastructure.*** We are committed to continue growing our global infrastructure. Our proximity to key customers due to our extensive presence in Asia has enabled us to build strong relationships with leading ODMs and OEMs. We intend to increase our investments in research and business development personnel in Asia to further strengthen these relationships. We believe that growing our highly-integrated global organization also provides us with a favorable cost structure while enabling continued advancement of our technology. Our global structure provides us access to an international pool of engineering and management talent, allowing us to recruit and retain highly accomplished personnel with proven expertise in video and image processing solutions.

## **Products**

We are currently shipping production volumes of our SoCs that incorporate the fourth generation of our core technology platform. We provide customers with guidelines known as reference designs so that they can efficiently incorporate our solutions in their product designs.

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 currently sell our solutions into the following end markets:

***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.

***Wearable Sports Cameras.*** 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 of cameras in this end market.

***Automotive Aftermarket Cameras.*** In several international markets, such as China, Russia, South Korea and Taiwan, small video cameras are mounted on board vehicles to record traffic accidents and help establish records for insurance and liability purposes. This market is still emerging, but has grown meaningfully over the last year. Our low power, high-performance, small form factor solutions are well suited for this market.

***IP Security Cameras.*** These cameras are used for monitoring and security in consumer and professional applications. Our solutions enable streaming and embedded intelligence which allows these applications to provide continuous monitoring and additional functionality, such as motion sensing or facial recognition.

## **Table of Contents**

**Digital Still Cameras.** This end market is evolving from simple still cameras to devices incorporating advanced functionalities, such as Full HD video capture. The DSC market is further segmented into high-end and low-end categories, which are differentiated by image and video quality supported by a spectrum of CMOS sensors and the quality of lenses. We compete in the high-end category of the DSC market on the basis of our high-quality still image and video processing and low power consumption.

**Telepresence Cameras.** This end market encompasses HD videoconferencing and consumer Skype cameras. For example, our iOne SoC combines high image quality with the ability to run full duplex HD video applications such as Skype.

**Camcorders.** Our high-performance and low power architecture enables improved consumer experience with Full HD video capture. In addition, our ability to provide high-resolution still image capture and HD video capture simultaneously enables a hybrid capability for the consumer.

**Pocket Video Cameras.** These compact single-function video cameras are used for impromptu video capture. Our low power, high-performance attributes, in addition to our small form factor, are ideally suited for these pocket-sized devices, which have large internal storage, long recording time and finite battery life. However, the proliferation of smartphones with enhanced video capture abilities has significantly decreased the size of this market.

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 capture, video compression, sharing and display while offering exceptional power, size and performance characteristics.

## **Table of Contents**

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;

low-power architecture with minimal system memory footprint;

programmable architecture that balances flexibility, quality, power and die size; and

full software development kit comprised of APIs to facilitate integration into customers' products.

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. Dual 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 44 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. We believe that our continued investment in image processing innovations will provide us with market opportunities in the high-end DSC and mirrorless markets, where camera vendors primarily compete on still image quality and capture performance.

---

## **Table of Contents**

### ***AmbaCast***

Our proprietary HD video processing architecture, known as AmbaCast, incorporates advanced algorithms for motion estimation, motion-compensated 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 standard.

Our solutions for the broadcast infrastructure market allow OEMs to offer both the H.264 and MPEG-2 encoding formats. Although H.264 has become the industry standard, MPEG-2 is still widely used as the format of both standard and high-definition digital television signals that are broadcast by terrestrial (over-the-air), cable and direct broadcast satellite television systems. 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 32nm. 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 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 2.0 and HDMI 1.4.

Our A9 SoC, which we introduced in January, 2013, supports 4K Ultra HD video resolution at 30 frames per second as well as high frame-rate video for capturing fast-action sports with 1080p video at 120 frames per second or 720p video at 240 frames per second. Our A9 SoC includes dual core ARM® Cortex -A9 CPUs providing the performance required for advanced applications including wireless connectivity to smartphones for video streaming or image sharing. Fabricated in 32nm CMOS technology, the A9 SoC offers very low power consumption, enabling 4K resolution video cameras with small form factors and extended battery life.

### ***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. 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 HD video with wireless video streaming to smartphones. The Kit leverages our multi-stream encoding capability which supports the recording of Full HD video while simultaneously recording and streaming a second stream to the smartphone. The Kit is available for our A7L SoC product family, providing full 1080p60 HD video with photography and low power consumption. This Kit enables accelerated end customer product development and allows consumers to enjoy the benefit of a ruggedized sports camera or the advanced photographic capabilities of a dedicated DSC with smartphones that enable remote control, viewing, playback and Internet video sharing.



---

## **Table of Contents**

### ***Transcoding Expertise***

We were the first to market with a single-chip broadcast-class high definition H.264 CODEC. Our current solution, the A6 Broadcast Encoder/Transcoder solution delivers high-quality 1080p60 encode and 1080i60 transcode in a small form-factor and power-efficient device suited for high-density applications. Targeting H.264 and MPEG-2 head-end encoders and high-density transcoders in the infrastructure market, our A6 SoC deploys features such as rate-distortion optimization, a method of improving video quality and compression, and multipass, a technique for encoding video into another format using multiple passes to improve quality. Our A6 SoC provides the ability to decode and simultaneously re-encode high-quality video streams into either H.264 or MPEG-2 formats. This facilitates the delivery of video to various consumer devices, such as personal computers, set-top boxes, smartphones and tablets, which require different formats at varying resolutions and bit-rates.

### **Customers**

We sell our solutions to leading ODMs and OEMs globally. In the camera market, our video processing solutions are designed into products from leading OEMs including GoPro, Robert Bosch GmbH and affiliated entities and Samsung, who source our solutions from leading ODMs including Ability Enterprise Co., Ltd., Asia Optical Co. Inc., Chicony Electronics Co., Ltd., DXG Technology Corp., Hon Hai Precision Industry Co., Ltd. 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 Google, Inc.) and Telefonaktiebolaget LM Ericsson, who source our solutions from leading ODMs such as Plexus Corp.

Sales to customers in Asia accounted for approximately 87%, 84% and 94% of our revenue in the fiscal years ended January 31, 2013, 2012 and 2011, 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. For example, GoPro, a leading OEM camera manufacturer, uses multiple ODMs in Asia while selling many of their products that incorporate our solutions in the United States and Europe. In fiscal year 2013, 78% of our revenue was attributable to sales of our solutions into the camera market and 22% of our revenue was attributable to sales of our solutions into the infrastructure market. In fiscal year 2012 and 2011, 75% of our revenue was attributable to sales of our solutions into the camera market and 25% 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, but could last up to three years or more. 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 63%, 80% and 91% of our revenue was derived from sales through our logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, for the fiscal years ended January 31, 2013, 2012 and 2011,

## **Table of Contents**

respectively. In addition, in the fiscal year ended January 31, 2013, Chicony Electronics Co., Ltd., or Chicony, a large ODM customer in Asia, represented 16% of our revenue. In previous years, Chicony purchased our products from Wintech. 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 2013, sales directly and through our logistics providers to our five largest customers collectively accounted for approximately 37% of our revenue and sales to our 10 largest customers collectively accounted for approximately 48% of our revenue. In fiscal year 2012, sales directly and through our logistics providers to our five largest customers collectively accounted for 46% of our revenue and sales to our 10 largest customers collectively accounted for approximately 62% of our revenue. In fiscal year 2011, sales directly and through our logistics providers to our five largest customers collectively accounted for 57% of our revenue and sales to our 10 largest customers collectively accounted for approximately 82% of our revenue.

## **Sales and Marketing**

We sell our solutions worldwide using both our direct sales force and logistics providers. We have direct sales personnel covering the United States and Asia, and we operate sales offices in Santa Clara, California and Hong Kong, and business development offices in China, Japan, South Korea and Taiwan. In addition, in each of these locations, 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 1.2% of total revenue in fiscal year 2013. Conversely, our revenue derived from the wearable sports camera market, the IP security camera market and the market for automotive aftermarket cameras supported total revenue growth in fiscal year 2013 despite the sharp decline in 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 is typically 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.

## **Table of Contents**

### **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.

### ***Wafer Fabrication***

We have a history of using several process nodes from 130nm through 32nm. We currently manufacture the majority of our solutions in 65nm, 45nm and 32nm silicon wafer production process geometries utilizing the services of several different foundries. 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. 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 by 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 engage in substantial research and development efforts to develop new products and integrate additional features and capabilities into our HD 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 three research and development design centers located in the United States, China and Taiwan.

---

## **Table of Contents**

For the fiscal years ended January 31, 2013, 2012 and 2011, our research and development expense was \$42.8 million, \$37.6 million and \$34.4 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.

Currently, our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow markets. Our primary competitors in the camera market include CSR Plc (who acquired Zoran Corporation in August 2011), Fujitsu Limited, HiSilicon Technologies Co., Ltd. and Texas Instruments Incorporated, as well as vertically integrated divisions of consumer device OEMs, including Canon Inc., Panasonic Corporation and Sony Corporation. In the automotive aftermarket camera market, we compete against Core Logic, Inc., Novatek Microelectronics Corp. and Sunplus Technology Co. Ltd. Our primary competitors in the infrastructure market include Intel Corporation, 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, NVIDIA Corporation, Qualcomm Incorporated 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 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 each of 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

---

## **Table of Contents**

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, 2013, we had 17 issued and allowed patents in the United States plus nine additional continuation patents, three issued patents in China, one issued patent in Japan and 34 pending and provisional patent applications in the United States. The issued and allowed patents in the United States expire beginning in 2024 through 2031. 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, particularly as a public company, 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.

---

## **Table of Contents**

### **Employees**

At January 31, 2013, we employed a total of 444 people, including 107 in the United States and 337 in Asia, primarily in China and Taiwan. 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 assets and revenue by geographic area is set forth in Item 6, Selected Financial Data and in Note 13, Segment Reporting, of Notes to Consolidated Financial Statements of this Form 10-K, both of which are 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 share 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, have 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 15% of our total revenue in fiscal year 2012 and approximately 1.2% of our total revenue in fiscal year 2013. If other product categories incorporating our SoC solutions are not commercially successful, our revenue and business will suffer.

---

**Table of Contents**

***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 2013, sales directly and through our logistics providers to our five largest customers collectively was estimated to be 37% of our revenue, and sales to our 10 largest customers collectively was estimated to be 48% of our revenue. In fiscal year 2013, our largest ODM customer was estimated to be 16% of our revenue and built 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. The loss of a significant customer like Kodak 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.

***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.



---

## **Table of Contents**

***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 any of our third-party vendors, and we typically negotiate pricing 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 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 customers 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 those customers, 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 could take two or more quarters. As we transition to more advanced process nodes beyond 32 nanometer, or nm, we will be increasingly dependent upon Samsung Electronics Co., Ltd., or Samsung, Taiwan Semiconductor Manufacturing Co., Ltd., or TSMC, who are two of the only three foundries currently available for certain advanced process technologies that we may utilize.

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.

***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. Even after an order is received, our customers may cancel these orders or request a decrease in production quantities. Any such cancellation or decrease 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.

---

**Table of Contents**

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 derive the majority 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 and 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 this 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 sports cameras, automotive aftermarket cameras, IP security cameras, digital still cameras, or DSCs, and telepresence 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.

***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, 2013, 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 a significant amount 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 solution 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; or the emergence of new industry standards for video compression. 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.

---

## **Table of Contents**

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 and DSCs, and to enter new markets. 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.

The DSC camera market is primarily served by only a few OEMs, such as Canon Inc., Nikon Corporation and Sony Corporation. These OEMs are large, multinational corporations with substantial negotiating power relative to us and, in some instances, have 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 revenue from the sales of our solutions into the DSC camera market.

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.

***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. We expect that we will have to do so again in the future.

***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

**Table of Contents**

semiconductor companies enter our markets, and as the internal resources of large OEMs grow. 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.

Our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow markets. Our primary competitors in the camera market include CSR plc (who acquired Zoran Corporation in August 2011), Fujitsu Limited, HiSilicon Technologies Co., Ltd. and Texas Instruments Incorporated, as well as vertically integrated divisions of consumer device OEMs, including Canon Inc., Panasonic Corporation and Sony Corporation. In the market for automotive aftermarket cameras, we compete against Core Logic, Inc., Novatek Microelectronics Corp. and Sunplus Technology Co. Ltd. Our primary competitors in the infrastructure market include Intel Corporation, 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, NVIDIA Corporation, Qualcomm Incorporated 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 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

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

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.

