## PART I

### Item 1. Business

### Overview

We are a fabless semiconductor provider of high-performance application-specific standard products. Our core strength of expertise is the development of complex System-on-a-Chip ("SoC") devices, leveraging our extensive technology portfolio of intellectual property in the areas of analog, mixed-signal, digital signal processing, and embedded and standalone integrated circuits. The majority of our product portfolio leverages the ARM technology portfolio. We also develop platforms that we define as integrated hardware along with software that incorporates digital computing technologies designed and configured to provide an optimized computing solution. Our broad product portfolio includes devices for data storage, enterprise-class Ethernet data switching, Ethernet physical-layer transceivers ("PHY"), mobile handsets, connectivity and other consumer electronics. We were incorporated in Bermuda in January 1995.

Our registered and mailing address is Canon's Court, 22 Victoria Street, Hamilton HM 12, Bermuda, and our telephone number there is (441) 296-6395. The address of our U.S. operating subsidiary is Marvell Semiconductor, Inc., 5488 Marvell Lane, Santa Clara, California 95054, and our telephone number there is (408) 222-2500. We also have operations in many countries, including Canada, China, India, Israel, Italy, Japan, Malaysia, Singapore, South Korea, Spain, Sweden, Switzerland and Taiwan. Our fiscal year ends on the Saturday nearest January 31. In this Annual Report on Form 10-K, we refer to the fiscal year ended January 27, 2007 as fiscal 2007, the fiscal year ended February 2, 2008 as fiscal 2008, the fiscal year ended January 29, 2009 as fiscal 2009, the fiscal year ended January 30, 2010 as fiscal 2010, the fiscal year ended January 29, 2011 as fiscal 2011, the fiscal year ended January 28, 2012 as fiscal 2012, the fiscal year ended February 2, 2013 as fiscal 2013, the fiscal year ended February 1, 2014 as fiscal 2014 and the fiscal year ending January 31, 2015 as fiscal 2015.

#### **Available Information**

Our website address is located at www.marvell.com. The information contained in our website does not form any part of this Annual Report on Form 10-K. However, we make available free of charge through our website our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after we electronically file this material with, or furnish it to, the U.S. Securities and Exchange Commission ("SEC").

### **Industry Background**

The semiconductor industry has evolved over the last five decades primarily due to the rapid and systematic advancements in photolithography techniques and new materials used in the manufacture of semiconductor devices, which has enabled the fabrication of transistor devices with a greater number of features and functions at ever-smaller chip sizes and with increasing power efficiency. As transistor line widths shrink over time, transistor density increases proportionally, enabling the manufacture of ever more complex devices in a fixed area of silicon. This phenomenon, known as "Moore's Law," states that with the transition to each new successive process node, transistor device size will shrink by  $0.7\times$ . This can enable a  $2\times$  increase in the number of transistors, an increase in device performance, a reduction in chip size, or additional functionality. Furthermore, the transition to ever smaller process geometries results in proportionally lower power consumption of integrated circuits.

The effect of Moore's Law on the semiconductor industry has been a rapid increase in the processing speed, the device density of integrated circuits and improved power efficiency. This has enabled the integration of multiple complex functions onto a single piece of silicon, which in the past required multiple discrete integrated circuits. Concurrently, with the advances in semiconductor technology, there has been an evolutionary shift

toward standards-based communication interconnect protocols, such as Ethernet and wireless local area network ("LAN"). This has given rise to a large number of diverse electronic systems suppliers that address the simultaneous transmission of voice, video, audio and data through both wired and wireless connections.

Technological innovations have increased the capability to transmit and process information, which has led to both business enterprise and consumer electronic devices sharing and communicating ever larger amounts of information for a wide array of applications. Due in part to the ongoing evolution of both semiconductor and communications technology, the bandwidth demanded by users has continued to expand at an exponential rate. Additionally, as the bandwidth demand from service providers, enterprises and consumers has risen, there has been a commensurate increase in the required amount of data storage capacity. We believe the market effects enabled by the advances in both semiconductor and communication technologies will provide a large and growing market for our products, technologies and intellectual property capabilities.

Within most modern electronic systems, the device interconnects and data transmission occurs within the analog signal domain. However, due to advanced technologies, modern systems approaches and new algorithms, most new products convert the analog signals into digital signals to process the information. Given the high volume and cost sensitive nature of current electronic devices, it is very beneficial to be able to integrate many of the analog and digital functions onto a single integrated circuit, which can help to increase system performance, lower costs and lower overall power consumption. As a result, these devices require a combination of both analog and digital integrated circuit technologies, more commonly known as mixed-signal technology. Historically, the ability to manufacture mixed-signal technologies required the use of expensive, non-scalable semiconductor manufacturing process technologies. However, to achieve price points that will accelerate the acceptance of these highly integrated mixed-signal devices, a small number of semiconductor suppliers, including us, have invested in the fundamental research and development capability, which allows for the use of high volume, lower cost and scalable complementary metal oxide semiconductor ("CMOS") fabrication technology.

Because the processing requirements of these mixed-signal integrated circuits continue to expand with the increased performance and sophistication of the devices in which they are embedded, many of these integrated circuits are now also integrating high-performance embedded microprocessors and complex digital signal processors to handle the increased workload. With improvements in the performance of such embedded microprocessors, devices can further expand their capabilities while at the same time minimizing power requirements.