---

**Table of Contents**

*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 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.

*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 all of Asia other than Japan. Approximately 63%, 80% and 91% of our revenue was derived from sales through Wintech for the fiscal years ended January 31, 2013, 2012 and 2011, 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 2015, 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.

*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



## Table of Contents

quarter as our customers typically increase their production to meet year-end demand for their products. 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:

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;

variances in order patterns by our customers, particularly any of our significant customers;

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;

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. 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 declines in margins and profitability or incur losses.

***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 \$121.1 million in fiscal year 2013. 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.



*Due to our limited operating history, we may have difficulty accurately predicting our future revenue and appropriately budgeting our expenses.*

We were incorporated in 2004 and first generated product revenue in the third quarter of fiscal year 2006. As a result, we have a limited operating history from which to predict future revenue. This limited operating experience, combined with the rapidly evolving nature of the markets in which we sell our solutions, 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 substantially all of our revenue from sales when we have received notification from our logistics providers that they have sold our products,

## **Table of Contents**

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 \$42.8 million, \$37.6 million and \$34.4 million in fiscal year 2013, 2012 and 2011, respectively. We expect to continue 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. We do not know whether we will have sufficient resources to maintain the level of investment in research and development required to remain competitive. 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 end 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 will depend in large part upon our ability to attract, retain and motivate highly skilled management, engineering and sales and marketing personnel. The loss of any key employees or the inability to attract, retain or motivate qualified personnel, including engineers and sales and marketing personnel,

---

**Table of Contents**

could delay the development and introduction of, and harm our ability to sell, our solutions. We believe that our future success is dependent on the contributions of Fermi Wang, our co-founder, Chairman of the Board of Directors, President and Chief Executive Officer, Les Kohn, our co-founder and Chief Technology Officer, George Laplante, our Chief Financial Officer, Didier LeGall, our Executive Vice President, and Christopher Day, our Vice President, Marketing and Business Development. Each of these executive officers is an at-will employee. The loss of the services of Dr. Wang, Mr. Kohn, Mr. Laplante, Dr. LeGall, Mr. Day or certain other key personnel could harm our business, financial condition and results of operations. For example, if any of these individuals were to leave unexpectedly, we could face substantial difficulty in hiring qualified successors and could experience a loss in productivity during the search for any such successor and while any successor is integrated into our business and operations.

Our key technical and engineering personnel represent a significant asset and serve as the source of our technological and product innovations. We plan 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. For example, in the camera market, the unavailability of complementary metal-oxide semiconductor, or CMOS, sensors could slow adoption of our solutions in the DSC market. 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

---

**Table of Contents**

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 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 32nm, we will be increasingly dependent upon Samsung and TSMC, who are two of the only three 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.

---

**Table of Contents**

***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, 2013, we had 17 issued and allowed patents in the United States plus nine additional continuation patents, three issued patents in China, one issued patent in Japan and 34 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.

---

## **Table of Contents**

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 issuing. 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, particularly as a public company, we expect 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



---

**Table of Contents**

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 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.

***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



---

**Table of Contents**

prohibited by the FCPA or other applicable laws and regulations. We are in the early stages of implementing our FCPA compliance program and 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 (EU's) Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (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.

As a result of efforts by us and our third party contractors to comply with these or other future environmental laws and regulations, we could incur substantial costs, including those relating to excess component inventory, and be subject to disruptions to our operations and logistics. In addition, we will need to procure the manufacture of compliant products and source compliant components from suppliers. We cannot assure you that existing laws or future laws will not have a material adverse effect on our business.

***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

---

**Table of Contents**

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 and H.264, 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. 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. 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.

***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

## **Table of Contents**

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.

***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, 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;

geopolitical and economic 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;

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

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.

---

**Table of Contents**

***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.

***We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our ordinary shares less attractive to investors.***

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act, (the JOBS Act), enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, (the Sarbanes-Oxley Act), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years, although we could lose that status sooner if our annual revenues exceed \$1 billion, if we issue more than \$1 billion in non-convertible debt in a three year period, or if the market value of our ordinary shares held by non-affiliates exceeds \$700 million. We cannot predict if investors will find our ordinary shares less attractive because we may rely on these exemptions. If some investors find our ordinary shares less attractive as a result, there may be a less active trading market for our ordinary shares and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

---

**Table of Contents**

***Our management has limited public company experience. As a result of becoming a public company, we will be 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 will incur significant legal, accounting and other expenses that we did not incur as a private company. The individuals who constitute our management team have limited experience managing a publicly traded company, and limited experience complying with the increasingly complex and changing laws pertaining to public companies. Our management team and other personnel will need to devote a substantial amount of time to compliance, and we may not effectively or efficiently manage our transition into a public company.

We expect rules and regulations such as the Sarbanes-Oxley Act to increase our legal and finance compliance costs and to make 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. Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. Section 404 compliance may divert internal resources and will take a significant amount of time and effort to complete. We may not be able to successfully complete the procedures and certification and attestation requirements of Section 404 by the time we will be required to do so. However, our auditors will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until we are no longer an emerging growth company as defined in the JOBS Act if we take advantage of the JOBS Act exemptions available to us. In addition, these Sarbanes-Oxley Act requirements may be modified, supplemented or amended from time to time. Implementing these changes may take a significant amount of time and may require specific compliance training of our personnel. In the future, we may discover areas of our internal controls that need improvement. If our auditors or we discover a material weakness or significant deficiency, 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. If we fail to successfully complete the procedures and certification and attestation requirements of Section 404, or if in the future 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 Securities and Exchange Commission, or 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 share. We cannot assure you that we will be able 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 implement a new 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.***

We intend to hire additional accounting and finance personnel with system implementation experience and Sarbanes-Oxley Act compliance expertise. 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

---

**Table of Contents**

and procedures. If our finance and accounting organization is unable for any reason to respond adequately to the increased demands that will result from 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 strengthen 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 incur significant expense and devote substantial management effort toward ensuring compliance with Section 404.

We are implementing a new enterprise resource planning, or ERP, system. This project will require significant investment of capital and human resources, the re-engineering of many processes of our business and the attention of many employees who would otherwise be focused on other aspects of our business. Any disruptions, delays or deficiencies in the design and implementation of the new ERP system could result in potentially much higher costs than we had anticipated 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 appropriate 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, 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

---

**Table of Contents**

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, 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 2013 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 2014 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, 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 following this offering, a substantial amount of cash or cash equivalents, and



---

**Table of Contents**

because the calculation of the value of our assets may be based in part on the value of our ordinary shares which may fluctuate after this offering 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. See Taxation U.S. Federal Income Taxation PFIC.

***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 87% of our revenue in fiscal year 2013. 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 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. 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. If we complete acquisitions, we may not strengthen our competitive position or achieve our goals in a timely manner, or at all, and these acquisitions may be viewed negatively by our customers, financial markets or investors. 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.

## **Table of Contents**

*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.

### **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.*

We cannot predict the extent to which a trading market will develop or how liquid that market might become. The trading price of our ordinary shares is likely to be highly 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;

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

## **Table of Contents**

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. As of January 31, 2013, we had 27,035,074 ordinary shares outstanding.

All of the ordinary shares sold in the IPO are freely tradable without restrictions or further registration under the Securities Act of 1933, as amended, (the "Securities Act"), except for any shares held by our affiliates as defined in Rule 144 under the Securities Act. A total of 20,135,074 ordinary shares outstanding as of January 31, 2013 are restricted as a result of securities laws, lock-up agreements or other contractual restrictions that restrict transfers for at least 180 days after the date of the final IPO prospectus, subject to certain extensions. The underwriters may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements with the underwriters prior to expiration of the lock-up period.

The holders of approximately 12,446,421 ordinary shares will be entitled to rights with respect to registration of such shares under 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

---

**Table of Contents**

exercise of their registration rights, our ability to raise capital may be impaired. We filed a registration statement 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 a lock-up period of at least 180 days and other 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.

*A limited number of shareholders will have the ability to influence the outcome of director elections and other matters requiring shareholder approval.*

As of January 31, 2013, our executive officers and directors and their affiliates beneficially own, in the aggregate, approximately 32% of our outstanding ordinary shares. These shareholders, if they acted together, could exert substantial influence over matters requiring approval by our shareholders, including electing directors, adopting new compensation plans and approving mergers, acquisitions or other business combination transactions. This concentration of ownership may discourage, delay or prevent a change of control of our company, which could deprive our shareholders of an opportunity to receive a premium for their stock as part of a sale of our company and might reduce our stock price. These actions may be taken even if they are opposed by our other shareholders.

*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.

*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;

---

**Table of Contents**

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 U.S. 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 of 1933 or the Securities Exchange Act of 1934 of the U.S. 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.

**Table of Contents****ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

Our principal executive offices are located in Santa Clara, California, consisting of approximately 22,000 square feet of office space under a lease that expires in fiscal year 2014. In March 2013, we entered into a new lease for approximately 35,000 square feet of office space that expires in fiscal year 2019. This new facility will accommodate our principal sales, marketing, research and development and administrative activities. We also lease approximately 54,000 square feet of office space in Hsinchu, Taiwan under lease agreements that automatically renew each year. These Taiwan facilities accommodate research and development, business development, operations, finance and administrative support. We lease approximately 23,000 square feet of office space in Shanghai and Shenzhen, China, under leases that expire in November 2015 and April 2014, respectively, to support research and development and business development. We lease additional facilities in Hong Kong for business development 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 use as of January 31, 2013:

Major Locations	Approximate Square Footage	Use
United States:		
Santa Clara, California	22,000	Corporate Headquarters; Sales; Marketing; Research and Development; Administration
Asia Pacific:		
Hsinchu, Taiwan	54,000	Research and Development; Business Development; Operations; Administration
Shanghai, China	15,000	Research and Development; Business Development
Shenzhen, China	8,000	Research and Development; Business Development
Kowloon, Hong Kong	4,000	Business Development; Warehousing
Shin-Yokohama, Japan	4,000	Business Development;
SeongNam, South Korea	2,000	Business Development;

**ITEM 3. LEGAL PROCEEDINGS**

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

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.



**Table of Contents****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, 2013		
Fourth Quarter	\$ 13.42	\$ 7.42
Third Quarter	7.42	5.55

On March 28, 2013, there were 297 shareholders of our recorded 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 28, 2013, the last reported sale price of our stock was \$15.66 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 for 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 (the Exchange Act) except as shall be expressly set forth by specific reference in such filing.

**Table of Contents**

The following graph shows a comparison from October 10, 2012 through January 31, 2013 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 3 Months Cumulative Total Return

	10/10/2012	10/31/2012	11/30/2012	12/31/2012	1/31/2013
Ambarella, Inc.	100	119.1	143.7	184.0	164.4
NASDAQ Composite	100	97.6	98.6	98.9	103.0
PHLX Semiconductor Index	100	99.7	101.7	104.4	112.2

**Use of Proceeds**

On October 15, 2012, the Company closed its initial public offering, or IPO, of 6,000,000 ordinary shares inclusive of 1,095,349 shares sold by certain shareholders of the Company, which was effected through a Registration Statement on Form S-1 (File No. 333-174838) that was declared effective by the Securities and Exchange Commission on October 9, 2012. The public offering price of the shares sold in the offering was \$6.00 per share. The net proceeds from the offering to the Company were \$25.4 million after deducting underwriting discounts and commissions and other offering expenses. Upon the closing of the IPO, all outstanding redeemable convertible preference shares converted into ordinary shares on a one-to-one basis and all outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares. On November 6, 2012, a total of 900,000 ordinary shares were sold to the Company's IPO underwriters in connection with their exercise of the over-allotment option. The net proceeds to the Company from the sale of these shares were approximately \$5.0 million after deducting underwriting discounts and commissions. There has been no material change in the use of proceeds from our initial public offering as described in our final prospectus filed with the SEC pursuant to Rule 424(b).

**Stock Split**

Effective August 24, 2012, the Company's board of directors and shareholders approved a reverse stock split of one (1) ordinary share for every four and one half (4.5) authorized, issued and outstanding ordinary shares and one (1) preference share for every four and one half (4.5) authorized, issued and outstanding

**Table of Contents**

preference shares (the Stock Split). Upon approval of the Stock Split, the ordinary shares and preference shares outstanding and the number of ordinary shares and preference shares covered by each outstanding right, option, warrant or arrangement were proportionately decreased to reflect the Stock Split and the exercise or purchase price of each such right, option, warrant or arrangement was proportionately increased to reflect the Stock Split. The Company is authorized to accept the surrender of fractional shares resulting from the Stock Split from any shareholder that elects to forego payment for such fractional shares.

**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,				
	2013	2012	2011	2010	2009
	(in thousands, except per share data)				
Revenue	\$ 121,066	\$ 97,257	\$ 94,739	\$ 71,525	\$ 41,747
Income (loss) from operations	\$ 19,906	\$ 11,255	\$ 15,477	\$ 12,948	\$ (2,928)
Net income (loss)	\$ 18,188	\$ 9,821	\$ 13,929	\$ 13,288	\$ (2,952)
Net income (loss) per share attributable to ordinary shareholders:					
Basic	\$ 0.64	\$ 0.32	\$ 0.54	\$ 0.51	\$ (0.46)
Diluted	\$ 0.60	\$ 0.30	\$ 0.50	\$ 0.49	\$ (0.46)

**Selected Consolidated Balance Sheet Data:**

	As of January 31,				
	2013	2012	2011	2010	2009
	(in thousands)				
Cash, cash equivalents and restricted cash	\$ 100,497	\$ 59,461	\$ 42,139	\$ 31,599	\$ 17,140
Working capital	108,318	54,875	35,764	20,148	6,749
Total assets	138,603	81,739	64,133	47,768	25,430
Total liabilities	26,271	24,390	25,964	25,928	18,606
Redeemable convertible preference shares		50,900	39,273	39,273	39,273
Total shareholders' equity (deficit)	112,332	6,449	(1,104)	(17,433)	(32,449)

**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.



---

## **Table of Contents**

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 for wearable sports cameras, automotive aftermarket cameras, Internet Protocol, or IP, security cameras, digital still cameras, or DSCs, telepresence cameras and camcorders. In the infrastructure market, our solutions efficiently manage IP video traffic, broadcast encoding 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 future revenue from such customer's product.

### ***Fiscal Year 2013 Financial Highlights and Trends***

We recorded revenue of \$121.1 million, an increase of 24% as compared to fiscal year 2012. The increase was primarily due to rapid growth in the wearable sports, automotive aftermarket and IP security camera end markets.

We recorded operating income of \$19.9 million, an increase of 77% as compared to fiscal year 2012, primarily due to an increase in revenue and as well as efficient control of operating expenses.

We generated cash flows from operating activities of \$10.5 million, a decrease of 17% as compared to fiscal year 2012. The decrease was primarily due to an increase in accounts receivable resulting from the transfer of sales from Wintech Microelectronics Co., Ltd., or Wintech, to direct sales to a large ODM customer with longer payment terms; additional inventory purchased to support rapid growth of sales; and the release of deferred revenue resulting from renegotiation of agreements with an infrastructure customer. The decrease in cash flows was partially offset by an increase in accrued liabilities associated with the timing of payments to suppliers and employees.

We completed our initial public offering, or IPO at \$6.00 per share on October 15, 2012. A total of 6,000,000 ordinary shares were offered, including 1,095,349 ordinary shares sold by certain of our shareholders. The aggregate net proceeds to us were approximately \$25.4 million, net of underwriting discounts and commissions and offering expenses. We did not receive any proceeds from shares sold by the selling shareholders.

We sold a total of 900,000 ordinary shares to our IPO underwriters in connection with exercise of their over-allotment option on November 6, 2012. The aggregate net proceeds were approximately \$5.0 million, net of underwriting discounts and commissions. A substantial portion of our revenue is derived from sales through our logistics provider, Wintech, who serves as our non-exclusive sales representative in all of Asia other than Japan. For the fiscal years ended January 31, 2013, 2012 and 2011, approximately 63%, 80% and 91% of our revenue, respectively, was derived from sales through Wintech. Beginning in fiscal year 2013, we sold our solutions directly to Chicony Electronics Co., Ltd., or Chicony, a large ODM that builds cameras for multiple OEMs, rather than having Chicony purchase our solutions through Wintech. For the fiscal year ended January 31, 2013, approximately 16% our revenue was

---

## **Table of Contents**

derived from sales to Chicony. We anticipate that a significant portion of our revenue will continue to be derived from sales through Wintech and Chicony for the foreseeable future.

### **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 the revenue 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.

*Pricing, Product Cost and Margins.* 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 the infrastructure market, have higher prices and higher gross margins as compared to solutions sold into the camera market. 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 rapid adoption by consumers, has 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 sports cameras, automotive aftermarket cameras, IP security cameras, high-end DSCs and enterprise telepresence 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. Over the last two years, we have continued to provide solutions for the camcorder and infrastructure markets, but also have expanded our focus to include the wearable sports, automotive aftermarket, IP security, DSC and telepresence camera markets. We believe our entry into these new markets will continue to facilitate revenue growth and customer diversification. While we will continue to expand our end market exposure, 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 video capture markets in which we compete.

*Ability to Capitalize on Connectivity Trends.* 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 sports cameras, IP security cameras and DSCs. The combination of our compression technology with wireless connectivity enables wireless video streaming and the uploading of videos and images

**Table of Contents**

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 sports cameras allow consumers to quickly stream or upload video and images to social media platforms.

*Sales Volume.* A typical design win 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 15 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,		
	2013	2012	2011
	(dollars in thousands)		
Revenue	\$ 121,066	\$ 97,257	\$ 94,739
Cost of revenue	40,405	32,458	34,500
<b>Gross profit</b>	<b>80,661</b>	<b>64,799</b>	<b>60,239</b>
Operating expenses:			
Research and development	42,829	37,618	34,449
Selling, general and administrative	17,926	15,926	10,313
<b>Total operating expenses</b>	<b>60,755</b>	<b>53,544</b>	<b>44,762</b>
Income from operations	19,906	11,255	15,477
Other income (loss), net	136	(90)	(47)
Income before income taxes	20,042	11,165	15,430
Provision for income taxes	1,854	1,344	1,501
<b>Net income</b>	<b>\$ 18,188</b>	<b>\$ 9,821</b>	<b>\$ 13,929</b>

**Table of Contents**

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,		
	2013	2012	2011
Revenue	100%	100%	100%
Cost of revenue	33	33	36
Gross profit	67	67	64
Operating expenses:			
Research and development	35	39	36
Selling, general and administrative	15	16	11
Total operating expenses	50	55	47
Income from operations	17	12	17
Other income (loss), net			
Income before income taxes	17	12	17
Provision for income taxes	2	1	2
Net income	15%	11%	15%

**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, and we expect these will be the primary markets for our solutions for the foreseeable future. We derive a substantial portion of our revenue from sales made indirectly through our logistics provider, Wintech.

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 into the camera market as our customers build inventory 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.

Gross profit is revenue less cost of revenue. Gross margin is gross profit expressed as a percentage of revenue. 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



## **Table of Contents**

incorporated into more complex configurations, such as those used in the infrastructure market, have higher prices and higher gross margins, as compared to solutions sold into the camera market. 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 and as we launch our solutions into new markets.

### ***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 and as a percent of revenue as we develop 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 and the rules and regulations applicable to companies listed on The NASDAQ Stock Market, investor relations costs, as well as higher insurance premiums.

### ***Other Income (Loss), Net***

Other income (loss), net consists primarily of gain and loss from foreign currency transactions and remeasurements. It also includes gain and loss from revaluation of fair value of warrants to purchase our redeemable convertible preference shares and interest earned from investing in money market funds. Upon the completion of our IPO, all outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares and no longer are required to be accounted for at fair value. As a result, there is no future impact to net income (loss) from the revaluation of warrants.

### ***Provision (Benefit) 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 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.

**Table of Contents***Comparison of the Fiscal Years Ended January 31, 2013, 2012 and 2011**Revenue*

	Year Ended January 31,			2013 Amount	Change		2012 Amount	%
	2013	2012	2011		%	%		

Revenue	\$ 121,066	\$ 97,257	\$ 94,739	\$ 23,809	24%	\$ 2,518	3%
---------	------------	-----------	-----------	-----------	-----	----------	----

Revenue increased for the fiscal year ended January 31, 2013 primarily due to increased unit sales into the camera market as well as the release of higher than normal deferred revenue attributable to the infrastructure market. Camera market revenue expanded as a result of continuing adoption of our SoCs by current and new customers selling end products into the automotive aftermarket and IP security camera end markets and the adoption of our new A7 SoC in the wearable sports market. Infrastructure market revenue increased as a result of renegotiations of purchase agreements with an infrastructure customer resulting in the release of \$3.4 million of deferred revenue in the year ended January 31, 2013. Improved ASPs in the infrastructure market also contributed to revenue growth, which was partially offset by lower license revenue as some technology licenses near the end of their useful life.

Revenue increased for the fiscal year ended January 31, 2012 primarily due to increased shipments of our A5S SoC into new and established camera applications, including sports and automotive aftermarket cameras. The increase in camera market revenue was partially offset by the loss of revenue from end products incorporating our older generation A5 SoC in the pocket video market, which was heavily impacted by the closure of the Eastman Kodak Company camera division. Improved ASPs in the infrastructure market resulted in a modest increase in revenue in the infrastructure market.

*Cost of Revenue and Gross Margin*

	Year Ended January 31,			2013 Amount	Change		2012 Amount	%
	2013	2012	2011		%	%		

Cost of revenue	\$ 40,405	\$ 32,458	\$ 34,500	\$ 7,947	24%	\$ (2,042)	(6)%
Gross profit	80,661	64,799	60,239	15,862	24	4,560	8
Gross margin	67%	67%	64%		0%		3%

Cost of revenue increased for the fiscal year ended January 31, 2013 primarily due to an increase in the number of units sold in the camera market and to a lesser extent, to the increased sale of our higher cost A7 SoC. Cost of revenue decreased for the fiscal year ended January 31, 2012 primarily due to a change in product mix as customers transitioned from the higher cost A5 SoC to the lower cost A5S SoC and A2S SoC. In addition, due to volume discounts afforded us by our foundry vendors, the average unit cost of our A5S SoC decreased in the year ended January 31, 2012 from the previous year.

Gross margin in the fiscal year ended January 31, 2013 was consistent with the previous year's gross margin. In fiscal year 2013, camera market gross margin improved modestly as lower gross margin revenue from products sold into the pocket video market was replaced with higher gross margin revenue in the wearable sports, automotive aftermarket and IP security camera end markets. In addition, the release of previously deferred revenue described above resulted in an increase in gross margin in the infrastructure market. Although gross margin improved in both the camera and infrastructure markets in fiscal year 2013, the overall gross margin remained unchanged from fiscal year 2012 as lower gross margin camera business became a larger share of the total revenue in fiscal year 2013. Gross margin increased for the fiscal year ended January 31, 2012 primarily due to the transition to the higher gross margin A5S SoC and A2S SoC from the lower gross margin A5 SoC.

**Table of Contents****Research and Development**

	Year Ended January 31,			2013 Amount	Change		
	2013	2012	2011		%	2012 Amount	%
Research and development	\$ 42,829	\$ 37,618	\$ 34,449	\$ 5,211	14%	\$ 3,169	9%

Research and development expense increased for the fiscal year ended January 31, 2013 primarily due to an increase in engineering headcount and additional bonus and stock-based compensation expense. Our research and development engineering headcount increased to 334 at January 31, 2013 compared to 311 at January 31, 2012, resulting in an increase in salary, benefits and stock-based compensation expenses of approximately \$2.2 million. Due to enhanced overall performance in fiscal year 2013, we accrued an additional bonus of \$1.2 million and a one-time IPO related bonus to China employees of approximately \$0.4 million. In the third quarter of fiscal year 2013, we granted restricted stock units and offered participation in an employee stock purchase plan (ESPP) upon completion of our IPO, resulting in an increase in stock-based compensation expense of approximately \$0.8 million in fiscal year 2013.

Research and development expense increased for the fiscal year ended January 31, 2012 primarily due to an increase in engineering headcount and higher license fees for design tools, which were partially offset by lower product development costs incurred at our foundry vendors. Our research and development engineering headcount increased to 311 at January 31, 2012 compared to 286 at January 31, 2011, resulting in an increase in personnel costs and stock-based compensation expense of approximately \$5.0 million, while our license fees associated with software design tools increased by approximately \$0.5 million. For the fiscal year ended January 31, 2012, product development costs incurred at our foundry vendors declined from \$7.3 million in the prior fiscal year to \$5.2 million as we developed fewer new SoCs compared to the prior year.