Many of these new, sophisticated devices are also handheld battery-powered devices in which minimizing power consumption is critical to maximizing the life of the battery. Utilizing highly integrated circuits that are optimized for power efficiency is a critical factor for such handheld devices. Additionally, advanced digital power management solutions that regulate the power supply to the integrated circuits in an efficient and cost-effective manner are becoming increasingly important to the reduction of both the overall power consumption and the total size of the solution.

#### **Platform Solutions**

Over the last several years, we have transitioned from a supplier of standalone semiconductor components to a supplier of fully integrated platform solutions. Our platform solutions contain multiple intellectual property components in integrated hardware along with software that incorporates digital, analog and mixed-signal computing and communication technologies, designed and configured to provide an optimized solution compared to individual components. Our solutions have become increasingly integrated, with ever more components resulting in an all-in-one solution for a given customer's end product. The demand for such highly integrated platform solutions is generally driven by technological changes and anticipation of the future needs of the device manufacturer and end user, as well as to an increasing extent by service providers, including cellular network carriers and Internet based applications providers. For example, in order to provide a complete solution for a

specific handheld consumer electronics device, a device manufacturer may require a solution that integrates a high-performance applications processor, along with seamless communications capability with a 3G/4G Long-Term Evolution ("LTE") multi-band modem, Wi-Fi, Bluetooth, radio frequency ("RF"), GPS and near field communication ("NFC"). In addition, a device manufacturer may require high-definition graphics processing, high-definition video and audio, and power management. These platforms will often cross multiple end markets, integrating components and technologies traditionally associated with one end market with components and technologies from another end market. For example, we may integrate an applications processor, traditionally associated with the mobile and wireless end market, with software and other components in an end user product targeting the home cloud. Therefore, it has become critical that our products across multiple end markets work together seamlessly.

In addition, software has become increasingly important to our business over the last several years, and we expect software to become even more important in the years to come. On-chip software, which acts as the "driver" for the functionality of the chip, has always been a critical part of our business. However, the software that we deliver with our chip has become significantly more complex as the range of uses and the needs in application-level software have increased. For example, a chip that we develop for a smartphone may need to include software that is compatible with the latest version of a specific company's operating system that enables 3D user interface and graphics, and that works seamlessly with a variety of popular end user applications. These demands require a significant amount of up-front software development, testing, and often additional licensing.

Lastly, the market for consumer electronics devices is becoming increasingly standards-based. These standards change rapidly and often several different standards may exist and overlap in a single market. Our platforms are typically designed to operate seamlessly with all relevant standards, which require us to design products in anticipation of these relevant standards. For example, we have communications processors and software designed to operate on several different cellular standards, including GSM/ enhanced data for the GSM environment ("EDGE") (2G), WCDMA (3G), TD-SCDMA (China 3G) and 4G LTE.

In summary, while providing the most advanced components at the lowest possible price remains critical to our business, continuing the transformation into a platform solutions provider through the integration of multiple components together with industry-leading software capability will continue to increase in importance to our overall success.

### **Our Markets and Products**

During the early stages of the company, our core technologies were focused on the storage market. Today, we provide high-performance products for traditional hard disk drive ("HDD") controllers to companies such as Seagate Technology, Toshiba Corporation and Western Digital Corporation. Over the past few years, we have expanded our core storage technologies by developing solid state flash drive ("SSD") controllers, which are currently sold to flash providers, such as Micron, SanDisk and Toshiba and other companies who are building drives based on our SSD technologies. In addition, we have also developed unique high-performance solutions for the solid state hybrid drive ("SSHD") market, which we expect to grow rapidly over the next few years.

As our business grew, we expanded into the networking market, where we developed industry-leading PHY devices and wired and wireless Ethernet-switching solutions, which enable high-speed transmission between communications systems that are sold by manufacturers of networking and wireless equipment, such as Brocade Communication Systems, Inc., Cisco Systems, Inc., FREEBOX, Hewlett Packard Company, Huawei Technologies Co., Ltd., Intel Corporation, Juniper Networks, Inc. and ZTE Corporation. We also provide complete smartphone and tablet platform solutions, including communications and applications processors, wireless connectivity, power management and other platform components, for customers such as BlackBerry, Huawei, Motorola Solutions, Samsung, Yulong and ZTE Corporation. We also provide printer SoC and system level solutions, including wireless, for both inkjet and laser jet printer systems for companies including Hewlett Packard Company. Our wireless products also are used on a standalone basis in consumer electronics devices,

including smartphones, tablets, wireless access routers and gaming devices, by companies such as Cisco Systems, Microsoft Corporation, Samsung and Sony Corporation. In addition, we also provide video and application processors combined with our connectivity and power management for new consumer devices, such as the Google Chromecast.

Our current product offerings are primarily in three broad end markets: mobile and wireless, storage and networking. Our net revenue by end market for the last three fiscal years are as follows:

	Year Ended					
	February 1,		February 2,		January 28,	
	2014		2013		2012	
		(in	millions, except for	r percentages)	)	
Mobile and Wireless	\$ 839	25%	\$ 823	26%	\$ 969	29%
Storage	1,682	49%	1,495	47%	1,561	46%
Networking	670	20%	709	22%	698	21%
Other	213	6%	142	5%	165	4%
Total	\$ 3,404		\$ 3,169		\$ 3,393	

### Mobile and Wireless

We offer a broad range of products for the mobile and wireless end market, including integrated communications processors, thin modems and connectivity solutions. Our solutions power the complete value chain of mobile and wireless devices that are designed to provide full-featured, media-rich experiences and robust services to everyone from the business user to the consumer.

# Communications and Applications Processors

Our communications processors are highly integrated cellular SoC devices that enable mobile handset developers to address GSM/EDGE (2G), WCDMA (3G), TD-SCDMA (China 3G) and 4G LTE mobile network standards. Our communication products include high-performance multi-band baseband thin modems and applications processors in highly integrated low-power SoC platforms for voice, computation and multimedia-intensive mobile applications for smartphones and tablets.

The PXA920 was our first generation 3G communications processor solution that targeted the TD-SCDMA smartphone market. In fiscal 2013, we introduced our unified 3G platform with the PXA986, PXA988, and PXA1088 that address the worldwide WCDMA market and China 3G market. These solutions are highly integrated 3G SoC communications processors that feature advanced modem technologies, with PXA986 integrating a WCDMA modem and PXA988 integrating a TD-SCDMA modem. The PXA1088 integrates both WCDMA and TD-SCDMA modems with a high-performance quad-core application processor that enables a world-phone design. These products combine dual-core and quad-core gigahertz class applications processing performance with advanced 3D graphics and 1080p multimedia processing capability.

In fiscal 2014, we introduced the PXA1088LTE, our 4G LTE single-chip mobile SoC that integrates our multi-mode LTE modem with a high-performance quadcore application processor and graphic processing capabilities. This advanced solution is designed to provide high-performance, low-power mobile computing and support for all global mobile standards, including LTE frequency division multiplex ("LTE FDD"), time division LTE ("TD-LTE"), high speed packet access plus ("HSPA+"), time division HSPA+ ("TD-HSPA+") and EDGE. All of our mobile platforms are complemented by our power management, RF and wireless connectivity solutions.

#### Thin Modems

Our thin modems allow us to target high-end applications and are highly optimized multi-mode baseband modem devices that enable the design of a wide-array of high-performance, low-power Internet-connected devices, targeting smartphones and tablets. Our thin modems incorporate a multi-band multi-mode design, which is capable of addressing global 3G and 4G mobile standards.

The PXA180x-series modem solutions are a series of highly integrated 4G LTE cellular thin modems supporting Release 9 category 4 (3GPP) FDD and TDD LTE, Release 8 (3GPP) WCDMA, Release 8 (3GPP) TD-SCDMA, and 2.5G (GSM/GPRS/EDGE) cellular standards. These devices target multiple applications, including smartphone, tablet, mobile hotspot, automotive and fixed data access points for enterprise and consumer use. The PXA180x-series modem platform is complimented by our power management, RF and in many instances wireless connectivity components. Our newest solutions are designed to support next-generation LTE standards with category 4 speeds, which can achieve up to 150 megabits-per-second downlink throughput. We are also investing in and designing next generation advanced LTE solutions for the smartphone, tablet and other high-volume markets.

#### Connectivity

Our Avastar family of wireless products include standalone Wi-Fi products, as well as multi-function SoCs which incorporate multiple wireless communications protocols, including Wi-Fi, Bluetooth, NFC and FM, delivered on a single chip. Historically, these products have been incorporated primarily in gaming systems, digital cameras, printers, and wireless access points and routers. In today's increasingly connected and mobile lifestyle, the number and variety of products that require wireless communications have expanded significantly to include mobile phones, tablets, digital TV, set-top boxes, video dongles, in-car infotainment and smart appliances. Our products are well positioned for these devices by delivering low-power and high-performance functionality with the latest technologies, such as Wi-Fi Certified Passpoint, Wi-Fi Certified Miracast, IEEE 802.11ac, and Bluetooth Smart Ready. We have a broad wireless product portfolio that includes single stream 1x1, 2x2 MIMO and 4x4 MIMO devices, as well as Global Navigation Satellite System hybrid location products. In addition, the Avastar family of products are designed to provide a high degree of integration of radios, RF components, power management and memory.

# Mobile Computing Products

Our ARMADA 100, 500, 600 and 2100 products are SoCs that are designed to deliver advanced integration, excellent multimedia performance and superior power consumption savings for mobile computing products. These products have been incorporated into tablets, notebooks, eReaders, gaming devices, scanners and educational devices. We have also introduced thin client products designed to operate on Linux-based devices, offering a low-power and cost-efficient alternative to existing desktop computers. Our ARMADA line of chips are also used in a large variety of embedded devices, ranging from point-of-sale devices, vending machines, connected displays, wireless speakers and other entertainment devices.

## Storage

We offer a broad range of integrated data storage products across all major technologies, including HDD, SSD, and SSHD controllers. In addition, we offer storage system products for complex storage area network solutions. These products provide increased performance and reduced power consumption for enterprise, desktop and mobile storage systems. These integrated SoCs feature ultra-fast read channels, high-performance processors, transceivers, DDR RAM controllers and cryptographic engines.