**Selling, General and Administrative**

	Year Ended January 31,			2013 Amount	Change		
	2013	2012	2011		%	2012 Amount	%
Selling, general and administrative	\$ 17,926	\$ 15,926	\$ 10,313	\$ 2,000	13%	\$ 5,613	54%

Selling, general and administrative expense increased over each of last two fiscal years primarily due to increases in facility costs and outside services to support our expanding business and operations. In addition, costs associated with being a public company, such as legal, accounting and insurance, increased following our IPO in October 2012.

**Other Income (Loss), Net**

	Year Ended January 31,			2013 Amount	Change		
	2013	2012	2011		%	2012 Amount	%
Other income (loss), net	\$ 136	\$ (90)	\$ (47)	\$ 226	251%	\$ (43)	(91)%

Other income, net increased for the fiscal year ended January 31, 2013 primarily due to revaluation of warrants in the third quarter of fiscal year 2013. Upon completion of our IPO, the warrants converted from warrants to purchase preference shares into warrants to purchase ordinary shares and as a result, there will be no future impact to net income from the revaluation of warrants.

**Table of Contents**

Other loss, net in each of the fiscal years ended January 31, 2012 and 2011 primarily related to changes in exchange rates of foreign currency and warrant-revaluation expense.

**Provision for Income Taxes**

	Year Ended January 31,			Change			
	2013	2012	2011	2013	2012		
	(dollars in thousands)			Amount	%	Amount	%
Provision for income taxes	\$ 1,854	\$ 1,344	\$ 1,501	\$ 510	38%	\$ (157)	(10)%
Effective tax rate	9%	11%	10%		(2)%		1%

Income tax expense increased by \$0.5 million, or 38%, in fiscal year 2013 as compared to fiscal year 2012 primarily due to an increase in profitability, partially offset by a decrease in our effective tax rate. The effective tax rate decreased by approximately 2% for the fiscal year 2013 as compared to fiscal year 2012 primarily due to a favorable change in our geographic mix of profit.

The decrease in income tax expense in the fiscal year ended January 31, 2012 was primarily due to a decrease of \$4.3 million in income before income tax for the fiscal year 2012 and was offset by an unfavorable change in our geographic mix of profits.

**Liquidity and Capital Resources****Issuance of Convertible Preference Shares**

In January 2012, we completed the sale of Series D redeemable convertible preference shares, or Series D. A portion of the proceeds from the sale of Series D shares was used to repurchase ordinary shares under a repurchase program. A total of 1,047,596 shares of Series D were sold at a price of \$11.25 per share, resulting in net proceeds to the Company of approximately \$11.6 million. Upon the closing of the IPO, all outstanding convertible preference shares, including the Series D shares, converted into ordinary shares on a one-to-one basis.

**Ordinary Share Repurchase Program**

In January 2012, we completed an ordinary share repurchase program. Pursuant to the program, we offered to repurchase ordinary shares at a price of \$10.35 per ordinary share, which approximated the then-current fair market value. A total of 698,424 ordinary shares were tendered by employees, former-employees and consultants for repurchase by the Company. The ordinary shares tendered for repurchase were originally acquired through the exercise of stock options prior to the shares being tendered. A total of approximately \$7.2 million cash was paid to ordinary shareholders for the 698,424 shares repurchased. The cost of this repurchase program was reflected in additional paid-in capital in the consolidated statements of redeemable convertible preference shares and shareholders' equity (deficit).

**Initial Public Offering**

On October 15, 2012 in connection with our IPO, we completed the sale of 6,000,000 ordinary shares inclusive of 1,095,349 shares sold by certain of our shareholders. The public offering price of the shares sold in this offering was \$6.00 per share. The net proceeds to us from the offering were approximately \$25.4 million after deducting underwriting discounts and commissions and other offering expenses. Upon the completion of the IPO, all outstanding redeemable convertible preference shares converted into ordinary shares on a one-to-one basis and all outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares. On November 6, 2012, we sold 900,000 ordinary shares to the IPO underwriters in

**Table of Contents**

connection with their exercise of the over-allotment option. The net proceeds from the sale of these shares were approximately \$5.0 million after deducting underwriting discounts and commissions.

**Cash Flows**

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

	Year Ended January 31,		
	2013	2012	2011
	(in thousands)		
Net cash provided by operating activities	\$ 10,514	\$ 12,686	\$ 13,025
Net cash provided by (used in) investing activities	(1,014)	(1,484)	2,059
Net cash provided by financing activities	32,050	5,846	213
Net increase in cash	\$ 41,550	\$ 17,048	\$ 15,297

**Net Cash Provided by Operating Activities**

*Fiscal year 2013 compared to fiscal year 2012:* Cash provided by operating activities decreased primarily due to an increase in accounts receivable resulting from the transfer of sales from Wintech to direct sales to a large ODM customer for whom we provided longer payment terms. In addition, inventory increased to support rapid growth of sales while deferred revenue decreased resulting from renegotiation of agreements with an infrastructure customer. The decrease was partially offset by an increase in accrued liabilities associated with the timing of payments to suppliers and employees.

*Fiscal year 2012 compared to fiscal year 2011:* Cash provided by operating activities decreased primarily due to an increase in credit sales and the associated timing of cash receipts from customers; additional software licenses purchased for research and development projects; and decreased deferred revenue that resulted from recognition of NRE service revenue from our infrastructure customers. The decrease was partially offset by an increase in accrued liabilities associated with the timing of payments to suppliers and employees.

**Net Cash Provided by (Used in) Investing Activities**

*Fiscal year 2013 compared to fiscal year 2012:* Net cash used in investing activities decreased primarily due to the release of \$0.5 million in restricted cash that was previously pledged to the Taiwan government and was released upon completion of a research and development project.

*Fiscal year 2012 compared to fiscal year 2011:* Net cash provided by investing activities decreased primarily due to \$5.0 million of cash received from a short-term investment, which was partially offset by an approximately \$1.0 million investment in a private company in fiscal year 2011. These investment activities were not repeated in fiscal year 2012.

**Net Cash Provided by Financing Activities**

*Fiscal year 2013 compared to fiscal year 2012:* Net cash provided by financing activities increased primarily due to \$30.4 million of net cash proceeds from the sale of our shares in connection with our IPO and the exercise of the underwriter's over-allotment option and an increase over the previous year of \$0.6 million in cash receipts from employee purchases of shares in connection with the employee stock purchase plan adopted upon completion of our IPO.

*Fiscal year 2012 compared to fiscal year 2011:* Net cash provided by financing activities increased primarily due to \$11.6 million cash received from the issuance of preference shares and \$1.1 million additional

**Table of Contents**

cash received from stock option exercises. The increase was partially offset by \$7.2 million in cash payments associated with the ordinary share repurchase program that was completed in January, 2012.

**Sources of Liquidity**

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 2013, 2012 and 2011. As of January 31, 2013 and 2012, we had cash of approximately \$100.5 million and \$58.9 million, respectively.

**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 2013. 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 and enterprise resource planning systems. We expect our accounts receivable and inventory balances to increase, and to 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 in the future 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- 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.

**Contractual Obligations, Commitments and Contingencies**

The following table summarizes our outstanding contractual obligations as of January 31, 2013:

	Payment Due by Period as of January 31, 2013					All Other
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years	
<b>Contractual Obligations</b>						
Facilities under operating leases <sup>(1)</sup>	\$ 1,499	\$ 621	\$ 878	\$	\$	\$
	2,611	2,464	127	20		

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

Technology license or other obligations under operating leases <sup>(2)</sup>						
Noncancellable purchase obligations <sup>(3)</sup>	15,085	15,085				
Uncertain tax liabilities <sup>(4)</sup>	1,364					1,364
Total	\$ 20,559	\$ 18,170	\$ 1,005	\$ 20	\$	\$ 1,364

- (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

---

## **Table of Contents**

headquarters has a five-year term and terminates in fiscal year 2014. The lease for our China facility has a five-year term and terminates in fiscal year 2016. The Hong Kong facility has a three-year term and terminates in fiscal year 2014. The leases for our Japan facilities have two-year terms and terminate in fiscal year 2014 and 2015, 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) Non-cancellable purchase obligations consist primarily of inventory purchase obligations with our independent contract manufacturers.
- (4) Uncertain tax liabilities represent our liabilities for uncertain tax positions as of January 31, 2013. 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 of our 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, 2013, a total of 4.7 million outstanding stock options and restricted stock units, or RSUs, will potentially dilute our earnings per share. This potential dilution will only result if outstanding options vest and are exercised and RSUs vest and are settled. As of January 31, 2013, 6% of our outstanding options had exercise prices in excess of the current market price.

### **Off-Balance Sheet Arrangements**

As of January 31, 2013, we did not engage in any off-balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

### **Critical Accounting Policies and Significant Management Estimates**

Our audited consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles, or GAAP. In connection with the preparation of our audited consolidated financial statements, we are required to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. On an ongoing basis, we evaluate the estimates, judgments and assumptions including those related to revenue recognition, allowance for doubtful accounts, inventory valuation, impairment of long-lived assets, impairment of financial instruments, warranty costs, valuation of equity instruments, stock-based compensation, deferred income tax assets, valuation allowances and uncertain tax positions. 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. These estimates, judgments and assumptions are based on historical experience and on various other factors that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates under different assumptions or conditions, and such differences could be material.

#### ***Revenue Recognition***

We generate revenue from the sale 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 right 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 have received 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



---

## **Table of Contents**

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 reduction 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 sell a limited amount of software under perpetual licenses that include post-contract customer support, or PCS. We do not have evidence of fair value for the PCS and, accordingly, license revenue is recognized ratably over the estimated support period in accordance with ASC 985, Software Revenue Recognition. The revenue from those licenses comprised 2%, 3% and 2% of our total revenue for the years ended January 31, 2013, 2012 and 2011, respectively.

### ***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 our products decrease, additional inventory write-downs may be required. Once inventory is written down, a new accounting basis has been established and, accordingly, any associated reserve is not reversed until the inventory sold or scrapped. There has been no material inventory loss to date to be recognized.

### ***Warranty Costs***

We typically provide warranty on our products. We accrue 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 we engage 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. Our warranty accrual has not been material to date.

### ***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 estimate the fair value of awards of RSUs based on the fair value of our ordinary shares on the date of grant. We use the Black-Scholes option pricing model to determine the fair value of each option grant. Determining the fair value of stock-based awards 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 was calculated using the simplified method as prescribed by 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

## **Table of Contents**

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 option forfeitures and record stock-based compensation only for those options 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.

Prior to the initial public offering, we engaged an independent appraiser to assist us in the valuation of our ordinary share price. Our board of directors directed these regular valuations and had input into determining the relevant objective and subjective factors accounted for and relevant approaches in each valuation. After the IPO, the exercise price of stock option awards is determined based on the closing price of the Company's ordinary shares traded on NASDAQ on the grant date.

### ***Allowance for Doubtful Accounts***

We frequently monitor cash collections from our logistics providers and end customers. We perform ongoing credit evaluation of our customers and generally require no collateral. We assess the need for allowances for doubtful accounts for estimated losses resulting from the inability of our 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. To date, we have not experienced any material bad debt and, therefore, no allowance for doubtful accounts has been recorded.

### ***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 audited 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 our 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

---

**Table of Contents**

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.

***Earnings Per 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 exercise of employee stock purchase plan, upon release of vested restricted stock units, upon conversion of our redeemable convertible preference shares and upon exercise of warrants.

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 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 earnings per share.

***Jumpstart Our Business Startups Act of 2012, or JOBS Act***

The JOBS Act permits an emerging growth company such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have elected to opt out of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted. This decision to opt out of the extended transition period under the JOBS Act is irrevocable.

Subject to certain conditions set forth in the JOBS Act, as an emerging growth company, we intend to rely on certain extended transition periods for other requirements, including without limitation, providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404 and complying with any requirement that may be adopted regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis). These exemptions will apply for a period of five years following the completion of our IPO although if the market value of our ordinary shares that is held by nonaffiliates exceeds \$700 million before that time, we would cease to be an emerging growth company.

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

We had cash and restricted cash totaling \$100.5 million and \$59.5 million at January 31, 2013 and 2012, respectively. Our cash and restricted cash consist of cash in standard bank accounts and investments in certificates of deposit. The primary objectives of our investment activities are to preserve principal and provide liquidity without significantly increasing risk. Our cash are held for working capital purposes. We do not enter into investments for trading or speculative purposes.

**Table of Contents***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. However, we believe that the exposure to foreign currency fluctuation from operating expenses is immaterial at this time as the related costs do not constitute a significant portion of our total expenses. 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 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, 2013. 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.

	Apr. 30, 2012	Jul. 31, 2012	Oct. 31, 2012	For the Three Months Ended				
				Jan. 31, 2013	Apr. 30, 2011	Jul. 31, 2011	Oct. 31, 2011	Jan. 31, 2012
	(in thousands, except per share data)							
Revenue	\$ 25,921	\$ 27,958	\$ 35,669	\$ 31,518	\$ 21,640	\$ 22,268	\$ 28,778	\$ 24,571
Cost of revenue	7,516	8,626	12,679	11,584	7,115	7,448	10,093	7,802
Gross profit	18,405	19,332	22,990	19,934	14,525	14,820	18,685	16,769
Operating expenses:								
Research and development	11,473	9,356	10,802	11,198	8,747	9,695	9,169	10,007
Selling, general and administrative	4,025	4,184	4,603	5,114	3,425	4,030	3,806	4,665
Total operating expenses	15,498	13,540	15,405	16,312	12,172	13,725	12,975	14,672
Income from operations	2,907	5,792	7,585	3,622	2,353	1,095	5,710	2,097
Other income (loss), net	(2)	4	137	(3)	(27)	3	3	(69)
Income before income taxes	2,905	5,796	7,722	3,619	2,326	1,098	5,713	2,028
Provision (benefit) for income taxes	303	570	1,005	(24)	307	121	665	251
Net income	\$ 2,602	\$ 5,226	\$ 6,717	\$ 3,643	\$ 2,019	\$ 977	\$ 5,048	\$ 1,777
Net income per share attributable to ordinary shareholders:								
Basic	\$ 0.08	\$ 0.20	\$ 0.27	\$ 0.14	\$ 0.06	\$ 0.01	\$ 0.21	\$ 0.04
Diluted	\$ 0.07	\$ 0.19	\$ 0.25	\$ 0.13	\$ 0.06	\$ 0.01	\$ 0.19	\$ 0.04

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

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.

## **Table of Contents**

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 securities 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**

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit pursuant to the Securities and Exchange Act of 1934 as amended ( Exchange Act ) is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of January 31, 2013, our disclosure controls and procedures were effective.

### **Management's Report on Internal Control over Financial Reporting**

This Annual Report on Form 10-K does not include a report of management's assessment regarding our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) or an attestation report of our independent registered accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly public companies.

### **Changes in Internal Control over Financial Reporting**

There were no changes in internal control over financial reporting during the last fiscal quarter that has materially affected, or are reasonably likely to materially affect, our 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.



**Table of Contents**

**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 2013 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. The information under the heading "Executive Officers of the Registrant" in Part I of this Annual Report on Form 10-K is also incorporated herein by reference.

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 2013 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 2013 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 2013 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 2013 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.



**Table of Contents**

**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:

<b>Financial Statement Description</b>	<b>Page</b>
<u>Report of Independent Registered Public Accounting Firm</u>	68
<u>Consolidated Balance Sheets As of January 31, 2013 and 2012</u>	69
<u>Consolidated Statements of Operations For the Years Ended January 31, 2013, 2012 and 2011</u>	70
<u>Consolidated Statements of Redeemable Convertible Preference Shares and Shareholders' Equity (Deficit) For the Years Ended January 31, 2013, 2012 and 2011</u>	71
<u>Consolidated Statements of Cash Flows For the Years Ended January 31, 2013, 2012 and 2011</u>	72
<u>Notes to Consolidated Financial Statements</u>	73

**(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.

**Table of Contents**

**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 redeemable convertible preference shares and shareholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of Ambarella, Inc. and its subsidiaries at January 31, 2013 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended January 31, 2013 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

San Jose, California

April 4, 2013

**Table of Contents****AMBARELLA, INC.****CONSOLIDATED BALANCE SHEETS**

(in thousands, except share and per share data)

	January 31, 2013	January 31, 2012
<b>ASSETS</b>		
Current assets:		
Cash	\$ 100,494	\$ 58,944
Accounts receivable, net	20,153	9,485
Inventories	8,918	6,786
Restricted cash	3	517
Deferred tax assets, current	1,220	861
Prepaid expenses and other current assets	2,360	1,226
<b>Total current assets</b>	<b>133,148</b>	<b>77,819</b>
Property and equipment, net	2,536	1,686
Deferred tax assets, non-current	938	426
Intangible assets, net		270
Other assets	1,981	1,538
<b>Total assets</b>	<b>\$ 138,603</b>	<b>\$ 81,739</b>
<b>LIABILITIES, REDEEMABLE CONVERTIBLE PREFERENCE SHARES AND SHAREHOLDERS EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 6,674	\$ 6,481
Accrued liabilities	14,419	7,931
Income taxes payable	286	530
Deferred revenue, current	3,451	8,002
<b>Total current liabilities</b>	<b>24,830</b>	<b>22,944</b>
Deferred revenue, non-current		200
Other long-term liabilities	1,441	1,246
<b>Total liabilities</b>	<b>26,271</b>	<b>24,390</b>
Commitments and contingencies (Note 12)		
Redeemable convertible preference shares (Note 8):		
Series A, B, C and D redeemable convertible preference shares, \$0.00045 par value per share	5,611,111,	
3,665,550, 3,027,777 and 2,222,222 shares authorized at January 31, 2012, respectively; 5,611,107,		
3,629,253, 3,027,771 and 1,047,596 shares issued and outstanding at January 31, 2012,		
respectively; initial liquidation preference of \$10,100, \$13,000, \$16,350 and \$11,785 at January 31, 2012,		
respectively		50,900
Shareholders equity:		
Preference shares, \$0.00045 par value per share, 20,000,000 shares authorized and no shares issued and outstanding at January 31, 2013; no shares authorized, issued and outstanding at January 31, 2012;		
Ordinary shares, \$0.00045 par value per share, 200,000,000 and 44,444,444 shares authorized at January 31, 2013 and at January 31, 2012, respectively; 27,035,074 shares issued and outstanding at January 31, 2013; 7,600,869 shares issued and outstanding at January 31, 2012	12	3
Additional paid-in capital	91,911	4,225
Retained earnings	20,409	2,221

Edgar Filing: AMBARELLA INC - Form 10-K

Total shareholders' equity	112,332	6,449
Total liabilities, redeemable convertible preference shares and shareholders' equity	\$ 138,603	\$ 81,739

See accompanying notes to consolidated financial statements.

**Table of Contents****AMBARELLA, INC.****CONSOLIDATED STATEMENTS OF OPERATIONS**

(in thousands, except share and per share data)

	Year Ended January 31,		
	2013	2012	2011
Revenue	\$ 121,066	\$ 97,257	\$ 94,739
Cost of revenue	40,405	32,458	34,500
<b>Gross profit</b>	<b>80,661</b>	<b>64,799</b>	<b>60,239</b>
<b>Operating expenses:</b>			
Research and development	42,829	37,618	34,449
Selling, general and administrative	17,926	15,926	10,313
Total operating expenses	60,755	53,544	44,762
Income from operations	19,906	11,255	15,477
Other income (loss), net	136	(90)	(47)
<b>Income before income taxes</b>	<b>20,042</b>	<b>11,165</b>	<b>15,430</b>
Provision for income taxes	1,854	1,344	1,501
<b>Net income</b>	<b>\$ 18,188</b>	<b>\$ 9,821</b>	<b>\$ 13,929</b>
Net income per share attributable to ordinary shareholders:			
Basic	\$ 0.64	\$ 0.32	\$ 0.54
Diluted	\$ 0.60	\$ 0.30	\$ 0.50
Weighted-average shares used to compute net income per share attributable to ordinary shareholders:			
Basic	13,511,646	7,961,944	7,458,627
Diluted	15,016,986	9,469,820	9,107,073

See accompanying notes to consolidated financial statements.

**Table of Contents****AMBARELLA, INC.****CONSOLIDATED STATEMENTS OF REDEEMABLE CONVERTIBLE PREFERENCE SHARES AND SHAREHOLDERS  
EQUITY (DEFICIT) (in thousands, except share data)**

	Redeemable Convertible Preference Shares		Outstanding Ordinary Shares		Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Total
	Shares	Amount	Shares	Amount			
<b>Balance January 31, 2010</b>	12,268,131	\$ 39,273	7,744,461	\$ 3	\$ 4,093	\$ (21,529)	\$ (17,433)
Exercise of stock options, dollar amounts net of unvested stock options exercised early			100,779		140		140
Vesting of early exercised stock options					404		404
Stock-based compensation expense related to stock awards granted to employees and consultants					1,856		1,856
Net income						13,929	13,929
<b>Balance January 31, 2011</b>	12,268,131	39,273	7,845,240	3	6,493	(7,600)	(1,104)
Issuance of preference shares	1,047,596	11,627					
Exercise of stock options, dollar amounts net of unvested stock options exercised early			454,053		824		824
Vesting of early exercised stock options					394		394
Stock-based compensation expense related to stock awards granted to employees and consultants					3,616		3,616
Net excess income tax benefit associated with stock-based compensation					125		125
Repurchase of ordinary shares			(698,424)		(7,227)		(7,227)
Net income						9,821	9,821
<b>Balance January 31, 2012</b>	13,315,727	50,900	7,600,869	3	4,225	2,221	6,449
Conversion of redeemable convertible preference shares to ordinary shares	(13,315,727)	(50,900)	13,315,727	6	50,894		50,900
Issuance of shares in connection with initial public offering, net of issuance cost			5,804,651	3	30,412		30,415
Conversion of preference share warrants to ordinary share warrants					110		110
Exercise of stock options, dollar amounts net of unvested stock options exercised early			313,827		950		950
Vesting of early exercised stock options					314		314
Stock-based compensation expense related to stock awards granted to employees and consultants					4,999		4,999
Net excess income tax benefit associated with stock-based compensation					7		7
Net income						18,188	18,188
<b>Balance January 31, 2013</b>		\$	27,035,074	\$ 12	\$ 91,911	\$ 20,409	\$ 112,332

See accompanying notes to consolidated financial statements

**Table of Contents****AMBARELLA, INC.****CONSOLIDATED STATEMENTS OF CASH FLOWS**

(in thousands)

	Year Ended January 31,		
	2013	2012	2011
<b>Cash flows from operating activities:</b>			
Net income	\$ 18,188	\$ 9,821	\$ 13,929
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation of property and equipment	737	596	563
Loss on disposal of long-lived assets	4	23	4
Amortization of other intangible assets	270	540	1,040
Stock-based compensation	4,999	3,616	1,856
Net excess income tax benefits associated with stock-based compensation	7	(125)	
Change in value of warrants	(149)	103	
Changes in operating assets and liabilities:			
Accounts receivable	(10,668)	(656)	260
Inventories	(2,132)	624	(5,731)
Prepaid expenses and other current assets	(1,134)	(511)	(27)
Deferred tax assets	(871)	(149)	486
Other assets	(443)	(113)	(227)
Accounts payable	193	(244)	1,575
Accrued liabilities	6,508	1,336	(322)
Income taxes payable	(244)	244	155
Deferred revenue	(4,751)	(2,419)	(536)
Net cash provided by operating activities	10,514	12,686	13,025
<b>Cash flows from investing activities:</b>			
Restricted Cash	514	(274)	(243)
Short-term investment			5,000
Investment in a private company		102	(972)
Purchase of property and equipment	(1,528)	(682)	(896)
Purchase of intangible assets		(630)	(830)
Net cash provided by (used in) investing activities	(1,014)	(1,484)	2,059
<b>Cash flows from financing activities:</b>			
Net proceeds from issuance of preference shares		11,627	
Repurchase of ordinary shares, at cost		(7,228)	
Net proceeds from exercise, repurchase of stock options and employee stock purchase plan	1,610	1,322	213
Proceeds from initial public offering, net of underwriting discounts and commissions and offering costs	30,440		
Net excess income tax benefits associated with stock-based compensation		125	
Net cash provided by financing activities	32,050	5,846	213
Net increase in cash and cash equivalents	41,550	17,048	15,297
Cash and cash equivalents at beginning of period	58,944	41,896	26,599
Cash and cash equivalents at end of period	\$ 100,494	\$ 58,944	\$ 41,896
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid for income taxes	\$ 3,402	\$ 854	\$ 657
<b>Supplemental disclosure of noncash investing activities:</b>			
Increase in accrued liabilities related to non-monetary assets purchases	\$ 122	\$ 59	\$ 125

Edgar Filing: AMBARELLA INC - Form 10-K

**Supplemental disclosure of noncash financing activities:**

Increase in accrued liabilities related to non-monetary financing activities	\$ 25	\$	\$
Conversion of convertible preference shares to ordinary shares	\$ 50,900	\$	\$
Conversion of convertible preference share warrants to ordinary share warrants	\$ 110	\$	\$

See accompanying notes to consolidated financial statements.