#### Hard Disk Drive Controllers

HDD controllers provide high-performance input/output ("I/O") interface control between the HDD and the host system. We support a variety of host system interfaces, including SATA, SAS, PCIe and USB, which can support the complete range of enterprise, desktop and mobile HDDs. We are the leading HDD controller supplier and currently supply products to all of the major hard drive manufacturers. Our HDD controllers with advanced 500-gigabyte-per-platter technology for mobile HDDs provide a technological advantage that enables a higher level of data storage on a smaller form factor.

### Solid-State Drive Controllers

Our SSD controller SoCs are targeted at the growing market for flash-based storage systems, for the enterprise, consumer and mobile markets. Our SSD controllers leverage significant portions of intellectual property and software developed for the HDD market. Additionally, we incorporate unique intellectual property and development required to ensure stable device operation. We have also leveraged our technology in consumer SSD controllers and have developed a family of SSD controller-based solutions designed for the smartphone and tablet markets. We support a variety of host system interfaces, including PCIe, SATA, SAS and emerging mobile standards for a complete range of enterprise, desktop and mobile SSD applications.

### Solid State Hybrid Drive Controllers

A SSHD is a HDD that also contains flash memory, thereby leveraging the low cost of a HDD with the performance of a SSD. Our SSHD controller SoCs include the technology required for HDD operation as well as a high-speed interface for the on-drive flash memory.

### Networking

Residential, enterprise, and service provider networks are experiencing rapid change. To meet these challenges, our Networking business is evolving by investing and adding technologies required for the build-out of new network architectures. We are focusing on cloud infrastructure and service provider infrastructure.

- Residential networks are where personal applications and data reside within the privacy and control of a residential network. Our products are designed to allow a multitude of smart devices to share content and manage home services.
- Enterprise networks represents the next generation of the network that enables a more mobile workforce, global collaboration, increased bandwidth and enhanced security.
- Service Provider networks encompass the converged wireless and wireline public infrastructure and low-power commercial data centers, where we are focused on the convergence of networking, computing and storage technologies.

Our ARMADA XP family of products is a quad-core processing, enterprise-class cloud computing platform. This platform integrates four ARM-based 1.6Hz CPU cores along with a host of I/O peripherals and is optimized to consume low power while simultaneously delivering high-performance per-watt.

Our Kirkwood family of products is based on our embedded CPU technology and has been designed to maximize overall performance while minimizing power consumption. Designed for network-connected consumer electronics equipment, this family of products is used in home gateways, set-top boxes, network storage, printers, media players and point-of-service terminals.

Our Discovery Innovation family of products provides a complete SoC solution based on our embedded CPU technology. These high performance, low-power, highly integrated processors are ideally suited to a wide range of applications, ranging from sophisticated routers, switches and wireless base stations to high volume laser printer applications.

The Xelerated product family provides programmable network processing solutions designed for carrier Ethernet, access, aggregation, mobile backhaul, transport and data-center (mobile cloud) platforms, where high-performance-per-watt, enhanced quality of service is an essential metric.

Our Link Street family of 10/100 Fast Ethernet and Gigabit switches is targeted to the small office and home office market, where cost, ease-of-use and flexibility are critical. These devices are targeted at applications, such as standalone switches, media converters, Internet protocol phones, firewall appliances, wireless and wired gateway routers, and wireless access points. When integrated with a high-performance ARM-based embedded microprocessor, a media access controller and PHY interface, our Link Street family of products provides an integrated single-chip solution for small and medium-size business applications, as well as residential applications.

The Prestera DX family of Gigabit Ethernet ("GbE") switches offer integration and performance for small and medium-size business networks, and mobile access and backhaul infrastructure networks. These products are designed to enable system vendors to design affordable, plug-and-play, high-density and standalone switches, which address the cost-sensitive desktop switching market. The Prestera EX family of enterprise switches is designed to deliver exceptional price and performance. The Prestera EX family delivers a complete line of Fast Ethernet, GbE and 10GbE switching solutions.

The Prestera CX family of 10GbE and 40GbE switches is designed for the new generation of high density data centers and optical broadband, as well as the convergence of data and storage networks. Using standards-based congestion management capabilities and dynamic power management, these products enable virtualization, cloud computing and "software as a service."

Our Alaska family of Ethernet transceiver products includes high-performance and low-power Gigabit and 10/40 Gigabit PHY devices. These physical layer transceivers compliment Marvell's switch and SoC products and address enterprise switching, server and telecom applications. The Alaska family of products enables the accelerated deployment of 10/40GbE capable systems for the LAN, metropolitan area network ("MAN") and wide area network ("WAN") markets over both fiber and copper media. Our low-power, low-cost solutions are designed to address network connectivity for client systems, such as PCs, gaming systems and digital TVs.

Our Yukon family of connectivity products includes integrated, single-chip solutions, based on our proven enterprise-class Alaska family of products. These products are offered in an ultra-small form factor with low-power consumption and are targeted for client and server network interface cards.

Our Avanta product family provides solutions for next generation broadband, based on Ethernet passive optical network ("EPON") and Gigabit passive optical network ("GPON") architectures. These products consist of a highly integrated Gateway-on-a-Chip solution, Ethernet and packet processing, voice processing, power management and applications processors. The Avanta product is designed to meet the needs of next generation networks and the significant increases in required bandwidth, including high-quality video, online gaming and conferencing.

### Other Products

Printing Solutions

Our printer SoC products power many of today's laser and ink printers and multi-function peripherals. These SoCs include a family of printer-specific standard products as well as full-custom printer ASICs. We continue to pioneer and lead printing technologies including 3D printing and mobile printing.

Smart Home Products

Our smart home product portfolio includes the ARMADA 1500 family SoC and other products that are designed to enable the next generation of connected consumer platforms, and to enhance the eco-friendly "Connected Lifestyle" throughout the home, ranging from broadband access, home networking, home entertainment and home automation. Focused on complete solutions for service providers and OEMs, products from Smart Home are found in smart TVs, set-top boxes, multi-screen dongles such as Google Chromecast, smart lighting and smart appliances.

### Financial Information about Segments and Geographic Areas

We have determined that we operate in one reportable business segment: the design, development and sale of integrated circuits. For further information, please see "Note 13 — Segment and Geographic Information" in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8 of this Annual Report on Form 10-K.

## **Customers, Sales and Marketing**

Due to the increased importance of being able to offer fully integrated platforms to our customers, which combine multiple products, including products generally associated with multiple end markets, our sales force is strategically aligned along key customer lines. In this way, we believe we can more effectively offer a broader set of content into our key customer's end products, without having multiple product groups separately engage the same customer. We complement and support our direct sales force with manufacturers' representatives for our products in North America, Europe and Asia. In addition, we have distributors who support our sales and marketing activities in the United States, Europe and Asia. We also use third party logistics providers, who maintain warehouses in close proximity to our customer's facilities. We expect a significant percentage of our sales will continue to come from direct sales to key customers. We use field application engineers to provide technical support and assistance to existing and potential customers in designing, testing and qualifying systems designs that incorporate our products. We believe that superior field applications engineering support plays a pivotal role in building long-term relationships with customers by improving our customers' time-to-market, maintaining a high level of customer satisfaction and encouraging customers to use our next-generation products.

Our marketing team works in conjunction with our field sales and application engineering force and is organized around our product applications and end markets. Due to the complexity of our products, we believe that individual meetings between our customers and our marketing, sales and engineering teams provide the most effective and rapid means of communicating the capabilities, benefits and extremely technical specifications of each significant new product.

The target customers for our storage products are manufacturers of HDDs, SSDs and SSHDs for the enterprise, desktop and mobile computing markets.

The target customers for our switching, transceiver and connectivity products are manufacturers of high-speed networking equipment targeted at LANs, MANs and WANs, in addition to PC-client OEMs. The target customers for our communications controller and embedded processor products are the manufacturers and vendors of wireless communications equipment and handsets for the Internet voice communications market.

The target customers for our communications and applications processor products are manufacturers of mobile handsets, tablets, ultrabooks and a large variety of other handheld, portable consumer applications. Our target customers for our wireless and personal area networking products include manufacturers of wireless LAN solutions for small-and-medium size businesses, small office/home office and residential gateway solutions as well as manufacturers of a variety of new consumer applications such as mobile handsets, tablets, gaming devices and home entertainment multimedia client devices.

The target customers for our digital video processing products include manufacturers of consumer electronic devices, such as digital TVs, HD-based media players, HD-based set-top-boxes, media clients and audio-visual receivers. The target customers for our power management and green technology products are very diverse and include manufacturers of many different electronic devices.

Historically, a relatively small number of customers have accounted for a significant portion of our net revenue. Net revenue attributable to significant end customers is presented in the following table as a percentage of net revenue:

		Year Ended		
	February 1,	February 2,	January 28,	
Customer	2014	2013	2012	
Western Digital	24%	24%	19%	
Seagate	12%	10%	*	
Toshiba	*	10%	*	

## Less than 10% of net revenue

In fiscal 2013, Western Digital acquired Hitachi's HDD unit and in fiscal 2012, Seagate acquired the HDD operations of Samsung.

Our sales are made under purchase orders typically received between two and four months prior to the scheduled delivery date. These purchase orders can be cancelled without charge if notice is given within an agreed upon period. Because of the scheduling requirements of our foundries, we generally place firm orders for products with our suppliers generally up to 16 weeks prior to the anticipated delivery date and typically prior to an order for the product. These lead times typically change based on the current capacity at the foundries.

A significant number of our products are being incorporated into consumer electronics products, including gaming devices and personal computers, which are subject to significant seasonality and fluctuations in demand. Holiday and back to school buying trends may at times negatively impact our results in the first and fourth quarter and positively impact our results in the second and third quarter of our fiscal years. In addition, the timing of new product introductions by our customers may cause variations in our quarterly revenues, which may not be indicative of future trends.

#### Backlog

Our sales are made primarily pursuant to standard purchase orders for delivery of products. The quantities actually purchased by the customer, as well as the shipment schedules, are frequently revised during the agreement term to reflect changes in the customer's needs. Due to an industry practice that allows customers to cancel or change purchase orders with limited notice prior to the scheduled shipment dates, we believe that backlog is not a reliable indicator of future revenue. In addition, an increasing portion of our revenue is related to inventory pulled by customers from third-party logistics providers. As such, this revenue would not be included in the backlog. Our backlog also includes orders from distributors for which revenue is not recognized until the products are sold to end customers.