---

**Table of Contents**

**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.

On October 15, 2012, in connection with its initial public offering, or IPO, the Company completed the sale of 6,000,000 ordinary shares inclusive of 1,095,349 shares sold by certain shareholders of the Company. The public offering price of the shares sold in this offering was \$6.00 per share. The net proceeds from the offering to the Company were approximately \$25.4 million after deducting underwriting discounts and commissions and other offering expenses. Upon the completion of the IPO, all 13,315,727 outstanding redeemable convertible preference shares converted into ordinary shares on a one-to-one basis and all outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares. On November 6, 2012, a total of 900,000 ordinary shares were sold to the Company's IPO underwriters in connection with their exercise of the over-allotment option. The net proceeds to the Company from the sale of these shares were approximately \$5.0 million after deducting underwriting discounts and commissions.

***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, and 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 collectability of accounts receivable; (ii) write downs for excess and obsolete inventories; (iii) the estimated useful lives of long-lived assets; (iv) impairment of long-lived assets and financial instruments; (v) warranty obligations; (vi) the valuation of equity instruments; (vii) the realization of tax assets and estimates of tax liabilities, including reserves for uncertain tax positions; and (viii) 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, and the valuation of preference and ordinary shares. Such estimates often

## **Table of Contents**

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 all of Asia other than Japan, and to one large direct ODM customer, Chicony Electronics Co., Ltd., or Chicony. Termination of the relationship with these two customers 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 13 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 and accounts receivable. The Company places its cash primarily in checking and money market accounts with reputable financial institutions. 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 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.

### ***Cash, Cash Equivalents and Short-Term Investments***

The Company considers all highly liquid investments with maturities of less than three months at the time of purchase to be cash equivalents. Investments with maturities at the time of acquisition greater than three months are classified as short-term investments as these are considered as available-for-sale in current operations. There were no cash equivalents or short-term investments as of January 31, 2013 and 2012, respectively.

### ***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, the Company has not recognized any impairment losses related to this investment.

## **Table of Contents**

### ***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 write-offs of accounts receivable for the fiscal years 2013, 2012 and 2011, respectively. There was no allowance for doubtful accounts recorded as of January 31, 2013 and 2012, respectively.

### ***Fair Market Value of Financial Instruments***

The carrying amounts reflected in the consolidated balance sheets for cash, accounts receivable, accounts payable, accrued liabilities and other current liabilities, approximate fair value due to the short-term nature. The fair value of outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares is described in Note 8.

### ***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 basis has been established and, accordingly, any associated reserve is not reversed until the inventory sold or scrapped. There has been no material inventory loss to date to be recognized.

### ***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.

### ***Intangible Assets***

Technology licenses purchased from third parties and that can be used in alternative research and development projects are capitalized as intangible assets. Capitalized costs are amortized over an estimated economic useful life under a straight-line method and recorded as research and development expenses.

### ***Impairment of Long-Lived Assets***

The Company records long-lived assets at cost and evaluates them for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. 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. When the sum of the expected future undiscounted cash flows expected to be generated by the related asset group is less than its carrying amount, an impairment loss would be recognized. Should impairment exist, the impairment loss would be measured based

---

## **Table of Contents**

on the excess of the carrying amount of the asset over the asset's estimated fair value. 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, 2013.

### ***Revenue Recognition***

The Company generates revenue from the sale 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 right 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 reduction 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 sells a limited amount of software under perpetual licenses that include post-contract customer support, or PCS. The Company does not have evidence of fair value for the PCS and, accordingly, license revenue is recognized ratably over the estimated supporting period in accordance with ASC 985, Software Revenue Recognition. The revenue from those licenses comprised 2%, 3% and 2% of the Company's revenue in the fiscal years 2013, 2012 and 2011, 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 have not been material to date.

## **Table of Contents**

### ***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 have not been material to date.

### ***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 paid is recorded as deferred rent and is included in accrued liabilities.

### ***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.

### ***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

---

**Table of Contents**

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 estimates the fair value of awards of restricted stock units, or RSUs, based on the fair market value of its ordinary shares on the date of grant. The Company uses the Black-Scholes option pricing model to determine the fair value of each option grant. Determining the fair value of stock option awards 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 by 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 determined by the Black-Scholes option pricing model. 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.

Prior to the initial public offering, or IPO, the Company engaged an independent appraiser to assist in the valuation of its ordinary share price. The board of directors directed these regular valuations and had input into determining the relevant objective and subjective factors accounted for and relevant approaches in each valuation. After the IPO, the exercise price of stock option awards is determined based on the closing price of the Company's ordinary shares traded on NASDAQ on the grant date.

***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 exercise of employee stock purchase plan, upon release of vested restricted stock units, upon conversion of its redeemable convertible preference shares and upon exercise of warrants.

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 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 Company's computation of basic earnings per ordinary share.

**Table of Contents****Comprehensive Income**

There are no differences between comprehensive income as defined by ASC 220, Comprehensive Income, and net income as reported in the Company's consolidated statements of operations.

**Recent Accounting Pronouncements**

In May 2011, the FASB issued ASU No. 2011-04 Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS. The FASB amended its guidance to converge fair value measurement and disclosure guidance about fair value measurement under U.S. GAAP with International Financial Reporting Standards (IFRS). The amendment changes the wording used to describe many of the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. For many of the requirements, the FASB does not intend for the amendment to result in a change in the application of the requirements in the current authoritative guidance. The amendment becomes effective prospectively for the Company's interim period ending April 30, 2012. The adoption of this amendment did not have a material impact on the Company's financial position, results of operations or disclosures.

In June 2011, the FASB issued ASU No. 2011-05, Presentation of Comprehensive Income, requiring entities to present comprehensive income in either a single continuous statement or in two separate, but consecutive financial statements. A single statement must present the components of net income, total net income, components of other comprehensive income, total other comprehensive income and a total for comprehensive income. In a two-statement approach, an entity must present the components of net income and total net income in the first statement. That statement must be immediately followed by a financial statement that presents the components of other comprehensive income, a total for other comprehensive income, and a total for comprehensive income. The option to present items of other comprehensive income in the statement of changes in equity is eliminated. The new requirements do not change, under either accounting framework, which components of comprehensive income are recognized in net income or other comprehensive income, or when an item of other comprehensive income must be reclassified to net income. Also, the earnings-per-share computation does not change. The Company adopted this guidance, which did not have an impact on its financial position, results of operations or disclosures and as such, due to the fact that there are no items that impact comprehensive income, no separate statement is presented.

**2. Restricted Cash**

The Company had a certificate of deposit of \$0.5 million as of January 31, 2012. The certificate of deposit was in Taiwan Cooperative Bank and was pledged in connection with a request from an application for Taiwan government research and development grants. The pledge was restricted for use until December 2012 and had been recorded as restricted cash on the consolidated balance sheet as of January 31, 2012. There was no material restricted cash recorded as of January 31, 2013.

**3. Inventories**

Inventories at January 31, 2013 and 2012 consisted of the following:

	As of January 31,	
	2013	2012
	(in thousands)	
Work-in-progress	\$ 4,044	\$ 3,233
Finished goods	4,874	3,553
<b>Total</b>	<b>\$ 8,918</b>	<b>\$ 6,786</b>

**Table of Contents****4. Property and Equipment, net**

Depreciation expense was approximately \$0.7 million, \$0.6 million and \$0.6 million for the years ended January 31, 2013, 2012 and 2011, respectively. Property and equipment at January 31, 2013 and 2012 consisted of the following:

	As of January 31, 2013                      2012 (in thousands)	
Computer equipment and software	\$ 2,810	\$ 2,481
Machinery and equipment	2,050	1,951
Furniture and fixtures	397	346
Leasehold improvements	642	543
Construction in progress	827	
	6,726	5,321
Less: accumulated depreciation and amortization	(4,190)	(3,635)
Total property and equipment, net	\$ 2,536	\$ 1,686

**5. Intangible Assets**

Intangible assets at January 31, 2013 and 2012 consisted of the following:

	Gross Carrying Value	As of January 31, 2013 Accumulated Amortization (in thousands)	Net Carrying Value
Intangible assets	\$ 2,400	\$ 2,400	\$

	Gross Carrying Value	As of January 31, 2012 Accumulated Amortization (in thousands)	Net Carrying Value
Intangible assets	\$ 2,400	\$ 2,130	\$ 270

Intangible assets are recorded at cost and amortized over their estimated useful lives of three years. The aggregated amortization expense for the years ended January 31, 2013, 2012 and 2011 was approximately \$0.3 million, \$0.5 million and \$1.0 million, respectively. There was no future amortization expense related to the intangible asset as of January 31, 2013.

**6. Accrued Liabilities**

Accrued liabilities at January 31, 2013 and 2012 consisted of the following:

	As of January 31, 2013                      2012 (in thousands)	
Accrued employee compensation	\$ 8,599	\$ 4,642



Edgar Filing: AMBARELLA INC - Form 10-K

Refundable exercised unvested options	210	470
Accrued warranty	352	404
Accrued rebates	272	233
Accrued product development costs	2,875	679
Other accrued liabilities	2,111	1,503
<b>Total accrued liabilities</b>	<b>\$ 14,419</b>	<b>\$ 7,931</b>

**Table of Contents****7. Deferred Revenue and Deferred Cost**

Deferred revenue and related cost at January 31, 2013 and 2012 consisted of the following:

	As of January 31,	
	2013	2012
	(in thousands)	
Deferred revenue on product shipments	\$ 3,827	\$ 6,968
Deferred revenue from licenses	485	1,955
Deferred cost of revenue on product shipments	(861)	(721)
 Total deferred income	 \$ 3,451	 \$ 8,202

**8. Capital Stock*****Redeemable Convertible Preference shares***

In January 2012, the Company completed the sale of Series D redeemable convertible preference shares, or Series D. A portion of the proceeds from the sale of Series D shares was used to repurchase ordinary shares under a repurchase program. A total of 1,047,596 shares of Series D preference were sold at a price of \$11.25 per share, resulting in net proceeds of approximately \$11.6 million. Upon the closing of the IPO, all outstanding convertible preference shares, including the Series D shares, converted into ordinary shares on a one-to-one basis.

Redeemable convertible preference shares at January 31, 2012 consisted of the following:

Series	Par Value Per Share	Shares		Initial Liquidation Preference (in thousands)
		Authorized	Outstanding	
A	\$ 0.00045	5,611,111	5,611,107	\$ 10,100
B	\$ 0.00045	3,665,550	3,629,253	13,000
C	\$ 0.00045	3,027,777	3,027,771	16,350
D	\$ 0.00045	2,222,222	1,047,596	11,785
		14,526,660	13,315,727	\$ 51,235

***Ordinary Share Repurchase Program***

In January 2012, the Company completed an ordinary share repurchase program. Pursuant to the program, the Company offered to repurchase ordinary shares at a price of \$10.35 per ordinary share, which approximated the then-current fair market value. A total of 698,424 ordinary shares were tendered by employees, former-employees and consultants for repurchase by the Company. The ordinary shares tendered for repurchase were originally acquired through the exercise of stock options prior to the shares being tendered. A total of approximately \$7.2 million cash was paid to ordinary shareholders for the 698,424 shares repurchased. The cost of this repurchase program was reflected in additional paid-in capital in the consolidated statements of redeemable convertible preference shares and shareholders' equity (deficit).