### Research and Development

We believe that our future success depends on our ability to introduce improvements to our existing products and to develop new products that deliver cost-effective solutions for both existing and new markets. Our research and development efforts are directed largely to the development of high-performance analog, mixed-signal, digital signal processing and embedded microprocessor integrated circuits with the smallest die size and lowest power. We devote a significant portion of our resources to expanding our product portfolio based on a

broad intellectual property portfolio with designs that enable high-performance, reliable communications over a variety of physical transmission media. We are also focused on incorporating functions currently provided by stand alone integrated circuits into our integrated platform solutions to reduce our customers' overall system costs

We have assembled a core team of engineers who have extensive experience in the areas of mixed-signal circuit design, digital signal processing, embedded microprocessors, CMOS technology and system-level architectures. We have invested and will continue to invest significant funds for research and development. Our research and development expense was \$1.2 billion, \$1.1 billion and \$1.0 billion in fiscal 2014, 2013 and 2012, respectively.

### Manufacturing

### Integrated Circuit Fabrication

The vast majority of our integrated circuits are fabricated using widely available CMOS processes, which provide greater flexibility to engage independent foundries to manufacture integrated circuits at lower costs. By outsourcing manufacturing, we are able to avoid the cost associated with owning and operating our own manufacturing facility. This allows us to focus our efforts on the design and marketing of our products. We currently outsource a substantial percentage of our integrated circuit manufacturing to Taiwan Semiconductor Manufacturing Company. To a lesser extent, we also utilize United Microelectronics Corporation, with the remaining manufacturing outsourced to other foundries primarily in Asia. We work closely with our foundry partners to forecast on a monthly basis our manufacturing capacity requirements. Our integrated circuits are currently fabricated in several advanced manufacturing processes up to and including 28 nanometer. Because finer manufacturing processes lead to enhanced performance, smaller silicon chip size and lower power requirements, we continually evaluate the benefits and feasibility of migrating to smaller geometry process technology in order to reduce cost and improve performance.

### Assembly and Test

We outsource all product packaging and testing requirements for our production products to several assembly and test subcontractors, including STATS ChipPAC Ltd. in China, Singapore and Taiwan; Global Testing Corporation in Taiwan; Siliconware Precision Industries in China and Taiwan; ASE Electronics in China, Malaysia, Singapore and Taiwan; and Amkor in Philippines, South Korea and Taiwan.

## Quality Assurance

We are certified to the International Organization for Standardization Quality Management Systems Standard ISO 9001:2008. We build quality into our products starting with the design and development process. Our designs are subjected to extensive circuit simulation under extreme conditions of temperature, voltage and processing before being committed to manufacture. We pre-qualify each of our subcontractors and conduct regular in-depth quality audits. We closely monitor foundry production to ensure consistent overall quality, reliability and yield levels. All of our independent foundries and assembly-test subcontractors have been awarded ISO 9001 certification.

### **Environmental Management**

We believe that our products are compliant with the current Restriction of Hazardous Substances Directive, the European legislation that restricts the use of a number of substances, including lead, and the REACH (Regulation, Evaluation and Authorization of Chemicals) SVHC Substances Directive. In addition, each of our manufacturing subcontractors complies with ISO 14001:2004, the international standard related to environmental management. We are also working to establish a "conflict-free" supply chain, including ethical sourcing of certain minerals for our products.

## **Intellectual Property**

Our future revenue growth and overall success depend in large part on our ability to protect our intellectual property. We rely on a combination of patents, copyrights, trademarks, trade secret laws, contractual provisions and licenses to protect our intellectual property. We also enter into confidentiality agreements with our employees, consultants, suppliers and customers and seek to control access to and distribution of, our documentation and other proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use our products and technology without authorization, independently develop similar technology or design around our patents. In addition, we often incorporate the intellectual property of other companies into our designs and we have certain obligations with respect to the non-use and non-disclosure of their intellectual property. It is possible, however, that the steps taken by us to prevent misappropriation or infringement of our intellectual property or our customers' intellectual property may not be successful.

As of February 1, 2014, we have been issued and/or have acquired over 4,200 U.S. patents and over 1,200 foreign patents with expiration dates ranging from 2014 to 2034. We also have more than 2,700 U.S. and foreign pending patent applications on various aspects of our technology; however, we cannot be certain whether we will be issued patents as a result of these applications. Furthermore, it is possible that our patents may be invalidated, circumvented, challenged or licensed to others. Additionally, the laws of some foreign countries in which our products are or may be developed, manufactured or sold, including various countries in Asia, may not protect our products or proprietary information to the same extent as do the laws of the United States and thus make the possibility of piracy of our technology and products more likely in these countries. We may need to engage in litigation in the future to enforce our intellectual property rights or the rights of our customers, to protect our trade secrets or to determine the validity and scope of proprietary rights of others, including our customers. This litigation could result in substantial costs and diversion of our resources and could materially and adversely affect our business, financial condition and results of operations.