***Stock Split***

Effective August 24, 2012, the Company's board of directors and shareholders approved a reverse stock split of one (1) ordinary share for every four and one half (4.5) authorized, issued and outstanding ordinary shares and one (1) preference share for every four and one half (4.5) authorized, issued and outstanding preference shares (the "Stock Split"). Upon approval of the Stock Split, the ordinary shares and preference shares



---

**Table of Contents**

outstanding and the number of ordinary shares and preference shares covered by each outstanding right, option, warrant or arrangement were proportionately decreased to reflect the Stock Split and the exercise or purchase price of each such right, option, warrant or arrangement was proportionately increased to reflect the Stock Split. The Company is authorized to accept the surrender of fractional shares resulting from the Stock Split from any shareholder that elects to forego payment for such fractional shares.

***Initial Public Offering***

On October 15, 2012, in connection with its initial public offering, or IPO, the Company completed the sale of 6,000,000 ordinary shares inclusive of 1,095,349 shares sold by certain shareholders of the Company. The public offering price of the shares sold in this offering was \$6.00 per share. The net proceeds from the offering to the Company were approximately \$25.4 million after deducting underwriting discounts and commissions and other offering expenses. Upon the completion of the IPO, all 13,315,727 outstanding redeemable convertible preference shares converted into ordinary shares on a one-to-one basis and all outstanding warrants to purchase redeemable convertible preference shares converted into warrants to purchase ordinary shares. On November 6, 2012, a total of 900,000 ordinary shares were sold to the Company's IPO underwriters in connection with their exercise of the over-allotment option. The net proceeds to the Company from the sale of these shares were approximately \$5.0 million after deducting underwriting discounts and commissions.

***Preference shares***

After completion of the 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, 2013.

***Warrants***

In connection with a financing agreement in 2004, the Company issued warrants to purchase Series B redeemable convertible preference shares at an exercise price of \$3.582 per share. The warrants are fully vested and are exercisable through December 2014.

In June 2005, the FASB issued authoritative guidance on the classification of freestanding warrants and other similar instruments on shares that are redeemable (either puttable or mandatorily redeemable). The guidance requires liability classification for warrants issued that are exercisable into convertible preferred stock. Liability classification requires the warrants to be remeasured to their fair value for each reporting period. At January 31, 2012, the fair value of the warrants of \$259,000 was included in accrued liabilities.

Prior to the closing of IPO, the Company utilized the Black-Scholes option pricing model to determine the fair value of the warrants to purchase redeemable convertible preference shares, including the consideration of underlying ordinary share price, a risk-free interest rate, the expected term and expected volatilities. The warrants were revalued up to the closing of IPO and any change in fair value has been recorded in other income (loss).

The warrants to purchase 36,292 redeemable convertible preference shares converted to warrants to purchase ordinary shares in connection with the IPO on October 10, 2012, and as a result, \$110,000 of aggregate fair market value was reclassified from liabilities to shareholders' equity. A total of 36,292 warrants were outstanding and have not been exercised as of January 31, 2013.

**Table of Contents****Ordinary shares**

200,000,000 and 44,444,444 ordinary shares were authorized at January 31, 2013 and 2012, respectively. As of January 31, 2013 and 2012, the following ordinary shares were reserved for future issuance:

	As of January 31,	
	2013	2012
Shares reserved for redeemable convertible preference shares		13,315,727
Shares reserved for options and restricted stock units	5,818,126	4,960,843
Shares reserved for employee stock purchase plan	460,445	
Shares reserved for warrants	36,292	36,292

**9. 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 board of directors adopted, and the shareholders approved, the 2004 Stock Plan, as amended, (the "2004 Plan"). The 2004 Plan was last amended on August 28, 2012. The 2004 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 board of directors has adopted, and the shareholders have approved, the 2012 Equity Incentive Plan, (the "EIP"). The EIP became effective on October 8, 2012. The 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 the estimated 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 estimated fair market value on the grant date. Options granted under the Plans have a term of up to 10 years from grant date. Options granted to new employees generally vest 25% on the first anniversary date of the grant and the remainder ratably over the following 36 months. Vesting schedules for other grants to employees vary and are subject to approval by the board of directors.

In the third quarter of fiscal year 2013, the Company's board of directors granted restricted stock units, or RSUs, covering a total of 344,671 ordinary shares. The estimated fair value on the grant date was \$9.99 per ordinary share. Pursuant to the terms of the awards, 1/16th of the RSUs shall vest each 3 months following the vesting commencement date, so as to be 100% vested on the fourth anniversary of the vesting commencement date (the "Time-Based Vesting Schedule"); provided, however, that the RSUs shall not vest at all until a

**Table of Contents**

Liquidity Event has occurred, at which time the Time-Based Vesting Schedule shall apply, subject to the RSU holder continuing to provide services to the Company through such vesting dates. For purpose of the RSUs, Liquidity Event means either (i) the expiration of the lock-up period that commenced on October 10, 2012 and will end on April 8, 2013 applicable in connection with the Company's IPO, or (ii) a change in control of the Company. The lock-up period is not a contingent condition, and, accordingly, beginning at the IPO, a cumulative expense for the portion of the RSUs that had met the service condition was recognized.

**2012 Employee Stock Purchase Plan.** The board of directors has adopted, and the shareholders have approved, the 2012 Employee Stock Purchase Plan, or ESPP, which became effective upon the completion of IPO. The ESPP permits eligible participants to purchase ordinary shares at a discount through contributions of up to 10% of their eligible compensation, subject to any IRS limitations. The ESPP provides for offering and purchase periods of six months in duration, except for the first offering period that commenced on the occurrence of the IPO and will end on September 16, 2013. 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.

**Early exercise rights.** Certain employees have the right to early exercise unvested options, subject to repurchase rights held by the Company at their original purchase price upon termination of employment until vested. As of January 31, 2013 and 2012, a total of 84,377 and 76,982 shares of unvested early exercised options were repurchased, respectively. There were 53,151 and 122,064 unvested shares subject to the Company's repurchase rights as of January 31, 2013 and 2012, respectively.

**Stock-based Compensation**

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

	Year Ended January 31,		
	2013	2012	2011
	(in thousands)		
Stock-based compensation:			
Cost of revenue	\$ 92	\$ 52	\$ 41
Research and development	2,942	1,821	1,058
Selling, general and administrative	1,965	1,743	757
<b>Total stock-based compensation</b>	<b>\$ 4,999</b>	<b>\$ 3,616</b>	<b>\$ 1,856</b>

As of January 31, 2013, total unrecognized compensation cost related to unvested stock options and unvested restricted stock units was \$7.3 million and \$2.4 million, respectively and is expected to be recognized over a weighted-average period of 2.26 years and 1.77 years, respectively. As of January 31, 2012, total unrecognized compensation cost related to unvested stock options was \$9.5 million and is expected to be recognized over a weighted-average period of 2.70 years.

The Company recognized \$507,000 and \$473,000 of income tax benefit, of which \$7,000 and \$125,000 was recorded in paid-in-capital for the years ended January 31, 2013 and 2012, respectively. The Company recognized \$111,000 of deferred income tax benefit for the year ended January 31, 2011 which had no impact on paid-in capital.

**Table of Contents**

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,		
	2013	2012	2011
<b>Stock Options:</b>			
Volatility	66%	65%	63%
Risk-free interest rate	0.91%	1.64%	1.79%
Expected term (years)	6.05	6.05	6.05
Dividend yield	0%	0%	0%
<b>Employee stock purchase plan awards:</b>			
Volatility	51%	N/A	N/A
Risk-free interest rate	0.18%	N/A	N/A
Expected term (years)	0.94	N/A	N/A
Dividend yield	0%	N/A	N/A

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

	Shares	Weighted-Average Exercise Price	Option Outstanding		Total Intrinsic Value of options Exercised (in thousands)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
			Weighted-Average Grant-date Fair Value				
Outstanding at January 31, 2010	2,952,083	\$ 2.73					
Granted	1,024,629	8.77	\$ 5.12				
Exercised	(100,779)	2.11			\$ 670		
Forfeited	(61,151)	4.04					
Outstanding at January 31, 2011	3,814,782	4.35					
Granted	1,207,564	8.82	\$ 5.24				
Exercised	(454,053)	2.91			\$ 2,682		
Forfeited	(192,387)	6.78					
Outstanding at January 31, 2012	4,375,906	5.63					
Granted	451,071	8.79	\$ 5.23				
Exercised	(313,827)	3.21			\$ 2,087		
Forfeited	(168,615)	7.22					
Outstanding at January 31, 2013	4,344,535	\$ 6.07				6.81	\$ 16,918
Exercisable at January 31, 2013	3,100,758	\$ 5.20				6.17	\$ 14,774
Vested and expected to vest at January 31, 2013	4,257,819	\$ 6.02				6.78	\$ 16,768

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 reporting date and exercise price. The closing price of the Company's ordinary shares was \$9.96 on January 31, 2013, 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 as of exercise date and exercise price.





**Table of Contents**

The following table summarizes restricted stock units activities for the year ended January 31, 2013:

	Shares	Weighted-Average Grant-Date Fair Value
Unvested at January 31, 2012		\$
Granted	345,171	9.99
Vested		
Forfeited	(5,954)	9.99
Unvested at January, 2013	339,217	\$ 9.99

As of January 31, 2013, the aggregate intrinsic value of unvested restricted stock units was \$3.4 million.

**Non-employee Stock-based Compensation**

The fair value of awards granted to non-employees is determined on the date of grant 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, 2013, 2012 and 2011, respectively.

**Modification of Stock-based Compensation**

During fiscal year 2012, the Company modified certain stock-based awards outstanding for Mr. Victor Lee, the Company's former Chief Financial Officer. Pursuant to a severance agreement with Mr. Lee, the Company (i) immediately accelerated 12 months of vesting of outstanding options held by Mr. Lee to the extent such options vest based solely on service to the Company over time, and (ii) accelerated the vesting of an aggregate additional 22,222 shares. In addition, the Company extended the post-termination exercise period of vested outstanding options to the earlier of (a) two-year anniversary of completion of the Company's initial public offering or (b) the expiration of the option by its terms. Upon the modification of Mr. Lee's stock-based awards, the Company recognized an additional \$206,000 in stock-based compensation during fiscal year 2012.

**10. 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,		
	2013	2012	2011
	(in thousands, except share and per share data)		
<b>Numerator:</b>			
Net income	\$ 18,188	\$ 9,821	\$ 13,929
Less: amount allocable to preference shareholders	(9,517)	(7,204)	(9,749)
Less: amount allocable to unvested early exercised options	(61)	(51)	(172)
Net income allocable to ordinary shareholders - basic	\$ 8,610	\$ 2,566	\$ 4,008
Undistributed earnings reallocated to ordinary shareholders	432	277	514
Net income allocable to ordinary shareholders - diluted	\$ 9,042	\$ 2,843	\$ 4,522



**Table of Contents**

<b>Denominator:</b>			
Weighted-average ordinary shares outstanding	13,599,273	8,118,834	7,779,624
Less: weighted-average unvested early exercised options subject to repurchase	(87,627)	(156,890)	(320,997)
Weighted-average ordinary shares basic	13,511,646	7,961,944	7,458,627
Effect of potentially dilutive securities:			
Employee stock options	1,443,809	1,507,876	1,648,446
Restricted stock units	16,930		
Employee stock purchase plan	27,230		
Warrants to purchase ordinary shares	6,737		
Over-allotment shares	10,634		
Weighted-average ordinary shares diluted	15,016,986	9,469,820	9,107,073
Net income per ordinary share:			
Basic	\$ 0.64	\$ 0.32	\$ 0.54
Diluted	\$ 0.60	\$ 0.30	\$ 0.50

Earnings per share (EPS) of ordinary shares was calculated using the two-class method required for participating securities. Prior to the date of the IPO, all series of redeemable convertible preference shares were considered to be participating securities due to their non-cumulative dividend rights. In connection with the Company's IPO in October 2012, all outstanding redeemable convertible preference shares converted to ordinary shares. Net income has been allocated to the ordinary shares, redeemable convertible preference shares and unvested early exercised options based on their respective rights to share in net income and weighted-average outstanding during the periods.