We have expended and will continue to expend considerable resources in establishing a patent position designed to protect our intellectual property. While our ability to compete is enhanced by our ability to protect our intellectual property, we believe that in view of the rapid pace of technological change, the combination of the technical experience and innovative skills of our employees may be as important to our business as the legal protection of our patents and other proprietary information.

From time to time, we may desire or be required to renew or to obtain licenses from third parties in order to further develop and effectively market commercially viable products. We cannot be sure that any necessary licenses will be available or will be available on commercially reasonable terms.

The integrated circuit industry is characterized by vigorous pursuit and protection of intellectual property rights, which has resulted in significant and often time consuming and expensive litigation. From time to time, we receive, and may continue to receive in the future, notices that claim we have infringed upon, misappropriated or misused the proprietary rights of other parties. Although we defend these claims vigorously, it is possible that we will not prevail in pending or future lawsuits. In addition, we may be sued in the future by other parties who claim that we have infringed their patents or misappropriated or misused their trade secrets, or who may seek to invalidate one or more of our patents. Any of these claims could materially and adversely affect our business, financial condition and results of operations. Even if claims against us are not valid or successfully asserted, these claims could result in significant costs and a diversion of management and personnel resources to defend. In that event, our business, financial condition and results of operations could also be materially and adversely affected. In any of the pending or future claims or actions asserted against us, we may seek to obtain licenses under a third party's intellectual property rights; however, we may not be able to obtain such licenses on commercially reasonable terms, if at all. See "Risk Factors" under Item 1A of this Report on Form 10-K and "Note 10 — Commitments and Contingencies" in our Notes to the Consolidated Financial Statements set forth in Part II, Item 8, of this Annual Report on Form 10-K for further discussion of the risks associated with patent litigation matters.

## Competition

The markets for our products, particularly in the mobile and wireless end market, are intensely competitive, characterized by rapid technological change, evolving industry standards, frequent new product introductions, short product life cycles and pricing pressures imposed by high-volume customers. Competition has intensified as a result of the increasing demand for higher levels of integration and smaller process geometries, and we expect competition to intensify as current competitors continue to strengthen their product offerings and new competitors enter our markets.

We believe that our ability to compete successfully in the rapidly evolving markets for our products depends on a number of factors, including the:

- · performance, features, quality and price of our products;
- · timing and success of new product introductions by us, our customers and our competitors;
- · emergence, and rate of adoption and acceptance of new industry standards;
- · ability to obtain adequate foundry capacity; and
- number and nature of our competitors in a given market.

By end market our major competitors are as follows:

Mobile and Wireless	Storage	Networking
Broadcom Corporation	LSI Corporation	Broadcom Corporation
MediaTek, Inc.		Freescale Semiconductor Holdings I, Ltd.
QUALCOMM Incorporated		LSI Corporation

Spreadtrum Communications, Inc.

In addition, we expect increased competition in the future from other emerging and established companies. Although we believe we will be able to successfully compete with existing and potential competitors, some of these current and potential competitors have longer operating histories, greater name recognition, access to larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than we do. As a result, they may be able to respond more quickly to changing customer demands or to devote greater resources to the development, promotion and sale of their products than we can. Our current or future competitors could develop and introduce new products that will be priced lower, provide superior performance or achieve greater market acceptance than our products. In addition, in the event of a manufacturing capacity shortage, these competitors may be able to manufacture products when our ability to do so may be limited.

Furthermore, current or potential competitors have established or may establish financial and strategic relationships among themselves or with existing or potential customers or other third parties to increase the ability of their products to address the needs of customers. Accordingly, it is possible that new competitors or alliances among competitors could emerge and rapidly acquire significant market share, which could harm our business.

In addition, many of our current and potential customers have substantial technological capabilities and financial resources. Some customers have already developed, or in the future may develop, technologies that could compete directly with our products. We may also face competition from suppliers of products based on new or emerging technologies.

Historically, average unit selling prices in the integrated circuit industry in general, and for our products in particular, have decreased over the life of a particular product. We expect that the average unit selling prices of

our products will continue to be subject to significant pricing pressures. In order to offset expected declines in the selling prices of our products, we will need to continue to introduce innovative new products. In addition, we need to continue to reduce the cost of our products. To accomplish this, we intend to continue to implement design changes that lower the cost of manufacturing and assembling and testing our products. We may also enter into long-term, strategic arrangements with our foundry partners to secure wafer capacity at reduced prices, by negotiating reduced charges from our foundries. In addition, we plan to work with multiple foundry partners to ensure that our products are qualified and can be manufactured in multiple locations, which we believe will ensure favorable wafer pricing. 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. If we fail to introduce lower cost versions of our products in a timely manner or to successfully manage our manufacturing, assembly and testing relationships, our business could be adversely impacted.

### **Employees**

As of February 1, 2014, we had a total of 7,355 employees.

### **Executive Officers of the Registrant**

The following table shows information about our executive officers as of March 20, 2014:

Name	Age	Position(s)
Name Dr. Sehat Sutardja	52	Chief Executive Officer and Chairman of the Board
Weili Dai	52	President
Michael Rashkin	68	Chief Financial Officer
Dr. Zining Wu	41	Chief Technology Officer

Dr. Sehat Sutardja, one of our co-founders, has served as the Chief Executive Officer and Chairman of our Board of Directors since 1995 (from 1995 to 2003 he was Co-Chairman of the Board of Directors). While remaining deeply involved in the daily challenges of running a global growth company, Dr. Sutardja participates heavily in our engineering and marketing efforts across analog, video processor, and microprocessor design while offering input across all of our other product lines. Dr. Sutardja is widely regarded as one of the pioneers of the modern semiconductor age. His breakthrough designs and guiding vision have revolutionized numerous industry segments, from data storage to the high-performance, low-power chips now driving the growing global markets for mobile computing and telephony. For his relentless innovation, he has been awarded more than 360 patents and has been named a Fellow of IEEE. In 2006, Dr. Sutardja was recognized as the Inventor of the Year by the Silicon Valley Intellectual Property Law Association. Dr. Sutardja also served as President from 2003 to June 2013. Dr. Sutardja holds an M.S. and Ph.D. in Electrical Engineering and Computer Science from the University of California at Berkeley. Dr. Sutardja received a B.S. in Electrical Engineering from Iowa State University. Dr. Sutardja is the husband of Ms. Dai.

Ms. Weili Dai, one of our co-founders, has served as President of the Company since July 2013. Widely considered a technology visionary, Ms. Dai is the only woman co-founder of a global semiconductor company. Her business acumen, strategic thinking, product leadership, endless passion and personal network have contributed greatly to Marvell's success. Her close relationship with Marvell's customers and the foundation of the trust shared with them have given her a strong reputation for professionalism and integrity throughout the technology industry. Prior to her appointment as President, Ms. Dai served as a Vice President of MsI from 2008 to July 2013, including the position of General Manager of the Communications & Consumer Business of MsI since September 2011 and General Manager of the Communications and Computing Business Unit of MsI from March 2009 to September 2011. From 1995 to May 2007, Ms. Dai served as Chief Operating Officer, Executive Vice President and a member of the Board of Directors of the Company. Ms. Dai holds a B.S. degree in Computer Science from the University of California at Berkeley. Ms. Dai is the wife of Dr. Sutardja.

Michael Rashkin has served as our Chief Financial Officer since February 2014 and served as our Interim Chief Financial Officer from December 2013 to February 2014. Mr. Rashkin served as President of the Marvell Charitable Fund from March 2011 to November 2013. From January 2008 to March 2011, Mr. Rashkin served as Vice President of Taxes and General Tax Counsel of MSI. From July 2007 to January 2008, Mr. Rashkin served as Interim Chief Financial Officer of the Company. In 2007, Mr. Rashkin was appointed Special Assistant to the CEO and Vice President of Strategic Development of MSI. Prior to 2007, Mr. Rashkin was Vice President and General Tax Counsel of MSI from 2005 to 2007. From 2000 to 2005, Mr. Rashkin served as Director of Taxes and General Tax Counsel of MSI and Director of Taxes and Tax Counsel of MSI from 1999 to 2000. Mr. Rashkin holds an LL.M. from the New York University Graduate School of Law, a J.D. from St. John's University School of Law and a B.S. from Brooklyn College, City University of New York. Mr. Rashkin is a member of both the California and New York bars.

*Dr. Zining Wu* has served as our Chief Technology Officer since January 2014. From August 2008 to January 2014, Dr. Wu served as MSI's Vice President, Data Storage Technology. Prior to August 2008, Dr. Wu worked as an engineer and in various managerial roles in MSI's Storage group since July 1999. Dr. Wu holds a BS in Electronic Engineering from Tsinghua University in Beijing, China, and a M.S. and Ph.D. in Electrical Engineering from Stanford University. Dr. Wu holds over 230 U.S. patents and has published eight technical papers and a book related to data storage technology.

### Item 1A. Risk Factors

# **Additional Factors That May Affect Future Results**

Investing in our common shares involves a high degree of risk. You should carefully consider the risks and uncertainties described below and all information contained in this report before you decide to purchase our common shares. Many of these risks and uncertainties are beyond our control, including business cycles and seasonal trends of the computing, semiconductor and related industries. If any of the possible adverse events described below actually occurs, we may be unable to conduct our business as currently planned and our financial condition and operating results could be harmed. In addition, the trading price of our common shares could decline due to the occurrence of any of these risks, and you could lose all or part of your investment.

#### Our financial condition and results of operations may vary from quarter to quarter, which may cause the price of our common shares to decline.

Our quarterly results of operations have fluctuated in the past and could do so in the future. Because our results of operations are difficult to predict, you should not rely on quarterly comparisons of our results of operations as an indication of our future performance.

Fluctuations in our results of operations may be due to a number of factors, including, but not limited to, those listed below and those identified throughout this "Risk Factors" section:

- changes in general economic and political conditions and specific conditions in the end markets we address, including the continuing volatility in the technology sector and semiconductor industry;
- · the highly competitive nature of the end markets we serve, particularly within the semiconductor industry;
- any current and future litigation that could result in substantial costs and a diversion of management's attention and resources that are needed to successfully maintain and grow our business;
- our dependence on a few customers for a significant portion of our revenue;
- our ability to maintain a competitive cost structure for our manufacturing and assembly and test processes and our reliance on third parties to produce our products;