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,		
	2013	2012	2011
Options to purchase ordinary shares	2,053,520	1,698,505	637,090
Restricted stock units	60,504		
Employee stock purchase plan	20,356		
Early exercised options subject to repurchase	87,627	156,890	320,997
Redeemable convertible preference shares (if-converted basis)	9,131,824	12,344,993	12,268,131
Warrants to purchase redeemable convertible preference shares (if-converted basis)		36,292	36,292
Warrants to purchase ordinary shares	24,889		
	11,378,720	14,236,680	13,262,510

**Table of Contents****11. Income Taxes**

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

	Year Ended January 31,		
	2013	2012 (in thousands)	2011
U.S. operations	\$ 3,264	\$ 2,923	\$ 2,758
Non-U.S. operations	16,778	8,242	12,672
<b>Income before income taxes</b>	<b>\$ 20,042</b>	<b>\$ 11,165</b>	<b>\$ 15,430</b>

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

	Year Ended January 31,		
	2013	2012 (in thousands)	2011
<b>Current:</b>			
U.S. federal tax	\$ 2,022	\$ 962	\$ 306
U.S. state taxes	5	26	
Non-U.S. foreign taxes	701	502	708
	2,728	1,490	1,014
<b>Deferred:</b>			
U.S. federal tax	(743)	(73)	473
U.S. state taxes	(109)	(36)	10
Non-U.S. foreign taxes	(22)	(37)	4
	(874)	(146)	487
<b>Provision for income taxes</b>	<b>\$ 1,854</b>	<b>\$ 1,344</b>	<b>\$ 1,501</b>

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,		
	2013	2012 (in thousands)	2011
U.S. federal tax at statutory rate	\$ 6,814	\$ 3,796	\$ 5,246
U.S. state taxes	(107)	(13)	9
Non-U.S. foreign tax differential	(4,513)	(2,306)	(3,577)
Stock-based compensation	682	537	366
U.S. R&D credit	(890)	(623)	(571)
Other	(132)	(47)	28
<b>Provision for income taxes</b>	<b>\$ 1,854</b>	<b>\$ 1,344</b>	<b>\$ 1,501</b>



**Table of Contents**

Temporary differences that gave rise to significant portions of the Company's deferred tax assets and liabilities at January 31, 2013 and 2012 were as follows:

	As of January 31,	
	2013	2012
	(in thousands)	
<b>Deferred tax assets:</b>		
Deferred revenue	\$	\$ 83
Federal and state credits	1,243	1,301
Expenses not currently deductible	1,345	895
Foreign deferred	60	38
Stock-based compensation	950	451
<b>Gross deferred tax assets</b>	<b>3,598</b>	<b>2,768</b>
<b>Valuation allowance</b>	<b>(1,243)</b>	<b>(1,301)</b>
<b>Total deferred tax assets</b>	<b>\$ 2,355</b>	<b>\$ 1,467</b>
<b>Deferred tax liabilities</b>		
Property and equipment	(197)	(180)
<b>Net deferred tax assets</b>	<b>\$ 2,158</b>	<b>\$ 1,287</b>

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

	Balance at Beginning of Period	Additional Charged to Expenses	Additions Charged to Other Account (in thousands)	Deductions Charged to Expenses or Other Accounts	Balance at End of Period
Tax Valuation Allowance					
Year ended January 31, 2013	\$ 1,301	\$	\$	\$ (58)	\$ 1,243
Year ended January 31, 2012	\$ 1,153	\$ 280	\$	\$ (132)	\$ 1,301
Year ended January 31, 2011	\$ 5,409	\$ 46	\$	\$ (4,302)	\$ 1,153

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, 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, 2013 would be \$2.9 million. Cumulative undistributed earnings of foreign subsidiaries for which no deferred taxes have been provided approximated \$18.4 million at January 31, 2013. The decrease in tax expense for the fiscal years ended January 31, 2013 was primarily due to a change in the mix of earnings in various geographic jurisdictions and the re-enactment of the U.S. federal research credit on December 31, 2012.



**Table of Contents**

As of January 31, 2013 and 2012, the Company had deferred tax assets (net of deferred tax liabilities) before valuation allowance, of \$3.4 million and \$2.6 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 California state research and development credit carryforwards of approximately \$1.8 million at January 31, 2013. The California credits can be carried forward indefinitely.

As of January 31, 2013, the Company maintained a full valuation allowance against its California credit carryforwards due to uncertainty regarding the future utilization of these deferred tax assets. The total state tax credit valuation allowance decreased by approximately \$0.1 million in fiscal 2013. As of January 31, 2013, the Company has no valuation allowance other than state tax credit carryforwards as the Company has sufficient positive evidence to indicate no other valuation allowance is needed as a result of the Company's history of profitable operations in the United States.

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, 2013, the Company had approximately \$3.0 million in unrecognized tax benefits, \$2.1 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,		
	2013	2012	2011
	(in thousands)		
<b>Beginning balance:</b>	\$ 2,213	\$ 2,007	\$ 1,883
Additions based on tax positions related to the current year	325	311	244
Additions for tax positions of prior years	690	34	138
Reductions for tax positions of prior years	(210)	(139)	(258)
<b>Ending balance:</b>	\$ 3,018	\$ 2,213	\$ 2,007

The Company classified \$1.2 million and \$1.1 million of income tax liabilities as other long term liabilities as of January 31, 2013 and 2012, 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 \$23,000, \$37,000 and \$22,000 of interest expense and penalties related to uncertain tax positions for the years ended January 31, 2013, 2012 and 2011, respectively. The Company recorded noncurrent liabilities of \$116,000 and \$93,000 related to interest and penalties related to uncertain tax positions at January 31, 2013 and 2012, 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



**Table of Contents**

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, 2013, the Company's long-term income taxes payable, including estimated interest and penalties, was approximately \$1.4 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.

**12. Commitments and Contingencies**

The Company leases its principal facilities and time-based software licenses under operating agreements with various expiration dates through February 2018. Net rental expenses for the years ended January 31, 2013, 2012 and 2011 were approximately \$4.3 million, \$3.9 million and \$2.6 million, respectively. Future annual minimum lease payments under these operating leases with initial lease terms in excess of one year are as follows:

<b>Fiscal Year</b>	<b>As of January 31, 2013 (in thousands)</b>
2014	\$ 3,085
2015	614
2016	391
2017	10
2018	10
	\$ 4,110

***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, 2013 and 2012, total manufacturing purchase commitments were approximately \$15.1 million and \$9.9 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, 2013 and 2012, respectively.

**Table of Contents****13. 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,		
	2013	2012	2011
	(in thousands)		
Hong Kong	\$ 104,458	\$ 80,627	\$ 87,438
Asia Pacific	550	1,350	1,503
United States	7,990	9,825	2,213
North America	2,602	1,323	455
Europe	5,466	4,132	3,130
Total revenue	\$ 121,066	\$ 97,257	\$ 94,739

As of January 31, 2013, substantially all of the Company's long-lived tangible assets are located in the Asia Pacific region.

***Major Customers***

The customers representing 10% or more of revenue and accounts receivable were customer A, a logistic provider, and customer B, a direct ODM customer that combined accounted for approximately 80%, 80% and 91% of total revenue for the years ended January 31, 2013, 2012 and 2011, respectively. Accounts receivable with these customers combined accounted for approximately \$17.6 million and \$7.8 million as of January 31, 2013 and 2012, respectively.

**14. Related-Party Transactions**

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

Starting from the fiscal year 2008, the Company entered into several software license agreements with Cadence Design Systems, Inc. ( Cadence ). A member of the Company's Board of Directors is also the Chief Executive Officer, President and Director of Cadence. Under these license agreements, the Company committed to pay \$5.1 million payable in 17 quarterly payments through June 2011. In April 2011, the Company committed to pay \$5.1 million for additional licenses payable in 12 quarterly payments through January 2014. The Company paid \$1.8 million, \$1.9 million and \$0.9 million under these agreements for the years ended January 31, 2013, 2012 and 2011, respectively. Operating lease expenses related to these agreements included in research and development cost were approximately \$1.8 million, \$1.6 million and \$0.6 million for the years ended January 31, 2013, 2012 and 2011, respectively.

In addition to the related party transactions noted above, the Company recognized revenue from sales to Wintech Microelectronics Co., Ltd, or Wintech, the Company's logistics provider. Wintech, along with an

---

**Table of Contents**

affiliate, is a shareholder of the Company owning approximately 4.6% and 7.4% of the voting stock as of January 31, 2013 and 2012, respectively. The Company recognized revenue from sales to Wintech of approximately \$76.5 million, \$77.6 million and \$85.7 million for the years ended January 31, 2013, 2012 and 2011, respectively. As of January 31, 2013 and 2012, the Company had receivables from Wintech of approximately \$8.2 million and \$7.8 million, respectively.

**15. Subsequent Events**

In March 2013, the Company entered into a lease agreement of approximately 35,000 square feet for its Santa Clara headquarters that has a five-year term and terminates in fiscal year 2019. The minimum lease payments for the following five fiscal years under this operating lease as of April 4, 2013 are as follows (in thousands):

<b>Fiscal Year</b>	
2014	\$ 530
2015	885
2016	906
2017	927
2018	948
	\$ 4,196

**Table of Contents****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 April 4, 2013.

**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 April 4, 2013.

<b>Signature</b>	<b>Title</b>
<i>/s/ Feng-Ming Wang</i> Feng-Ming Wang	President, Chief Executive Officer, Executive Chairman and Director (Principal Executive Officer)
<i>/s/ George Laplante</i> George Laplante	Chief Financial Officer (Principal Financial and Accounting Officer)
<i>/s/ Les Kohn</i> Les Kohn	Chief Technical Officer and Director
<i>/s/ Chenming C. Hu</i> Chenming C. Hu	Director
<i>/s/ Christopher B. Paisley</i> Christopher B. Paisley	Director
<i>/s/ Lip-Bu Tan</i> Lip-Bu Tan	Director
<i>/s/ Andrew W. Verhalen</i>	Director



**Table of Contents****EXHIBITS INDEX**

<b>Exhibit</b>	<b>Description</b>
<b>Number</b>	<b>Description</b>
3.1(1)	Amended and Restated Memorandum of Association and Second Amended and Restated Articles of Association of the Registrant
4.1(2)	Third Amended and Restated Investors Rights Agreement, dated January 5, 2012, by and among Ambarella, Inc. and certain of its shareholders
10.1.1(3)*	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(5)*	Form of Restricted Stock Unit Award Agreement under Amended and Restated 2004 Stock Plan
10.2.1(6)*	2012 Equity Incentive Plan
10.2.2(7)*	Form of Stock Option Agreement under 2012 Equity Incentive Plan
10.2.3(8)*	Form of Restricted Stock Agreement under 2012 Equity Incentive Plan
10.2.3(9)*	Form of Restricted Stock Unit Agreement under 2012 Equity Incentive Plan
10.3(10)*	2012 Employee Stock Purchase Plan
10.4(11)*	Form of Indemnification Agreement
10.5(12)*	Offer Letter entered into by Ambarella, Inc. with George Laplante dated March 3, 2011, as amended
10.6.1(13)*	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(14)*	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(15)*	Description of Executive Bonus Plan For Fiscal Year 2013
10.7.2(16)*	Description of Executive Bonus Plan For Fiscal Year 2014
10.8.1(17)	Sales Representative Agreement dated January 31, 2011 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
10.8.2(18)	Amendment No. 1 to Sales Representative Agreement dated February 1, 2012 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
10.8.3(19)	Amendment No. 2 to Sales Representative Agreement dated October 1, 2012 by and between Ambarella, Inc. and WT Microelectronics Co., Ltd.
10.9.1(20)	Lease dated September 29, 2006 by and between Renault & Handley Employees Investment Co. and Ambarella Corporation
10.9.2(21)	First Amendment to Lease dated November 12, 2009 by and between Renault & Handley Employees Investment Co. and Ambarella Corporation
10.10	Lease Agreement dated March 1, 2013 by and between Ambarella Corporation and Westcore Jay, LLC.
22.1(22)	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.



**Table of Contents**

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 S-1/A (No. 333-174838) filed on September 12, 2012.
- (2) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on August 22, 2012.
- (3) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 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 S-1/A (No. 333-174838) filed on September 12, 2012.
- (6) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (7) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (8) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (9) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (10) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (11) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 12, 2012.
- (12) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.
- (13) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.
- (14) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.
- (15) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on August 22, 2012.
- (16) Incorporated by reference to the Form 8-K (No. 001-35667) filed on March 11, 2013.
- (17) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 26, 2012.
- (18) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on September 26, 2012.
- (19) Incorporated by reference to the Form S-1/A (No. 333-174838) filed on October 5, 2012.
- (20) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.
- (21) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.
- (22) Incorporated by reference to the Form S-1 (No. 333-174838) filed on June 10, 2011.

\* 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. In accordance with Rule 406T of Regulation S-T, the information in these exhibits is furnished and deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Exchange Act of 1934, and otherwise is not subject to liability under these sections.